- 23. Compare, for instance, similar concerns that arise when we seek to make sense of human nature in a way that connects to morality regardless of whether we involve add-on virtual or non-virtual parts.
- 24. See Coleman, Hello Avatar, chapter 4: "Presence."
- 25. Dibbell, "Rape in Cyberspace."
- 26. Coleman, Hello Avatar, 47.
- 27. Thanks to William Kline for challenging me on this point in an early discussion.
- 28. Fox, "Woman Uses Thought Control."
- 29. I aim this also as a response to an anonymous reviewer's question about whether the harm of a virtual rape crosses the virtual border to cause real harm to the avatar's driver.
- 30. Bujega, "Avatar Rape."

Bibliography

Bugeja, M. "Avatar Rape." *Inside Higher Ed*, February 25, 2010, http://www.insidehighered.com/views/2010/02/25/bugeja#ixzz2EX3PjBWt.

Coleman, B. *Hello Avatar: Rise of the Networked Generation*. Cambridge: MIT Press, 2011.

Dibbell, J. "A Rape in Cyberspace." Originally published in *The Village Voice*, December 23, 1993. Retrieved from http://www.juliandibbell. com/texts/bungle_vv.html.

Fox, M. 2012. "Woman Uses Thought Control to Eat Chocolate." *NBCNews.com*, December 17, 2012, http://vitals.nbcnews.com/_ news/2012/12/17/15955022-woman-uses-thought-control-to-eat-chocolate?lite.

Harbisson, N. "I Listen to Color." *CNN* website, September 10, 2012, http://www.cnn.com/2012/09/09/opinion/harbisson-hear-colors/index. html.

Huff, C., D. G. Johnson, and K. Miller. "Virtual Harms and Real Responsibility." *Technology and Society Magazine*, *IEEE* 22, no. 2 (2003): 12–19.

O'Connell, S. "The Right Word, for Dummies." *Washington Post*, April 22, 2011, http://www.washingtonpost.com/gog/movies/ dumbstruck,1207292/critic-review.html.

Powers, T. M. "Real Wrongs in Virtual Communities." *Ethics and Information Technology* 5, no. 4 (2003): 191–98.

Whitty, S. "Dumbstruck' Review: Documentary Captures Drama of Ventriloquism." *The Star Ledger*, April 22, 2011, http://www.nj.com/entertainment/movies/index.ssf/2011/04/dumbstruck_review_documentary_captures_drama_of_ventriloquism.html.

Wolfendale, J. "My Avatar, My Self: Virtual Harm and Attachment." *Ethics and Information Technology* 9, no. 2 (2007): 111–19.

A Philosophy of the Web

Sidey Myoo

Jagiellonian University, Krakow

Computers, too, lead us to construct things in new ways. With computers we can simulate nature in a program or leave nature aside and build second natures limited only by our powers of imagination and abstraction. The objects on the screen have no simple physical referent. In this sense, life on the screen is without origins and foundation. It is a place where signs taken for reality may substitute for the real. Its aesthetic has to do with manipulation and recombination.

> - Sherry Turkle, Life on the screen. Identity In the Age of Internet

What I'm saying is that you have to think about technology, you have to use it, because in the end it is in your blood. Technology will move in and speak through you, like it or not. Best not to ignore.

- Tim Etchells, Certain Fragments: Contemporary Performance and Forced Entertainment

Introduction

My aim is to propose broad outlines for a philosophy of the web, after which I will provide a description of the Academia Electronica, a type of online university, as an illustration of how the philosophical ideas outlined may be applied on a practical level. In particular, I will describe the Academia Electronica in the context of an ontological postulation with respect to electronic reality regarded as a sphere of being. What underlies my choice of subject matter is philosophical reflection on human engagement with the web, the type of activity engaged in, and the time spent on the web. The main idea is that the creation of one's own personal space on the web and the intensity of communication mean that these phenomena cannot be considered unreal and therefore cannot be described as, for example, artificial.

I decided on this dual approach for the article since I recognize that theoretical analysis is not necessarily adequate or convincing if it fails to entail real consequences. A philosophy of the web requires statements concerning genuine human activity in the electronic reality as well as ontological propositions on this sphere of being, unless someone who spends hours each day working at a computer insists that they are engaged in something artificial or unreal, or an imitation of reality.

A story

Late one night, deeply immersed in the electronic world of Second Life, I made my way to the coast to spend a few moments on the beach before leaving the online world. On the interface I switched the time to sunset and sat back in a deckchair. After a while, a woman (from Holland, as I recall) came up to me and after a short, customary greeting told me that she had just become homeless. At first I was puzzled as to how someone sitting at a computer could be homeless; however, it turned out that the home in question was not a physical one but one she had built with her Second Life husband and had been living in for the previous nine months. Quite apart from her relationship in Second Life, where she spent time every day and had a child (a bot), she was married in the physical world. On the day I met her, her Second Life relationship had come to an end and she had, in that sense, become homeless.

A philosophy of the web

This story goes some way to explaining my understanding of the philosophical issues relating to the ontology of electronic being and the human person. In general terms, this subject matter arises out of the fact that humans are increasingly active on the web, both quantitatively and qualitatively; their attention is drawn to it and they find ever more content within it, frequently at the expense of certain forms of being in the physical world. This is not to say that I regard online phenomena merely as modes of communication utilitarian in character, but rather as having the nature of real human activity with an ontological and anthropological dimension. Since I regard online events as being just as important, authentic, and real as those in the physical world, I use concepts of both electronic and physical reality. I attach particular importance to worlds created by means of interactive 3D graphics; thus, what I have in mind when I refer to "the electronic world" is an electronic reality in which people gather for no other reason than to participate

and where one's motives for spending time are existential. I emphasize the significance of electronic worlds because they have the power to assimilate various kinds of human activity, at which point they become of interest to the philosopher.

By "world," I mean just that: a place with earth and sky, rivers and trees, deserts and meadows, with a sun that makes regular trips across the horizon, a moon that crests in its passing, and most of all the natural elements that quietly comprise a place: gravity and wind, and an ocean that responds to both. All of this, depicted on the computer monitor before you. There are people there, too.¹

I propose a philosophy of the web as a branch of philosophy combining all its various strands. Furthermore, I acknowledge that analysis of online phenomena is fundamental to understanding humankind and the world in the present day, and that there is indeed an onus on philosophy to explain these phenomena at a more fundamental level than would be the case for other fields of learning. This involves directing philosophical analysis to electronic reality and the technology with which it is so thoroughly imbued, which means understanding philosophy as the science of technological imponderables. I would argue that the analysis and constant re-evaluation of these phenomena is incumbent on the humanities in their relationship with humanity, which, finding itself in an ever more intimate coexistence with technology, does not necessarily perceive the profound changes taking place, seeing their invasiveness and paradigmaticality as utility. We work, spend time, and have emotional experiences in both realities, and the activity and meaning which we bring into effect and to which we are subject are equally real to us in either: people and things are capable of authentic and real existence in both spheres.

Technology is taking over many aspects of human life, enveloping us in a constantly expanding, complementary sphere, both in the electronic reality of the web and in the physical world in the form of smart appliances. It is, I believe, illusory to regard computers merely as tools, and even erroneous since the computer (the interface) is actually the gateway to another world:

Thus, image becomes image-interface. In this role it functions as a portal into another world, like an icon in the Middle Ages or a mirror in modern literature and cinema. Rather than staying on its surface, we expect to go "into" the image.²

The computer may be seen more abstractly as an evolving device, constantly enhancing its possibilities. From this perspective, a personal computer becomes not just a concrete object but the manifestation of a technology at a particular stage of its development. This involves understanding technology as developing at an incomparably faster pace than other fields, giving rise to futurological extrapolations that further development of technology will bring in its wake manifest consequences for humanity.³ Statements such as: In the future, processors and computers will be faster, should be regarded as reasonable extrapolations and not casual opinions of no scientific consequence. In evolutionary history, technological development goes on unabated, and with each technological advance, humanity is systematically alienated from the natural world, which itself is being transformed into an artifact by the power of technology

The fundamental philosophical questions to be resolved are: What constitutes reality in the contemporary world? How should philosophy relate to various kinds of reality: physical, electronic, immaterial, or a hybrid form of being? What is the value of gaining access to the web through various devices, subsequently spending hours on end online, and benefiting from continuity of communication? Which ontological categories should be assigned to immaterial, electronic forms of being that have their origins in the physical world, and how should their value be assessed?

Let us leave behind the bimodal reality as described in two different ontologies. I do not intend to discuss issues of augmentalism and immersionism, although I have reservations about augmentalism precisely because it has its roots in two different ontologies. Immersionism, on the other hand, assumes the transfer of intentionality from the physical to the electronic world while partially inhibiting certain types of activity, for example, sensory, in the latter. I am not sure how to understand the concept of extending the boundaries of the physical world when it might rather be a case of adding the ontologically different electronic space to the physical world. Buechner's remarks concerning the alterity between physical and electronic being in the context of augmentalism are intuitive:

The claim of this paper is that one kind of augmented reality is philosophically incoherent. That is, there are a priori reasons to believe that it cannot happen. It is not that the concept makes sense, but is either physically or technologically unachievable. Rather, the very concept is incoherent. It is metaphysically impossible. [...] My claim is not about limitations of the physical world, but rather about the concept of reality augmentation and the metaphysical limitations imposed by a philosophical theory of fictional entities.⁴

Intuitive propositions that web-based phenomena may be regarded as a type of reality began to appear in the literature in the 1970s. Although they grasped the sense of reality arising from the development of electronics, they were still deeply rooted in the idea of electronic reality being something artificial and unreal. This approach doubtless arose from a deep-seated and ontologically weak understanding of virtual reality as something unsubstantial and ephemeral rather than as a distinct and ontologically convincing form of being, an example of which is someone claiming that he possesses virtual money. This might, for example, mean that the individual in question has been promised money, which, not yet being in their possession, is, in a certain sense, non-existent; or it may refer to money which the individual really possesses in their account but which exists electronically rather than physically. Thus, an ontological distinction can be made between virtual and electronic: virtual money is not real and is not held in an account but which is, for example, expected; money held electronically rather than physically in an account, on the other hand, is real rather than virtual.

Historical, yet significant on account of her position on the ontology of electronic forms of being, are the findings of Sherry Turkle, which stem largely from psychological analysis:

What is real? That question may take many forms. What are we willing to count as real? What do our models allow us to see as real? To what degree are we willing to take simulations for reality? How do we keep a sense that there is a reality distinct from simulation? Would that sense be itself an illusion?⁵

In an ontological sense, the emergence of virtual reality can be traced to Myron Krueger in the early 1970s. However, in common with other contemporary views (*virtual realism*, Michael Heim; *virtual realm*, Margaret Morse; *new nature of reality*, Nicole Stenger; *parallel universe*, Michael Benedikt; *cyber world*, Hans Moravec; *work space*, Steve Pruitt; *computer culture*, Dave Healy; *virtual community*, Howard Rheingold), he failed to grasp the full ontological meaning which would have enabled him to understand electronic reality as a sphere of being. Moreover, Krueger also made use of another idea, *artificial reality*, which actually militated against ontological analysis since it introduced the notion of artificiality. Nevertheless, in my estimation Myron Krueger came closer to seeing virtuality as reality in the ontological sense than any other theoreticians I am familiar with who also entertained intuitions in this area. What he lacked, in my opinion, was philosophical analysis, which would have placed his intuitions on electronic reality on the level of philosophical categories.⁶

Once we accept the realness of electronic reality, apart from fundamental ontological issues, there are also anthropological ramifications. A person can simply become addicted to communicating or being in electronic reality. Rejecting this situation may give rise to technological exclusion. Giving up using a cell phone or emails can lead to an existential bubble in which one is soon faced with limitations such as the inability to communicate with others: "The concern has been that if we are spending more time in virtual rather than in face-to-face communication, our weak ties may grow but strong ties shrink."⁷

The expanding sphere of electronic being makes various kinds of online experience possible. I regard such experiences as the natural development of events in the life of the modern individual: by this I mean a philosophical interpretation connected with, for example, self-creation; in other words, the emergence of an online identity or the existence of knowledge as transcendent in the shared electronic sphere of being.⁸

When an individual enters the online world, particularly a graphic 3D environment, one discovers a space for selfcreation and can begin to effect changes which also extend to one's physical existence. And here lies the essential point: an individual can exist in electronic reality in new and diverse ways. This is the difference between instant messaging and the electronic world. Depending on technological possibilities, an individual can introduce various content online, the most important element of which is one's emotions. There are also axiological implications: values, which may be present in any form of human reality, have the same meaning as when originally encountered in the physical world. Thus, in electronic reality an individual can find a world of feelings and spiritual values, such as truth and falsehood, which are not established by a particular kind of reality but by an individual's activity within it. The value system that an individual encounters in electronic reality can also suggest choices to which they will be subject. Two questions arise from this. The first relates to the fact that an individual can see on the screen what they are saying or how they appear in the form and behavior of their avatar; this may lead them to modify their actions and learn from the experience since it is crucial for them to exist in electronic reality. In order to maintain positive activity within a nonlinear structure of contacts, such behavior is necessary to eliminate negative values. This is quite distinctive since technology creates situations that cannot exist in the physical world, which is mainly due to nonlinearity and the ease with which emotions can be expressed online. The second question has to do with situations where an individual easily becomes emotional, which may or may not give them a sense of the significance of the value experienced and of responsibility for their behavior. This is a rather common experience in electronic reality when an individual is faced with choices straddling the physical and electronic worlds. If an existential balance between the two worlds is not maintained, someone who has important issues in the physical world can easily be faced with similar issues in the electronic world and will have to make choices between the two.

I argue that *it is in being virtual that we are human*. Virtual worlds reconfigure selfhood and sociality, but this is only possible because they rework the virtuality that characterizes human being in the actual world.⁹

This involves both the psychic and the corporeal:

A virtual being has mystery—that of the coevolution of man and machine, that of the redefinition of the body, of the organic, and of evolution. A virtual being is a perception that is alive.¹⁰

An important factor is self-expression, which in the 3D world begins with the physical appearance of the avatar. The individual goes about the electronic world in a form they have created themselves and with a name they have given themselves, capable of making friends or falling in love. Being in the electronic world becomes very pleasurable when, as a matter of course, one can access a space where all the problems of the physical world have been removed. Continual participation in an environment like Second Life can turn into an authentic existence.

The moment we accept the electronic environment as a sphere of being and an alternative reality to the physical world, the events and experiences of the physical world can take on a credible and valuable form in electronic reality. Things really happen, but just differently from in the physical world because they are governed by a different ontology. Unless the electronic sphere is recognized as a type of human reality in its own right, each activity in the electronic reality will to some extent be seen as separated from the physical world but complementary to it; it will never attain its fullness but remain a hybrid whose essence is to be found in the physical world. The fundamental point here is one's philosophical attitude to the world. Without, at this stage, going into the possibility of affirming the existence of any particular reality, the individual lives with some sort of conviction about the existence of the physical world and has no need to cogitate on the matter: that is for philosophers. A similar conviction is also in evidence when I affirm the existence of electronic reality. It is something I accept and seek to substantiate as a developing sphere of being, doing so from the perspective of a philosopher living in the contemporary world.

For the past three decades, I have been fascinated with the construction of identity and how it affects culture: the symbiotic relationship between the real and the virtual, and how identity reacts and shifts when processed through manipulated time.¹¹

One day I realized that what I was doing in electronic reality amounted to genuine engagement. This intuition led to the setting up of online university courses in the form of Academia Electronica in Second Life.¹²

The idea of academism

In this section of the article I would like to illustrate the practical dimension of a philosophy of the web. To this end, I will describe the Academia Electronica, a non-institutional university in Second Life in which I have run official, academic lectures for five years. Apart from lecture courses, individual lectures are also given by invited guests as well as undergraduate and postgraduate students. Most of the lectures are archived in the form of audio recordings on the academy's website. The Academia Electronica embodies the idea of academism in that it extends and diversifies the content of academic life possible in e-learning.

The academy is mainly concerned with examining the multifarious issues that arise when the electronic environment is regarded as a sphere of human reality. It describes electronic reality from the perspectives of philosophy, cultural studies, sociology, psychology, and other disciplines. While the academy provides a platform for discussing philosophy, it itself is a subject of philosophical enquiry and a laboratory of the humanities. It asks whether electronic being can really exist and an online identity really be created, and whether values can exist in a nonlinear system of human communication.

I chose Second Life firstly because I realized that it is the best form of electronic reality: an electronic world in which various aspects of academic life can be present; and secondly because I am convinced that technological development will affect the quality and length of online participation, especially in electronic worlds, leading to ever more widespread avatarization. Avatarization indicates a state of affairs that enables individuals, in the form of their avatar, to engage in unrestricted activity in electronic reality (including professionally), to maintain other contacts, and to possess goods. I also realized that Second Life is the best method of academic contact since it not only enables communication with students but, by its very nature, allows the expression and exchange of views. For example, part of my contact with Masters and PhD students is through Second Life. This sometimes takes place in the evening, often around a campfire. I believe such conversations can be more effective than institutional meetings in a physical university where the environment itself (being in the professor's study and being faced with the barrier of the professor's desk) determines the nature of contact, potentially inhibiting the student from engaging in philosophically inspired free expression of their views through being too conscious of the institutional surroundings in which they find themselves.¹³ I have also noticed that chat room messages inspired during a lecture can contain insights that may form the basis for the development of the student's own future theories. Since these insights arise while the lecture is in progress, they may, at the request of students, result in the lecture continuing on a different track or turning into a seminar. What is remarkable is the development of a rapport between the members of the group arising out of the instant messaging taking place concurrently with the lecture by students who are visible to each other in the form of their avatars; this would be impossible in the physical world since it would disrupt the lecture.

A university in the electronic world should be a place where academic life can take its course. Therefore, it is essential to develop land with buildings and other elements conducive to an academic atmosphere in Second Life. At various times art galleries have been set up, which I also make use of during physical lectures, going into the Academia and observing the exhibits with students (at present there is a gallery of twentieth-century art and another of photographs). There are also concert halls with performances of streamed and live music. This is made possible by advances in 3-D technology; what matters here is not communication or visual images but engagement in the electronic space.¹⁴

The electronic university changes the teacher-student relationship, starting with students creating avatars for themselves and adopting online names, which they use whenever they make contact. When students engage in academic activity, they are entitled to manage the buildings and grounds, but in so doing they assume responsibility for academic property. It is also important that when they visit Second Life, they are, to a certain extent, representing the Academia in particular and the academic world in general, which places certain obligations and responsibilities upon them.

The question of trust and responsibility is fundamental as it is concerned with the existence on the web of a university, a different kind of place and one that is respectful of the academic world. It is important for the university to observe the principle of openness (open lectures, events fostering an academic community, continuous access, and the opportunity for creativity), while at the same time maintaining its status. If it intends to exist as a university in the electronic world, where individuals create their own, often private worlds, realize their dreams, and occasionally experience that life to the fullest, then every effort must be made to create an appropriate space for them. It is important that the university be accepted in the electronic world, while at the same time becoming a point of reference and center for different kinds of activity brought to the electronic world by others. There is clearly a place for a university in the electronic world as there is for any kind of activity. When a university is transposed to the electronic world, certain features are bound to be different when compared with academia in the physical world. These changes result from the different ontological reality prevailing in the electronic world. For example, appearing in the form of an avatar affects interaction between individuals, while university buildings and lecture theaters need not resemble their physical counterparts at all, bringing an air of innovation to the conduct of lectures. This entirely new quality, based on electronic reality, arises instantaneously and in a manner requiring a particular response.

Since 2007, almost 200 students have officially completed courses and several dozen lectures have been given by invited academics. In addition, numerous artistic and popular educational events have taken place. I believe that these kinds of academic activities point towards the university of the future, which will be first and foremost a place rather than a mosaic of lectures.

In June 2012, two historic events in Polish e-learning took place at the Academia Electronica. June 6 saw the first public defense of a doctoral dissertation, titled *Computer Games in the Perspective of the Anthropology of Everyday Life*) by Radosław Bomba (RL)/Radel Bailey (SL), doctoral advisor Andrzej Radomski (RL)/An Redinamus (SL), Maria Curie-Skłodowska University, Lublin. On June 22, the first defense of a masters dissertation, titled *The Existence of Responsibility on the Web*, was made by Aleksandra Budzisz (RL)/Skrzydlatamara (SL), masters advisor Sidey Myoo, Jagiellonian University, Krakow. Both events were recorded and are available on the Academia website.

The Academia Electronica owes its existence to the engagement of those with no professional connection with the university but who give of their technical expertise to maintain its proper functioning, including the website.

Every Monday since 2007 (except during the summer vacation), I enter the electronic world for a few hours, halting my activities in the physical world. Activity in the electronic world can be directed toward any reality or person one wishes. These worlds are mutually exclusive with regard to their ontologies and how time is spent in them: the individual is of paramount importance; the worlds are secondary.

Notes

- 1. Au, Making of Second Life, vi.
- 2. Manovich, Language of the New Media, 290.
- 3. Kyrre and Olsen, *Becoming through Technology*, 40–61; Hörl, "Luhmann," 94–121.
- 4. Buechner, *Fictional Entities*.
- 5. Turkle, *Life on the Screen*, 73.
- 6. Krueger, Artificial Reality II.
- 7. Baron, Always On, 222.
- Fleischmann and Strauss, "Interactivity as Media Reflection," 76.
- 9. Boellstorff, Coming of Age, 29.

- 10. Dyens, Metal and Flesh, 33.
- 11. Hershman-Leeson, Raw Data Diet, 249.
- 12. Academia Electronica. www.academia-electronica.net
- 13. Borgman, Scholarship in the Digital Age, 4, 65.
- 14. Riha, "Interactive 3-D Documentary," 100–102; Abelson, Leeden, and Lewis, *Blown to Bits*, 80–82.

Bibliography

Abelson, Hal, Ken Leeden, and Harry Lewis. *Blown to Bits. Your Life, Liberty, and Happiness After the Digital Explosion*, Addison-Wesley, Boston 2008.

Au, Wagner James. *The Making of Second Life: Notes from the New World*. HarperCollins e-books, 2008.

Baron, Naomi. *Always On: Language in an Online and Mobile World*. Oxford: Oxford University Press, 2008.

Boellstorff, Tom. *Coming of Age in Second Life: An Anthropologist Explores the Virtually Human*. Princeton, NJ: Princeton University Press, 2008.

Borgman, Christine. Scholarship in the Digital Age: Information, Infrastructure, and the Internet. Cambridge, MA: The MIT Press, 2007.

Buechner, Jeff. *Fictional Entities and Augmented Reality: A Metaphysical Impossibility Result*. In *Journal of Evolution and Technology* 22, no. 1 (2011), http://jetpress.org/v22/buechner.htm.

Dyens, Ollivier. *Metal and Flesh: The Evolution of Man: Technology Takes Over*. Cambridge, MA: The MIT Press, 2001.

Fleischmann, Monika, and Wolfgang Strauss. "Interactivity as Media Reflection between Art and Science." In *The Art and Science of Interface and Interaction Design, Vol. 1*, edited by Christa Sommerer, Jain Lakhmi, and Laurent Mignionneau. Berlin: Springer-Verlag, 2008.

Hershman-Leeson, Lynn. "The Raw Data Diet, All-Consuming Bodies, and the Shape of Things to Come." In *Database Aesthetics, Art in the Age of Information Overflow*, edited by V. Vesna. Electronic Mediations, Vol. 20. University of Minnesota Press, 2007.

Hörl, Erich. "Luhmann, the Non-trivial Machine and the Neocybernetic Regime of Truth." In *Theory Culture & Society* 29, no. 3 (May 2012).

Krueger, Myron. Artificial Reality II. Addison-Wesley Publishing Company Inc., 1991.

Kyrre, Jan, and Berg Olsen. "Becoming through Technology." In *New Waves in Philosophy of Technology*, edited by Jan Kyrre, Berg Olsen, Evan Selinger, and Søren Riis. New York: Palgrave Macmillan, 2009.

Manovich, Lev. *The Language of the New Media*. Cambridge, MA: The MIT Press, 2001.

Riha, Daniel. "Biography as an Interactive 3-D Documentary." In *Digital Memories Exploring Critical Issues*, edited by Daniel Riha and Anna Maj. Oxford: Inter-Disciplinary Press, 2009.

Turkle, Sherry. *Life on the Screen: Identity in the Age of the Internet*. New York: Simon & Schuster, 1997.

Paths to Defeasibility: Reply to Schauer on Hart

Ronald Loui

University of Illinois–Springfield

Frederick Schauer's attention has recently been drawn to defeasibility in a paper with a provocative title: "Is Defeasibility an Essential Property of Law?"¹ The crisis of confidence for Schauer appears to take hold about the time he reviews Nicola Lacey's biography of H. L. A. Hart.² Schauer actually finds room for defeasibility in a legal system, along the lines of judicial nullification of rule-derived legal guidance. He permits an ethical override of the logic and language of law, as a strongly desirable power granted the wise jurist in a system that is truly justice-seeking.

The most significant push for defeasibility has been felt in the community that has attempted to model legal reasoning with computer programs. The AI (artificial intelligence) and Law community, an international group of interdisciplinarians, visited the concept of defeasibility two decades ago. In fact, defeasibility has become so entrenched in AI and Law that the development of defeasible reasoning has advanced formally and mathematically within this milieux. Henry Prakken, for example, a lecturer in the Intelligent Systems Group of the computer science department at Utrecht University, and professor of law and IT at the Law Faculty of the University of Groningen, wrote his 1993 thesis at Free University Amsterdam, titled Logical Tools for Modelling Legal Argument. In 2002, he would be invited to write the review article "Logics for Defeasible Argumentation" with Gerard Vreeswijk for the Handbook of Philosophical Logic. Defeasible logic has also benefitted from the theses at Maastricht's law school by a mathematician, Bart Verheij, Dialectical Argumentation with Argumentation Schemes: An Approach to Legal Logic, and a computer scientist, Arno Lodder, DiaLaw: On Legal Justification and Dialogical Models of Argumentation. Verheij's advisor, Jaap Hage, a legal philosopher, added Reasoning with Rules: An Essay on Legal Reasoning and Its Underlying Logic. Those are just some of the Dutch researchers. Prominent proponents of defeasibility can be found in the AI and Law community from Italy, Argentina, Australia, the United Kingdom, Germany, France, Canada, Thailand, China, Japan, and the United States.

Apparently the desire to explain legal reasoning in enough detail that a computer system could be designed around the explanation has led many researchers to "dialogical defeasible argumentation," regardless of prior logical or legal tradition.

Yet, Schauer has apparently lost the will to defend the very defeasibility he found so interesting in his 1993 *Playing By the Rules: A Philosophical Examination of Rule-Based Decision-Making in Law and in Life*. Like H. L. A. Hart himself, who introduced defeasibility to the Western philosophical vernacular, then nearly disavowed defeasibility in the introduction to his collected works, there has been a noticeable retreat.³

Those of us tasked with designing actual systems of symbol manipulation that perform quasi-legal reasoning remain steadfast in our appraisal of defeasibility as a useful design paradigm. The purpose of this short note is to briefly review the main places in the analysis of legal reasoning where defeasibility finds its use.

Before I enumerate, it is worth remembering some history.

Defeasibility entered artificial intelligence and computer modeling in the storm that was "non-monotonic logic," an idea that occupied a Rockefeller-sized fraction of the AI field's intellectual investment at its peak. Rationalization of this situation came slowly, as epistemologically oriented philosophers such as John Pollock and Henry Kyburg began to weigh in. The philosophical tradition remains a moderating partner, while non-monotonic logicians, especially adherents to "default logic," continue with their creative flows. Pollock was influenced by Roderick Chisholm through John Ladd, but he always claimed he was trying to interpret Wittgenstein directly (although Waismann might be an equally good locus focus for Pollock's pre-formal work). Wittgenstein also inspired Jon Doyle, author of AI's truth-maintenance system, one of the major breaks from the attempt to do non-monotonic reasoning as a kind of modal belief logic.

In an era of renewed US interest in Constitution and secession, it is worth remembering that "indefeasible" was a popular high note of the classically trained rhetorician, especially when drawing a line in the sand: in the *1776 Virginia Declaration of Rights*, "community hath an indubitable, inalienable, and indefeasible right to reform, alter or abolish government . . ." (attributed to James Madison); and John Adams: "The people