The rubric autoimmunity currently encompasses sixty to seventy diverse illnesses which affect many of the tissues of the human body. Western medical practice asserts that the crisis known as autoimmune disease arises when a biological organism compromises its own integrity by misrecognising parts of itself as other than itself and then seeks to eliminate these unrecognised and hence antagonistic aspects of itself. That is, autoimmune illnesses seem to manifest the contradictory and sometimes deadly proposition that the "identity": body/self both is and is not "itself". Based on the assumption that under normal circumstances "the self" ought to coincide naturally with "the body"—or at the very least the self ought to inhabit the living location of the body more or less unproblematically—this scientific paradigm depicts autoimmune illness as a vital paradox. Yet for those of us who have lived through the experience of an autoimmune crisis, the living paradox that we embody may also lead us to question the basis upon which these medical assumptions rest. This essay raises some of these questions.

Probably more than many of you, I grew up in thrall to a metaphor—not that I knew this at the time. During the summer after eighth grade I began to experience uncontrollable diarrhoea and wasting. Within the course of a few months, I went from being a husky, energetic, pubescent boy to a withered, incontinent, critically ill teen. Rather than starting high school with the rest of my cohort, I spent the fall adjusting to a different kind of institution: the hospital. After what felt like an eternity of probing, prodding, palpating, and x raying, it was determined that I was suffering from an acute inflammatory bowel syndrome called Crohn's disease. When the doctors who were treating me tried to explain what Crohn's was, I heard the word "autoimmunity" for the first time. Now for a thirteen year old I had a pretty big vocabulary but this was not part of it, so they tried to break the word down for me. First one doctor told me: "Your immune system is attacking the lining of your small intestine. It's as if your body is rejecting part of itself." My face must have shown that I didn't get the concept, so another added: "Well, autoimmunity is like being allergic to yourself". Despite this clarification I was still adrift, so they tossed one more metaphoric life preserver my way. "It's as if you're eating yourself alive," they said. With this bloody analogy they finally hauled me up onto the dry terrain of knowledge and I lived on that cannibal island for almost twenty years. No doubt, the doctors who gave me these memorable images offered them as gifts of understanding. They really did want to help. It is just that their metaphors were not particularly safe for a thirteen year old's imagination. Or anyone's imagination as far as I am concerned.

Part of the difficulty that my physicians encountered in explaining the maelstrom in my guts stemmed from the fact that, according to the logic of their bioscientific explanations, what was happening to me was (at best) completely paradoxical. Indeed, bio-logically it really should not have been happening at all, except that it was, and there's the rub. My autoimmune disease provoked a category crisis—or perhaps it was a category crisis. Somehow my body had gotten its "self" mixed up and in so doing had violated the categorical imperative not only of immunology but of most Western epistemology: self is self and not-self is not-self and ne'er the twain shall meet. For, according to the then prevailing account of the immune system (an account which continues to hold sway over all but a few renegade immunologists even today) "the immune system" specifically names the organismic capacity to distinguish between "self" and "non-self". Many practising immunologists even go so far as to characterise their discipline as the "science of self/non-self discrimination", affirming the decisive formulation introduced in the mid-twentieth century by the Colossus of modern immunology, Sir Macfarlane Burnet. Burnet canonised self/non-self (SNS) discrimination in his 1969 book Self and Not-Self: Cellular Immunology Book One, where he define it as an axiom of his clonal selection theory: "The need and the capacity to distinguish between what is acceptable as self and what must be rejected as alien is the evolutionary basis of immunology".

Certainly, this dichotomising premise seems to work quite well for infectious diseases, where "alien" pathogens, whether bacteria, virus, or parasite, can easily be figured as "invaders" against whose incursions the "defence forces" of the immune system wage their valiant wars. This was after all how biological immunity was initially imagined by its first theorist, Elie Metchinkoff, who defined it as the organism's "natural capacity" for "host defense."

As we have come to learn since then, however, the immune system does not simply defend the self against the other. Sometimes it also
“defends” against “the self” itself—although in these circumstances defence is often reimagined as suicidal attack. This “dysteleologic” possibility first occurred to immunity’s second theorist, Paul Ehrlich (with whom Metchnikoff shared the Nobel prize in 1908) when he described the inhibitory effect that he named “horror autotoxicus”.

According to Ehrlich’s formulation, the organismic “contrivances,” which enjoin the organism’s cells and molecules from “acting against the organism’s own elements,” “naturally” determine “the individual” as a non-contradictory or self identical formation. Yet, viewed the other way around, the “horror” of autotoxicity also reveals the existence of a fearful gap between the multiple cellular constituencies that comprise the organism and “the individual” as such. Hence, the “auto” of autotoxicus, which later becomes the “auto” of autoimmunity, reflexively obscures an important conceptual collapse: it identifies a confluence of diverse biological elements, here defined as the organism’s “own,” with and as “the individual” who is implicitly specified as their “owner”.

Underlying this formulation, the autonomy of the individual as the self possessor of its “own” cellular property grounds both the theory and the politics of immune function as it has emerged over the last century or so. Not all that surprising a move perhaps for a theory that silently transformed a two thousand year old juridical metaphor into an essential biological function. It is, however, a significant one nevertheless, since it enunciates a foundational assumption of Western political rationality—that is, to be a person means to have a body—in and as “human nature”. Part of biological immunity’s success, both as a medical concept and a cultural explanation, derives then from its function as a “hybrid” (in the sense Bruno Latour gives to the term) that naturalises the social relations of property ownership as a physiological imperative. Conversely, autoimmunity becomes anathema not just because it wreaks havoc in human bodies but also because it confounds the political ontology that underlies our entire way of life. Perhaps that is also why “autoimmunity” continues to provoke if not horror at least misunderstanding, despite all efforts to the contrary.

**A VITAL PARADOX**

For the last thirty two years I have lived with a chronic and periodically life threatening autoimmune illness. In these pages I want to use this experience to tease out some insights about the world in which I have lived with my disease. Or, maybe I should say, about the world in which my disease lives. Over the years since I was first diagnosed as “having” Crohn’s disease, I have come to believe that many illnesses, especially chronic and life threatening illnesses, emerge from the living contexts that we familiarly call our “selves”. This is particularly true of autoimmune illnesses since the rubric specifically designates conditions that, according to the prevailing scientific accounts, are entirely self induced. In medical terms, autoimmune illnesses occur when (1) parts of the self—that is, particular tissues or cells of the body, appear to other parts of the self—that is, the biochemical components of the immune system, as other than “self” and (2) the “non-self” within the self provokes acts of self destruction, or as one recent revisionist medical text circumspectly puts it “autoaggressive immune behaviors”.

Based on the assumption that under normal circumstances “the self” ought to coincide *naturally* with “the body”—or that at the very least the self ought to inhabit the living location of the body more or less unproblematically—this scientific paradigm depicts autoimmune illness as a living contradiction. Western medical practice asserts that the crisis known as autoimmune disease arises when a biological organism compromises its own integrity by misrecognising parts of itself as other than itself and then seeks to eliminate these unrecognised and hence *antagonistic* aspects of itself. That is, autoimmune illnesses seem to manifest the paradoxical and sometimes dually propositional that the body/self both is and is not itself.

Admittedly this very abstract description presents only the most superficial version of the complex cellular, molecular, and energetic processes that animate the living physiology of autoimmune disease. Hence it necessarily efficaces the myriad transformations that occur within the tissues and the cells of any body experiencing an autoimmune disorder—transformations that are the proper subjects of the biomedical writings about autoimmunity which I consider in the next section. Yet my absurdly abstract account does have one entirely non-scientific virtue: it suggests that the scientific conceptualisation of autoimmune disorders depends on certain fundamental philosophical assumptions about what we imagine our embodied “selves” to be. Since the nominal subject of autoimmune research is not any actual person living with an autoimmune condition but rather the “condition” as it unfolds within numbers of people, these assumptions about “selfhood” generally appear unproblematic in the scientific accounts that they organise. If individual differences or alternative concepts of self emerge in the course of an autoimmune illness, they are rendered invisible or unimportant in the scientific literature. Obviously such scientific generalisations do make logical sense as taxonomies of disease. Indeed, such logical analysis constitutes the genius of Western medicine—a genius without which I for one would not be alive. Nevertheless, for those of us who have lived through the experience of an autoimmune crisis and are also afflicted with a philosophical bent, the living paradox that we embody through the course of our illnesses may also lead us to question the basis upon which these medical assumptions rest.

If bioscience tells us we are in fact destroying ourselves on a cellular or molecular level, then we might find some use in imagining that, rather than simply negating the somatic ground of our existence, “autoaggressive immune behaviors” could lead us to ask new questions about what our “self” is anyway. If—for example, autoimmune disorders represent the body’s violent misrecognition of parts of itself as non-self, how stable can the received notions of “self” be? Can the painful physical differences that emerge from autoimmune disease modify the common equation of body with self? In other words, does autoimmune illness complicate the popular and political understanding that we each “have” a singular and unified body? More importantly do it challenge the notion that this “body” circumscribes who and what we are? In short, what kind of self are we when we live the bodily difference known as autoimmune disease? And what kinds of selves might we learn to become?

Underlying my desire to write this paper is the sense that a vital paradox vibrates within the concept of autoimmunity which can lead us to reflect upon our selves—both “diseased” and not—in new, more creative ways. We might—for example, consider the possibility that rather than simply manifesting threatening physical or even psychosomatic breakdowns, autoimmune illnesses might provoke productive differences: differences that can lead to
transformations which are at once personal and political, local and global, material and spiritual. Perhaps this is not entirely surprising since empirically speaking all serious illness is change of a critical kind. When we define a life event as an illness we are describing transformations that occur not just in the cellular or molecular processes of our bodies but more importantly in the course of the life in which these physiological changes take on significance. Unfortunately, we are usually very narrow minded in how we make meaning from the kinds of changes that we characterise as illness, so most often these changes appear to us as lacking any intrinsic value. The more significantly these changes affect our lives, the more their somatic antithetical to all that we think of as valuable, especially that context of value we call life.

SO, ‘‘WHAT IS AUTOIMMUNITY’’?

This is the question that I have been churning around my guts for over three decades and the best answers I’ve come up with are: A paradox. A self contradiction. A contradictory self. In point of fact, this is a question to which there is no known answer, as all the medical experts who study this phenomenon will attest. That is: it is a question whose answer both exceeds and confounds the limits of current scientific knowledge. Of course, there have been many partial answers—many limited attempts to describe and analyse the concept of autoimmunity since it was first conjured up about a hundred years ago. None of them, however, can completely make sense of this contradictory phenomenon in a non-contradictory way. Leaving aside the philosophical niceties for a moment, let me try a more concrete approach to the original query. The rubric autoimmune is used to classify sixty to seventy diverse illnesses which affect many of the tissues of the human body. A very partial list of the illnesses currently considered autoimmune conditions includes: insulin dependent diabetes, multiple sclerosis, rheumatoid arthritis, ulcerative colitis, Crohn’s disease, Grave’s disease, Hashimoto’s thyroiditis, systemic lupus erythematosus, ankylosing spondylitis, scleroderma, myasthenia gravis, psoriasis, Addison’s disease, chronic fatigue syndrome, polymyositis, vasculitis, posterior uveitis, chronic inflammatory demyelinating polyneuropathy, glomerulonephritis, chronic active hepatitis, and in some accounts AIDS. The list grows daily. According to one current estimate, about five per cent of the US population (more than two thirds of them women) suffer from autoimmune illnesses, which given current population figures would mean between twelve to fifteen million people in the US alone. Apart from the fact that there is no known cure—or cause—for any of these conditions, so that at best they are treated symptomatically, what links this incredibly diverse range of illnesses is a putative underlying aetiology. In a very rudimentary sense, this aetiology is what autoimmunity “is”.

Obviously, this is a rather general definition of autoimmunity and as such not necessarily very helpful to those who learn that their health is compromised by it. Thus, the following paragraphs from the newsletter of the American Autoimmune Related Diseases Association attempt to characterise this amorphous concept in more popular terms.6 The American Autoimmune Related Diseases Association is an advocacy organisation dedicated to making autoimmunity a more viable rubric both for scientific research and funding. The problem that the organisation seeks to redress is that until recently those illnesses that have been characterised as autoimmune have largely been classified by specific somatic symptoms rather than by generalisable somatic patterning. Thus, illnesses such as lupus, multiple sclerosis, myasthenia gravis, rheumatoid arthritis, juvenile insulin dependent diabetes, scleroderma, and chronic fatigue syndrome, to name just a few, are seldom thought of as related either for treatment or research purposes. The AARDA takes as its mission articulating links within the medical and scientific considerations of these illnesses by foregrounding the concept of autoimmunity as an overarching and/or underlying condition. Clearly, then, this organisation has an investment in its definition of autoimmunity which is why I use it here.

WHAT IS AUTOIMMUNITY?

Autoimmunity is a result of a hypersensitive immune system that causes one’s own immune system to attack the self. Autoimmunity involves a reaction of the individual’s immune system against the organs and tissues of his or her own body. One of the functions of the immune system is to protect the body by responding to invading micro-organisms, such as bacteria and viruses. It does this by producing antibodies or sensitised lymphocytes (a type of white blood cell) that will recognise and destroy the invaders. Autoimmune diseases occur when these reactions unexplainably take place against the body’s own cells and tissue by producing self reactive antibodies.6

This passage provides a description shaped by accepted scientific knowledge, yet directed towards a lay readership that is deeply affected by autoimmunity, but which is not really expected to know quite what it means. As such it illustrates the ways doctors and patients collaborate to produce meaning from the experience of autoimmune illnesses. According to this collaborative account, the first thing we must learn in order to understand autoimmunity is that “the hypersensitive immune system”—whatever that might be—can “attack” the self—whatever that might be. Now in an age when the notion of “beating up on one’s self” has long since passed into our everyday psychology, perhaps it is not exactly news that we are capable of doing real violence to ourselves. Nevertheless, the concretisation of this popular metaphor at the level of cellular physiology might take some getting used to. When my doctors told me, “you’re eating yourself alive,” I had a hard time incorporating this image because until then I had never thought of myself as having the capacity to personally affect my existence on the cellular, molecular, or subatomic levels (though of course this is really where living takes place). While I, a renowned “hypersensitive,” might be adept at beating myself up psychologically, how could my cells and molecules do it for me? In order to comprehend this possibility, it becomes necessary to accept that one’s body, as well as one’s self can be painfully and even fatally contradictory (passing over, for the moment, both the problematic singularity of either term, or the impossibility of distinguishing between the two). In this account, then, autoimmunity is the violence I do to myself by virtue of my excessive somatic sensitivity. In other words, I am so sensitive to my “self” that I do myself harm. Needless to say, it is a rather mind bending proposition.

Recently, a few radical immunological theorists have been trying to address the convolutions that the problem of autoimmunity introduces into the classic SNS host/intruder models of immune function by taking autoimmunity not as a paradoxical exception but as a normal abnormality. By locating autoimmunity (along with the vexing “problems” of transplant rejection and immune “tolerance” of tumour cells) at the centre of her immunological revision—for example, Polly Matzinger suggests that the immune system engages not “self/non-self” distinctions—which have increasingly had to be thought of as contextual in any
case—but rather “danger”. She foregrounds the agency of as yet unknown cofactors which might catalyse T cell activity in the presence of events (rather than entities) that locally endanger or stress tissue. In so doing, Matzinger dispenses with the need to conceive the organism as distinct from not only its environment, but also the many benign and perhaps necessary “others” that coexist with and in, if not “as,”—for example, bacteria that inhabit our guts without whom we are just dead meat.”

This reconception shifts immunological attention away from foundational binaries: self/non-self, host/aggressor, (which as Derrida would remind us, always conceal violent hierarchies anyway) and instead focuses on qualitative assessments of lived relational dynamics. Matzinger thereby reorients the bioscientific interrogation of the organism’s immune “properties” from spatialised boundary definitions to spatiotemporal processes. Thus, she also helps reimagine the organism as a concatenation of biochemical transformations of energy and matter located in the space/time which we call a life, rather than as a permeable frontier that needs to be defended. Or, to put it in explicitly biopolitical terms, Matzinger’s theory suggests that our bodies are not appro-
priable “things” that we “have” and so our “selves” do not reveal an “identity” among the ongoing changes which motivate these physical incarnations. Instead, it gestures towards the possibility that: “Life is a window of vulner-
ability,” as Donna Haraway has so eloquently remarked.10 For the last one hundred years or so, immunology has both explicitly and implicitly affirmed the “naturalness” of the proprietary understanding of selfhood incorporated by liberal political philosophy. In An Essay Concerning Human Understanding John Locke introduced the logical or mathe-
matical operation “identity” to replace “soul” as a secular imperative, and coevolve.13

Our language betrays us here, as Nietzsche first advised us, since the linguistic structure of predication assumes the actions of agents rather than the unfolding of processes.14 Yet the nature of our existence contradicts our very modes of explanation. Or, more precisely, our biological existence is contradictory. Francisco Varela makes this point succinctly when he describes “the intriguing paradoxicality proper to an autonomous identity: the living system must distinguish itself from its environment, while at the same time maintaining its coupling; this linkage cannot be detached since it is against this very environment from which the organism arises, comes forth.”

Autoimmunity seems to literalise the “intriguing paradoxicality proper to an autonomous identity” in ways that make it both visible and palpable. As such it materialises a critical tension that Western political philosophy and Western bioscience both collude to make disappear. Our notions of selfhood and identity assume the singularity of “a body” that we possess as the ground of our being. Yet autoimmune illnesses reveal that this singularity is fairly problematic if not entirely illusory. Indeed, they suggest that our sense of selfness is predicated on the disavowal of our own otherness as well (that is, until this selfness gets somatically construed as otherness and all our disavowings is for naught since self and other are now painfully obviously the same). But what if we were to take autoimmunity as an exemplarily process of articulation through which a living being is paradoxically localised in time and space—as current theories of immune function suggest—rather than simply assuming that autoimmune diseases manifest contradictions that ought not occur? That is, what if we were to recognise that “the problem” which autoimmune reveals is not that “I” can mistake my “self” for an “other,” but rather that my embodied self always already is other? How might we
reimagine our sense of personhood if we consider we are not identical to ourselves on a cellular, molecular, or subatomic basis? What if difference is the embodied substrate of subjectivity rather than sameness or one-ness? Could we redraw our maps of human nature? Could we learn to live other-wise?

Perhaps the untapped potential manifest by autoimmunity’s current irremediability lies in its capacity to provoke such unanswerable questions. In our part of the world we have a prejudice that knowing is better than not knowing and in the case of illness most of us happily share this prejudice. Even in circumstances where the desire for certain knowledge is well founded, however, there is an often unremarked benefit that not knowing can afford: that we might learn something new. My experience of living with Crohn’s disease for over 30 years has led me to consider the possibility that the symptoms of “my disease” may be telling me something very important about the world in which I live—something that I might not otherwise have recognised or appreciated. Indeed, having spent many years considering the diverse and often irreconcilable medical explanations for autoimmunity and reflecting on their various contradictions and conundrums, I feel more and more certain that the challenge which autoimmunity poses may be more one of natural philosophy than bioscience. That is to say, the problem that autoimmunity represents for certain knowledge may indicate that there is a problem with what we take to be most certain about ourselves ontologically, epistemologically, and biochemically.

For the last hundred years, immune discourse has served as one of the most powerful technologies for transforming the ways that humans live in environments replete with manifold microbial “aliens,” some of which are capable of challenging our lives as individuals, as communities, and even as nations (as both the AIDS pandemic and the threats of bioterrorism so painfully remind us). Nevertheless, despite its obvious resourcefulness and efficacy, immune discourse fails to capture the complexity of the self differences, the “alien-ness” that lies within us. In part, this failure derives from the biopolitical logic that made “immunity” the preferred description for how we coexist with the microbes that we both need and fear. Ignoring the long legacy of political and legal assumptions about personhood that the juridical notion of immunity contains, biomedicine unwittingly affirms the singular and self consistent “body” as the philosophical basis of personhood in much the same way that Thomas Hobbes did when he wrote The Leviathan in 1651. In this foundational text of liberal political theory, Hobbes adapted Galileo’s mapping of the physical world in terms of bodies and motion to the political economy of persons. In so doing, Hobbes derived the notion of “self defence” as the first “natural right” by positing the self ownership of “the body” as the legal ground for self relation. Thus, the notion of self defence as a natural phenomenon preceded our understanding of it as a biological phenomenon by at least two hundred years. Yet it is important to stress that Hobbes’s natural understanding is not a biological notion but a physical one. His body is an “object/body”, not a living one—though aliveness is one of the essential properties that it guards as its own. Ironically, then, while seeking to explicate the vexing conditions within which a complex organism maintains its vitality in the face of challenges to its aliveness, the biomedical appropriation of immunity as biological “self defence” also contains the very objectification that Hobbes makes a political condition of personhood.

The paradoxes of autoimmunity alert us to the contradictions that arise when such a political concept of “the body” comes to stand in for the vital complexities incorporated by living organisms. Organisms are not bodies in the Hobbesian sense because they are neither self identical nor self consistent. Rather organisms—human and non-human alike—necessarily engage the field of otherness from which they arise and within which they endure as both their condition of possibility and as their ground of being. This suggests that we might need to revise not only our political assumptions but also our biological axioms in order to encompass the “proper paradoxicality” that Varela reminds us provides the very basis for our existence. By taking autoimmunity not as paradox but as paradigm, we begin to glimpse the bio-politics that infects the bio-logic of immune discourse. Moreover, we begin to perceive the ways that biomedicine and bio-politics inform each other as ways of making sense of human lives. Yet since lives are at stake in these processes of understanding, perhaps now is the time to consider what might be gained by bracketing our investments in the conflicts between self and non-self and learning to live other-wise.

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