

# **Innerarity and Immunology: Difference and Identity in selves, bodies and communities**

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## **ABSTRACT**

*Daniel Innerarity's Ethics of Hospitality highlights a tension in both communities and individuals between embracing difference and protecting identity, while recognizing that difference is constitutive of identity (the fear that dominates contemporary society is above all a fear of difference, of contamination). This dynamical relation between difference and identity can be seen in the workings of the human immune system, as explained by Chilean biologist and philosopher Francisco Varela: the immune system is a process of perpetual construction of bodily identity through self-referential cognition and distinction between self and non-self. This similarity allows for interesting analogies: for example, a society torn apart by xenophobia and chauvinism can be seen as analogous to a body ravaged by an autoimmune disease such as lupus. With the working hypothesis that the similarities respond to what Stafford Beer calls "systemic invariance", this paper explores the similarities between the activity of the immune system and the relation between identity and difference in the work of Innerarity.*

**Keywords:** Inmunology, Varela, Innerarity, ethics of hospitality, identity and difference

## **1. The lifelong foreigner**

In 1946, as a recent immigrant to England, Hungarian-born George Mikes wrote a book entitled *How to be an Alien*, in which he pokes fun at the English and their relationship with foreigners. In the preface to the work, he writes of a terrible revelation:

"I think I am the right person to write about 'how to be an alien'. I *am* an alien. I have been an alien all my life. I first understood that I was an alien when I was twenty-six years old. In my country, Hungary, everybody was an alien so I did not think I was very different or unusual. Then I came to England and learned that I was different. This was an unpleasant surprise.

I learned immediately that I was an alien. People learn all important things in a few seconds. A long time ago I spent a lot of time with a young woman who was very proud of being English. One day, to my great surprise, she asked me to marry her. 'No,' I replied, I cannot marry you. My mother does not want me to marry a foreigner.' She looked surprised and replied, 'Me, a foreigner? What a funny thing to say. I'm English. You are the foreigner! And your mother is a foreigner, too!' I did not agree. 'Am I a foreigner in Budapest, too?' I asked. 'Everywhere,' she said. 'If it's true that you're an alien in England, it's also true in Hungary and North Borneo and Venezuela and everywhere.'

She was right, of course, and I was quite unhappy about it. There is no way out of it. Other people can change. A criminal can perhaps change his ways and become a better person but a foreigner cannot change. A foreigner is always a foreigner (Mikes, 1999, p. 2.)"

The first thing this bit of humour highlights is that foreignness is relational; that is, it does in fact depend on whether one is in Hungary or Venezuela. We also see that the soft chauvinism of the English lady is closely related to a non-relational theory of truth. These ideas point to a reexamination of the notions of identity and difference that is present in the work of both Spanish philosopher Daniel Innerarity and Chilean Biologist Francisco Varela. Both authors see the construction of identity as a process intimately linked to that of difference, and both hold relational accounts of truth.

There is more to be gleaned from Mikes. The English lady's flawed account of foreignness can only be corrected if the lady in question is able to see herself as a potential foreigner (say, in Budapest). In other words, a proper

recognition of foreignness in others requires the recognition of foreignness in oneself. In this way, the humorous notion of a lifelong foreigner gains some philosophical credence. If the irresistible pun can be forgiven, inner rarity is constitutive of identity, as something constructed in a dialogical relationship with others. This account of identity as a process, and as something to be cultivated, contrasts with a widespread conception of identity as something to be defended, kept from contamination. In this paper we shall explore some interesting analogies between how Varela (2000; Maturana & Varela, 1994) views the construction of identity in organisms and the way Innerarity (2001) conceives the workings of identity in selves and communities, through a discussion of immunology and phenomena of social exclusion.

## **2. Two accounts of Identity and Difference**

Looking out of his bedroom window at a winter scene, alone and trying not to remember an amorous disappointment, Paul Simon sings:

I've built walls,  
A fortress deep and mighty,  
That none may penetrate.  
I have no need of friendship; friendship causes pain.  
It's laughter and it's loving I disdain.  
I am a rock (...)  
And a rock feels no pain (Simon, 1965).

In fact, our frailty stems from our need of 1 others, and of an environment. If we did not need to eat, breathe or love, we would not need an immune system. A rock is perfectly safe in its being, but it is an extremely impoverished sort of being. A rock feels neither pain nor wonder. The richness of life correlates to the frailty of life: an animal, exposed to disease, wounds and indigestion, has a richer world than a rock; humans, having left the safe and well defined contours of an ecological niche, are exposed to disappointment, alienation and existential anguish. Many more options are open to the human than the rock; "loss of safety favors flexibility" (Innerarity, 2001, 37)<sup>1</sup>.

Difference is thus a source of both richness and danger. In order to successfully navigate difference, some form of cognition of the environment is needed. The dynamics of identity and difference can therefore be put into three headings: frailty as the consequence of having a relationship with an outside environment, richness as something derived from this relationship, and cognition as a way of navigating said relationship. We shall present the accounts of difference and identity in Innerarity and Varela along these lines, in order to show some interesting analogical relations.

### **2.1 Innerarity's hospitality**

A key insight of Innerarity's *Ethics of Hospitality* is the realization, against modern conceptions of man, that passivity is a constitutive part of existence, that our being in the world "has the structure of reception and encounter" (Innerarity, 2001, 17). As another pop musician would put it, "life is what happens to you while you're busy making other plans" (Lennon, 1980).

Human finitude is not a sufficient explanation of our passivity. A rock is quite finite and yet completely protected from the outside. This is because, unlike humans, a rock has no need of friendship, love or political action; what Innerarity calls "relational goods" (2001, 54). Humans find happiness in activities (in helping one's community overcome problems, in the work that being a couple entails) and "activity places the agent out in the world, making her vulnerable to misfortune" (Innerarity, 2001, 128). *Frailty stems from a constitutive need of the outside environment*.

This means that the outside environment is not primarily a source of danger but a source of richness. Hospitality is receptivity to the richness that comes from without; "the strange is a reservoir for enriching and correcting the limitation of one's own positions" (Innerarity, 2001, 212).

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<sup>1</sup> All quotations from Innerarity (2001; 2010) and Varela (2000) are translated from Spanish to English by the authors of this paper.

This view towards difference is opposed to postmodern views that preach tolerance and respect between cultures on the basis of their mutual incommensurability. If all cultures are to be treated as an isolated unit, no culture can enrich another. This incommensurability is, empirically, bullshit. Whatever unfathomable and mysterious worldview is held by South African musicians, Paul Simon was able to understand and incorporate their ideas in the wonderful album *Graceland*. Not only were The Beatles able to enrich their music with that of India, the Bollywood film industry is a marvelous Indian appropriation of western culture. According to Innerarity, “[t]he benefits of multiculturalism are relative to the plurality of adscriptions and identities that are put in play in a complex society. These benefits would crumble if multiculturalism were understood as a museum of irreducible differences” (2001, 216).

Liberality, as a virtue, is the “productive accommodation of diversity” (Innerarity, 2001, 240). This implies a humble view of oneself and one’s own culture(s); it implies recognizing that others may know what I ignore. This is especially hard for western culture, because of certain spectacular successes. Anthropologist Wade Davis (2009) often repeats in his conferences that non-western cultures are not failed attempts at being a westerner, but rather different answers to the question “what does it mean to be human, and to be alive?”: the particular focus and skills of western culture led it to put a man on the moon; Tibetan culture, on the other hand, focused on spiritual enlightenment, achieving comparable, if less visible, results. Westerners, particularly with regards to the current environmental crisis, have much to learn from non-western cultures (Bula, 2010; Davis, 2009). *The outside environment is a source of richness because it can provide us with variety that we lack, if we are receptive to it.*

Receptivity to the outside relates to cognition. We can only learn from things outside ourselves if we are open to learning, to finding the unexpected and being shaken by it. The ability to change course when events demand it, to change ideas when they have proven inadequate, to allow events to change one’s own goals and values is the basic virtue of openness to experience without which life would be but a dumb affirmation of sameness; “[a] life closed to the irruption of the unforeseen— to the visit of hosts that break our coherence— would be an autistic tautology” (Innerarity, 2001, 84). *Cognition is the ability to transform in accordance to changes in the outside environment.*

Innerarity contrasts human openness to unforeseen experiences to an animal’s comfortable fit within an ecological niche: “The limits that constitute our situation in the world are contingent, fragile and questionable. If they were rigid, anything outside our horizon of experience would not be anything at all for us. Man would be an animal fixed in a limited life space (...)” (Innerarity, 2001, 214). Humans, unlike animals, can loose their faith, or be born again, or come to or cease to believe in love, or to shift from Ptolemaic to Copernican astronomy, or learn to love a kind of music they had not understood before. In brief, humans are capable of epistemological crises.

Humans, undoubtedly, have a unique sort of openness to difference that is not shared by other organisms. Nevertheless, as we shall see, organic life understood as an autopoietic network, has the same sort of relations to the outside environment that we have seen in selves and communities.

## 2.2 Life as autopoiesis

What is life? Maturana & Varela (1994) reject criteria such as reproduction or the presence of a genetic code in favor of a structural, systemic criterion: a living things is a self-organizing system that has itself as its output, as a separate entity from its environment.

That self-replication is the essence of life suggests that it is geared towards tautology rather than openness. However, the autopoietic process requires a constant exchange with an environment:

“A living organism is characterized by continual flow and change in its metabolism, involving thousands of chemical reactions. Chemical and thermal equilibrium exists when all these processes come to a halt. In other words, an organism in equilibrium is a dead organism. Living organisms continually maintain themselves in a state far from equilibrium, which is the state of life (Capra, 1996, 175-176).”

This stable state far from equilibrium can only be kept up if a system is continually fed by energy and matter from its environment. The laws of physics dictate that all systems tend towards an equilibrium in which no matter or

energy is exchanged. Life is in local and temporal disobedience to the laws of thermodynamics. Such disobedience is fragile and dependent on exchanges of matter and energy with the outside. *Frailty stems from a constitutive need of the outside environment.*

How does life in its minimal expression, a single cell, differentiate itself from an environment? The cell membrane plays a key role, not only as a physical border between the cell and the outside environment but through the systemic role it plays. It is semi-permeable; its role is to determine which ions and molecules are to be let inside, and which are to be kept out. It is therefore a key part of the autopoietic production of an identity (Varela, 2000).

Varela extends the notion of identity from the cell to more complex forms of organization that are not defined by a cell membrane. Multicellular organisms are organized through systems of molecular communications (such as the endocrine system or the immune system) that, through complex interactions, determine what belongs to the organism and what does not. We will explore this in more detail when we discuss the immune system. The question of what constitutes the identity of a self or a social system remains open; Maturana & Varela (1994) are very cautious about extending the notion of autopoiesis to social systems.

Varela takes a radical stance towards cognition that bears heavily on the understanding of identity: the process of life and the process of cognition are one and the same. Cognition, for Varela (2000), is to be understood as an embodied and situated *action*; it is neither primarily representational nor defined by the presence of propositions that correspond to an outside reality.

Maturana and Varela understand cognition as *structural coupling*. This is the transformation of a given system in order to accommodate to another system to which it is related. Urban stray dogs change their patterns of locomotion in order to accommodate to the system of city traffic: noisy and frightening experiences transform them until they learn to wait at the traffic light like human pedestrians. In successful marriages, both members of the couple are mutually and gradually transformed until daily cohabitation becomes a sort of graceful dance. Cognition, then, is just the transformations of a system, in response to its environment, in order for it to continue its *autopoiesis*. In other words, *cognition is the ability to transform in accordance to changes in the outside environment.*

Life is an organism's effort to remain differentiated from the outside environment by responding to it in ways that permit continued *autopoiesis*. However, without the outside environment, an organism would cease to exist as such. An organism must simultaneously maintain its relationship to the environment and differentiate itself from it (Varela, 2000, 59).

What is outside an inside is not previously set, but rather continuously redefined. In the autopoietic process, an organism defines what is noxious and healthy to it, what is strange and what is familiar, what is interesting and what is ignored. Video game savvy teens, due to intense training and structural coupling, can detect very subtle patterns of light and sound that, to most adults, are just sound and fury, signifying nothing. Varela distinguishes between an organism's *environment* (its physical and chemical surroundings) and its *world* (what an organism can react to and experience, a product of its autopoiesis) (Varela, 2000, 60). A world is not pre-given but, rather, constructed in an autopoietic process. What is meaningful to an organism depends on the organism's self-production, and therefore on identity.

World-creation by an organism is spurred by ruptures in the process of autopoiesis:

"The source of this world-creation is always a breakdown in autopoiesis, be it minor, such as changes in the concentration of a metabolic product, or major, such as a rupture in boundaries. Due to the very nature of autopoiesis(...) every breakdown can be seen as an action on the part of the system on what is missing, in order to conserve identity (...) Action is manifest as an attempt to modify its world: a change of place several nutrients, an augmented flow of some metabolic product via metabolic synthesis, etc. (Varela, 2000, 62)."

This action is understood as cognition. Therefore, cognition, and the attendant world-creation which enriches our experience, is due to ruptures in the autopoietic process, originated in the outside environment. In other words, *the outside environment is a source of richness because it can provide us with variety that we lack, if we are receptive to it.*

### 2.3 Isomorphism

So far, we have identified three points of convergence between Innerarity's and Varela's account of identity and difference, related to the frailty of systems, the richness derived from the outside environment and the idea of cognition as transformation in accordance to the environment. We can now advance a working hypothesis: *Identity is a property of a system and it is the ongoing product of a cognitive process that accommodates to changes in the outside environment in order to preserve a differentiation from it; and said process can be more or less successful (complete failure being equivalent to the death of the system). In so far as organisms, selves and communities produce identities, there is systemic invariance between the systems in question, that is, they can be mapped on to the same general model.*

Our hypothesis cannot be tested in the classical sense, but rather explored, because models are neither true nor false. Models abstract from phenomena by throwing away some of their variety, for some given purpose. They are neither true nor false but rather more or less useful for the purpose at hand (Beer, 1993). A street map of Budapest is neither true nor false in relation to a topographic map of the same city; both are models created for different purposes.

Of course, the nature of a model depends on what variety the model ignores from the phenomenon it is modeling. A topographic map ignores streets and gas stations, a street map ignores elevations and rivers. A model, therefore, is, in a sense, always an impoverished (though useful) presentation of a phenomenon. A mapping of diverse phenomena onto the same model will impoverish the phenomena in question (Beer, 1994). This is true of our suggested general model of identity. In order to map personal and cultural identities, as well as the identities of organisms, we have to sacrifice tons of variety: note the abstract and stilted character of our general formulations. They lack both the humanistic richness of Innerarity and the biological detail of Varela.

What, then, is the point of this exercise? If we can establish isomorphism between phenomenon A and phenomenon B, we can use what we know of phenomenon A to solve or explore problems relative to phenomenon B. If the spread of a forest fire, on the one hand, and the spread of panic in a crowd, on the other, map onto the same model, we can use what we know of forest fires in order to prevent the spread of panics in crowds, or vice-versa. The value of the general model depends on whether it is, in fact, useful. In what follows, we shall try to get a better understanding of the phenomenon of perceived contamination in selves and communities using the immune system of organisms as an aid to understanding.

### 3. Contamination

Imperial Empress of the Indiana Ku-Klux-Klan, Daisy Douglas Barr read the following poem in a Klan meeting, July 1923:

"My heart is heavy but not relenting,  
Sorrowful but not hopeless;  
Pure but ever able to master the unclean ...  
I am the Spirit of Righteousness  
They call me the Ku Klux Klan  
I am more than the uncouth robe and hood  
With which I am clothed  
YEAH, I AM THE SOUL OF AMERICA (cited in Fessenden, 1999, 23)."

Klansmen and racists of late nineteenth and early twentieth century viewed non-whites as a contaminating agent in the soul or body of America. Madison Grant, an influential eugenicist, writes: "democratic ideals among a homogeneous population of Nordic blood, as in England or America, is one thing, but it is quite another for the white man to share his blood with, or in trust his ideals to, brown, yellow, black or red men. This is suicide, pure and simple" (cited in Fessenden, 1999, 28-29). Both Barr and Madison see themselves as preservers of America, of the soul of America, and the purity of American blood and ideals. The "soul" of America is seen as a property of blood and race and is seen as threatened by the impurity of non-white races; the black race, in particular, is seen as alien and inassimilable (Fessenden, 1999, 33).

Protection against contaminating agents is a sort of bodily and spiritual disposition that goes beyond racism: Barr was a prohibitionist that wanted to keep the purity of the body against alcohol, Grant an important conservationist that wanted to preserve American species (which goes to show there is some limited merit to this disposition). Homophobic discourse tends to see homosexuality as a kind of contagious disease (e.g. Knauer, 2001). This disposition is closely related to a particular kind of fear that Innerarity sees as characteristic of the present:

“(...) global fear is characterized by its not having an origin in the potential threat of the similar [as in Hobbes' state of nature] but in the disquiet provoked by the different. The other, the foreigner, the different plays the role of a disturbing difference. What is feared is not symmetrical conflict – which presupposes equality– but rather assimilation or contamination (Innerarity, 2010).”

White racism during the American Progressive Era was related to a universal ideal and was, in this sense, modern. White European civilization was seen as a pinnacle of cultural evolution, in the context of Herbert Spencer's social Darwinism (Fessenden, 1999). The rejection of non-whites as contaminants is therefore consistent with what Innerarity has called modernity's “phagocytosis of the diverse” in the name of universality (Innerarity, 2001, 203). Phagocytosis is precisely the process that the immune system uses to get rid of foreign objects in the body (such as bacteria or dead tissue cells). In other words, Klansmen saw themselves as America's white blood cells.

The important question is this: what constitutes a genuine foreign body? Georgia's draconian new immigration law, HB87, for example, has proved harmful to the state's economy: in 2011, unharvested crops rotted in the fields, to the tune of millions of dollars (Waldron, 2011). What the law saw as foreign pathogens turned out to be an important part of the state's economy.

Georgia's cognitive failure highlights the fact that foreignness is a construct, a product of a given systems cognitive action. An excessive defense of identity correlates to a notion of identity as something unitary. The postmodern idea of independent and mutually incomprehensible worldviews set side by side partakes of a fundamentally mistaken notion of identity where “identity” is a single or main descriptor that wholly identifies an individual. If people's identities were, in fact, something like “African-American”, or “Mormon” cultures could be thought of as independent and impenetrable. One culture could only contaminate another by penetrating it. People, however, are more complex. Amin Maalouf (1998), a Christian Lebanese with a French nationality, holds that neither his Arabic or French heritage, nor his Christian religion should determine what he is: he is all of that and more. The adscription of identity to a single descriptor only occurs pathologically, when one of the many descriptors that constitute an identity is seen as threatened. When individuals (rather than societies) see themselves as multicultural the “us vs. them” mentality tends to fade.

Of course, the notion of identity as a complex and perpetually re-negotiated patchwork is harder to handle, cognitively, than the notion of something pure, permanent and unitary that is to be defended as a fortress. Chauvinism can afford to be simple-minded; multiculturalism has a permanent cognitive task.

As we shall show in the following section, Varela's idea of immunology moves away from the traditional military metaphor of a body's defense against foreign agents to a view of immunology as a cognitive process. We intend to use Varela's insights on immunology to illuminate the social and cultural problem of perceived contamination of selves and cultures, in accordance with our hypothesis of systemic invariance.

#### **4. From military defense to cognitive process**

The anthropomorphic representation of white blood cells as policemen is quite common in popular culture (for example, the film *Osmosis Jones*). The idea, of course, is that the immune system is a way in which the body defends itself by “catching the bad guys”. This metaphor is also common in scientific literature.

In Varela's view, the main task of the immune system is not military defense against foreign objects but the permanent re-creation of identity. White blood cells are not a single kind of thing but rather a diverse ecosystem with different antibodies. These cells, in their interactions, constitute a bodily identity (Varela, 2000, 121). White blood cells, concerned with both foreign bodies and parts of the body, act as a network that acts, primarily, as a way of conserving the body's inner environment.

The role of the immune system is to provide operational closure; that is, an identity that allows it to be told apart from the outside. This is not given once and for all; rather, as the body changes, as it must in order to survive, the body's idea of itself also changes: "The establishment of the system's identity, rather than being a reaction against antigens is a positive and creative enterprise" (Varela, 2000, 132). The constant re-creation of identity implies, but is not limited to, getting rid of harmful foreign objects. The body, as a living and knowing process, is constantly changing because of structural coupling; the immune system takes stock of this change. For example, the immune system of men who have had a vasectomy learns to attack the man's spermatozoa which have ceased to play a role in the autopoietic system.

The defensive role of the immune system is cognitive. It must identify objects with pathogenic potential. It must be able to *learn* from past experiences (as it does, for example, through getting measles). The shift from a military to a cognitive view of the immune system can be applied on the other side of our analogy to what it means to protect an identity. Identity is no longer to be seen a static entity that is to be preserved in its original form. It is quite pointless to debate the religious beliefs of American founding fathers: to protect an identity is not to look in the past for an original that must be copied; it is an ongoing cognitive process.

Any system, if it is to grow and survive, has to change, that is, to perform structural coupling with other systems in its outside environment. Identity is to be constructed and recognized throughout these changes, not frozen and preserved. An organism that is not changing is a dead organism; a self or culture that cannot change is doomed to eventual extinction or, at best, a very poor and limited sort of life. Picture, for example, a 30 year old that, in order to remain authentic and true to himself, thinks and acts as he did when he was 15...

If an immune system were not cognitive, it would not know what to attack. As a matter of fact, autoimmune diseases such as lupus are cognitive failures of precisely that sort: what belongs to the body is attacked as foreign. If the cognitive component of the protection of identity is denied, autoimmune disease inevitably follows: if the protection of identity is understood exclusively as the elimination of foreign elements, self-phagocytosis ensues, because there is no way of knowing what belongs and what does not belong to the body. McCarthy's witch-hunts of the fifties, for instance, could be seen as a misguided protection of America that wound up attacking the country they aimed to defend. The phenomena of chauvinism, political witch hunts and social exclusion can be profitably understood as forms of cultural or social autoimmune diseases.

The defense of a national or regional identity, as well as of identities that do not fit in the mold of the nation state, are legitimate and important concerns. However, identity must be understood as a kind of stability that remains throughout change. Identity is to be continually re-thought, re-interpreted and re-negotiated, not defended like a fortress. This implies recognition of the richness that can come from the outside environment, and the need we have of it.

## 5. Conclusion

We believe that the study of how organisms preserve their identities can produce important insights on the study of how societies and selves do the same. We have shown how a refined biological understanding of the immune system can be used analogically to produce an interesting perspective on certain important social phenomena. Innerarity's *Ethics of Hospitality*, as well as the general problem of cultural identity, will continue to gain relevance in the years to come, especially because of third world immigration to the first. Whether we see identity as something to be defended from the foreign or creatively re-created will make a massive difference in the years to come.

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