

Zombie Disciplines: Knowledge, Anticipatory Imagination, and Becoming in Postnormal Times

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Abstract

This article does three things: first, it explores the erosions of traditional forms of knowledge and how this is impacting the way change is approached and understood; second, it expands on Ziauddin Sardar's notion that imagination is central to unlocking new ways of being and knowing the world—and in particular, explores Marcus Bussey's anticipatory imagination further; and third, we address notions of agency and suggest how, through a reimagining, an ontological shift from Enlightenment notions of Being to new notions of Becoming is available to us, which we believe is worth consideration given our postnormal context.

Keywords

postnormal times, postnormal condition, agency, epistemology, ontology, object-orientated ontology, anticipatory imagination

Introduction

Ours is an age defined by significant change. In these postnormal times (Sardar 2010), we are suspended between the no-longer and the not-quite-yet. Those things we have held to be true are increasingly irrelevant, ways of knowing and being in the world are rapidly transforming, and the tools that we once used to navigate change have become all but obsolete (Beck 2002; Sardar 2010, 2015). With the loss of faith in science, technology, and politics to lead the West into the future, with the traditional touchstones questioned, it seems there is uncertainty not just about the future, but about how to even begin thinking about the future (Montuori 2011). In these postnormal times, humans de-emphasize change and cling to traditional notions of stability and certainty: a

product of our perception of what is and what is not normal. As a consequence, our postnormal condition nurtures ignorance and fosters uncertainty (Mayo 2020b), characteristics which, we argue here, are systemically promoted through zombie disciplines.

In an interview with the *Journal of Consumer Culture*, the noted German sociologist Beck (2002) reflected on the challenge of theorizing about a society whose system of

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coordinates is changing significantly. Throughout his career, Beck (2002) had repeatedly rejected “zombie categories” which he attributed to the sociological classics and claimed embodied aspects of experience were no longer relevant in the 21st century. Zombie categories, such as “social class” or the “nation state,” Beck contended, are merely kept alive today artificially by scholars (Gross 2016). Going further, in the wake of the terrorist attacks of 9/11, Beck (2003) argued that state-based concepts of war, peace, friend, foe, enemy, crime, and peace should also be rendered obsolete. With these concepts, he built the general foundations for the assertion that sociology, as a discipline, should liberate itself from the intellectual blockages that it had inherited from the classical tradition. “How can one,” Beck (2002, 263) queries, “make reasonable decisions about the future under such conditions of uncertainty?”

Indeed, these sentiments mirror those of futurist Sardar, who argued that postnormal times provides a lens through which futures studies may interpret and understand the present period and develop a language to describe the ruptures that are occurring across disciplines and canons. Traditional futures approaches deal with the plurality of alternative futures by distinguishing between plausible, probable, possible, and preferable. Now, Sardar contends that a postnormal landscape challenges empiricist futures and makes conventional strategic planning and foresight work problematic (Sardar and Sweeney 2016). This is not the death nail for futures studies; rather, it is a redoubling of importance of futures approaches and a signal toward the importance of the imagination in navigating the change of our age (Montuori 2011; Sardar 2010) and indeed, the importance of imagination in dealing with zombie disciplines.

This article aims to do three things. First, it explores the erosion in traditional forms of knowledge and how this is impacting the way change is approached and understood. Expanding on Beck’s notion of “zombie categories,” we argue that it is indeed “zombie disciplines,” concomitant with the erosion of knowledge, that leave us ill-equipped to

effectively navigate current epochal changes. To demonstrate this, we use the example of sociology, unpacking the characteristics that render it as a zombie disciple. Second, we take Sardar’s (2015, 38) contention and expand further on the notion of imagination as a means “to produce new definitions of everything from art to architecture, politics to policy, science to spirituality and what it means to be human in postnormal times.” Anticipatory imagination (Bussey, Song, and Hsieh 2017) is offered here as a useful process for questioning and formulating that is linked to pedagogies of possibility (Bussey et al. 2012) and for opening spaces for alternate forms of knowledge creation. We make the case that, in light of zombie disciplines, fostering anticipatory imagination within curriculums and institutions invites change and transformation at the personal and cognitive levels while fostering new values and new strategies that can creatively manage uncertainty and complexity (Bussey, Song, and Hsieh 2017). Third, we address notions of agency and suggest how, through a reimagining, an ontological shift from Enlightenment notions of Being to new notion of Becoming is available to us, which is worth considering given our postnormal context.

Zombies and the Living Dead

The zombie, as a metaphor, provides a deeper critique of knowledge in postnormal times: occupying the space of both the living and the dead, they embody the paradox of our transitional age. By nature, the zombie is “human and non-human, living and not living, cultural and non-cultural, natural and supernatural, suspended between fundamental binaries that most definitions presuppose” (Vervaeke, Mastropietro, and Miscevic 2017, 27). The zombie has its origins in Haitian Vodou via African spirituality; it represents the embodiment of the fear of slavery, economic, political, or spiritual (Moreman 2010). Appropriated by modernity, the outbreak of zombieism is a 20th century phenomenon rooted in the Western imagination, that has exploded and become part of the cultural zeitgeist, and transformed

into the flesh-eating ghoul of modern cinema. To date, over one thousand zombie movies have been made since 1920 and over half of them produced in the last 10 years. The zombie phenomena commercialized by Romero's *Night of the Living Dead* (1968), considered to be the movie to popularize the zombie genre and to establish it as a cultural phenomenon, replaced the earlier alien villain introduced by H. G. Wells in his 1898 classical novel *War of the Worlds*, which was a source of inspiration for many film directors. Now the threat to Western humanity was not the fear of the alien, the Other, rather, the threat existed within us, amongst us, an imminent viral threat.

While there has been much academic discussion of the zombie of the cinema, there has been little examination of the zombie itself, prompting several scholars to "analyze the zombie as a symbol in itself" (Moreman 2010, 264), representative of the "anxieties growing from the anomie resulting from a monolithic authority structure weakened by secularism, pluralism, and cultural relativity" (Moreman 2010, 265), quintessentially the slave without master, subject to their vilest desires, and without hope of divine salvation (Moreman 2010). As Deleuze and Guattari (1984, 33) put it, "the only modern myth is the myth of the zombie."

The primary feature of the zombie is that they inhabit a diseased world: by embodying a diseased body, they exist without cure. In this sense, the zombie lacks the essential feature of any living organism; rather, they straddle the divide between the living and dead. Unintelligibly, they are communal in that they vaguely share proximity despite the absence of any accord between them (Webb and Byrmand 2008). They shuffle from place to place, seemingly unattached; they do not talk, rather communicate their incommunicability; they are heedless, fierce, and threatening but give no thought to defending themselves against harm; and are not evil, rather merely scrabbling to satisfy a base instinct of their own craving (Vervaeke, Mastropietro, and Miscevic 2017). Indeed, zombies are us. Their premise is based on their self-reflected image of humanity. But

zombies are an ugly us. They lack dignity, and in pursuit of their consumption, they will destroy themselves (Webb and Byrmand 2008). Thus, more than a symbolic representation, the zombie is an abstraction by which we may explore the erosion of knowledge in post-normal times.

The zombie metaphor has indeed provided utility for the topic of critical assessment within sociology and, in particular, cultural studies. The zombie as a metaphor has been used to describe how disciplines, such as sociology, anthropology, and economics, are based upon ideas which are dead, but paradoxically continue to walk amongst us. As Quiggin noted:

Some ideas live on because they are useful. Others die and are forgotten. But even when they have proved themselves wrong and dangerous, ideas are very hard to kill. Even after the evidence seems to have killed them, they keep coming back. These ideas are neither alive nor dead... they are undead, or zombie ideas (Quiggin 2012, 1).

An examination of zombie disciplines is crucial in postnormal times, especially given that the entire *raison d'être* of higher education based upon critique, contestation, and developing new knowledge has given rise to "post-truth" (postmodernism), "deep-fake" (not possible without computer algorithms), and "fake-news" (made popular largely due to uncritical masses). Universities, together with some of the disciplines that are taught, are like the living dead: an uncritical movement of scholarship, bounded and restricted by its methodological constraints, which continues to exist and to teach next generation of students, thus allowing the system to self-perpetuate (Apple 2016).

A discipline, rooted in traditional forms of knowledge production and dissemination, in these postnormal times, characterized by chaos, complexity, and contradiction, rather than leading to wisdom, instead produces an epistemological veil, a "smog of ignorance" (Sardar 2020): an obnoxious projection of the existence of knowledge that masks a lack of knowledge within the neo-liberal educational

system which benefits only those within the power structure rather than the students (Apple 2016). This diseased reasoning is a helpful way of describing people's inability to provide authentic explanations to complex issues because the capacity of organizations to make judgments has become infected with zombie ideas (Smyth 2018).

Disciplines and Knowledge

The current disciplinary ordering and structuring of knowledge is largely a product of the Enlightenment in general and modernity in particular. During the pre-modern period, most Western higher education institutions of learning included four distinct faculties of study: theology, canon law, medicine, and the arts otherwise known as the liberal arts (which mainly taught the trivium: grammar, rhetoric, and logic). The rise of modernity witnessed the evolution and expansion of a range of knowledge systems by new and emerging scholarly communities. During the 19th century, disciplines became a helpful medium through which most universities in the West were able to catalog and archive new emerging forms of knowledge, ranging from the natural sciences, to social sciences, and to humanities. Throughout the early 20th century, new disciplines were added to the growing list; with psychology, the late 20th century witnessed the growth of media studies, gender studies, and queer studies.

It is clear that the rise of disciplines was closely associated with knowledge production and dissemination, but as Skúlason (2015) in *A Critique of Universities* has pointed out, the purpose, function, and objective of higher education establishments and their relationship with discipline and knowledge served different purposes. The French tradition, as seen with the l'Université de France, which was founded by Napoleon in 1806, viewed discipline and knowledge as serving the interest of the state. Similarly, the British tradition considered the function of universities to train the administrators, soldiers, and leaders to run the empire. Conversely, the German tradition as developed

by the Prussian philosopher and linguist Wilhelm von Humboldt (d. 1835) via the Humboldt University of Berlin considered the importance of advancing science, scholarship, and research as the purpose of higher education.

A number of critiques of academic disciplines have demonstrated how disciplines have strong connections with knowledge and not with ethics or wisdom. In an early critique of discipline, Foucault (1972), in *Archaeology of Knowledge*, argued how academic disciplines are simply a set of "ideas" that have been historically grounded in power structures and have actively re-produced existing power politics. Furthermore, modern knowledge production translates to power, control, and exploitation. According to Guhin and Wyrzten (2013), knowledge production is a political act, which they term as "violence of knowledge." They question the liberal assertion that "true" knowledge is apolitical by locating the deeply political circumstances through which knowledge is produced. They go on to elucidate the point, drawing upon postcolonial theorists to describe how the "Other," subjected to "violence of essentialization," based upon the principles of Orientalism, is largely an academic pursuit for dominating, restructuring, having the authority over the Orient (Said 1979, 3), and "epistemic violence," which according to Spivak (1988) refers to the process by which Western forms of epistemology preclude or destroy local forms of knowledge. For Sardar (2020, 2), "wisdom integrates and unifies the knowledge and values of a person, it cannot be abused, and a wise person cannot be immoral." For the subaltern, knowledge, when linked to disciplines, is not the pursuit of the greater good, neither is it linked with wisdom; knowledge is the obliteration of the cultural codings that enable agency.

It has now been established that contemporary knowledge production is linked to neoliberalism. The cultural theorist Amin (2014) illustrates how paradigms within the social and economic sciences tend to shift with times and schools of thoughts, often in opposition to one another. This critical analysis reveals that the dominant paradigm becomes the "single

thought” of the moment when it “responds best to the demands posed by the particular phase of capitalist development” (Amin 2014, 20)—what best suits those with power and influence in society (Husain and Osswald 2016). Similarly, the social philosopher Polanyi (1944) argued that instead of historically normal patterns of subordinating the economy to society, the system of self-regulating markets required subordinating society to the logic of the market. As a result, the “developed world” runs society “as an adjunct (accessory) to the market; instead of the economy being embedded in social relations, social relations are embedded in the economic system” (Polanyi 1944, 24). More recently, most universities have developed a tradition which embodies the market and the business model of neo-liberalism; as Sardar noted, “the underlying argument of most of the early literature on the crisis of education is that thanks to confluence of the rise of neoliberalism, increasing globalization and advancing communication technology, universities have become big businesses” (Sardar and Henzell-Thomas 2017, 5). These arguments, centered on discourses of productivity and activity, paradoxically create feelings of compliance and passivity, including inability to think, loss of individual control, and contagion (Husain and Osswald 2016). Additionally, the emphasis on creating a labor force results in the student as the consumer rather than the learner. These consumers become what Husain calls “zombie graduates,” who are entitled to be happy yet lack critical understanding and suffer acute philosophical poverty (Husain and Osswald 2016).

Sociology as a Zombie Discipline

Disciplines disseminate ideas and concepts that are no longer representative of reality but continue to shape minds and outlooks, education and policies, and outlooks and futures (Husain and Osswald 2016). Zombie disciplines range from anthropology to economics, political science to development studies, cultural studies to media studies, all varieties of “area studies,” certain types of history and philosophy,

particular perspectives on biology, and many other “subjects” in between. For illustrative purposes, we will focus on sociology.

It is clear that sociology is a product of modernity whilst concurrently maintaining the objective to make sense of modernity. Modernity had fundamentally transformed Western societies through industrialization, urbanization, and decline of religion, and introduction of sociology made it possible to reflect upon the nature of these socio-cultural transformations. In short, “sociological conceptualizations of capitalism, modernity, and economic development as western European phenomena emerged due only to factors endogenous to the region, such as the French Revolution, the Enlightenment, and the industrial revolution” (Boatcă 2013, 56). However, it is important to challenge some of the many claims underpinned by the literature related to ideas of modernity and liberalism, especially related to the socio-political transformation of France and advances of liberty, equality, and fraternity. In fact, as James (2001) has pointed out, it was the slave resistance in Haiti that was instrumental in shaping these ideas of universal rights in the minds of French thinkers. Thus, sociology is an outcome of socio-historical factors of European modernity. Its rise coincided with positivist epistemology, which developed from the decaying roots of Western religious certainty. Auguste Comte (d. 1857), the author of *Plan of the Scientific Works Necessary for the Re-Organisation of Society* (1822), proposed sociological positivism as a way of solving social problems through rational planning. Comte maintained that positivist or scientific methods of approaching society would lead to a linear, orderly, and progressive view of history, starting with theological stage, through a metaphysical phase, and gradually leading to a positive or scientific stage.

Whilst the origins of sociology can be traced back to Plato’s *Republic* (375 BC), Ibn Khaldun’s *Muqaddimah* (1377), or even Baron Montesquieu’s work *The Spirit of the Law* (1748), it was in the fourth volume of Comte’s *Cours de Philosophie Positive* (1838) that the

actual term sociology was first used. As a result, he is considered to be the father of modern sociology and his ideas enjoy the same legitimacy as the natural sciences. The second key figure within sociology was Herbert Spencer who combined scientific metaphors with sociological theories. Spencer's *The Study of Sociobiology* (1873) advocated evolutionary theory of Social Darwinism to "explain" the intellectual superiority of Europeans over non-Europeans. His idea was used to justify Western superiority via anthropology and colonialism abroad whilst justifying the status quo of the ruling classes in England by resisting social reforms made by the oppressed working classes. Whilst socio-biology has had a complex and controversial history, some of the ideas of race science continue to shape popular and scientific debates.

Given its historical context, it is important to note that the rise of sociology was materially connected with its Eurocentric formations. As Alatas (1977, 13) has noted, the "vigorous outburst of colonialism in the 19th century was accompanied by intellectual trends which sought to justify the phenomenon [of colonialism]." In light of the current questioning of sociology's heteronormative standpoint by feminism, critical race theory, and others, Go (2013) has pointed out that sociology, and by extension any discipline, needs to take stock of issues related to knowledge, power, and standpoint. So, whilst the discipline is the product of history—it is the product of only one history of the victor.

Zombie disciplines do not only have their foundations firmly anchored in imperialist and racist histories, but also have "Great Men" associated with them who are required to be cited within the literature. Sociology revolves around three thinkers: Marx, Durkheim, and Weber. Karl Marx's ideas have been well documented especially those related to capitalism, economy, class struggle, and ideology. Perhaps what is less frequently debated is his idea related to non-European societies. In his analysis of the empires that existed before industrialization, Marx viewed pre-capitalist "Asiatic Empires," such as the Ottoman,

Chinese, Indian, and Persian empires, as going through political change without any social transformation. In his analysis of India, he argued how despite centuries of political change, the village-centered social order was unaltered. The British Empire destroyed India's village-centered order by connecting India's local economy with the global economy. For Marx, colonialism was crucial to create the conditions of a world capitalist order (Marx, Engels, and Adoratskii 1942). Max Weber's writings and interests were diverse and covered a range of topics, ideas, and concerns. His key writings on modernity were to establish the claim that while scientific knowledge existed, especially throughout worlds, such as China, India, and the Islamic world, systematic rational science was unique to the West and could be traced back to the Hellenic mind, that is, ancient Greece (Kalberg 2008). Emile Durkheim's views on imperialism were slightly different from those of Marx and Weber, especially given that he did not publicly advocate nor hold a critical position on the French Imperialism (Seidman 2013). Nevertheless, these three classical sociologists failed to "incorporate the dynamics of Empire into their historical sociology of contemporary society" (Seidman 2013, 39).

To spread ideas and concepts, zombie disciplines use canonical texts and, in the case of sociology, canonical sociological classics. As McLennan (2013, 122) pointed out, these texts "were largely couched as grand ethnographies of social progress, however complicated, featuring a common scenario in which non-Western societies are positioned as backward and modern capitalist ones as advanced." There are many epistemic shortcomings that gave rise to sociology as a zombie discipline, perhaps one of the most important of these is based upon the claims of metrocentricism; that is to say, epistemological ideas underpinned within sociology, rooted within a specific understanding of Europe and rest of the world, are made universal through the writings of Weber, Marx, and Durkheim (Go 2013).

It is important to note that the key to understanding any zombie discipline lies neither in the uncritical acceptance, nor its rejection,

but rather in acknowledging its ontological standpoint, its limitations, and its ability (or more pointedly, inability) to navigate post-normal times. In postnormal times, the mask slips from sociology and its related disciples to expose its zombie nature, and in doing so, it demonstrates how it leads to the logical conclusion of postmodernism, the death of knowledge, and the triumph of interpretation.

Is sociology dead? It can be argued that as a discipline, it is indeed dead, but it continues to give the illusion that it exists. Sociology is dead, especially given the rejection of any grand theory or set of theories to explain the nature of society. This raises several broad ontological questions, most pertinently stated by cultural theorist and philosopher Baudrillard (d. 2007). In a number of transformative articles, especially *Simulcra and Simulation* (Baudrillard 1994) and *The Gulf War Did Not Take Place* (Baudrillard 1995), he argued that society did not exist; if it does, it is entirely composed of signs. His argument is based upon the notion that televisual communication and by extension social media and its signs are so ubiquitous in its “reality” that people struggle in deciding what is real. By the same logical conclusion, if the boundary between real and the hyper-real is blurred, then how can sociologists develop a theory explaining the nature of society? Indeed, this speaks to the quandary posed by Beck (2002, 203) as he reflected on the challenge of theorizing significant societal change: “if the fundamental distinction and criteria that we have always identified with modern society no longer apply, where can one begin?”

Perhaps what is most striking is that contemporary society—given its complexity, chaos, and contradiction together with its speed and spontaneity—is moving faster than sociology, so it is difficult for it, or indeed any discipline, to keep up with. The desire to play down change in spite of change is symptomatic of a humanity attempting to navigate post-normal times without the adequate know how to do so (Mayo 2020c). Zombie disciplines create zombie people, who continue to make decisions that are informed by toxic knowledge

(Sardar 2020), and these further exacerbate the impacts of postnormal change (Serra 2014).

Culture and Imagination

The root of this predicament is human culture. The psychologists Vervaeke, Mastropietro, and Miscevic (2017) locate the epistemological crisis in Western culture, a result of the collapse in the worldviews of modernity; and as a result, we are now bereft of the wherewithal to respond to emergent challenges. He takes an esthetic reading of Western culture, reflecting on the collective sense of alienation, disconnection, and disenchantment that appears apparent in a society devoid of a spiritual mythology to compel action. As Vervaeke, Mastropietro, and Miscevic (2017) put it, “it is one thing for a culture to run its course and give rise to the next stage in its development, or even to be conquered by another culture – a death and rebirth, if you will. It is another for it to trip over itself and expedite its own demise – a waking death the walking death epitomize” (p. 42).

Indeed, ours is a cultural crisis owed to humanity’s inability to move beyond a manufactured normalcy that perpetuates a familiar sense of the present (Mayo 2020b). The sociologist Clammer asserts, “if Bauman is correct in his argument that the outcome of modernity was the Holocaust (Bauman 2000) then it is indeed our very civilization that has brought us to the brink of catastrophe, but perhaps this time to an ecological Holocaust. If this is the case than ... it is our very culture and the values that constitute it that is the root of our problems” (Clammer 2014, 41). Culture, as Clammer (2014, 12–13) reminds us, is premised on constellations of values, assumptions, and drivers that are constantly in flux. Within culture lies imagination, which, according to Sardar (2010, 443), is a key ingredient for coping with postnormal times: “while imagination is intangible, it creates and shapes our reality; while a mental tool, it affects our behaviour and expectations.” With imagination, the construction of myths and stories becomes the vehicle for communicating and negotiating meaning about our world (Brockmeier 2009). And

these acts of meaning making link us to culture (Bruner 1990). As such, “given that our imagination is embedded and limited to our culture, we will have to unleash a broad spectrum of imaginations from the rich diversity of human cultures and multiple ways of imagining alternatives to conventional, orthodox ways of being and doing” (Sardar 2010, 443).

Futurists have a role to play here. Futures thinking, as an approach to problem solving, understands the world as a complex system and draws on a wide range of tools to access understanding, capacity building, and strategic potentialities concerning possible, plausible, and preferred futures (Bussey, Song, and Hsieh 2017; Glenn and Gordon 2003; Slaughter 1996). The primary focus of futurists is images of the future (Dator 2019; Polak 1973), and as it is culture that provides us with such images, imagination is the domain of the futurist.

However, the imagination is contextual; we cannot imagine beyond our experiential, spatial, or temporal contexts. Indeed, contexts often seem hegemonic and diminish agency (Bussey 2014), and our futures are colonized (Sardar 1998). Responding to this, futures work locates agency within the past–present–future nexus of culture. In this way, the role of the futurist is to break free from dominant (extended) present-centered imagery of the future and facilitate creation of and/or the presentation of alternative images of the future. This requires us to, as Bussey suggested, “claim – or reclaim – our right to cultural agency... to offer alternative narratives, images and visions ... to hack into the cultural coding that determines how we think, relate, remember, act, love, fear and hope” (Bussey 2017b, 89). Here, the futurist is responsible for generating new possibilities within the cultural genome, exploring new pathways by reconfiguring old elements, inserting new code, and bringing out creative work generating alternative futures (Bussey 2017b, 89). To achieve this, what is required is an appreciation of anticipation as a human faculty and anticipatory imagination, the pedagogical device, as tools for thinking beyond current utilitarian approaches to the future, emancipating those invested in—even complicit

in—a dominant reading of the present (Bussey 2014, 2016, 2017b; Bussey, Song, and Hsieh 2017). Thus, the role of the futurist is to unlock anticipatory imagination. This requires a framework for praxis.

Anticipatory Learning, Imagination, and Agency

As a pedagogical device, anticipatory action learning is a well-established framework in the futures research tool bag. Effective anticipatory action learning processes link individuals to social transformation, integrate different kinds and levels of appreciation of futures, create open-ended and continually evolving conditions, and contribute to intelligent action rather than formal knowledge (Sardar 2013). Felder and Brent (2003) suggest that working in the space between knowledge and problem is where learning is truly fostered. Within this framework, “socially robust knowledge ... capable of dealing with unknown and unforeseeable contexts” is fostered and tested (Nowotny, Scott, and Gibbons 2013, 167). This points toward the request of postnormal sciences to engage extended peer communities in the work of science; however, we argue, anticipatory action learning goes much further.

Postnormal science, where postnormal times finds its foundations, was conceived as a means to question values and make them explicit in scientific research (Funtowicz and Ravetz 1993). Funtowicz and Ravetz (1993) were advocating for the inclusion of non-expert audiences and stakeholders, those groups whose concerns and values are usually considered external to the scientific process, as a means to democratize research inputs and outputs. Known as extended peer communities, these groups can and might lead toward the integration and absorption of localized knowledge, which can shape areas of study and bring about more collaborative and responsive modes of research.

Anticipatory action learning is different and more relevant in postnormal times, in that it incites active participation, is future focused in

its application of anticipatory decision making, and embeds a reflective practice—or double loop learning—in which participants identify a problem, posit a solution, apply this solution, assess the outcome, and reflect on the questions: what happened, did it work, and where next (Bussey, Song, and Hsieh 2017; Inayatullah 2006; Stevenson 2002). In this way, teacher and student, researcher and subject, all become creators and purveyors of new—practical—knowledge and are involved in positive action toward the future. Indeed, the anticipatory action learning model has successfully been integrated into curriculums for the development of students' anticipatory reasoning and questioning as well as into community engagement projects deployed by city planners to bolster participatory decision-making processes (Gould 2008). Conceptually, this future-orientated attention essentially draws an awareness of and yearning for alternatives already embedded in the present database of images and practices.

However, positive action, nested in constructive optimism (Stevenson 2008, 917), requires a healthy imagination that is “critically aware of the diminished futures that appear hegemonic in the dominant culture” (Bussey, Song, and Hsieh 2017). Bussey, Song, and Hsieh (2017) have offered a model for anticipatory imagination that brings in the personal and transformational as domains that point to the capacity to lead from conditioned reality to a point beyond it—something new, perhaps even surprising. Indeed, the inclusion of the personal and transformational domains acknowledges that there is a connection between our sense of identity and our relationship with the future, and the process of transformation can have personal, social, and cultural outcomes. Thus, personal imagination is dependent on an individual's social and cultural capital and makes sense of deep existential questions of identity, potentially, and taboos; social imagination speaks to the assumptions, values, rationalities, and institutional conditions that set contexts; and cultural imagination exposes the historical and epistemological roots of context. Anticipatory imagination

traverses all three plains of imagination to, in the case of Bussey et al., empower engineering students to regard the interdependence of systems, embrace risk taking and open-ended questioning, and adopt a proactive stance toward their future in reconstructive and creative ways.

We propose that this pedagogical model for building anticipatory imagination should be deployed and embraced across disciplines. Unlocking anticipatory imagination, it is suggested, builds confidence around one's capacity to actively reframe contexts, deploy skills and materials in the quest to solve problems. That is to say, that the futurist becomes the hacker, who exercises individual and collective agency within the cultural domain, to put one's creative energy in the service of social, cultural, and ecological processes that keep gridlocking, in a state of postnormal paralysis (Bussey 2017b).

Fundamentally, this is all about agency: the capacity of individuals and communities to make decisions concerning all main aspects of their lives in ways that are neither completely constrained nor completely without reference to social, economic, and family circumstances (Evans and Strauss 2010). In particular, agency refers to the agentive dimension of human subjectivity, the human-specific capacity to actively influence and change their living conditions (Brockmeier 2009). This capacity for action, Brockmeier (2009) tells us, is mediated through the particular social character of human life. In Brockmeier's (2009) view, this implies that the conduct of action is under the sway of intentional states, such as beliefs, desires, emotions, and moral commitments, states which in turn are interwoven with culture, society, and history. Indeed, we are reminded of Karl Marx who reflected, in his *Theses on Feuerbach* (1888/1969), that the “human essence is no abstraction inherent in each single individual ... but the ensemble of the social relations” (Marx and Engels 1968, 14).

A particular futures method provides the opportunity to unpack and analyze the particular contextualities that are seen to govern and/or affect images of the future: causal layered

analysis (CLA) (Inayatullah 1998). This post-structuralist method opens up a greater understanding of one's complicity in any context and how, through the logic of causality, through either active or passive behavior, one can rework the world around them. Causal layered analysis encompasses four vertical layers within which horizontal discourses may be entered:

Layer	Agency
Litany	I have the ability to influence the direction of my life
Systems	Set and rigid, institutional and paternalistic
Worldviews	Grand narratives
Myth/ metaphor	If you imagine it, you can make it so

The basic insight here is that agency, however constrained by force of circumstance, always lies where the stakeholder stands and, in the context, what they determine.

Postnormal times is a transitional period. What comes after postnormal times, Sardar (2015, 27) tells us, "can be consciously shaped to be better, saner, more globally and ecologically relevant, more pluralistic, more humane and more peaceful alternative." While the emphasis here is on agency, Sardar is implicit in his invitation for a diversity of voices in shaping what comes next. Indeed, Sardar's project has long been to simultaneously resist and disengage from the defining power of the West and create an intellectual and cultural space for the non-West by encouraging non-Western cultures and societies to describe themselves with their own categories and concepts and anticipate their own futures (Boxwell 2002). Further, agency is not an exclusive property of humans or even the biosphere (Smith 2013). Surely in our post-normal times, as autonomous machines become smarter and more ubiquitous, bound to make life-or-death decisions, their agency ought to be addressed too (Braidotti 2013).

Braidotti (2013) advocates for a post-anthropocentric configuration for knowledge that grants the earth the same agency as the human subjects that inhabit it. This will require a reimagining of what is meant by agency. For

Braidotti, this reimagining cannot be drawn from the immediate context or the current state of terrain, rather:

They have to be generated affirmatively and creatively by efforts geared to creating possible futures, by mobilizing resources and visions that have been left untapped and by actualizing them in daily practices of interconnection with others. This project requires more visionary power or prophetic energy, qualities which are neither especially in fashion in academic circles, nor highly valued scientifically in these times of coercive pursuit of globalized 'excellence' (Braidotti 2013, 191).

Untapped visions may be explored through anticipatory imagination. What makes narrative such a flexible vehicle of imagination is its capacity to tap into multiple frameworks of meaning that draw on both real and fictive scenarios of agency. As Brockmeier (2009, 227) points out, the imagination and its use of narrative seamlessly mingles the factual with the fictitious, the real with the possible; "in fact, it fuses the real and possible with the impossible." Agency, then, in postnormal times exists everywhere, is open and fluid, is not linked to a dominant world view, but rather invites us to reimagine everything we thought we already knew.

Layer	Agency in normal times	Agency in postnormal times
Litany	I have the ability to influence the direction of my life	Everything has agency
Systems	Set and rigid, institutional and paternalistic	Open, fluid, and dynamic
Worldviews	Grand narratives	Eroding, new, yet to emerge
Myth/ Metaphor	If you imagine it, you can make it so	Reimagine everything that you thought you knew

Inayatullah (2003) proposes that while all four layers of CLA are important in the process

of unpacking the contextualities, a higher order is placed on the value of the mythic/metaphoric layer as it is the layer that informs all other layers. Indeed, mythology has the ability to transcend paradigms (Meadows 2008). Thus, a change in the mythology that drives us, a re-imagining of how we are in the world, whilst enabled by the imagination and facilitated through the epistemological realm, has implicated effects on the ontological realm. Let us address this in a return to our zombie metaphor.

Anticipation and Becoming

Our relationship to the zombie has been one based on fear: fear of the Other, fear of the imminent existential threat, and fear of that which exists amongst us waiting to ravish us and strip us of our very souls. It is no mistake that the West has appropriated the zombie into the zeitgeist from the Haitian Vodou tradition; Said's *Orientalism* remains entrenched in the cultural artifacts of today. Others, like Deleuze and Guattari (1984), viewed the zombie from a Freudian-Marxist view, in which capitalism is the root of the so-called death drive; as people become de-humanized by commodification, they can increasingly look forward only to death (Moreman 2010). It is a relationship rooted in fear. This fear, it is argued, stems from the fact that zombies, at first glance, look like us; they are our undead doppelgangers, familiar yet unfamiliar, intimate, and strange, all at the same time. Here, we enter the realm of the uncanny.

Freud's (2003) conceptualization of the uncanny indicates the divergence of the realm of the real and the realm of the fantastic. Freud's project, whilst denoting the very real emotion—the uncanny experience—is nevertheless a response to the objective world, a response that remained ungraspable for Freud by anything available to him in the clinical terms. Freud's acknowledgment of other forms of knowing and being outside empirical constructs hints at a disownment of the Enlightenment constructs of reason, rationalism, and secularism that otherwise framed the clinical case studies of Freud's work (Mayo 2020c).

Freud's notion of the uncanny has become a point of reflection for many thinkers investigating our relationship with the world. The philosopher Morton (2010) argued strongly for the importance of uncanniness and for allowing space for strangeness in intimacy, in which other beings can be their strange selves, "strange strangers." For Morton, these beings are everywhere and everything: people, animals, trees, chairs, desks, sports cars, skyscrapers, microbes, and laptops. His goal is to, philosophically, make the inanimate, animate. This is an open and co-evolving space, where objects share relationships with one another in a manner that is reciprocal (Bussey 2017a). This approach moves beyond Enlightenment, subject-object relations, instead seeking to conceptualize an ecology of objects, flattened and without hierarchy. Ontologically, this is a proposition toward Becoming, rather than Being. This process of Becoming is more closely aligned to what Coole (2013) calls new materialist ontology "a process of materialisation in which matter literally matters itself ... this is not, then, the dead, inert, passive matter of the mechanist, which relied on an external agent – human or divine – to set it in motion. Rather, it is a materialisation that contains its own energies and forces of transformation. It is self-organising, sui generis. Matter is lively, vibrant, dynamic" (p. 453). This approach seeks to expand our sense of agency so as to involve the interplay of human–non-human in co-creative works of materialization. If new materialism is moving to a process of Becoming, then our notion of subjectivity too becomes a process; fluid, porous, open, and coexistent (Mayo 2020c).

Giri (2013, 102) calls this weak ontology "which urges us to realise that ontological cultivation is not only a cultivation of mastery of the self, but also cultivation of its humility, fragilities, weakness, and servanthood facilitating blossoming of non-sovereignty and shared sovereignties... Weak ontology helps us realise that both identities and differences have inbuilt limitations and they ought to realise their own weakness as a starting point

for communication and sharing through cultivation of weak identities and weak differences.” This is resonant with object-orientated ontology, an anti-anthropocentric philosophy that removes humans from the center of the cosmos and asserts the agency of non-living forms. With object-orientated ontology, Morton (2010) offered the notion of the “mesh”—the interdependence and interconnectedness of all living and non-living things in a way which gives equal value to the holes in the network and the threading between actors within that network. In doing so, Morton keeps open a space for the uncanniness of our intimacy with the world and with other beings (Mayo 2020c). Thus, according to Morton (2010), through the embrace of object-orientated ontology, we open ways of being together in the world—subject and object—that go beyond Modernist constructs of the self and self-interest.

Conclusion

Should we reimagine our relationship with the zombie? The zombie as a symbol, as an abstracted concept, fills us with fear as it reminds us of our fundamental deficits as a human. The zombie disciplines as the force that perpetuates these deficits are proving obsolete to meet the emergent challenges presented in these postnormal times. Our proposition has been that, rather than ward off the zombie apocalypse as we are taught to do in Hollywood movies and popular culture, we should embrace the Otherness of the zombie, uncover and embrace the intimacy that underlies our uncanny relationship with the flesh-eating undead and seek to navigate the future together. By examining images of the future and uncovering cultural assumptions, with a view toward transformation, futures approaches provide the tool kit we need to shape a “better, saner, more globally and ecologically relevant, more pluralistic, more humane and more peaceful alternative” (Sardar 2015, 27). In particular, anticipatory imagination, nested within the anticipatory action learning framework, provides a

process that brings in the personal and transformational as domains of knowledge creation. As we have postured here, anticipatory imagination, when injected into the curricular that buoys zombie disciplines, unlocks agency, fosters confidence around one’s capacity to actively reframe contexts, and deploys skills and materials in the quest to solve problems. We aspire to create transformation from the inside out. Zombie disciplines, like the zombie itself, are not the enemy, but rather are relics from modernity (Mayo 2020a) that require excavation, re-vamping, and reframing to help us transition toward that which is to come after postnormal times. After all, the zombie is fundamentally and metaphorically transformational.

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References

- Alatas, S. H. 1977. *The Myth of the Lazy Native: A Study of the Image of the Malays, Filipinos, and Javanese from the Sixteenth to the Twentieth Century and Its Function in the Ideology of Colonial Capitalism*. London: Frank Cass & Co Ltd.
- Amin, S. 2014. “Unity and Change in the Ideology of Political Economy.” In *SpringerBriefs on Pioneers in Science and Practice*, edited by S. Amin, 31-41. Switzerland: Springer.
- Apple, M. W. 2016. “Piketty, Social Criticism, and Critical Education.” *British Journal of Sociology of Education* 37 (6): 879-883.
- Baudrillard, J. 1994. *Simulacra and Simulation*. Ann Arbor, MI: University of Michigan Press.

- Baudrillard, J. 1995. *The Gulf War Did Not Take Place*. Bloomington, IL: Indiana University Press.
- Bauman, Z. 2000. *Modernity and the Holocaust*. Ithaca, NY: Cornell University Press.
- Beck, U. 2002. "Zombie Categories: Interview with Ulrich Beck." In *Individualization: Institutionalized Individualism and Its Social and Political Consequences*, edited by U. Beck and E. Beck-Gernsheim, 202-212. London: Sage.
- Beck, U. 2003. "The Silence of Words: On Terror and War." *Security Dialogue* 34 (3): 255-267.
- Boatcă, M. 2013. "'From the Standpoint of Germanism': A Postcolonial Critique of Weber's Theory of Race and Ethnicity." *Political Power and Social Theory* 24: 55-80.
- Boxwell, G. 2002. "Islam, Postmodernism and Other Futures: The Contribution of Zia Sardar." *Journal of Futures Studies* 7 (1): 87-100.
- Braidotti, R. 2013. "The Posthuman." In *Introducing Disability*, edited by Mundus, 21. Cambridge: Polity.
- Brockmeier, J. 2009. "Reaching for Meaning." *Theory & Psychology* 19 (2): 213-233.
- Bruner, J. 1990. *Acts of Meaning*. Cambridge, MA: Harvard University Press.
- Bussey, M. 2014. "Concepts and Effects: Ordering and Practice in Foresight." *Foresight* 16 (1): 1-16.
- Bussey, M. 2016. "The Hidden Curriculum of Futures Studies." *World Futures Review* 8 (1): 39-45.
- Bussey, M. 2017a. "Anticipatory Aesthetics: New Identities and Future Senses." In *The Aesthetics of Development*, 49-70. New York: Springer.
- Bussey, M. 2017b. "# Hack Futures: Futurist as Hacker." *Journal of Futures Studies* 22(1): 89-95.
- Bussey, M., Å. E. Bjurström, M. Sannum, A. Shambushivananda, B. Nadhomi-Mukisa, L. Ceruto, D. Muwanguzi, A. Kumar Giri, A. Mukherjee, G. Pervyi, and M. Victoria Pineda. 2012. "Weaving Pedagogies of Possibility." In *Learning for Sustainability in Times of Accelerating Change*, edited by A. Wals and P. B. P. B. Corcoran, 77-90. Wageningen, the Netherlands: Wageningen Academic Publishers.
- Bussey, M., M. M. Song, and S.-H. Hsieh. 2017. "Anticipatory Imagination as a Tool for Re-thinking Engineering Education." *Journal of Professional Issues in Engineering Education and Practice* 143 (4): 02517004.
- Clammer, J. 2014. *Vision and Society: Towards a Sociology and Anthropology from Art*. London: Routledge.
- Coole, D. 2013. "Agentic Capacities and Capacious Historical Materialism: Thinking with New Materialisms in the Political Sciences." *Millennium: Journal of International Studies* 41 (3): 451-469. doi:10.1177/0305829813481006.
- Dator, J. 2019. "New Beginnings" Within a New Normal for the Four Futures." In *Jim Dator: A Noticer in Time*, 273-291. Springer.
- Deleuze, G., and F. Guattari. 1984. *Anti-Oedipus: Capitalism and Schizophrenia*. Translated by Robert Hurley, Mike Seem, and Helen R. Lane. London: Athlone.
- Evans, H., and J. C. Strauss. 2010. "Introduction: Gender, Agency and Social Change." *The China Quarterly* 204: 817-826.
- Felder, R. M., and R. Brent. 2003. "Learning by Doing." *Chemical Engineering Education* 37 (4): 282-309.
- Foucault, M. 1972. *The Archeology of Knowledge*. Translated by AMS Smith. London: Tavistock.
- Freud, S. 2003. *The Uncanny*. New York, NY: Penguin Books Ltd.
- Funtowicz, S. O., and J. R. Ravetz. 1993. "Science for the Post-Normal Age." *Futures* 25 (7): 739-755.
- Giri, A. K. 2013. "Rethinking Integration." *Sociological Bulletin* 62 (1): 100-109.
- Glenn, J. C. and T. J. Gordon 2003. *Futures Research Methodology*. Washington, DC: The Millennium Project.
- Go, J. 2013. "For a Postcolonial Sociology." *Theory and Society* 42 (1): 25-55.
- Gould, S. 2008. "Creating Alternative Community Futures: A Community Futures Tragedy." Master of Arts, PhD thesis. Queensland: University of the Sunshine Coast, Sippy Downs, 222.
- Gross, M. 2016. "Risk as Zombie Category: Ulrich Beck's Unfinished Project of the 'Non-Knowledge' Society." *Security Dialogue* 47 (5): 386-402.
- Guhin, J., and J. Wyrzten. 2013. "The Violences of Knowledge: Edward Said, Sociology, and Post-Orientalist Reflexivity." In *Postcolonial Sociology*, edited by J. Go, 231-262. Bingley: Emerald Group Publishing Limited.

- Husain, M. M., and K. Osswald. 2016. "Zombie Graduates Driven by Rickshaw Faculty - A Qualitative Case Study: Private Universities in Urban Bangladesh." *Policy Futures in Education* 14 (7): 1020-1035. doi:[10.1177/1478210316666442](https://doi.org/10.1177/1478210316666442).
- Inayatullah, S. 1998. "Causal Layered Analysis." *Futures* 30 (8): 815-829.
- Inayatullah, S. 2003. "Ageing: Alternative Futures and Policy Choices." *Foresight* 5 (6): 8-17.
- Inayatullah, S. 2006. "Anticipatory Action Learning: Theory and Practice." *Futures* 38 (6): 656-666. doi:[10.1016/j.futures.2005.10.003](https://doi.org/10.1016/j.futures.2005.10.003).
- James, C. L. R. 2001. *The Black Jacobins: Toussaint L'Ouverture and the San Domingo Revolution*. London: Penguin Books.
- Kalberg, S. 2008. *Max Weber: Readings and Commentary on Modernity*. John Wiley & Sons.
- Marx, K., and F. Engels. 1968. *Karl Marx and Frederick Engels: Selected Works in One*. Vol. 184. New York, NY: International Publishers.
- Marx, K., F. Engels, and V. V. Adoratskii. 1942. *Karl Marx and Frederick Engels: Selected Correspondence, 1846-1895*. Vol. 29. New York, NY: International Publishers.
- Mayo, L. 2020a. "On Relics of Modernity." *Critical Muslim* 34 (2): 201-210.
- Mayo, L. 2020b. "The Postnormal Condition." *Journal of Futures Studies* 24 (4): 61-72.
- Mayo, L. 2020c. "Through the Sea Glass." *Critical Muslim* 34 (3).
- McLennan, G. 2013. "Postcolonial Critique: The Necessity of Sociology." In *Postcolonial Sociology*, edited by J. Go, 119-144. Bingley: Emerald Group Publishing Limited.
- Meadows, D. H. 2008. *Thinking in Systems: A Primer*. London, UK: Chelsea Green Publishing.
- Montuori, A. 2011. "Beyond Postnormal Times: The Future of Creativity and the Creativity of the Future." *Futures* 43 (2): 221-227. doi:[10.1016/j.futures.2010.10.013](https://doi.org/10.1016/j.futures.2010.10.013).
- Moreman, C. M. 2010. "Dharma of the Living Dead: A Meditation on the Meaning of the Hollywood Zombie." *Studies in Religion/Sciences Religieuses* 39 (2): 263-281. doi:[10.1177/0008429810362316](https://doi.org/10.1177/0008429810362316).
- Morton, T. 2010. *The Ecological Thought*. Cambridge, MA: Harvard University Press.
- Nowotny, H., P. B. Scott, and M. T. Gibbons. 2013. *Re-Thinking Science: Knowledge and the Public in an Age of Uncertainty*. Hoboken, NJ: John Wiley & Sons.
- Polak, F. 1973. *The Image of the Future*. Amsterdam, NY: Elsevier Scientific Publishing Company.
- Polanyi, K. 1944. "The Self-Regulating Market and the Fictitious Commodities: Land, Labor, and Money." In *Primitive, Archaic, and Modern Economies: Essays of Karl Polanyi*, edited by G. Dalton, 26-37. Garden City, NY: Doubleday & Company, Inc.
- Quiggin, J. 2012. *Zombie Economics: How Dead Ideas Still Walk among Us*. Princeton, NJ: Princeton University Press.
- Said, E. W. 1979. *Orientalism*. New York, NY: Vintage Books.
- Sardar, Z. 1998. *Postmodernism and the Other: New Imperialism of Western Culture*. London: Pluto Press.
- Sardar, Z. 2010. "Welcome to Postnormal Times." *Futures* 42 (5): 435-444. doi:[10.1016/j.futures.2009.11.028](https://doi.org/10.1016/j.futures.2009.11.028).
- Sardar, Z. 2013. *Future: All that Matters*. London, UK: John Murray.
- Sardar, Z. 2015. "Postnormal Times Revisited." *Futures* 67: 26-39. doi:[10.1016/j.futures.2015.02.003](https://doi.org/10.1016/j.futures.2015.02.003).
- Sardar, Z. 2020. "The Smog of Ignorance: Knowledge and Wisdom in Postnormal Times." *Futures* 120: 102554.
- Sardar, Z., and J. Henzell-Thomas. 2017. *Re-thinking Reform in Higher Education: From Islamization to Integration of Knowledge*. London, UK: International Institute of Islamic Thought.
- Sardar, Z., and J. A. Sweeney. 2016. "The Three Tomorrows of Postnormal Times." *Futures* 75: 1-13. doi:[10.1016/j.futures.2015.10.004](https://doi.org/10.1016/j.futures.2015.10.004).
- Seidman, S. 2013. "The Colonial Unconscious of Classical Sociology." In *Postcolonial Sociology*, edited by J. Go, 35-54. Bingley: Emerald Group Publishing Limited.
- Serra, J. 2014. "Postnormal Governance." *East-West Affairs* 2 (1): 5-13.
- Skúlason, P. 2015. *A Critique of Universities*. Reykjavik: University of Iceland Press.

- Slaughter, R. A. 1996. "The Knowledge Base of Futures Studies as an Evolving Process." *Futures* 28 (9): 799-812.
- Smith, J. A. 2013. "Structure, Agency, Complexity Theory and Interdisciplinary Research in Education Studies." *Policy Futures in Education* 11 (5): 564-574.
- Smyth, J. 2018. "The Toxic University: Zombie leadership, academic rock stars, and neoliberal ideology , by John Smyth." *London Review of Education* 16 (3): 516-517. doi:10.18546/LRE.16.3.14.
- Spivak, G. C. 1988. "Can the Subaltern Speak?" In *Marxism and the Interpretation of Culture*, edited by C. Nelson and L. L. Grossberg, 271-313. Urbana, IL: University of Illinois Press.
- Stevenson, T. 2002. "Anticipatory Action Learning: Conversations about the Future." *Futures* 34 (5): 417-425.
- Stevenson, T. 2008. "Imagining the Future: Ideas for Change." *Futures* 10 (40): 915-918.
- Vervaeke, J., C. Mastropietro, and F. Miscevic. (2017). *Zombies in Western Culture: A Twenty-First Century Crisis*. Cambridge: Open Book Publishers.
- Webb, J., and S. Byrnam. 2008. "Some Kind of Virus: The Zombie as Body and as Trope." *Body & Society* 14 (2): 83-98.

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