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Wild Presence

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Abstract

The purpose of the present paper is to make a case for the reality of experience by conceptualizing it in terms of *self-sustaining embodied context*, as opposed to subjective or mental properties entailed in physical bodies. In need of a way to refer to the patterns we find in embodied context (i.e., experience) without using terms derived from physical-mental, objective-subjective dialectics, we examine the utility of discussing embodied context in terms of *presence*. At its core, presence refers to the persistent Now that runs through all our experiences, and stands in contrast to the "block universe" approach to reality. We then examine how the notion of embodied context speaks to the conceptualization of time entailed in the concept of presence, while simultaneously addressing the notions of bodies, intentionality, and phenomenology in a manner that is consistent with the notion of presence, yet renders presence causal and, therefore, non-epiphenomenal.

1. Introduction

Wild Systems Theory (WST) is a theoretical framework developed for cognitive science specifically (Jordan and Day 2016a,b, Jordan and Heidenreich 2010, Jordan and Ghin 2006), and the relationships between the arts and sciences, and culture and the sciences, in general (Jordan 2006, Jordan and Vinson 2012). WST attempts to establish the reality of experience by conceptualizing organisms as *multi-scale, self-sustaining, embodiments of context*. By *self-sustaining*, WST asserts that the energy-transformations that constitute an organism produce products that feed back into and sustain the work (i.e., energy transformations) that produced the products in the first place. At the single cell level, Kauffman (1995) refers to this type of work as *autocatalysis*, the idea being that over

the course of evolution, networks of chemical reactions emerged within the prebiotic soup that were ultimately capable of sustaining their existence as networks because certain of the reactions in the network were actually catalysts for the reactions that produced them, or for some other reaction in the network.

Referring to such systems as *multi-scale* speaks to the idea that organisms are constituted of multiple, nested scales of self-sustaining work. Maturana and Varela (1980) for example, referred to single-cell organisms in terms of *autopoiesis*, the idea that a system contains all that is needed to sustain and reproduce itself. At the neural level, Hebb (1949) created the notion of the *cell-assembly* to refer to the self-sustaining nature of neurons and neural networks (i.e., "neurons that fire together, wire together"). At the behavioral level, Skinner (1976) created reinforcement theory to refer to the self-sustaining nature of behavioral work. That is, behaviors (i.e., patterns of behavioral work) are sustained within, or deselected from, an organism's behavioral repertoire as a function of the consequences (i.e., products) they generate. Streeck and Jordan (2009) conceptualize interactions among organisms (i.e., communication) in terms of multi-scale work (e.g., postural alignment, gaze, gesture, and speech). And finally, Odum (1988) and Vandervert (1995) have referred to ecologies and societies, respectively, in terms of multi-scale, self-sustaining work.

2. Wild Systems and Embodied Context

By conceptualizing organisms in terms of multi-scale, self-sustaining work, WST is able to make a case for the reality of experience. Specifically, if organisms are constituted of multiple scales of self-sustaining work, then they can be conceptualized as self-sustaining *embodiments of context*. That is, the energy transformations that constitute the system must necessarily be of, from, and about the context within which the system emerged and within which is sustains itself. In short, the inside constitutes an embodiment of the constraints (both internal and external) the systems necessarily addresses to sustain itself.

It is this notion of *embodied* context, or embodied *aboutness* that WST equates with experience – not in the traditional sense in which experience is equated with subjectivity and contrasted with objectivity (i.e., that which is observer-independent), but in the *relational* sense that aboutness (i.e., embodied context) is something of which organisms *are constituted*. By relational we mean that a relational property, in essence, is an entity that is partially constituted by its relations with other entities. Rosen (1958, 1991) for example, famously coined the phrase *relational biology* to make the case that biological systems are closed to efficient cause and, as a result, should be classified as relational systems.

In cognitive science, Gibson (1979) borrowed the concept of *affordances* from the Gestalt psychologists and their notion of the *Aufforderungscharakter*, the idea that the environment, including other organisms, is perceived in terms of behavioral possibilities (i.e., affordances). Since these possibilities do not reduce to either the organism or the environment, and are, instead, constituted by both, they are described as being *relational*, and, as a result, are deemed inherently meaningful. Silberstein and Chemero (2015) recently proposed that because of their status as relational properties, affordances constitute the means by which organisms overcome subjective-objective divides.

WST's notion of embodied context is consistent with the notion of relational properties, yet goes a step further and asks what, if any, properties are non-relational (Jordan *et al.* 2017, Jordan and Day 2016a,b). That is, what aspects of realtiy, if any, exist as they do, independently of all context? Such a question is consistent with recent work in the philosophy of science that challenges the traditional distinction between *intrinsic* and *relational* properties. Mass, for example, is often contrasted with weight in order to distinguish intrinsic from extrinsic properties, in that, while the value of weight varies with gravity, the value of mass does not. Thus, weight is described as a relative, or *relational* property, while mass is described as being intrinsic. Jordan *et al.* (2017) assert that such an approach to defining intrinsicness leaves one vulnerable to the idea that because mass seems to be gravity-independent, its existence as mass is also *context-independent*. That is, the notion of intrinsicness can lead one to believe there are properties that exist completely independent of all other properties (i.e., independent of all context).

This concern with the idea of intrinsic, context-independent properties is shared by many contemporary philosophers of science. Jammer (2000) proposes that a particle's inertial mass emerges from its interactions with the Higgs field, which permeates all of space (i.e., all of context). Bauer (2011) argues that the dependence of mass on interactions between a particle and the Higgs field renders mass an externally grounded property, which is another way of saying the particle's mass depends on its context, and is therefore a *relational* property. A similar critique of intrinsicness can be found in Harré's (1986) notion of *ultra-grounding*, Prior *et al.*'s (1982) notion of *global groundedness*, and the assertion made by both Schaffer (2003) and Dehmelt (1989) that reality may ultimately be constituted of infinite levels of microstructure.

By asserting that all properties are relational, WST is able to assert that all of reality is inherently relational and, as a result, inherently *about*, or, said another way, inherently *meaningful*. According to this view, the phenomena we refer to via concepts such as *consciousness, self-awareness, phenomenology*, and *meaning* are conceptualized as phylogenetically scaled-up recursions on the aboutness inherent in all relations

and, in the end, of all of reality. As a result, embodiments of context are, likewise, inherently about – inherently meaningful.

Given that WST's focus on self-sustaining energy transformation is completely consistent with contemporary science, yet does not rely on concepts such as *physical, mental, objective, subjective, meaning, or information*, the notion of *embodied context* is able to describe the reality of experience in a way that does engender the ontological debates that are typically part and parcel to discussion regarding the reality of experience.

Although the notion of embodied context works well as a means of addressing the reality of experience, its reliance on the notion of *context* often renders it difficult to understand. Jordan *et al.* (2016) argue such difficulty arises from our tendency to conceptualize context as the constellation of yet-to-be measured background factors against which an event or object is foregrounded. Within such a take on context, it is possible to conceptualize the foregrounded event or object as existing *independently* of the myriad contextual factors that constitute its background. Said another way, our *ceteris paribus* thinking about context affords a belief in the notion of *intrinsic* properties.

Given the above-mentioned difficulties with the notion of intrinsic, context-independent properties, Jordan *et al.* (2016) assert that the acceptance of a context-independent notion of intrinsicness leads us to see context as simply constituting *background* factors. As a result, we miss the possibility that context is *constitutive* of the event or object. That is, by focusing on the foregrounded phenomenon (i.e., the event or the object), we lose sight of the fact that the event or object is completely *context-dependent*, in the sense that its existence as an object or an event *emerges from and is continuously constrained by* the context in which it exists. In short, objects and events constitute embodiments of context. According to WST's thoroughly relational ontology, organisms, just as the whole of reality, are constituted of relations. As a result, the notion of embodied context basically translates to the notion of embodied relationality.

An immediate advantage of the notion of embodied context is that discussions regarding the reality of experience do not require the use of unnecessary rhetorical dialectics such as physical, mental, objective, and subjective. As embodiments of context, events, bodies, and organisms are naturally and necessarily constituted of, and *about*, the contexts they embody and in which they emerge. As a result, they do not need to detect or process *information* from the environment in order to be "about" it. Rather, they need to modulate, and to be modulated by the contexts in which they sustain themselves. In short, embodiments of context are naturally and necessarily constituted of context and, as a result, of aboutness.

3. Bodies, Time, and Presence

WST utilizes the notion of embodied context as a means of addressing the subject-object divide that is central to many contemporary approaches to meaning, subjectivity, and consciousness. Within such subject-object divides, scholars assert that there is no such thing as a "self" or a "goal" – that instead, the "self" and "goals" are actually representations generated by the physical brain (Metzinger 2004). Others assert that our sense that we have conscious will is an illusion generated by the workings of our physical brain (Wegner 2002). And still others assert it is logically possible that a physical system identical to me could exist without any of my phenomenal properties (i.e., a zombie; cf. Chalmers 1996).

Common to these views is a physical-mental, objective-subjective divide that places the physical and objective in the center of reality, and the mental and subjective in conceptual spaces believed to be not quite as real. By conceptualizing bodies as embodied context, WST bypasses the subject-object divide and so avoids the problems such divides have perpetuated since their inception.

Just as WST's notion of embodied context was proposed to overcome subjective-objective divides by focusing on the nature of bodies in relation to the mind-body debates of its time, Franck (2008, 2012) attempts to overcome such divides by appealing to the nature of bodies, but in relation to contemporary debates regarding the nature of time.

3.1 Time and Presence

While it seems straightforward to propose that a body can be defined, in general, as a material object extended in three dimensions, it becomes more difficult when one attempts to describe how 3d objects are singled out in contemporary ontologies that conceptualize reality in terms of 4d spacetime. When looked at from spacetime, 3d objects result from cutting out time slices of vanishing width from the 4d continuum and separating them from their temporal environment. This type of cut is not provided in the physical worldview, according to which "the objective world simply is, it does not happen" (Weyl 1949, p. 116). According to this common opinion, often referred to as the *block universe view*, the world state happening to be present this moment is no more and no less real than any other.

Thus, while we will find a progression from "present" to "past" in experience, how this progression happens is not defined. The only kind of change natural science acknowledges is *real change*. Real change means that states differing in date also differ in structure or function. There are neither *bodies* nor *lifetimes* in the block universe. There are no 3d objects since there is nothing that could single out momentary states from their temporal environment, i.e. from adjacent coordinates in 4d space. Each

state, to repeat, is as real and existent as any other. In the block universe, time is a genuine dimension: it is the extension of the state space. The block is there, once and forever; time measures its extension as do the dimensions of space. In spacetime, accordingly, the dimensions of time and space are exchangeable (under the sole condition that one of the four dimensions is time-like).

While the block universe may not contain independent moments of "now" that flow into new "nows" that recede into the "past", human phenomenology does. These differing takes on time have proved troubling for physics (Carnap 1963, p. 37):

> Einstein said that the problem of the Now worried him seriously. He explained that the experience of the Now means something special for man, something essentially different from the past and future, but that this important difference does not and cannot occur within physics. That this experience cannot be grasped by science seemed to him a matter of painful but inevitable resignation.

In an attempt to reconcile these two different takes on time, without introducing yet another objective-subjective divide, Franck (2008, 2012) introduces the notion of *actuality*. Actuality refers to what is both real and present. *Reality* encompasses the past, the whole of history and pre-history, *actuality* does not. Actuality is restricted to the temporal present. Disregard such *presence* and you have removed the difference between past, present and future. Phenomena that exist only in virtue of being present in what is traditionally referred to as conscious experience are also traditionally referred to as qualia, and constitute *presence*. Franck (2012, p. 8) explains:

> Presence is a mode of existence on its own, clearly differing from the universal, objective, observer-independent, either-or mode of existence of physical realism. Presence is not either-or, but a matter of degree. It peaks in a "here and now", fades out towards a horizon, and varies in intensity.

To say that presence is a mode of existence on its own, is not to say that presence is independent of the block universe. Rather, it is to say that presence is a type of phenomenon that is different from the phenomenon of the block universe, yet both are entailed in reality. Clearly, the concept of presence is steeped in the phenomenological tradition of Heidegger (1927), and Franck (2012, p. 10) relies on Heidegger's notion of *dasein* as a means of clarifying presence.

> "Dasein" literally translates as "being there". When related to the mode the conscious mind exists in, "to be there" assumes a double meaning. It can mean to exist as a living organism (the brain), and it can mean to be present in the sense of mental presence ...

> Being, thus understood, means presence, as distinct from the things and events presented. The conscious mind is that one distinguished entity that itself performs the ontological differentiation of Being and Entities.

As a mode of being that cuts 3d bodies out from 4d space, presence is intrinsically dynamic, thus turning being into continuous becoming. This separation is performed by suppressing the presence of the environment, i.e. by turning the temporally adjacent regions into past or, respectively, future.[1] The time slice thus singled out is never the same, however. The phenomenon that is present, this moment, is now, this moment later, already past. Each moment another state is presented only to vanish into the past.

3.2 Bodies and Presence

For bodies, particularly those of organisms that have to move and navigate their environment in order to survive, the dimensions of space and time are far from exchangeable. The dimensions of space (e.g., x, y, and z), rather, are the directions in which the organism is allowed to perceive and to move freely. Time, however, is the direction in which the organism is neither capable of looking into nor free to move. Past and future are unperceivable and inaccessible. In time, one is not free to move, but subject to mercilessly enforced movement. One is bound to move in time in virtue of one's being bound to live in the now, i.e., to grow older. This difference is reflected in basic traits of the organism. Organs have evolved for movement in space, but not for movement in time.

The now is a narrow place to live in. To live in the now means to be prevented access to both the past and the future region of time. For an organism whose survival depends on its capability to find and capture sources of energy as well as the ability to avoid toxins and to flee from predators, this means that it has to find out ways of circumventing its blindness towards its temporal environment. Even an amoeba must be able to compare, in one way or another, its present with its previous state in order to follow the concentration gradient of a nutrient solution (Jordan and Ghin 2007). It must have a minimum memory and the anticipatory disposition of goal directedness.

Without anticipation and recollection, there is no comparison of before and after, hence no change discernible and no notion of time. Once a comparison occurs of what is and what is not (yet or no more), the *actual* splits into the immediate present and the reality extending beyond the now. When this split came to be, evolution gave rise to a new actual with a not predestined wealth of adjacent possibles (Kauffman 2016).

[1] Whitehead (1978) on the transition from spacetime (God's eye's view) to nowness.

However, this split, or divide, between the immediate present and the reality extending beyond the now did not occur without being overcome at the same time. The environment of 3d objects with the body being one of them is due to a present that is both standing and flowing. It is in motion relative to the states making appearance in it. The states of the organism and the environment are subject to constant change. To be an organism embodying the context that one is embedded in thus means to be in continuous *statu nascendi*.

3.3 Real Change, Temporal Change, and Presence

It is exactly this mode of existence that is dismissed by a physical worldview, according to which "the objective world simply is, it does not happen". By being dismissed from the objective world, presence finds itself suspected to be a purely subjective phenomenon, i.e. an appearance without counterparts in objective reality. This idea is well expressed in positions asserting that the "general view today of scientifically minded philosophers concerning the temporal passage is that it is a subjective illusion" (McCall 1994, p. 26). There do exist phenomena, however, that contradict the idea that presence and the experience of time that it entails are simply subjective illusions.

Specifically, Franck (2012, p. 11) distinguishes between presence and temporal change:

> ... presence ... is tied to the perspective of the first person The temporal present, in contrast, has inter-subjective meaning. People agree on living in one and the same "now". They even agree on the particular world state happening to surface in the "now".

Franck (2012) further clarifies the distinction between presence and temporal change via the following three observations. First, presence entails an ability to change the focus of attention in ways that increase the intensity of some aspects of presence while decreasing the intensity of others, what Franck refers to as *focal* change. Focal change occurs, for example, when one shifts one's attention from the shape of an object to its color. Second, not all aspects of presence are under intentional control because the intensity of some phenomena cannot be varied simply by will, as occurs when the brightness of the sky decreases from dusk till dark. And third, the intensity of presence fluctuates in the daily cycle from waking, to getting tired, to sleeping. As one wakes, one has the sense the temporal "now" has simply moved on, independently of ones intentions.

Franck (2012) asserts that the above-mentioned points allow one to clearly distinguish presence from temporal change. And even though the seeming synchronization of temporal change seems to be forbidden by relativity theory, the now and temporal change are objective in the social sense of objectivity. They are acknowledged, accordingly, by experimental

physics. As a result, experimenters cannot simply ignore the difference between past, present and future. In particular, they cannot ignore the now when measuring time itself.

Even though relativity theory treats time and space coordinates exchangeably, time resists being measured like space. In space, distances are measured by simple comparison; for measuring distances in space, a ruler is enough. In time, things are not so simple. The reason is that we are forbidden, under penalty of death, to leave the now. This prohibition is as objective as anything can be objective. It forbids comparison of distances in time because distances in time extend beyond the now. The only way of measuring time thus consists in counting recurring events in the very now. The dependence on this cumbersome and lastly unsatisfactory method is experimental proof of the objectivity of the temporal present.

The experimenter adapts to the temporal nature of the context in which she or he is embedded in a way that is not altogether different from that which unicellular creatures discovered at the dawn of biological evolution. She or he assimilates, as does the microbe, the brute fact that there is no escape from the now – unless forever.

By drawing a distinction between the perspective-laden nature of presence and the seemingly perspective-independent (i.e., inter-subjective) nature of temporal change, Franck is able to begin describing a relation between the conception of time entailed in the notion of presence, and the notion of time addressed in the block universe framework. Specifically, Franck points out that the temporal change entailed in presence seems to "move on" as it were, with neither a cause nor the involvement of energy.

What changes in temporal change is just the intensity with which world states are present. But because temporal change is so inter-subjective and non-controllable, he states, "there is no other way, thus, to establish synchrony between individual instances of mental presence than by involving real change" (Franck 2012, p. 11). In other words, because there exist phenomena in presence that (1) cannot be controlled by the individual, and (2) are inter-subjective, it seems that presence must somehow be connected with the real change entailed in the block universe.

3.4 Wild Presence: A Potential Synthesis of Presence, Energy, and Embodied Context?

As stated above, temporal change and presence seem to simply "happen" and do not feel as if they require a cause or an expenditure of energy. Temporal change, the change of the intensity with which world states are present, is spontaneous; it simply seems to come and go. Thus, one might assume that presence, as a mode of existing, is basically incompatible with energy and altogether exempt from causality – hence, the collapse into notions of time as a subjective illusion.

Despite the fact that presence and temporal change seem removed from causality, the intensity of presence is subject to change, and such changes vary in the daily cycle of waking, tiring, dreaming and dreamless sleep. This cycle is clearly connected with the energy level of the brain. The intensity of presence (i.e., vigilance) is high when brain activity (e.g., measured by blood oxygenation level dependency) is high (Freeman, personal communication). The question, thus, of how presence might have evolved, may be tentatively translated into the question of how it is conceivable that presence found a way to energize itself. WST's conceptualization of organisms as self-sustaining embodiments of context may provide a fruitful approach to answering this question.

According to Kauffman (1995), living systems emerged spontaneously in the pre-biotic soup as the ratio of diverse chemical types to possible chemical reactions reached a critical value at which more and more reactions emerged that served as catalysts for either the reaction that produced them, or for some other reaction in a larger-scale network of reactions. Kauffman referred to such systems as *self-metabolizing*, the idea being that work (i.e., energy transformations) being accomplished by a network of interactions was producing its own energy source. As a result, such systems were able to move further and further away from thermodynamic equilibrium and, as a result, persist (i.e., sustain themselves).

This idea, that a system of energy transformation is able to sustain itself as a persistent whole across a time-scale larger than the transformations that constitute it, may provide a means of describing *efficacious* presence. It is efficacious because it is constituted of work (i.e., energy transformation). It constitutes presence because the work and its ability to sustain its integrity emerge relationally out of the contingent contexts of (1) the lower-level autocatalytic properties of certain chemical systems, and (2) the larger-scale, contingent context of the pre-biotic soup.

In other words, self-sustaining, wild systems are *contextually emergent* (Bishop and Atmanspacher 2006). As a result, the scientific description of self-sustaining systems cannot be reduced to a description of the autocatalytic properties of certain chemical interactions, for the emergence of such networks necessitated the larger-scale context of the prebiotic soup. Thus, while the lower-scale autocatalytic properties were necessary for the emergence of self-sustaining systems, they were not sufficient. Rather, these lower-scale autocatalytic properties had to be embedded within the contingent, larger-scale context of the pre-biotic soup.

Given that both lower- and higher-level scales are necessary for the emergence of self-sustaining systems, their contextually emergent nature renders them *relational systems*; that is, they are constituted of the persistent interaction of the smaller-scale autocatalytic properties within the larger-scale context of the pre-biotic soup. The emergence and sustainment of such persisting wholes is consistent with the idea that such sys-

tems are continuously in *statu nascendi*. As a result, one might speculate such self-sustaining, continually emerging, persisting wholes constitute the phenomenon we refer to as the temporal now. In short, wild systems constitute presence.

The notion of contextually emergent *status nascendi* is consistent with WST's notion of *embodied context*. For given both lower- and higher-level contexts are necessary for the emergence of such systems, self-sustaining energy transformers naturally and necessarily embody both scales of context (Jordan and Ghin 2006). That is, they are constituted of both contexts. As a result, their ability to sustain themselves as wholes across the nesting of smaller- and larger-scale dynamics indicates they are constituted of memory and anticipation. In regards to the former, they are naturally and necessarily embodiments of previous Nows or, said another way, they are embodiments of their own, previous dynamics. In regards to anticipation, their persistence across smaller- and larger-scale dynamics constitutes a pre-specification to their current context, of the possible ways in which they can persist in context. In short, the persistent sustainment of the macro-whole across multiple scales of nested dynamics renders them inherently memory- and anticipation-laden.

An immediate advantage of the notion of wild presence is that it affords a means of describing the concepts of time and now that satisfies the qualities of presence (i.e., spontaneity and the differentiation of past and future from the now), yet renders it efficacious because it is constituted of energy transformation. At the level of the single cell, the contextually emergent stability would give rise to a duration of scale-relative, dynamic persistence, that one might refer to as time.

Said another way, the macro-stability would perpetually give rise to, and persist within, the now, the duration of which (or temporal aspect of which) would emerge from the relation between the smaller-scale work that constitutes the larger-scale whole, and the larger-scale contingent context that was needed for the emergence. As a result, both time and the now are contextually dependent, contextually emergent properties of embodied context.

In addition to addressing the nature of time and the now, the notion of embodied context also satisfies traditional concerns regarding phenomena referred to via concepts such as *intentionality* and *phenomenology*. In regards to the former, Jordan (2003) proposes that self-metabolizing (i.e., self-sustaining) systems constituted the phylogenetic emergence of *end-directedness* (i.e., intentionality) into the natural order. That is, as a single-cell system makes its way up a concentration gradient of nutrients, the micro-macro dynamics of the cell (i.e., the smaller-scale chemical systems that collectively constitute the cell, and the cell as a whole, respectively) are synergistically coupled in such a way that changes in the micro-level (e.g., low energy levels) give rise to macro-level phase transi-

tions (e.g., tumbling or swimming) that recursively change the dynamics at the micro-level (e.g., increased energy levels).

Jordan claims such systems entail end-directedness because the self-sustaining nature of their micro-macro synergy renders them inherently *directed* toward self-sustainment. In short, the micro-macro synergy, as a whole, constitutes a goal. To be sure, it is not the type of conscious goal humans have as they decide they want to eat ice cream or watch a movie. Rather, it is a goal in the sense that the system's dynamics actively offset disturbances to certain system states (e.g., energy levels) and, as a result, persist.

In regards to phenomenology, as we stated at the beginning of the present paper, WST proposes that due to their status as self-sustaining *embodiments of context*, wild systems are naturally and necessarily about the contexts they embody and, as a result, constitute *proto-aboutness*, or *proto-consciousness* (Jordan and Ghin 2006). This is not meant to imply that single-cell organisms entail the phenomenon we traditionally refer to as consciousness. Rather, the point is that the phenomenon of consciousness (i.e., phenomenology) may actually be a phylogenetically scaled-up recursion on the embodied aboutness inherent in all self-sustaining embodiments of context, what we have described in the present paper as *wild presence*.

Rather, the point is that it is logically possible to coherently describe the phenomenon of consciousness in a manner that is completely consistent with contemporary science, yet does not rely on problematic ontological dialectics such as physical-mental, objective-subjects.

In short, wild systems constitute self-sustaining embodiments of the multi-scale context in which they phylogenetically emerged and in which they sustain themselves. In subsequent papers, Jordan and colleagues go on to describe a possible trajectory by which the embodied aboutness of single-cell organisms was able to eventually evolve into full-blown self-awareness (Jordan and Ghin 2007, Jordan and Heidenreich 2010, Jordan and Vinson 2012, Jordan and Day 2016a,b). At the heart of this trajectory is the energy-transformation hierarchy from which all wild systems contextually emerged and are naturally and necessarily about.

4. Conclusion

The purpose of the present paper is to make a case for the reality of experience by conceptualizing it in terms of *self-sustaining embodied context*, as opposed to subjective or mental properties entailed in physical bodies. In need of a way to refer to the patterns we find in embodied context (i.e., experience) without using terms derived from physical-mental, objective-subjective dialectics, we examined the utility of discussing embodied context in terms of *presence*.

At its core, presence refers to the persistent now that runs through all our experiences, and stands in contrast to a block-universe reality espoused by many contemporary philosophers and scientists. Here, time and space constitute separate dimensions of a four-dimensional reality, where time does not pass because any moment is just as real as all other moments.

The notion of embodied context allows us to discuss the persistent now without resorting to physical-mental, objective-subjective dialectics. First, because of their status as self-sustaining energy transformation systems, embodiments of context are naturally and necessarily causal, yet do not have to be referred to as physical. Second, if such systems are contextually emergent (i.e., their existence necessitates certain lower-level autocatalytic systems that are necessarily embedded in a larger-scale context that affords the emergence of self-sustaining systems; Jordan and Ghin 2006) the perpetuation of the entire system constitutes the emergence of a sustained, dynamic whole whose persistence might give rise to the collective now and, as a result, our notions regarding time. Third, because wild systems constitute embodiments of context, they are naturally and necessarily about the contexts they embody. Jordan and Ghin (2006) propose that because these embodiments of context were energy-transformation systems and, hence, energy *storage* systems, they afforded the phylogenetic scale-up from the small-scale aboutness of a single-cell organism to the full-blown self-awareness of a human being, as the emergence of one scale of energy-transformation systems afforded the emergence of larger-scale energy transformers capable of capturing the energy entailed in lower-level energy transformers. And finally, because the micro-macro synergies of self-sustaining systems were directed toward sustainment, Jordan (2003) asserts they constitute embodied intentionality which, just as embodied aboutness, was able to scale up to the level of human self-awareness due to its status as an energy storage system.

Collectively, it seems that the notions of embodied context and presence are quite compatible. By conceptualizing embodiments of context as self-sustaining energy transformation systems, WST is able to describe embodied context in ways that address (1) their status as thoroughly relational, and hence, meaningful systems, (2) their status as causal systems, (3) the contextually-emergent means by which they might give rise to the phenomenon we refer to as time, and (4) their natural and necessary end-directedness (i.e., their status as intentional systems). The presence such systems entail is a vital, self-sustaining presence, whose status as energy-transformation systems affords it the ability to cull out a trajectory in the block universe and give rise to very real, very robust *lifetimes*. In short, it is *wild* presence. Or, as stated by Mead, "the world is a world of events" (1932, p. 1).

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