

Original Article

A.N. WHITEHEAD AND SUBJECTIVITY

Paul Stenner

University of Brighton, Brighton, UK

Correspondence: Paul Stenner, School of Applied Social Science, University of Brighton, Falmer Campus, Mayfield House, Brighton BN9 1PH, UK.

E-mail: P.Stenner@brighton.ac.uk

Abstract

This paper comes at subjectivity from a Whiteheadian perspective. It argues that Whitehead provides us with a “deep” form of empiricism grounded in the notion of the “actual occasion” of experience and in the temporal and spatial co-assembly of multiplicities of such occasions. A deep empiricism that embraces process, affirms creativity, foregrounds value and refuses to bifurcate nature into irreconcilable subjective and objective aspects, it is argued, might serve as a useful corrective to current tendencies in social theory to avoid subjectivity and to elide the differences between forms of subjectivity.

Keywords

Whitehead; subjectivity; deep empiricism; critical psychology; experience; process

Subjectivity (2008) 22, 90–109. doi:10.1057/sub.2008.4

Introduction

Alfred North Whitehead was born in the UK in 1861 and died in the US in 1947. In a recently published introduction to Whitehead’s philosophy, Philip Rose (2002, p. i) describes the later philosophy of Alfred North Whitehead as “arguably among the least understood and appreciated work of the Twentieth Century” and adds that it has been “largely overlooked”. He attributes this situation in part to the sheer



difficulty and novelty of Whitehead's writings, which he compares to Kant's *Critique of Pure Reason*.

This situation of being overlooked is changing in philosophy and social theory. Prominent philosophers and theorists of science such as Isabelle Stengers, Donna Haraway and Bruno Latour have contributed a new and unexpected frisson of "radical chic" to Whiteheadian process philosophy. Isabelle Stengers (2002), for example, gives an excellent account of the *constructivist* nature of Whitehead's thought. Also of relevance in this context are the evident parallels between Whiteheadian thought and that of Gilles Deleuze (Halewood, 2005). Deleuze was directly influenced by Whitehead, as can be seen in such terminology as intensities of experience, disjunctive syntheses, planes of immanence and events. But in addition to this, both were strongly influenced by Henri Bergson and his organismic and anti-mechanistic style of philosophy with its roots in figures such as Spinoza and Leibniz. In a recent volume, Nigel Thrift, through a reading of Pred's (2005) work, identifies "the rediscovery of the process philosophy of Whitehead" as a key facet in the current challenge to "social theory as currently constituted" (Thrift, 2008, p. 226).

It should also be briefly noted that Whitehead has long exerted a slow but steady influence within psychology, particularly at the biology/psychology interface, which he called "psychological physiology" (Hartshorne, 1934; Johnson, 1945; Wolf, 1981; Langer, 1988; Riffert and Weber, 2003). He has been somewhat less influential with respect to the psychosocial interface, however, where questions of subjectivity have been no less intensely debated in recent years (Henriques *et al.*, 1984; Hollway, 1989; Tolman and Maiers, 1991; Hofmeister, 2005). Psychosocial theorists have tended to draw accounts of subjectivity from sources such as psychoanalytic theory, phenomenology, symbolic interactionism and discourse theory and in fact there has been a distinctly "unWhiteheadian" tendency to champion subjectivity *against* notions of objectivity as if they were polar opposites. No doubt this tendency is part of a reaction against the objectivist biases of mainstream experimental psychology which has long striven to guarantee scientificity by way of the expulsion of subjectivity from the midst of its procedures (Curt, 1994).

There have, however, been some clear moves in recent social theory to renounce this "anti-object subjectivism" and to re-engage with objects, with embodiment and with materiality. Obvious examples are actor-network-theory (ANT), feminist and queer theory, and Deleuzian post-structuralism. These are perhaps the key sources that are nowadays renewing an interest in Whitehead among social theorists and philosophers. These are broadly positive moves that trouble overly clear distinctions between subject and object, draw attention to "hybrid" entities and processes of assemblage and dispersal, and open new questions concerning what we actually mean by subjectivity and experience (Middleton and Brown, 2005; Stephenson and Papadopoulos, 2006).

From a Whiteheadian perspective, however, there are at least two key sources of misunderstanding latent in some of these “returns” to “the body”, “the object” and “materiality”. There is a rather too hasty dismissal of the concept of subjectivity as such and there is a related tendency to “flatten out” any would-be distinctions between human and non-human entities. Such positions thus risk a return to a bleak anti-subjectivism that mocks those who might cling to the idea that “humans are very different from knives or paper” (Harman, 2002, cited in Thrift, 2008). With respect to the latter, for example, Nigel Thrift invokes the ANT principle of the democracy of things and states that in his theory “things [and human beings] are given *equal* weight, and I do mean equal” (Thrift, 2008, p. 9). Much of this is done in the name of a Whiteheadian inspiration since the book begins with strong references to Whitehead, including key concepts such as the “actual occasion”.

The point concerning the dismissal of subjectivity can be brought out most starkly by contrasting one of Thrift’s statements about his non-representational theory with a statement from Whitehead himself. “Thus things”, writes Thrift, “are not just bound by their brute efficacy to the visible termini of humans in some form of latent subjectivism such as ‘concern’ or ‘care’”. Now, it is certainly true that for Whitehead a “thing” is, by definition, “describable without reference to its entertainment” in an occasion of experience (Whitehead, 1933/1935, p. 226). In this sense, things are not “bound by their brute efficacy to the visible termini of humans”. But it is certainly problematic to imply that his work is based upon a move away from the subject–object relation as the fundamental structure of experience and hence from concepts such as concern and care. On the contrary, on this matter Whitehead’s thinking is quite comparable to that of his contemporary Martin Heidegger in being grounded in the concept of concern. The centrality of this concept is due to the way in which it brings together subject and object as relative terms in the unity of what he calls an *actual occasion* of experience:

Thus the Quaker word “concern”, divested of any suggestion of knowledge, is more fitted to suggest this fundamental structure. The occasion as subject has a “concern” for the object. And the “concern” at once places the object as a component in the experience of the subject, with an affective tone drawn from this object and directed towards it. With this interpretation, the subject–object relation is the fundamental structure of experience. (Whitehead, 1933/1935, p. 226)

Granted, Thrift does state that he wishes to “temper... the more extreme manifestations of this lineage, which can end up by positing a continuity of and to experience about which I am sceptical” (2008, p. 6). However, one wonders what is left of Whiteheadian cosmology if this radical extension of the concept of experience and hence of empiricism is omitted. It is a little like being a Marxist without the dialectical materialism. It is also difficult not to be sceptical about the

remaining self-consciously “inhuman” theoretical framework “in which individuals are generally understood as effects of the events to which their body parts (broadly understood) respond and in which they participate” (Thrift, 2008, p. 60). In recent “radical” social theory, it seems the baby of subjectivity is at risk of being thrown out with the bathwater of representationalism, leaving only the hollow remainder of a reactive ensemble of “body parts”.

Some clarity is therefore needed if we are not simply going to recruit Whitehead into concerns alien to his own. His chief problem was not the notion of the subject/object structure of experience itself, but its too rapid identification with the difference between knower and known (Whitehead, 1933/1935, p. 225). It is this conflation of the deeper subject/object relation with the more superficial distinction between knower and known that gives rise to a “representational” style of thinking and its interminable debates. I will argue that it is precisely by way of the subject/object relation of the actual occasion that we are best positioned to conceive of “the cumulation of the universe and not a stage-play about it” (Whitehead, 1927–1928/1985, p. 237).

Deep empiricism and shallow empiricism

A key aim of this paper is to intervene in these current debates in social theory by arguing that we can recognize in Whitehead’s philosophy an exemplary instance of what I wish to call *deep empiricism*.¹ “Deep empiricism”, in the sense in which I use it here, bears a very close family resemblance to William James’s *radical empiricism* (1912) and to a cluster of new labels that are now very much associated with Deleuzian philosophy, including “transcendental empiricism” and “plural empiricism” (Hayden, 1998). This resemblance is no surprise, since in the preface to the English translation of *Dialogues*, Deleuze (Deleuze and Parnet, 1987, p. vii) explains that his distinct brand of empiricism is “derived from the two characteristics by which Whitehead defined empiricism: the abstract does not explain, but must itself be explained; and the aim is not to rediscover the eternal or the universal, but to find the conditions under which something new is produced (creativity)”.

The notion of deep empiricism presupposes a distinction with a more shallow form. I will define “shallow empiricism” as a combination of two aspects that are usually presented as mutually antagonistic but that are actually two sides of a single coin: a “material aspect” and an “ideal aspect”. On one side of the coin, the world is presented as essentially made up of meaningless matter. Real “objective” reality is thus brute physical “stuff” or substance. Any attributions of subjectivity (aim, value, enjoyment) to nature itself are to be strictly avoided. When observing nature, the shallow empiricist thus observes only what is publicly observable. To the extent that this is achieved, the subjectivity of the knower can be considered objective. On the other side of the coin, the notion of subjectivity is restricted only to the high-grade experiences of a human knower.

Thus, in shallow empiricism we find the evacuation of subjectivity from nature and its concentration into the figure of the human knower. Shallow empiricism thus broadly corresponds to the form of empiricism we typically associate with the word empiricism, namely, the philosophical doctrine which holds that sense experience is the origin of all knowledge.

Far from being a species of empiricism predicated upon the exclusion of subjectivity, deep empiricism radically extends and refines the domain of subjectivity. But in deep empiricism neither “subject” nor “object” play the role of first term or primary substance. On the contrary, as has already been hinted at, the first term is always an *actual occasion* and an actual occasion is always a fusion of subject and object in the unified event of an experience. Deep empiricism is thus “deep” in at least four ways:

- (a) ... because it entails a thoroughgoing shift in cosmological perspective. That is to say, it entails a shift away from either materialism (where “matter” is ontologically foundational) or idealism (including linguistic relativism) and towards a process ontology grounded in concern (Stenner, 2008).
- (b) ... because subjectivity is considered to extend well beyond the high-grade forms of human subjectivity typically associated with “consciousness” and “knowing”. Human conscious experiences and in particular our high-grade perceptual experiences are a late arrival on the scene of experience which, in fact, presuppose more fundamental forms of subject/object relation that can equally well be analysed in terms of actual occasions of experience. These “depths” matter, since the higher grade complexities build upon and, as it were, “parasite” the more basic forms of subject/object relation that Whitehead identifies with the concept of concern (Serres, 1982; Stenner, 2005).
- (c) ... because it allows serious consideration of the bewildering complexity and uniqueness proper to those higher grades of experience that include consciousness and linguistic mediation. It allows us both to affirm a certain commonality between human beings, animals, plants and even rocks but without “flattening out” or otherwise denying the very important differences between the kinds of actual occasions that occur in the context of, say, a mountain, a penguin, an organ and a human being. Without wishing to be unpleasant to amphibians, the subjectivity of a human being is a deepened and intensified form of subjectivity than that experienced by, say, a frog.
- (d) ... finally, because it is not just about describing more or less accurately some matter of fact, but about finding the conditions under which something new is invented and enters into the world. Experience is about novelty and creativity: it is the becoming of objective reality. As such it concerns a certain deepening of the possibilities immanent in an existing state of affairs. Whitehead’s principle of relativity holds that “it belongs to the nature of every “being” that it is the potential for every “becoming” (Whitehead, 1927–1928/1985, p. 45).

The genealogy of shallow empiricism: bifurcating nature on the basis of the fallacy of misplaced concreteness

Shallow empiricism, as summarized above, assumes a splitting between a knower (who knows on the basis of sensory experiences) and a known (an objective terminus for such experiences). For shallow empiricism, “the subject” and “subjectivity” are terms that pertain to the knower (and not the known) and the “object” is that which is known (preferably “objectively”). The subject is thus associated with adult human beings undertaking difficult tasks of knowledge (and, as a corollary, with “less than adult” human beings who fall short of the desired objectivity when undertaking such tasks), while the object is associated with the externality of brute material thinghood. Shallow empiricism thus leaves us with a highly distorted and limited conception of subjectivity (which is considered as separate from nature), coupled with a rather partial and superficial account of nature (as an objective externality with no subjective depths).

Those familiar with the work of A.N. Whitehead will recognize in my description of shallow empiricism a classic example of what he calls the *fallacy of misplaced concreteness* and the related *bifurcation of nature*. The fallacy of misplaced concreteness is the tendency to mistake high-grade abstractions of thought for concrete reality. The high-grade abstractions that Whitehead was mostly concerned with were those ideas developed during the 16th and 17th centuries that gave rise to modern physics and its accompanying metaphysics of scientific materialism. The idea of reality being at base a question of brute physical value-free matter, for instance, is not actually a concrete reality but a high-level abstraction of thought that turned out to be highly productive in limited domains. It is an abstraction, however, that has not been considered tenable in the physical sciences themselves since at least the early 20th century. Unfortunately, these high-grade abstractions have interacted with more commonsensical descriptions to yield a set of convictions that are very hard to shake, not least because they are rarely expressed in an explicit way. These convictions include the idea that reality is made up of self-contained “bits of matter”, each with its own qualifications (such as shape, motion, mass, colour, etc.) occupying definite locations in unchanging “empty space” and related together spatially in a manner accessible to geometry. “Matter involves nothing more than spatiality, and the passive support of qualifications” (Whitehead, 1934, p. 18).

The authoritative physical doctrines of the 17th century thus sedimented the plausibility of an ontology which holds that the ultimate and fundamental reality is a “succession of instantaneous configurations of matter” (Whitehead, 1926/1985, p. 63). That is to say, the “stuff” of nature is ultimately composed of brute material with the property of *simple location*: it belongs to a specifiable point in time and a specifiable point in space. It is well known, for example, that

a foundational gesture of modern physical science was the gesture of excluding what are variously called “final causes”, “ends”, “purposes”, “intentions”, “teleological causes” or “aims”, from any scientific explanation of the natural world (Whitehead, 1934, p. 24). Objective physical events are caused by other objective physical events in complex chains of causality, and there is no point at which something “subjective” like an aim or a purpose or a value might intervene into such objective physical systems. Subjectivity – including issues of aim and enjoyment – is thus excluded from nature as a matter of methodological course: “Scientific reasoning is completely dominated by the presupposition that mental functionings are not properly part of nature” (Whitehead, 1938/1966, p. 156).

But this exclusion of “subjectivity” from nature (and consequent “bifurcation” of nature) is self-evidently questionable. It is the result of a selective abstraction. In other words, from all that there is in nature, only certain rules of succession based on certain physical processes are “abstracted out” for consideration. All other forms of evidence based on experience are excluded into the background such that what is abstracted out can alone become the object of focus and concern. It is this whole – that is, what is abstracted *plus* the excluded background – that alone can be called a concrete reality. This is why the fallacy of misplaced concreteness concerns the mistaking of abstraction for concrete reality.

For instance, as soon as one begins to consider the nature of living organisms, and especially higher-order animal life, it becomes at best deeply problematic to maintain the irrelevance of issues of value, aim, enjoyment and mental activity in general. But of course it is perfectly possible to abstract from such organisms only their material aspects, and to attend to these alone. To take this one step further, when it comes to the social functioning of human beings, questions of aim and value become not only unavoidable but also an essential factor in accounting for action. Demonstrating the motive of a suspect is an indispensable tactic for any prosecuting lawyer in a criminal trial, for instance, and a social policy without an aim would be considered a non-starter in most circles!

The doctrine of scientific materialism that was awakened and galvanized by the birth and rapid success of modern physics is blind to subjectivity since the exclusion of subjectivity is precisely the blind-spot that enables its materialist vision. In other words, it is not just that subjectivity is ignored, but that it is actively excluded from consideration (or “negatively prehended”). But this does not mean that subjectivity does not exist or that it is in fact not relevant to, and part of, nature. On the contrary, it is absent from nature only thanks to an abstract conception of nature predicated upon its exclusion. This abstraction deals only with a small portion of the evidence provided by human experience and completely ignores the rest. It strategically blinkers itself: “It divides the seamless coat – or, to change the metaphor into a happier form, it examines

the coat, which is superficial, and neglects the body which is fundamental” (Whitehead, 1938/1966, p. 154).

Deep empiricism: nature as the ordering of actual occasions

Deep empiricism corrects the limitations of shallow empiricism. The notion of experience is not restricted to the spectacular subjectivity of discursively mediated sensory consciousness but finds its proper place in the world of nature. Through the same gesture, nature is wrestled free from a scheme of abstract thought which construes it as essentially “a dull affair, soundless, scentless, colourless; merely the hurrying of material, endlessly, meaninglessly” (Whitehead, 1926/1985, p. 69).

As a world famous mathematician trained also in theoretical physics, Whitehead the philosopher was well aware that the common-sense foundationalist doctrine outlined earlier was unsustainable in the context of more recent scientific and mathematical developments. “The stable foundations of physics” he asserted, “have broken up... The old foundations of scientific thought are becoming unintelligible” (Whitehead, 1926/1985, p. 21). Developments in the natural sciences have, bit by bit, rendered each feature of the common-sense doctrine implausible, leaving nothing that could serve as the basis or foundation for all interpretation. In the 19th century, for example, the common-sense notion of empty space was eliminated and replaced with an idea of the spatial universe as a field of force or incessant *activity*. Later developments ensured the replacement of the notion of a passive substratum of self-contained enduring bits of matter with the identification of matter with sheer activity or *energy*. Early 20th century developments associated with the concepts of relativity and the quantum theory accelerated the degeneration of the common-sense dogma. By the early 20th century the entire common-sense doctrine expressing the fundamental features in terms of which the universe should be interpreted lay in tatters. Whitehead describes the new scientific view as follows:

The fundamental concepts are activity and process. There are essentially no self-contained activities within limited regions. These passive geometrical relationships between substrata passively occupying regions have passed out of the picture. Nature is a theatre for the interrelations of activities. All things change, the activities and their interrelations. To this new concept, the notion of space with its passive, systematic, geometric relationship is entirely inappropriate... It has thus swept away space and matter, and has substituted the study of the internal relations within a complex state of activity. This complex state is in one sense a unity. There is the whole universe of physical action extending to the remotest star cluster. (Whitehead, 1934, p. 36)

I have dwelt on these issues in order to convey something of the scale of Whitehead's philosophical project. His project was nothing less than to replace the metaphysics of scientific materialism with a more adequate cosmology that is faithful to the new scientific understanding and that accommodates all kinds of reality, from atomic reaction to conscious experience to socio-cultural exchange. His philosophy was thus directly informed by his early work in physics and in mathematics, but aimed to generalize well beyond these experiences. It is thus important to recognize that Whitehead offered a philosophy grounded, on the one hand, in a new logic of complex relational systems and, on the other, in a new physics of field theory, with its emphasis on the historicity of physical systems (Mays, 1959). In the next two sub-sections I will divide Whitehead's philosophical solution into two related aspects, which I will refer to as the "atomic" aspect of deep empiricism (which deals with the basic nature of experience and the basic experiences of nature as atomic events or occasions) and the "continuity" aspect of deep empiricism (which addresses the problem of how things endure and change).

The atomic aspect of deep empiricism: actual occasions of experience

For shallow empiricism the search for basic atomic units is the search for those basic and irreducible bits of matter out of which the universe is composed. If such materialism is to be superseded, then it is obvious that an alternative account of fundamentals is required. For Whitehead, that account centres around the concept of an *event*, or as later articulated, an *actual occasion*. In a work published in 1920 he put the matter in the following clear terms: "If we are to look for substance anywhere, I should find it in events which are in some sense the ultimate substance of nature" (Whitehead, 1920/2004, p. 19). By 1927–1928 his terminology had shifted from "event" to "actual occasion/entities" with the latter defined as "the limiting type of an event with only one member" (Whitehead, 1927–1928/1985, p. 73). The positive doctrine of *Process and Reality*, for instance, "is concerned with the becoming, the being, and the relatedness of 'actual entities.' 'Actual entities' – also termed 'actual occasions' – are the final real things of which the world is made up. There is no going behind actual entities to find anything more real" (Whitehead, 1927–1928/1985, p. 18).

Given that Whitehead devotes much of his book *Process and Reality* to clarifying the status of an actual occasion, here I can only allude very abstractly to a number of the key features of the concept. My selective description is designed to accentuate a "deep empiricist" account of subjectivity based on the notion that subjective and objective aspects are fused together in each occasion of actuality. An actual occasion thus exemplifies the "concern" relation discussed earlier whereby a subject has a concern for its objects. Its objects are thus components in the subjectivity of the occasion, but, importantly, the

subject itself comes into being through its objective concerns. It is important to remind ourselves that Whitehead is not just offering us a psychology, or a physics, but a metaphysics. He is aiming to invent notions that are applicable to every kind of actual occasion, from the most infinitesimal atomic events through to my subjective experience of this room right here and now. Here are some of the features that all such occasions of experience might share in common:

1. Consistent with the fundamental concepts of physics, an actual occasion is not a substance or material but an *activity of realization*.
2. The concepts of realization and activity require the concept of process. Process is defined as *the becoming of actual occasions*. An ontology of *process* thus replaces an ontology of state or substance (Stengers, 1997, p. 67): “At an instant there is nothing. Each instant is only a way of grouping matters of fact. Thus there are no instants, conceived as simple primary entities... Thus all the interrelations of matters of fact must involve transition in their essence” (Whitehead, 1934, p. 48).
3. The word “actual” in actual occasions requires a distinction between the actual and the potential. Actuality is the realization of potential in a particular concrete form. An actual occasion – in which a subject concerns its objects – is this process of actualization.
4. The realization of potential into actual form is called the process of concrescence in the sense of becoming concrete. Potential, when actualized in a given occasion, concretizes in a radically specific concrete form (*this* actuality and not *that* one).
5. Through concrescence many things (objects, data) are grasped or *prehended* through a process (i.e. through the becoming of an actual occasion) into a new unity. The many become one.
6. This process of unification effects a reduction in the complexity of the prior potential. Actuality is thus a *decision* (in the sense of a “cutting off”) amid potentiality. The exclusion of aspects of potentiality that are not selected for actualization in a given occasion is called “negative prehension”.
7. The inclusion of aspects of potential that are actualized is called positive prehension or *feeling*. A feeling is the operation of passing from the objectivity of an object to the subjectivity of an actual occasion. The concrescence of an actual occasion is thus effected by feelings through which objects enter into the real internal constitution of a subject.
8. An actual occasion is thus a *pattern* grasped into the unity of an event or a selective and hence “evaluative” *patterning* of the many into one. In other words, an actual occasion is a passage from a state of *disjunctive diversity* to a state of *conjunctive unity*.
9. Creativity is central to this process of *conjunctive synthesis*. Something new is added to the universe by the actual occasion (e.g. the pattern itself is

- added). “[T]he many become one and are increased by one” (Whitehead, 1927–1928/1985, p. 21).
10. This principle of creativity stresses the potential novelty of any particular instance of actualization. Potentialities, by definition, can be actualized in various different ways. The way an actual occasion does in fact actualize its potentials into concrete form is a matter of that occasion’s perspective on the many, and its “subjective aim”. Its specific manner of feeling the many is its “subjective form”.
 11. The subject with its perspective does not pre-exist its feelings but creates itself through them. Whitehead’s *category of subjective unity* (Whitehead, 1927–1928/1985, p. 222) expresses that ultimately an actual occasion is a creature that creates itself.
 12. One must thus distinguish the process of self-realization from its product. To do this, Whitehead distinguishes the subject from the superject. The subject is the process of self-realization considered in terms of its own novel internal constitution or in terms of the immediacy of its self enjoyment. It is the internal self-becoming of the actual occasion. The superject, by contrast, is the objective *product* of these experiences – the creature of its creative process. An actual occasion is thus always di-polar, involving the subjective process of feeling and its objective product (Whitehead, 1927–1928/1985, p. 29).
 13. As subject, the actual occasion is the becoming unity of conjunctive synthesis. As superject it takes its place as one among the many in disjunctive diversity. In short, the experience of the subject is expressed by way of the superject as an object.
 14. Finally, we return to process by way of the principle of relativity, which holds that “it belongs to the nature of every ‘being’ that it is a potential for every ‘becoming’” (Whitehead, 1927–1928/1985, p. 45). Once an actual occasion becomes a determinate superject, then it can play the role of one of the many objects that are the concern of another actual occasion with its process of creative conjunctive synthesis. The subject becomes the superject, which in turn becomes the object for a new subject.

The continuity aspect of deep empiricism: the grouping of occasions into enduring entities

The concept of the actual occasion as “atom” of experience requires a supplementary concept, namely the grouping of actual occasions into what Whitehead calls “societies” and “nexuses” of actual occasions. This is important because the event of an actual occasion is not something that can endure over time. An actual occasion, in Whitehead’s philosophy, is not something with a history and hence not something that changes. It is something that becomes and then perishes. It is a momentary event of experience. It is, in this sense, atomic. In other words, the completely real things do not endure in time. How then to account for continuity on the basis of this atomic theory? Whitehead is very

clear that the enduring actual things that we routinely encounter, such as mountains, and chairs and trees and animal bodies and conversations, are not actual occasions. The actual things that endure and change and have histories – including ourselves – are always *societies* or *nexuses* of actual occasions. They are organized groupings of occasions, arranged spatially, as contemporaries, and arranged temporally, in an unfolding sequence. In sum, the actual occasion functions to explain atomicity while the concepts of “society” and “nexus” function to explain continuity. This is why Whitehead writes of actual occasions occurring “in” non-living objects or “in” living entities. An organism, for instance, is not itself an actual occasion but a temporally and spatially organized ensemble or assemblage of diverse occasions. To the extent that you experience yourself as enduring in time as a coherent personal identity, you are a temporally structured society of actual occasions of experience.

Combining the atomic and continuity aspects enables us to see how we might simultaneously entertain the idea of the relevance of actual occasions of experience to all kinds of natural entities while still grasping that there might be vast differences in the quality and detail of such occasions (differences in what Whitehead calls their “subjective form”). In other words, we can recognize the continuities between, say, human, animal, vegetable and mineral but without flattening out the differences into a bleak materialism. Combining the atomic and continuity aspects thus gives insight into what it means to talk of different types or grades of actual occasion operating at the variety of levels of complexity afforded by differing forms of assemblage. At the highest grade, some of these assemblages host the kinds of occasions that we associate with the complexities of human mentality, and at the lowest grade they host the kinds of repetitive occasions associated with physical sciences. But all are events that share the basic subject/object relation of an actual occasion of experience.

The grading of assemblages of actual occasions

In part, deep empiricisms of various kinds (including those of Bergson, James and Whitehead) were generated, not just by transformations in physics, but also as part of the “organismic” turn in philosophy and epistemology that arose with the development and rise in status of biology. During the 19th century, the cell theory had established an “atomic” basis to biology comparable to Dalton’s work in chemistry, and Darwin’s theory of natural selection had provided an account of endurance based on the evolution of structures of activity. The combination constituted a deep “organismic” challenge to the mechanistic materialism dominant in physics (Whitehead, 1926/1985, p. 135). It seems quite clear from a biological perspective that a sharp distinction between, for example, mind and matter serves to omit the so-called “lower” forms of life such as vegetation and the simple animal species. At the very least the distinction cannot be sharply drawn, since these basic forms “touch upon human mentality at their highest, and upon inorganic nature at their lowest”

(Whitehead, 1938/1966, p. 150). Whitehead, however, was not content with a restricted deep empiricism that merely extends the concept of experience so as to include the life-processes of biological organisms. For him, the obvious challenge for philosophy is to elaborate the general continuity that exists between human experience, at one extreme, and those physical occasions that are the subject matter of physics, at the other (Whitehead, 1933/1935, p. 244):

An occasion of experience which includes a human mentality is an extreme instance, at one end of the scale, of those happenings which constitute nature.... But any doctrine which refuses to place human experience outside nature, must find in descriptions of human experience factors which also enter into the descriptions of less specialized natural occurrences. If there be no such factors, then the doctrine of human experience as a fact within nature is mere bluff, founded upon vague phrases whose sole merit is a comforting familiarity. We should either admit dualism, at least as a provisional doctrine, or we should point out the identical elements connecting human experience with physical science. (Whitehead, 1933/1935, p. 237)

We have already seen that, by the early 20th century, physics had moved towards a conception of basic reality as activity and process. More specifically, contemporary physics conceives a natural occasion as a locus of energy:

Whatever else that [physical] occasion may be, it is an individual fact harbouring that energy. The words electron, proton, wave-motion, velocity, hard and soft radiation, chemical elements, matter, empty space, temperature, degradation of energy, all point to the fact that physical science recognizes qualitative differences between occasions in respect to the way in which each occasion entertains its energy. (Whitehead, 1933/1935, p. 238)

At a basic level then, in physics we are dealing with the passing of energy from a particular event to a particular event. A key conclusion of Clerk-Maxwell's groundbreaking work, for instance, is that energy passes through recognizable spatial and temporal paths. These paths are the continuities of nature, and they involve the assembling of numerous momentary events into an enduring form of coordination or nexus. The physical occasions in their individual atomicity, on the other hand, received attention in quantum mechanics and quantum physics. Quantum physicists see energy transferred in the form of definite discontinuous "quanta". Again, this means that, for the contemporary physicist, there is nothing static in the world. The ultimate physical entities are always "vectors indicating transference" (Whitehead, 1927-1928/1985, p. 238). Continuity is not given but is to be explained in terms of concepts like reproduction, repetition and iteration, and these concepts refer to the grouping of atomic occasions.

This situation in physics is sufficient for the identification of a basic form of actual occasion. It contains the basic subject/object structure of experience that Whitehead identifies with the concept of concern. A flux of energy is transferred

from occasion to occasion. The energy from a previous occasion is a datum or object that is received into the new occasion, only to be passed on to the next occasion. Of course it is controversial to talk of “concern” in this context and to refer to the receiving occasion as a “subject” “experiencing” its object. Nevertheless, we have the bare minimum required to identify an ongoing process involving discrete atomic events and forms of continuity that result from the co-assembly of such events. For this reason, Whitehead talks of simple physical feelings. The word “feeling” here is metaphysical in nature and obviously does not refer to a conscious experience. It is an activity of feeling in which a datum is appropriated or prehended from one occasion that has passed into another that is in the process of becoming. A simple physical feeling is therefore an act of causation (Whitehead, 1927–1928/1985, p. 236). For this reason Whitehead also talks of “causal” feelings (Whitehead, 1927–1928/1985, p. 236). Causality as such is thus the process by which the cause transfers its feeling to be reproduced by the new subject as its own. Causation is the re-enactment of feeling or the flow of feeling from event to event or from atomic occasion to atomic occasion.

Compared with higher forms of experience, a simple physical feeling does not add to the datum in question, but merely passes it on, having actualized potential in the same way as its predecessor and its contemporaries. Whitehead thus also talks of physical feelings as conformal feelings. For Whitehead, such feelings explain the mass conformity in the physical world that supports the laws of physics in any given epoch. But the conformity is not absolute and depends upon its epochal context. Subjectivity is thus at a minimum for simple physical feelings. To the extent that one can talk of their subjective form – that is, the way in which they feel, appropriate or prehend their objects – one must talk of a conformal subjective form whereby the feeling in question is merely re-enacted and passed on to future occasions with identical subjective forms.

Such physical feelings nevertheless contain the potential to be included in processes that engender more complex and developed subjective forms, such as those found in early instances of “life”. But all occasions of experience, no matter how complex and developed, are constructed around the vector quality of simple physical feelings. All our physical relationships, he states, “are made up of such simple physical feelings, as their atomic bricks” (Whitehead, 1927–1928/1985, p. 237).

Having sketched the most basic grade of actual occasion, let us now attend more explicitly to the idea of there being a variety of grades of actual occasions of experience. These grades correspond to a variety of levels of coordinated complexity, each level building upon and presupposing the others. Whitehead (1938/1966, p. 157) identifies six such levels, stressing that these are rough distinctions with fuzzy edges:

1. Human existence, body and mind
2. All other animal life

3. All vegetable life
4. Single living cells
5. All large-scale inorganic aggregates
6. All happenings on the infinitesimal scale disclosed by modern physics.

These diverse kinds of occasions are produced within diverse modes of organization or forms of assemblage, although there is continuity between the modes. As we have seen, large-scale inorganic aggregates are composed of occasions dominated by conformal physical feelings. The result of this canalization into “slavish conformity” is the massive and passive conformity that gives rise to the physical laws of nature (Whitehead, 1929/1958, p. 33). It is dominated by the average. Idiosyncratic coordination of isolated pockets of nature at this level is implausible. At the infinitesimal scale of level 6, however, the infra-molecular activity has “lost all trace” of this passivity (Whitehead, 1938/1966, p. 157).

Moving to the bodily aspect of level 1, the human body has recognizable boundaries, but – as the coordinated functioning of billions of molecules – it is also part and parcel of the larger field of nature. It is forever gaining molecules and losing molecules, and a clear-cut distinction between it and its wider environment is never strictly possible. The human body, then, is a region of the wider world. But it is a highly coordinated region capable of activity that is considerably more idiosyncratic and organized than might be expected from a stone or a mountain. Its occasions of experience are thus qualitatively distinct from those that occur at purely physical levels since they are the product of this extensive and intensive coordination. The human body is that region of nature which Whitehead defines as the “primary field of human expression” (Whitehead, 1938/1966, p. 22). Numerous parts of the body are coordinated into the unity of a definite system, and that system both coordinates its own responses and responds to itself.

In fact, this kind of description would apply to levels 1–4 inclusively, since all come under the broad category of “the living”. Something is alive if it is a region of nature “which is itself the primary field of the expressions issuing from each of its parts” (Whitehead, 1938/1966, p. 22). Both vegetables and animals are “composed of various centres of experience imposing the expression of themselves on each other” (Whitehead, 1938/1966, p. 23). When we compare animal to vegetable life, however, we find that animal life is comparatively more centralized. Of the numerous centres of experience, one or more tends to dominate and to receive as its data expressions from numerous other more specialist centres. If this dominant activity is lost, the animal dies because the whole coordination collapses. This higher-order coordination affords an extension of the difference between the actual and the possible and hence a deepening of the repertoire of possible experiences and expressions. A vegetable, by contrast, is more like a democracy (Whitehead, 1938/1966, p. 24). Its bodily

organization lacks a centre of experience operating at a higher level of complexity. Consequently, compared to an animal, a vegetable lacks the capacity to respond in novel ways to novel situations.

Personal experience as a temporal society of presiding actual occasions

We are now in a position to touch upon Whitehead's account of the high-grade actual occasions of human experience that we are all familiar with having. I am referring to the everyday sense of personal experience associated with concepts such as "the psyche", "interiority" and "self identity" that is typically associated with more familiar uses of the concept of subjectivity. So far I have been stressing only the first two senses in which deep empiricism is "deep". Namely, that it involves a radical shift in ontology or cosmology and that it extends the concept of subjectivity deep into nature. In discussing the particularities of human subjectivity, we touch upon the other two "depths". Namely, that personal occasions of experience can involve a deepened and intensified subjective form and that creativity and novelty are central to this (Whitehead, 1926/1996).

It is important to recognize that the human being cannot be sharply differentiated from other highly complex forms of animal life, and, ultimately, cannot be sharply distinguished from the physical environment more generally. Having said this, there seems to be little doubt that some kind of rubicon has indeed been crossed, particularly with respect to the capacity for novelty. Indeed, the human being is capable of what Whitehead calls outrageous novelty. We see this most obviously in the arts and literature. Robert Musil's main character in his novel *The Man Without Qualities*, for instance, is considerably more preoccupied with the conceptual entertainment of unrealized possibilities than with the actualized matter of fact. The future possibilities of our being can become such a major issue for us that it outstrips the value of our immediate quality of life. As Whitehead puts it, "the life of a human being receives its worth, its importance, from the way in which unrealized ideals shape its purposes and tinge its actions" (Whitehead, 1938/1966, p. 27). When we conceive of subjectivity, we are therefore "apt to emphasize rather the soul than the body. The one individual is that coordinated stream of personal experiences, which is my thread of life or your thread of life" (Whitehead, 1938/1966, p. 161).

For Whitehead, this coordinated stream of personal experiences is to be thought of as yet another instance of a society of actual occasions. Each occasion of experience is a self-realizing event that becomes and then perishes. Each occasion has its direct "inheritance" from its past and its anticipation of what it will become in the future. Each occasion is a concrescence of many data into the unity of the subjective form. However, for Whitehead, what is distinctive about the grouping of such personal experiences into societies is that the assemblage is purely temporal with no spatial dimension in evidence. It is purely a matter of one

occasion of experience following another and giving rise to another, and so forth in a temporal chain. Whitehead calls such a purely temporal society a “personal” society and he calls the occasions that occur within it “presiding” occasions (Whitehead, 1933/1935, p. 263). The enduring entity associated with such a society is a person conceived as an enduring percipient.

However, it is clear that such a non-spatial “personal” society and hence such a person can only exist in the context, as it were, of an embodied and spatial complex of broader “living” societies. The personal society abstracts itself, as it were, from this broader complex, presupposing its inheritance but transforming it into a new purely temporal register. The human being as a whole thus exceeds its personal society. The personal society presupposes the unity of the wider nexus of living societies which constitute its living body. This set in turn presupposes a wider environment of living and non-living assemblages from which that body has abstracted itself. The psyche is never disembodied and the body is never de-worlded. We hence return to a continuity theory of world, body and psyche. The increased capacity for novelty in human beings, for example, is no doubt dependent upon an increased centralization of bodily control in a high-grade brain. The human body is a “set of occasions miraculously co-ordinated so as to pour its inheritance into various regions within the brain” (Whitehead, 1933/1935, p. 243).

But the actual occasions of that living assemblage we call the brain are nevertheless not to be identified with the presiding occasions of personal experience that occur in a personal society. “There is no necessary connection between “life” and “personality”. A “personal” society need not be “living”, in the general sense of the term, and a “living” society need not be “personal” (Whitehead, 1933/1935, p. 264).

Further, the subjective forms of a personal society are also decisively shaped by virtue of the fact of their location in broader human societies and cultures, and by way of the mediation of language in particular. Although I can only briefly touch upon this crucial issue here (see also Stengers, 2005), there can be no doubt that human personal occasions of experience are intimately related to the actual occasions constituting the processes of broader collective and cultural life. With respect to this “psychosocial” interface, Whitehead was keenly aware, for instance, that the “mentality of mankind [sic] and the language of mankind created each other... the souls of men are the gift from language to mankind” (Whitehead, 1938/1966, p. 41).

Conclusion

In sum, Whitehead offers a relational process ontology that promises to deepen the constructivist insights associated with the turn to textuality, but without reducing the universe to “discourse” and “materiality”. In this ontology, things (whether occasions or assemblages) are *definable* as their relevance to other things and in

terms of the way other things are relevant to them. Things have *relational essences*. Likewise, things do not exist independently of temporality but are *constituted* by the history of their specific and situated encounters. Every actual thing is thus “something by reason of its activity” (Whitehead, 1927/1985, p. 26).

Importantly, this talk of “things” need not incline one towards denying the relevance of subjectivity. I have thus taken issue with a tendency illustrated in the work of Thrift (2008), who appears to define cutting-edge social theory as concerned with “flow” and “play” rather than with stability (since “non-foundational theory takes the leitmotif of movement”, p. 5 and “privileges play”, p. 7); as “a means of going beyond constructivism” (p. 5); and as “trading” in “modes of perception which are not subject-based” (p. 7). I have tried to show that, in fact, the concept of process is as much about stability as about change. Stability is to be thought of as an *achievement* resulting from particular ways of actualizing potential and of patterning occasions into spatial and temporal co-assemblies. Nevertheless, I have also stressed that *becoming* is an inherently self-creative process, albeit a self-creation grounded in the facticity of a concrete inheritance. Whitehead’s *category of subjective unity* is thus an exemplary statement of *constructivism*, which states that: “self-realization is the ultimate fact of facts. An actuality is self-realizing, and whatever is self-realizing is an actuality” (Whitehead, 1927–1928/1985, p. 222). The “capture of intensity” and the “clutch at vivid immediacy” are thus the defining characteristics of life (Whitehead, 1927–1928/1985, p. 105).

Finally, I have suggested that it is only on the basis of a deep extension of the concept of experience throughout nature that Whitehead is able to resoundingly affirm his reformed notion of the *subjectivist principle*: “that apart from the experiences of subjects there is nothing, nothing, nothing, bare nothingness” (1927–1928/1985, p. 167).

About the author

Paul Stenner is Professor in Psychosocial Studies at the University of Brighton. He began studying Whitehead while lecturing in Science, Culture and Communication at the University of Bath in the late 1990s. He has previously held Lectureships in Psychology at East London and University College, London and has been a Humboldt Fellow in the Department of Law at the Goethe University of Frankfurt. His theoretical work on psychosocial process ontology includes publications on thinkers such as Heidegger, Wittgenstein, Luhmann and Serres and he has published on substantive empirical topics ranging from affect to quality of life and human rights.

Note

- 1 After writing this paper Hilary McQueen brought it to my attention that Derek Malone-France (2005) has also used the phrase “deep empiricism” in a comparison of the work of Hartshorne and

Popper. Interestingly, he attributes it to David Griffin – a Whiteheadian scholar. Malone-France uses the concept in a rather different sense from my own since he is proximally concerned with the logic of metaphysical statements. It seems to me, however, that the uses are complementary.

References

- Curt, B. (1994). *Textuality and Tectonics: Troubling Social and Psychological Science*. Buckingham: Open University Press.
- Deleuze, G. and Parnet, C. (1987). *Dialogues*. Tomlinson, H. and Habberjam, B. (trans.). London: Althone Press.
- Halewood, M. (2005). On Whitehead and Deleuze: The Process of Materiality. *Configurations*, 13(1), pp. 57–76.
- Hartshorne, C. (1934). *The Philosophy and Psychology of Sensation*. Chicago: The University of Chicago Press.
- Hayden, P. (1998). *Multiplicity and Becoming: The Pluralist Empiricism of Gilles Deleuze*. New York: Peter Lang.
- Henriques, J., Hollway, W., Urwin, C., Venn, C. and Walkerdine, V. (1984). *Changing the Subject: Psychology, Social Regulation and Subjectivity*. London: Methuen.
- Hofmeister, A. (2005). Health and Subjectivity: Beyond Governmentality. In Gulerce, A., Hofmeister, A., Staeuble, I., Saunders, G. and Kaye, J. (eds) *Contemporary Theorizing in Psychology: Global Perspectives*. Concord, Ontario: Captus University Publications.
- Hollway, W. (1989). *Subjectivity and Method in Psychology*. London: Sage.
- James, W. (1912). *Essays in Radical Empiricism*. Nebraska: University of Nebraska Press.
- Johnson, A.H. (1945). The Psychology of Alfred North Whitehead. *The Journal of General Psychology*, 32, pp. 175–212.
- Langer, S. (1988). *Mind: An Essay on Human Feeling*. Baltimore, Maryland: The John Hopkins University Press.
- Malone-France, D. (2005). Hartshorne and Popper on Existential Necessity: A Deep Empiricist Interpretation. *International Journal for the Philosophy of Religion*, 57(3), pp. 193–208.
- Mays, W. (1959). *The Philosophy of Whitehead*. London: George Allen & Unwin.
- Middleton, D. and Brown, S.D. (2005). *The Social Psychology of Experience*. London: Sage.
- Musil, R. (1997). *The Man Without Qualities*. London: Picador.
- Pred, R. (2005). *Onflow: Dynamics of Consciousness of Experience*. Cambridge, MA: MIT Press.
- Riffert, F. and Weber, M. (eds) (2003). *Searching for New Contrasts: Whiteheadian Contributions to Contemporary Challenges in Neurophysiology, Psychology, Psychotherapy and the Philosophy of Mind*. Frankfurt am Main: Peter Lang.
- Rose, P. (2002). *On Whitehead*. Belmont, CA: Wadsworth.
- Serres, M. (1982). *The Parasite*. Baltimore: John Hopkins University Press.
- Stengers, I. (1997). *Power and Invention*. Minneapolis: University of Minnesota press.
- Stengers, I. (2002). *Penser avec Whitehead: une libre et sauvage création de concepts*. Paris: Gallimard.
- Stengers, I. (2005). Whitehead's Account of the Sixth Day. *Configurations*, 13(1), pp. 35–55.

- Stenner, P. (2005). An Outline of an Autopoietic Systems Approach to Emotion. *Cybernetics of Human Knowing*, 12(4), pp. 8–22.
- Stenner, P. (2008). Non-foundational Criticality? On the Need for a Process Ontology of the Psychosocial. *Outlines: Critical Social Studies*, 9(2), pp. 44–55.
- Stephenson, N. and Papadopoulos, D. (2006). *Analysing Everyday Experience. Social Research and Political Change*. Basingstoke: Palgrave Macmillan.
- Thrift, N. (2008). *Non-representational Theory: Space/Politics/Affect*. London: Routledge.
- Tolman, C.W. and Maiers, W. (1991). *Critical Psychology: Contributions to an Historical Science of the Subject*. Cambridge: Cambridge University Press.
- Whitehead, A.N. (1920/2004). *The Concept of Nature*. New York: Prometheus Books.
- Whitehead, A.N. (1926/1985). *Science and the Modern World*. London: Free Association Books.
- Whitehead, A.N. (1926/1996). *Religion in the Making*. New York: Fordham University Press.
- Whitehead, A.N. (1927/1985). *Symbolism: It's Meaning and Effect*. New York: Fordham University Press.
- Whitehead, A.N. (1927–1928/1985). *Process and Reality*. Corrected edition. New York: The Free Press.
- Whitehead, A.N. (1929/1958). *The Function of Reason*. Boston: The Beacon Press.
- Whitehead, A.N. (1933/1935). *Adventures in Ideas*. London: Cambridge University Press.
- Whitehead, A.N. (1934). *Nature and Life*. London: Cambridge University Press.
- Whitehead, A.N. (1938/1966). *Modes of Thought*. New York: The Free Press.
- Wolf, G. (1981). Psychological physiology from the standpoint of a physiological psychologist. *Process Studies*, 11(4), pp. 274–291.