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Unifying psychology through situational realism

Agnes Petocz
University of Western Sydney, apetocz@uws.edu.au

Nigel Mackay
University of Wollongong, nmackay@uow.edu.au

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Abstract

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Agnes Petocz

University of Western Sydney

Nigel Mackay

University of Wollongong

Author note

Agnes Petocz, School of Social Sciences and Psychology, University of Western Sydney; Nigel Mackay, Department of Psychology, University of Wollongong.

Correspondence concerning this article should be addressed to Agnes Petocz, School of Social Sciences and Psychology, University of Western Sydney, Bankstown Campus, Locked Bag 1797, Penrith, NSW, 2751, Australia.

Email: a.petocz@uws.edu.au

Abstract

We propose that a coherent and thoroughgoing version of realism, known as *situational realism*, offers a unifying programme for psychology. This realism emerges from the conditions of being that enable knowledge and discourse. Because this research originated largely in a century's work by Australian psychologists and philosophers, we will introduce and explain research and vocabulary that might be unfamiliar to some readers. The approach is characterised by seven themes: ontological egalitarianism; situational complexity and process orientation; a network or field view of causality; a realist logic; a view of relations as nonconstitutive; an externalist relational approach to mind; and acceptance of critical inquiry as the core scientific method. The combination of these features offers psychology the following: a metatheoretical framework that resolves current tensions; expansion into the field of meanings and reintegration with hermeneutics and semiotics; clarification and redirection of mainstream cognitive neuroscience and information processing; an integrative approach to personality; expansion, redirection and unification of psychological research methods; and revision and expansion in psychological practice and teaching.

  Keywords: realism, situational realism, unifying psychology, metatheory, integration

Unifying Psychology Through Situational Realism

Most mainstream psychologists would consider themselves realists: There is an objective world that includes human minds and behaviour, and these can be investigated scientifically. They would also be aware of opposition to this realist stance, mainly from those outside the mainstream favouring qualitative methods and relativist or constructionist philosophical approaches. However, there are many varieties of realism (cf. Archer et al., 1998; Harré, 1986; Hartwig, 2007; Varela & Harré, 2007), and some have greater potential than others for bridging divides within the wider field of psychology. We argue that a coherent and thoroughgoing approach is achieved in *situational realism* (Mackay and Petocz, 2011a); its themes fit together without contradiction and apply without compromise. The failure to systematically adopt such a realism explains many of psychology's difficulties, and helps explain the expanding ranks of dissatisfied and disaffected psychologists (cf. Toomela & Valsiner, 2010). It is unfortunate, therefore, that this realism is "probably the least known" of realisms (Greenwood, 2007, p. 605); it is confused with the other types of realism and is sometimes confused with generic positivism (cf. Hibberd, 2007, 2010). *Situational realism defines psychology as the study of those organism-environment relations and interactions (dynamical systems) that involve the psychological categories cognition, motivation and emotion*. This realism deserves to be better known, not least for its ability to resolve age-old tensions and unify psychology.

We will discuss briefly the historical origins of this approach, and identify and explain its seven key interrelated features or principles. We will then lay out the unifying programme for psychology offered by this realism, ranging across theory, research and

teaching. Finally, we will address briefly the question how this approach relates to other unifying approaches.

Background, Major Themes and Extension to Psychology

Situational realism is not the work of a single individual, but its core is in the system developed by the Scottish-Australian philosopher John Anderson (1893-1962), Challis Professor of Philosophy (initially including psychology) at Sydney University from 1927 to 1958: hence *Andersonian*, *Sydney* or *Australian realism* (for a reader-friendly account see Baker, 1986[1]). More recently, the term *situational realism* has been adopted (Hibberd, 2007, 2009; Mackay & Petocz, 2011a[2]) as better reflecting realism's central theme (see later) and its wider historical roots in the ancient Greek, British (particularly Scottish) and American realist traditions. Situational realism combines strands of thinking from pre-Socratic (especially Heraclitean) and Aristotelian philosophy, from Thomas Reid and the Australian-English philosopher Samuel Alexander, from William James and the American New Realists, E. B. Holt, R. B. Perry, and others (e.g., Holt et al., 1912). It has similarities to the (independently developed) direct realist ecological approach of the perceptual psychologist J. J. Gibson (Gibson, 1966, 1979), and it fits with more recent radical (i.e., direct realist) embodied cognitive science (Chemero, 2009) and the revival of neorealism (Tonneau, 2004).

Realism is a kind of "first principles" approach whose themes emerge from what Anderson called the "conditions of discourse" (1927a/1962, p. 11), which are revealed to be also the conditions of *existence*, of *facts*. Hence realism is not so much a "theory" or a

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[1] Also Grave, 1984; Mackie, 1962; Passmore, 1962, 1977; Anderson's essays in Anderson (1962), and his lecture notes and other material at the University of Sydney's "John Anderson Archive" at http://adc.library.usyd.edu.au/index.jsp?database=anderson&collection=anderson&page=home
[2] Although we there followed the tradition of favouring the unqualified term "realism", the existence of alternative versions of realism prompts us, for clarity's sake, to follow recent convention.

"new paradigm" as *the very precondition* of discourse and understanding (Stove, 1991).

For realism, "metaphysics" is not a dirty word, because it is not about an unknowable

reality behind experience; it is about the *reality* that is already *in* and *required by*

experience (cf. Baker, 1986, pp. 95ff; Groarke, 2009).

Situational realism is characterised by a set of interconnected features or principles, as

summarised in Table 1.

Table 1

Seven Features/Principles of Situational Realism

Feature/principle	Description
1. Ontological egalitarianism	There are no philosophically privileged elements of "being" that are more real than others. There are only complex spatio-temporal situations. There are no "levels" of reality and traditional dualisms are invalid (e.g., matter/spirit, free/determined, universal/particular).
2. Situational complexity and process orientation	Reality is a collection of infinitely complex situations. Situations are complex spatio-temporal occurrences that are always in process, always historically and contextually embedded.
3. Network or field view of causality	Situations arise from antecedent conditions, but causality is not a simple two-term linear (cause-effect) sequence. Causality is a complex three-term relation (cause, causal field or conditions, effect). Within the causal field things have their characteristic ways of working, by which they are constrained and, in turn, constrain other things.
4. Realist logic	Logic is *not* an abstract language or calculus or laws of *thought*. It deals with the laws of *things*, with the general forms of situations and with relations of implication between situations.
5. Relations as non-constitutive	Everything is related (spatially, temporally, causally, etc.) to other things. Those relations are always external to the things related and cannot be found in them. Nothing is (partially or wholly) *constituted by* its relations with other things.
6. Externalist relational view of mind/mentality	There is no such *thing* as mind; mind/mentality is a particular kind of *relation* between a subject (organism/person/knower) and the object (situation that is known). Thus, mind is not internal to brain, and the objects of mental relations (whether veridical or nonveridical) are external to the subject.
7. Science as critical inquiry	Science investigates natural (including human) systems. It is premised on recognition of cognitive fallibility. Its core feature is *not* experimentation or mathematisation or measurement, but *critical inquiry*—careful, systematic investigation, employing best available error-detection mechanisms, testing hypotheses via both logical and observational tests.

Note. Although some of these features occur in other (realist and nonrealist) approaches, we take the combination and systematic interlinking of all seven to be distinctive of situational realism.

Situational realism first influenced philosophy (e.g., Armstrong, 1968, 1997, 2010; Mackie, 1974; Passmore, 1970; Place, 1956; Smart, 1959; Stove, 1981, 1991), then extended to psychology, developing into a strong tradition, mainly at the University of Sydney (e.g., Henry, 2009; Hibberd, 2005; Maze, 1983a; McMullen, 1996, 2001; Michell, 1988; O'Neil, 1957, 1968, 1987; Sutcliffe, 1993). Realist work in psychology was vigorously pursued, but its publication was scattered and piecemeal over several decades.

Recently, we systematically collated its themes into a 900-page collection of 23 essays old and new, and presented them as a clear and recognisable position in psychology (Mackay & Petocz, 2011a, 2011b, 2011c). This collection contains discussion of many topics, including the themes listed in Table 1: historical development and contemporary relevance (Hibberd, 2009); the state of theory in psychology (Mackay & Petocz, 2011b); direct realism and cognition as a relation between knower and known (Anderson, 1927b/1962; Michell, 1988); attitudes and moral beliefs (Maze, 1973); mental causation (Medlow, 2011); a motivational theory of drives and consummatory actions (Maze, 1983b; Newbery, 2011); drives and affects in personality theory (McIlwain, 2007); mental plurality (Boag, 2005); how and why concepts are "out there" and not "in here" (McMullen, 2011); category, concept and class (Sutcliffe, 1993); representationism versus realism (Maze, 1991); the problem of false beliefs, hallucinations and other forms of error (Rantzen, 1993); social constructionism and deconstructionism (Maze, 2001); a realist reply to Gergen's social constructionism (Hibberd, 2002); psychotherapy and accounts of meaning (Mackay, 2003a, 2003b); symbolism (Petocz, 2011a); realism and

cultural studies (Bell, 2003); measurement in psychology (Michell, 2000); qualitative

research in psychology (Michell, 2004); and science and meaning in the scientist-

practitioner model of treatment (Petocz, 2004).

When these discussions become too philosophical, the practising experimentalist often

wonders what this all has to do with them, or, if they are thinking more pragmatically,

what do we think they should be doing instead. To this, we have answered: "it *really does*

all depend" (Mackay & Petocz, 2011a, p. 879, emphasis in original). One reviewer of the

book (Swami, 2012) asks for "a more thoroughgoing reply" that provides an "explicit

transitional programme" (pp. 264-5). In the rest of this paper, we shall focus on realism's

unifying promise and programme for psychology.

Situational Realism's Unifying Programme for Psychology

The programme consists of: a metatheoretical framework that resolves current

tensions; expansion into the field of meanings by reintegration with the traditional

methods of studying meaning, hermeneutics and semiotics; clarification and redirection

of mainstream cognitive neuroscience and information processing; an integrative

approach to personality; expansion, redirection and unification of psychological research

methods; and revision and expansion in psychological practice and teaching.

A Metatheoretical Framework that Resolves Current Tensions

Ostensibly psychology is *non*-Cartesian, having replaced Cartesian matter/spirit

dualism with a realist materialism. Yet it remains trapped in a subtle and persistent

Cartesianism (Bennett & Hacker, 2003, p. 111; Leahey, 2004, p. 141).

A number of new movements of expansion and integration present their proposals as

part of "an anti-Cartesian turn" (Wheeler, 2005, p. 16). These include second generation

cognitive science (Kövecses, 2005), embodied-embedded cognitive science (Gallagher, 2005; Wheeler, 2005), evolutionary psychology (Buss, 2005), evolutionary social psychology (Tooby & Cosmides, 2005), affective neuroscience (Panksepp, 1998), developmental neuro-psychoanalysis (Schore, 2003a, 2003b), and cognitive semiotics (Andreassan, Brandt & Vang, 2007; Donald & Andreassan, 2007; Jorna & van Heusden, 1998). Proponents searching for a "new theoretical framework" insist that it will *not* be Cartesian, but some are explicitly unsure what this alternative framework could be. The Cartesian legacy remains, hampering the kind of integration that is justifiably sought (see Petocz, 2011a, pp. 609-612; 2011b, pp. 107-111).

Situational realism resolves this by "going right back beyond the Cartesian starting points, of dualism in metaphysics, and representationism in epistemology" (Stove, 1991, p. 102). From the principles listed in Table 1, realism involves redefinitions of psychology's key terms and subject matter. Instead of the current textbook definition of *psychology* as the study of mind and behaviour, *realism defines psychology as the study of those organism-environment relations and interactions (dynamical systems) that involve the psychological categories cognition, motivation and emotion*. Instead of *cognition* as the internal processing of information, realism defines cognition (in all modalities, and whether conscious or unconscious) as a particular kind of relation between organism and its environment (cf. Michell, 2011). The subject term of this relation is a brain connected to its sensory apparatus – hence, an embodied brain.[3] Instead of defining *motivation* teleologically, realism defines motivation as the energising and directing "biological engines" of the organism, connected to attachment systems and to

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[3] This excludes computers as currently conceived, although in principle there is no reason why a non-organic system could not be a cogniser; the critical issue is whether a system is in fact sensitive to the full structure of environmental situations (see below and Michell, 2011).

the organism's cognitive apparatus (e.g., the Darwinian-derived Freudian instinctual

drives) (cf. Maze, 1983a; Newbery, 2011). Instead of *emotion/affect* as the internal

registration of the state of the body, realism defines emotion/affect either as a complex

combination of cognition and motivation rooted in drive-ancillary structures, or as drive-

equivalent motivational structures (McIlwain, 2007).[4] Cognition (in all of its modes) is

never disinterested, because embedded in the cognitive situation is the motivated subject-

term of the cognitive relation. Being an external relation, cognition is observable in the

guiding of the organism's movements during its behavioural actions (Michell, 2011).

Thus *behaviour* is not mere mindless movement, it is inextricably cognitive (Maze,

1983a). Furthermore, the cognitive situation is embedded in its social and historical

context; "Individual psychology", as Freud put it, "is at the same time social psychology

as well" (1921/1955, p. 69). Thus, to study cognition, motivation and emotion, the

researcher must not only include *both* terms (i.e., subject and object) of the relevant

relations, but also examine the interactions between those relations and others, including

the causal and contextual conditions under which the relations and their interactions take

place (we expand on this general theme below).

These realist revisions of psychology's key terms are combined with challenging the

long-held gulf between "science" and "meaning" in psychology, a legacy of the

presumed gap between *Naturwissenschaften* and *Geisteswissenschaften*. Phenomena in

both groups are part of the same reality, and enjoy the same ontological status--that of

complex situations occurring in space and time--and are equally open to the core

scientific method of critical inquiry that encompasses both hermeneutic and causal

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[4] As we note (Mackay & Petocz, 2011a, p. 877), the nature and role of emotion/affect is debated amongst realist thinkers (cf. Anderson, 1934/1962; Boag, 2008; McMullen, 1996).

questions. Realism charts a course for psychology between mainstream scientism and postmodernist antiscience (cf. Haack, 2003; Petocz, 2001, 2004).

Research in the Field of Meanings and Reintegration with Hermeneutics and Semiotics

If meanings (in their different manifestations) are real relational situations involving humans and other cognising organisms (e.g., X means Y to person P), and are equally part of the causal structure of the world, then they comprise an essential part of the subject matter of psychology. Realism thus embraces the study of meanings and prompts re-thinking the place of hermeneutics and semiotics, the traditional disciplines studying meaning, in psychology. Regarding hermeneutics, realism rehabilitates questions of meaning and qualitative methods of hermeneutic inquiry within its broader conception of scientific method (Mackay, 2003a, 2003b). Regarding semiotics, realism assists recent attempts to integrate semiotics and psychology by first clarifying the irreducible tripartite relational nature of meaning. This distinguishes the legitimate concerns of representation in the information sciences (e.g., what are the most efficient ways to design auditory warnings for artificial environments – see Petocz, Keller & Stevens, 2008) from incoherent epistemological representationism (representations in the brain cannot be genuine symbols - see below; also Michell, 1988; Petocz, 2011b, pp. 119-121). Psychological research can then proceed into investigating how different types of sign (icons or pictures, indicators, symbolic substitutes, etc.) can solve problems in information representation research. For example, in the field of auditory warnings, some types of sound-event mappings are readily learned, whereas others that are expected to be easily learned are not (see Petocz et al., 2008). The research door is also opened onto the

field of conceptual metaphor (e.g., Gibbs, 2011; Kövecses, 2010; Lakoff & Johnson, 1999), which stands on the frontier of embodiment approaches (e.g., Clark, 1997; Gallagher, 2005) and "second generation cognitive science" (e.g., Kövecses, 2005). In conceptual metaphor, we think of abstract concepts (e.g., mind, love, time) in terms of more concrete or bodily experience (mind is a container, love is a journey, time is a moving object). Thus, the whole field of signs, symbols, metaphors and meanings is brought into the domain of primary bodily and motivational experiences (see Petocz, 1999, 2011a, 2011b).

Clarification and Redirection of Mainstream Cognitive Neuroscience and Information Processing

Situational realism is antireductionist (Table 1: 1, 2, 5, 6). The brain is only one part of the mental relation, and so is necessary, but not by itself *sufficient* for psychology. Neither the mental relation, nor, a fortiori, mental "processes" and "structures" can be found in the brain; experiences do not happen in brains, and concepts are to be found "out there" not "in here" (McMullen, 2011). This has implications for the dominant computational information-processing model and the interpretation of neurophysiological data in psychology's experimental heartland. Rather than the mind being the brain's software, with mind and brain being different "levels" of a spatially coextensive unit, mind extends into the brain's environment: "no theory of the brain alone will be applicable to the combined brain-body-environment system (Chemero, 2009, pp. 178). Psychology is reducible to neuroscience only *if* the psychological is confined to the head and the environment is mentally represented. But the computer model of the brain/mind is misguided (Michell, 1988) and the representationism supposedly derived from it is

logically incoherent (Bickhard, 1996; Heil, 1981; McMullen, 2012). Neurophysiological

data give us only correlative information about the *state of the subject when* it stands in

particular psychological relations, *not* a picture of the physical instantiation of

consciousness, which extends *across* the whole organism-environment system.

Realism thus "cashes out" the metaphors of information processing, as being

statements about *what in the environment* is perceived, responded to, remembered, etc.

(cf. Tonneau, 2004). For example, memory is neither an internal mechanism or store, nor

the direct accessing of an internal token of a past event (cf. McMullen, 2012); the

difference between the "stores" of "short-term" versus "long-term" is a difference

between *what* is remembered – recent versus more distant events. There is no "problem"

of knowledge or consciousness, no "binding problem", no "problem of mental

causation", nor is psychology threatened by imminent "tectonic collision with

neuroscience" (Lloyd, 2010, p. 1). Instead, experimental cognitive and perceptual

psychologists can join those who are already investigating empirical questions within a

coherent realist framework (e.g., Best, 1995; Best & Tyler, 2007; see also Chemero,

2009, pp. 195-7).

An Integrative Approach to Personality

Personality (despite efforts to restrict it to "individual differences") is that specific

area that incorporates and attempts to connect all other areas in psychology. Thus Hall

and Lindzey (1970) maintain, "we are willing to accept any general theory of human

behaviour as a theory of personality" (p. ix). Recently there have been complaints that

"personality psychology … continues to retreat from its unique historical mission … to

provide *an integrative framework for understanding the whole person.*" (McAdams &

Pals, 2006, p. 204, emphasis in original). Instead, textbooks present "a parade of alternative grand theories" founded upon incompatible "first principles" (i.e., assumptions about human nature), with no attempt at overall integration. Worse, "the grand theories are faith-based systems whose first principles are untested and untestable", so that "choosing a grand theory to believe in may boil down to deciding which first principle simply 'feels right' " (p. 205). Mayer (1998, 2001) agrees that the grand theories are speculative and lack research, but adds that the narrower empirical research approaches (e.g., the trait approach) are directionless and lack theoretical grounding.

Situational realism questions the notion that the major theories' incompatible assumptions are "untestable". Realism's broader view of science recognises the legitimacy and primacy of *logical* testing (cf. Petocz & Newbery, 2010). Thus, the assumptions of different personality theories can be critically examined to establish a coherent theoretical foundation for a comprehensive, integrated theory incorporating the compatible strengths of the various theories. Such an integrated theory, resting on the realist revisions of key psychological terms and the realist combination of hermeneutic and causal inquiry, overlaps with Freudian psychoanalytic theory and coherently grounds empirical research (cf. Boag, 2012; Maze,1983a; McIlwain, 2007, 2009; Newbery, 2012a; Petocz, 1999; Westen, 1998).

Expansion, Redirection and Unification of Psychological Research Methods

Realism's broader view of science as critical inquiry and its equal acceptance of relational, qualitative and quantitative structures brings unification to psychological research methods. This potential can be realized via a sequence of methodological expansion, redirection and further expansion.

First, the notion of scientific method is expanded to include *conceptual analysis* (Machado & Silva, 2007) and *theoretical research*, both as *primary* in the testing process; that is, we must recognize as a methodological first-principle that an incoherent or conceptually flawed theory cannot be empirically tested (Petocz & Newbery, 2010). Once they are accepted as a crucial part of the scientific process, conceptual analysis leads to further expanding psychology's conception of scientific method by revealing that qualitative approaches are both legitimate and warranted (Bryman, 1988; Michell, 2004). Specific methods must be determined by, and appropriately attuned to, the nature of the subject matter under investigation – based on empirical examination of successes and failures. A new attention to conceptual analysis also redirects psychology's research attention onto the various confused assumptions about probability, evidence, induction, generalisation, validity, etc. that underlie psychology's quantitative and statistical data-analytic practices (Groarke, 2009; Michell, 1990, 1997, 2009a, 2009b; Petocz & Newbery, 2010). There is compelling evidence that psychology must reconsider its special-purpose approach to measurement; the psychological variables that are "measured" via rating scales rarely appear to meet the mathematical criterion for being "quantitative", and are not measureable in a proper scientific sense (see Michell, 2010). While such observations are usually seen as nihilistic attempts to end psychological research, nothing could be further from the truth here. Acceptance of the non-quantitative character of many phenomena of interest to psychologists will further redirect research efforts by pointing out the work to be done in following two important research paths: testing hypotheses regarding quantitativity (and hence measurability) of psychological

variables (Michell, 2000); and exploring the relatively untapped field of *non*quantitative

structures (causal, logical, semantic, algebraic, categorical, etc.) (Michell, 2001).

Finally, realism unifies psychology's research methods in three important ways. First,

all methods are united under the umbrella notion of *science as critical inquiry*; theoretical

research and conceptual analysis apply across the board and throughout the research

process (Cohen & Nagel, 1934; Petocz & Newbery, 2010). Second, realism resolves

current debates regarding how best to enrich psychology's narrow conception of

scientific method. For example, Machado and Silva (2007) propose to reintroduce

conceptual analysis, whereas Haig (2008) replies that we should instead be focusing on

developing new theories of scientific method, such as extending induction to abduction

and incorporating Bayesian analysis into the hypothetico-deductive method (Haig, 2005).

But conceptual analysis is not merely a linguistic or grammatical enterprise; it deals with

the logical structures of real situations, so is already central to scientific method, and

already includes what Haig deems to be an alternative. Third, realism resolves the

quantitative/qualitative debate by exposing underlying confusions. It has been shown

repeatedly that, though the mainstream of the field claims to be realist and quantitative,

they implicitly pursue antirealist, positivist, practices that are at odds with the realism of

the physical sciences that they wish to emulate (Gigerenzer, 1987; Grayson, 1988, 1998;

Michell, 2000, 2001, 2009b; Rosnow & Rosenthal, 1989; Rozeboom, 1960). The

qualitative nonmainstream's commitment to antirealist relativism and constructionism is

undermined by the fact that they accept and use qualitative methods that rest on realist

assumptions (cf. Bell, 2010; Hibberd, 2001, 2002; Michell, 2003; Petocz & Newbery,

2010). Situational realism thus rehabilitates qualitative research methods into scientific psychology without the tension created in most current attempts at integration.

Revision and Expansion in Psychological Practice and Teaching

Psychological practice is based on the North American *scientist-practitioner model* (cf. Belar & Perry, 1991). Psychologists are taught to be scientists first, then practitioners; practice must be scientifically based, implementing only those interventions that are evidence-based and derived from sound theory and rigorous empirical research. But this model is only as good as its underlying conception of science. Situational realism's broader approach to science as critical inquiry incorporates theoretical research, conceptual analysis, re-examination of measurement and expansion into qualitative methods. Its focus on situational complexity and process orientation promotes contextualism and attunement to individual differences, suggesting greater flexibility in psychological treatment approaches. For example, it entails the validity of hermeneutic inquiry and thus fosters a scientific version of psychodynamic theory and therapy (Shedler, 2010). Realism's network or field approach to causality fits with the evidence suggesting that the "active ingredients" in psychotherapeutic intervention may not be those typically nominated by proponents of specific theories. For example, as King et al. (2010) urge, "it is time for those universities that have not already done so to move beyond the convenient but intellectually dishonest position that CBT is the only evidence-based psychotherapy" (p. 4). All this points to reinterpretation and expansion of the *science* basis of the scientist-practitioner model of training, and expansion of what are accepted as evidence-based interventions (Mace, Moorey & Roberts, 2001; Petocz, 2004).

Regarding the teaching of psychology, situational realism's major implication is the adoption of a nondogmatic approach, reflecting the controversies and uncertainties in the field, and encouraging critical inquiry, examination of assumptions and creativity in the development of new methods (Newbery, 2012b). Consistent with realism's contextualism and process orientation, a developmental approach would be taken in all areas of psychology. Hence, the teaching curriculum would expand to include the history and philosophy not just of psychology, but also of *science*. Then the curriculum would focus on theory and meta-theory, conceptual analysis, and critical thinking. In particular, the teaching of research methods would be expanded to reflect realism's impact: students would learn that "research" includes *theoretical* research, and that *testing* theories or hypotheses requires *logical* tests to be passed before empirical tests are warranted; qualitative and quantitative methods would be taught under the single umbrella of science as critical inquiry (cf. Bryman, 1988), and not separately by different teachers positioned on either side of an ideological divide; students would learn about the various assumptions underlying statistical methods of analysis, probability, evidence and their interrelationships, including the socio-historical, political and ideological factors behind psychology's adoption of various methods; they would learn how to test hypotheses concerning quantitativity; they would learn existing qualitative methods and be encouraged to explore novel approaches to nonquantitative structures. Moreover, the teaching of psychology would include psychology's interdisciplinary context, with appropriate acknowledgment of cross-disciplinary themes and interdisciplinary connections. Students would recognise psychology as the "self-reflexive discipline" *par excellence*. By becoming aware of the "powerful impact of disciplinary socialization

practices" in psychology (Good, 2007, p. 286), such as those that currently exclude theoretical research from funding, students would be better prepared to take the discipline forward.

Why Situational Realism?

With unification now on the agenda for psychology (cf. Cleeremans, 2012; Lloyd, 2010), there is a smorgasbord of offerings for psychologists. Why, then, should psychologists adopt situational realism? What makes it, in our opinion, the healthiest option, despite its initially unpalatable aspects, such as deflationist revisions of claims in neuropsychology, or the limitation of quantitative methods and statistics to their realistically determined domains of application? The simple answer is that to pursue psychology scientifically one must adopt this realism or fall ultimately into contradiction (Mackay & Petocz, 2011a). But coherence isn't enough, so it is important to note that realism also has enough scope and depth to form a basis for the field. As such, it integrates the traditional areas of psychology (cognition, learning, personality, motivation, social, abnormal, etc.) while also sustaining a number of other unifying approaches (albeit some suitably modified): behavioural and perceptual approaches; evolutionary, developmental, contextualist, historical and dynamical systems approaches; embodiment, process-oriented, ecological and enactivist approaches; and semiotic, hermeneutic, phenomenological and cultural approaches.

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