



Author: Joseph Voros
Title: Integral futures: an approach to futures inquiry
Year: 2008
Journal: Futures
Volume: 40
Issue: 2
Pages: 190-201
URL: <http://hdl.handle.net/1959.3/30196>

Copyright: Copyright © 2007 Elsevier Ltd. All rights reserved.

This is the author's version of the work, posted here with the permission of the publisher for your personal use. No further distribution is permitted. You may also be able to access the published version from your library.

The definitive version is available at: <http://dx.doi.org/10.1016/j.futures.2007.11.010>

Integral Futures: An approach to futures inquiry

Joseph Voros

*Strategic Foresight Program,
Faculty of Business and Enterprise,
Swinburne University of Technology,
John Street, Hawthorn, VIC, 3122, Australia
Tel: +61.3.9214-5984; Email: jvoros@swin.edu.au*

Version Date: 18 May 2006

Abstract

This paper sketches the broad outlines of the philosophical and methodological foundations of an emerging approach to inquiry — ‘integral inquiry’ — and how this form of inquiry may be applied to futures studies, leading to an approach which has come to be called ‘Integral Futures’.

A version of this paper appeared in:
Futures, vol. 40, no. 2, pp. 190-201, 2008. Special Issue Title: ‘Integral Futures’.
doi:10.1016/j.futures.2007.11.010

1 Introduction

This paper sketches some of the broad outlines of an approach to futures studies which has come to be called ‘Integral Futures’, and discusses some of the philosophical and methodological foundations upon which this emerging form of inquiry is based, in relation to several existing and more familiar inquiry paradigms.

It is very easy to give a simple definition of Integral Futures: it is futures work undertaken through or carried out using an ‘integral’ approach. But this deceptively-simple statement conceals a great deal of complexity, not least because the two forms of inquiry implicitly contained in this definition—‘integral inquiry’ and ‘futures inquiry’, which together define Integral Futures by way of their mutual overlap—are each complex undertakings that are not-at-all easy to define simply. The purpose of this paper is to unpack the relatively unfamiliar concept of ‘integral inquiry’ in order to show how it may be applied to futures inquiry. The question of how to define or unpack the equally-complex concept of ‘futures inquiry’—which term may be used to encompass all forms of futures or foresight work, including futures studies, futures research, *prospective*, and so on—must be left to another time and place, although working futurists in general usually have some implicit model in mind for what it means to undertake ‘futures inquiry’.

This paper consists of two main themes—paradigms of inquiry in general, and futures inquiry in particular—expressed in four intertwined parts.

The first part (Section 2) contains a discussion outlining a well-known typology of research or inquiry paradigms. While a large number of approaches to inquiry exist, it is possible to conceive of these approaches as belonging to a few broadly-defined classes or categories. The typology can be considered to be a set of broad-brush-stroke generalisations which look for the large-scale structure of the wider landscape of approaches to inquiry in general, while at the same time recognising that many gradations and inter-leavings exist between the various forms. Each inquiry paradigm engenders certain commitments and assumptions which are inherent in and constitutive of the paradigm—ontological, epistemological, axiological and, of course, methodological. Different paradigmatic foundational assumptions give rise to different forms and approaches to inquiry, and these assumptions condition what are considered to be acceptable, appropriate or valid types of methodology. In this view, it is impossible to separate methodological considerations from the associated underpinning philosophical foundations, and to attempt to do so is, to quote Don Michael [31], to have “both feet planted firmly in mid-air”.

The second part (Section 3) considers briefly how the typology as defined can be seen reflected in the various forms of and approaches to futures work which have developed over the last few decades, ever since futures research emerged as a distinct field of endeavour in the 1960s.

The third part (Section 4) sketches the broad outlines, philosophical and methodological underpinnings, and overall ‘shape’ of what constitutes an ‘integral’ approach to inquiry, and briefly discusses one of the most well-known integral frameworks in current usage, that of Ken Wilber.

The fourth part (Section 5) considers the marrying of these two themes: futures inquiry using an integral approach—and this marriage is precisely what is meant here by ‘Integral Futures’.

2 Types of inquiry paradigms

In this section, inquiry paradigms in general are examined in order to show how methodological choices and approaches are embedded within paradigmatic assumptions, stances or commitments. This is done, in part, to provide a sound basis for considering methodologies, since methodological interventions cannot be properly or even competently undertaken in the absence of a solid understanding of the philosophical foundations underpinning them. In other words, each methodological approach has an implicit philosophical basis, so it is necessary for inquirers and practitioners to be fully aware of just what this basis is, and whether it is appropriate to the form, domain and purpose of the inquiry.

2.1 A classification schema for inquiry paradigms

There are many classification schemas for inquiry paradigms, and a look at almost any book dealing with the conduct of research will reveal some sort of typology. One of the better-known classification systems is the one developed by Guba and Lincoln in the various editions of the very influential *Handbook of Qualitative Research* [6–8]. According to Guba and Lincoln [14, p.107]:

A paradigm may be viewed as a set of basic beliefs (or metaphysics) that deals with ultimates or first principles. It represents a worldview that defines, for its holder, the nature of “the world”, the individual’s place in it, and the range of possible relationships to that world and its parts The beliefs are basic in the sense that they must be accepted simply on faith (however well argued); there is no way to establish their ultimate truthfulness. If there were, the philosophical debates ... would have been resolved millennia ago.

These ‘basic beliefs’, which are central to the different paradigms, may be found from the answers they would give to several fundamental questions. These questions are [14, p.108]:

1. the ontological question: what is the nature of ‘reality’ and therefore what is there that can be known?
2. the epistemological question: what is the nature of knowledge, the relationship between the would-be knower and what can be known? And,
3. the methodological question: how can the would-be knower or inquirer go about finding out whatever can be known?

To this set of three basic questions, they later added a fourth [29, pp.168-9], in response to commentary upon and extension to their work [20]:

4. the axiological question: what is intrinsically worthwhile?

In addition, they define and examine several issues or themes which run across and through all of the classes of inquiry paradigms they consider. These themes include: the aim or purpose of the inquiry; assumptions about the nature of how knowledge accumulates; the ‘voice’ or ‘posture’ of the inquirer; the roles of values in inquiry; the criteria for assessing the quality of work; and so on. (See Table 6.2 in each of [14,29] and Tables 8.1–8.4 in [15]. For convenience, some elements of these tables have been reproduced in the Appendix to this paper, in Tables 1 and 2.)

In their view, the different answers which are given to the four basic questions above actually *define* an inquiry paradigm, and thence characterise the stances taken on each of the main themes or issues. They then note [14, p.112] that

differences in paradigm assumptions cannot be dismissed as mere ‘philosophical’ differences; implicitly or explicitly, these positions have important consequences for the practical conduct of inquiry, as well as for the interpretations of findings.

In other words, paradigmatic assumptions affect, as a result, the overall methodological approach taken, the types of methods, techniques and tools that are considered valid, and the meanings and interpretations which are assigned to the results or data that have been generated by these practices.

Guba and Lincoln consider only Western approaches to knowledge inquiry, and initially posited four major classes of inquiry paradigm [14]. They later expanded this to five (see below) in response to some commentary from Heron and Reason [20], who also suggested the explicit consideration of the axiological question as foundational to paradigm definition. The insights of these scholars, who have sought to delineate the broad outlines of the vast field of contemporary qualitative inquiry in the Western tradition, will be used later in Section 3 as an organising principle for understanding the different approaches to *future* inquiry which have been used. What is important here is not the specific details of how many inquiry paradigms there are (in their various opinions), or whether they are ‘Western’ or ‘non-Western’, but rather the very observation *itself*—that there *are* different inquiry paradigms, which have fundamental distinctions and differences—and that variations between them are apparent when the paradigms are examined side by side. This has many implications for understanding how the human knowledge quest has been undertaken over the course of history. Of course, any other schema or typology of forms of knowledge inquiry could equally well be used, but the overall shape and direction of the argument would be essentially the same, even as particular details might vary.

In the following consideration of the five main classes of inquiry paradigms considered by the above-named scholars, a useful metaphor to hold in mind is that of the spectrum of visible light: while we know that there are literally *millions* of colours in the visible spectrum, we nonetheless also recognise that there are seven or so main ‘bands’ corresponding to the familiar sequence of red, orange, yellow, green, blue, indigo, violet. In much the same way, the five classes of inquiry paradigm as discussed by Guba, Lincoln, Heron and Reason are most usefully seen to blend into each other, and while there are certainly essential core aspects to each paradigm, there are also many forms of and approaches to inquiry which are found in the transitional areas between the clearly-recognisable bands. It is also useful to recall that there are large parts of the electromagnetic spectrum which are also *invisible* to our eyes, and yet these are no less real than those parts we can see. Thus, we leave open the idea that there may be other forms of knowledge and approaches to knowledge inquiry which are, as yet, not visible to our gaze ...

The five main classes of paradigm which these authors consider are [14,15,20,29]:

- positivism
- post-positivism
- Critical Theory and its variants, or ‘criticalism’
- constructivism
- participatory

and their major features are summarised in Tables 1 and 2 in the Appendix. The commentary presented here is based on a distillation of the positions taken and observations made in the above-cited works. Drawing upon an idea of Reason and Torbert [35], it is also sometimes useful to consider this five-part typology as consisting of three main classes: positivistic (positivism and post-positivism); interpretivistic (criticalism and constructivism); and action/participatory.

The first of these paradigms, positivism, represents the so-called ‘received view’ of scientific inquiry over the last few centuries, and nowadays it most often functions primarily as the foil against which other paradigms are compared. Post-positivism arose as a result of attempts to address some of the key weaknesses which have been identified in the pure positivist viewpoint. Criticalism arose as part of the post-modernist movement of the 20th century and, to a greater or lesser degree, in opposition to the earlier positivistic paradigms. Constructivism has some features in common with criticalism, although there are significant differences between the two paradigms (see [39,40] for a detailed comparison of these positions), and the participatory paradigm introduces new assumptions, most especially about ontology and epistemology, but also in respect of almost all other foundational assumptions and issues (see [20,33,34] for more details, and see [28] for a comparison between the constructivist and participatory paradigms.) What is of most interest and use to us here is to note the essential differences in the various foundational positions of the different classes of paradigm (Table 1), as well as briefly noting in passing some of their different stances on certain issues related to knowledge inquiry (Table 2).

2.2 Comparison of inquiry paradigms

Looking across Table 1, we can trace a shift in the ontological positions of the five inquiry paradigms. The stances move from: a ‘real’, objective, external but nonetheless knowable reality in positivism; to an external objective reality which is only imperfectly knowable in post-positivism; to an historically-contingent reality in criticalism which has formed over time through the reification of initially-plastic social structures; to multiple realities in constructivism which are dependent upon the relative specifics of the particular inquiry group; to a subjective-objective participative reality literally co-created by the interaction of the inquiring consciousness and the cosmos. In the two positivistic paradigms, reality remains external to the subjectivity of the inquirer but, in the other three, reality becomes increasingly contingent upon inquirer subjectivity so that, ultimately, in the participatory paradigm, the inquirer’s own subjectivity is considered to be literally *formative* of it.

We see a similar shift in the stances taken with respect to epistemology, axiology, methodology, the role of values, inquirer ‘posture’, and so on, and a careful reading of Tables 1 and 2 will reward the reader with many insights into these basic issues and paradigmatic commitments. Here, for reasons of space, we shall focus most strongly on epistemology and methodology.

The shifts in epistemological positions are especially interesting, as these of course form the basis for any knowledge claims which are produced by methodological interventions. We can see a change from the objectivist stances in the two positivistic paradigms—a view that the inquirer or would-be knower is separate and distinct from the object of knowledge (‘dualism’)—to the subjectivist stance taken in criticalism and constructivism—whereby knowledge is no longer considered ‘objective’ and therefore allegedly independent of the observer, but rather is influenced by the transaction between the would-be knower(s) and the object(s) of inquiry. In the criticalist view the findings are mediated (or ‘coloured’) by the value systems in operation, while constructivism takes a stronger stance and holds that the findings are *co-created* by the inquirer and the object of inquiry through the very act of

inquiry itself. Both of these views assume knowledge is primarily a function of mind—knowledge claims are expressed as propositions, which latter are mental constructs (as indeed they are in the two positivistic views). In the participatory paradigm, however, this ‘propositional’ knowledge is considered only one of *four* main types of knowledge: direct ‘experiential’ knowledge is prior to the propositional form, as is the ‘presentational’ form. These three forms of knowledge are considered useful insofar as they lead to the fourth, ‘practical’ knowing—knowing how to *do* something, which is considered the highest form of knowledge—hence the participatory paradigm’s emphasis on the primacy of ‘practical knowing’ (Table 2). In this view, my direct experience of the rain on my upturned face during a rain shower is also a form of knowledge, even in the absence of a theory of rainfall or climate, and is prior to any conceptual propositional knowledge I might convey to you about the experience, or any presentational form I might use to represent (i.e. ‘re-present’) it to you, such as through metaphor, song, dance, poetry, and so on.

On closer inspection, we can see in the epistemological positions of the five paradigms a three-part evolution in the emphasis placed on different forms of knowing. Following, for example, Reason and Bradbury [34, p.xxv], Chandler and Torbert [3], or Reason and Torbert [35], these forms of knowledge inquiry may be termed ‘first-person’, ‘second-person’ and ‘third-person’, and in a similar vein, Wilber [53, p.70] calls them ‘I’ (first person), ‘we/us’ (second person) and ‘it/its’ (third person, singular and plural). As noted above, one can simplify discussions of inquiry paradigms into three main types—positivistic (the two positivisms above); interpretivistic (criticalism and constructivism); and action/participatory—and this maps very suggestively to what Reason and Torbert [35] consider third-person, second-person and first-person modes of inquiry, respectively. (See also [45] for another view of social science paradigms and first-, second- and third-person research/practice.) In the positivistic paradigms, the emphasis is on ‘objective’, propositional knowledge; this is ‘third-person’ knowledge—the knowledge developed is about objectively-measurable qualities of material ‘objects’, things or ‘its’ (even when they are people). In the interpretivistic paradigms, the emphasis is placed on the subjective knowledge developed by a group of inquirers about some theme, issue or domain of inquiry; this is ‘second-person’ knowledge, as it is concerned with the shared, inter-subjective forms of knowledge which groups of people develop when they meet in a ‘we’ or ‘us’ space of discussion, dialogue, dialectic or hermeneutical meaning-making. While these two forms of knowing are also present in the participatory paradigm, it also adds the distinctly ‘first-person’ knowing of *direct experience*, a type of knowledge that cannot be transmitted via the mental-level constructs of propositional knowing, which is the basis of knowledge in the other paradigms, nor even via the ‘re-presentational’ forms mentioned earlier. Some of the different participatory approaches, such as ‘action inquiry’ [33,46], focus squarely on the subjectivity of the individual inquirer in the midst of action, while others, such as ‘co-operative inquiry’ [21,33], are more usually conducted with larger groups of people. Nonetheless the key addition to epistemological validity in this paradigm is the admission of forms of knowing which are not based solely in mental-level, conceptual propositional knowing, but which could emanate from other aspects or levels of first-person subjective human experience. And what is more, this knowing could itself be subject to critical self-reflexive inquiry (‘critical subjectivity’) to ensure that it is well grounded in the experiential reality upon which it is based, as well as ensuring congruence of all of the different accepted modes of knowing.

There is also a similar progression of methodologies. The positivistic paradigms undertake experimental manipulation of the exterior objective (‘third-person’) world in order to examine the causal dependencies of the different factors under consideration, the positivist paradigm using mostly quantitative methods, the post-positivist also admitting some qualitative. The emphasis moves from naïve verification of hypotheses as ‘true’ in the former, to attempts at

falsification of hypotheses in the latter—which hypotheses must of course survive all attempts at falsification to be admitted as ‘probably true’ findings. In the interpretivistic paradigms, the methods are grounded in the inter-subjective (second-person) ‘world’ of shared subjective experience, hence the dialogical/dialectical methods of criticalism, and the hermeneutical/dialectical methods of constructivism. In the participatory paradigm, the methods involve direct participation of the (first-person) ‘subjects’ of the inquiry in the very process of inquiry itself, granting equal-power status (i.e. ‘*political* participation’) to the participants, and this participation is conducted through the exchange of information via language constructs grounded in a direct, shared, first-person experiential context. Heron and Reason [21] have called this “research ‘with’ rather than ‘on’ people”.

In the case of the axiological stance, we see how propositional knowledge as an end in itself in the two positivistic paradigms shifts to propositional knowledge becoming simply a tool for social emancipation in the two interpretivistic paradigms. In the participatory paradigm, propositional knowledge is only considered useful insofar as it contributes to *practical* knowledge about how to flourish as human beings in balance with the rest of society and the wider cosmos. Again, we see a move away from the distanced, ‘objective expert’, ‘disinterested scientist’ stance or posture of the two positivistic paradigms, to a progressively more intimate engagement with the world, as an activist and advocate (criticalism), as a passionate participant/facilitator (constructivism), to a self-reflexive actor-agent engaging with others in multiple forms of knowing, knowledge-creation, and reality-creation (participatory).

3 Evolution of futures methods through the paradigms

With the foundational stances of inquiry paradigms now laid out in this way, we can immediately see how these modes of inquiry in general have been reflected in *futures* methods in particular over the last few decades. The discussion here will be indicative rather than exhaustive, as the evolution of futures methods over this period of time has been considered elsewhere, e.g., [25,43,50]. Here the purpose is to simply highlight the shift and evolution of the use of the above paradigmatic forms in futures inquiry.

The early futures literature was full of discussions about how, for example, forecasting—one of the first, archetypal, expert-based, highly quantitative futures methods—could be made more rigorous, reliable and valid. This approach, and others like it, was assumed by their users to be objective and ‘value free’, a classic positivistic stance with respect to the role of values in inquiry (Table 2), governed by an inquirer posture of ‘objective expert’. The use of subject-matter experts is also at the very heart of the Delphi technique (see e.g., [13], [19, pp.134-58]) which, however, uses (post-positivist) *qualitative* judgements cross-correlated to establish a majority opinion (Table 1). And, indeed, the positivistic paradigmatic commitment of Olaf Helmer (one of the inventors of Delphi) is apparent in his statement that “most of futures research may be regarded as a subfield of operations research” [19, p.83], which latter is an archetypal rational-quantitative field, although he did allow for definitions of futures research which were broader than this. It was recognised by the mid 1970s that positivistic, ‘rational’, ‘scientific’ approaches to futures research were on shaky methodological grounds, as pointed out by Ida Hoos [23] in the *Handbook of Futures Research* [10], as well as Roy Amara [1] in the same volume, who noted: “the familiar tools of scientific investigation can be applied only in their most primitive forms” [1, p.41]. Indeed, the limitations of positivistic approaches to futures inquiry forms the essential core theme of the book edited by Linstone and Simmonds [30], wherein the role of worldviews in futures research is seen to come right to the fore. The nature of the crisis in futures work at that time is succinctly stated by Linstone and Simmonds [30, p.xv] as follows:

No longer are we just dealing with methodological issues but with challenges to long-accepted paradigms. ... [There is a] growing awareness of the influence of the personality, experience, and character of those doing futures work, those requesting futures work, and the organizational and institutional environment in the selection of issues chosen to study. ... The heart of the matter is the perceptual change in the research worker himself.

In other words, the assumption of ‘value-free’ objective rational-scientific futures research independent of inquirer subjectivity became increasingly difficult to maintain, and by the mid-to-late 1970s there was a clear recognition of the important role of subjectivity in futures inquiry.

There were also early approaches to futures inquiry which were not based in the positivistic paradigms. The ‘prospective’ approach of Gaston Berger [4] emphasised the role of discussion and dialogue to determine what futures could be created and which of these were worth creating, which clearly demonstrates some of the paradigmatic commitments of both criticalism and constructivism, including the explicit consideration of values as intrinsic to inquiry. The idea that reality is ‘socially constructed’ [2] also lies at the heart of Bertrand de Jouvenel’s perspective on futures inquiry and informed political action [5,11]. Later, Richard Slaughter [41,42] discussed the explicit use of critical theory—and especially that of Jürgen Habermas [16]—in work undertaken in the late 1970s and early 1980s aimed at the re-conceptualising of futures inquiry beyond the earlier positivistic views. The issue of dissent and the use of dialectic is a central element of criticalist and constructivist approaches, and a recent special issue of this journal focussed explicitly on the role of dissent in futures studies [37], while the book edited by Sardar [38] is similarly dissenting and dialectical in tone and timbre. Even more recently, the use of participative methods in futures inquiry, in particular ‘action research’, has also been the subject of a special issue of this journal [32].

Finally, to round out this brief illustrative discussion, we recall that both positivist and post-positivist approaches share the same basic aim (Table 2). Thus, we can consider there to be four main purposes of the five main classes of inquiry paradigm: prediction and control; critique and transformation (leading to emancipation); understanding and insight (leading to re-construction of prior constructions); and human flourishing (through political participation). Given this, we can see strong resonances of these four inquiry aims in the four types of futures approaches discussed by Sohail Inayatullah [24, ch.1]: predictive; critical; interpretive; and anticipatory action learning.

In summary, then, we can see clear examples and elements of the inquiry paradigms described in Section 2 reflected in the use of futures methods over the last several decades. And this observation leads us to consider what the ‘next’ form of inquiry in that sequence might be; and, beyond that, how it might make itself felt in futures work ...

4 Towards an ‘integral’ approach to inquiry

Having looked at the evolution of the Western research paradigms discussed by Guba, Lincoln, Heron and Reason, and having traced their influence in futures inquiry, we are now in a position to consider what an ‘integral’ approach to knowledge inquiry might look like and entail.

The word ‘integral’ stems from the same root as other words such as ‘integrity’ which deal with wholeness and completeness. Dictionary definitions hint at the meaning intended in this context: whole, complete; essential; balanced; joined into a greater unity. ‘Integral’ also pertains to ‘integration’ which has connotations of a harmonious combination of elements into

a unified whole. All of these words capture the essence of the meaning of ‘integral’ in the sense intended here.

We saw in Section 2 how the ontological and epistemological (and thence also methodological) foundations of approaches to inquiry became progressively broader through the sequence of paradigms discussed there. Forms of what are considered valid knowing broadened out from the propositional, objective, third-person form of knowledge sought in the positivistic approaches, through second-person forms of knowledge created in the interpretivistic approaches, to include direct, experiential first-person knowledge arising in participatory inquiry. As well, and of particular importance, is that the participatory paradigm admits forms of knowledge which are no longer based solely at the mental-conceptual level—the ‘extended epistemology’ of participatory inquiry (Table 1) also recognises *other* forms of knowing which arise from *other* aspects or levels of human experience. While mental-conceptual knowledge may be transferred (to varying degrees and with varying degrees of success) via propositions and mental constructions, the participatory paradigm’s foundational ‘experiential’ form of knowledge *cannot* be so transferred from one person to another, and must always remain part of each individual’s own intimately first-person experience. This implies a need for recognition of a plurality of ways of knowing.

What this further implies is that any putative ‘integral’ approach to inquiry will need to be founded on a complete set of pluralisms regarding the ontological, epistemological, methodological and other assumptions upon which all forms of inquiry are based. That is, the foundational assumptions of integral inquiry must take into account, honour and somehow include the essence of the foundational assumptions of all existing approaches to inquiry, as well as extending them in new ways and joining them together into a harmoniously unified whole. Thus, to take an *integral* perspective, one needs to be able to move out of specific, particularising paradigmatic assumptions and paradigm-based perspectives into what we might call a ‘meta-paradigmatic meta-perspective’—a perspective which recognises and values the contributions of all paradigm-based perspectives but which is nonetheless free of and outside of their particularising hold. An integral meta-perspective can range across a variety of different perspectives, drop into them where needed, use them for as long as is necessary, and move out of them again when their utility for the current aspect of inquiry is exhausted. In other words, an integral (meta-)perspective is one that is, as it were, ‘freely-floating’ and not bound to any particular singular paradigm-based perspective.

Therefore, with the above in mind, we can delineate some of the features, shape and broad outlines of integral inquiry.

A truly ‘integral’ approach to inquiry would seek to include different *ways* of knowing, which would include (but not be limited to) those characterised earlier as first-, second- and third-person perspectives, as well as different forms or *levels* of knowing, whether experiential, propositional, or beyond—including post-mental *spiritual* experience, which latter has been investigated by methodological approaches quite different from those described here, and for a much longer span of time, as well. This leads to the consideration, also, of different levels of *reality* as possible domains of inquiry—no longer simply the physical-material level of existence (as in the positivisms) and the mental-conceptual level of existence (as in criticalism and constructivism), but also other possible levels of reality beyond the mental. A truly integral approach to knowledge inquiry would seek to include not only all levels of human experience, but would also consider *all* levels of existence *itself*, in *all* of the forms it has been conceived of in the entire history of the human knowledge quest, be it material, mental or, indeed, spiritual. This is no mean feat, and this last idea may challenge even those who are long accustomed to insisting on the consideration of mental-interpretive forms of knowledge beyond the merely physical-empirical. The inclusion of spiritual-gnostic knowledge re-integrates into the human knowledge quest forms of

knowledge-seeking which scientific rationality has eschewed for centuries, since the emergence and subsequent dominance of positivistic science.

Thus, an ‘integral’ approach to inquiry accepts that there are multiple ways of knowing (i.e. ‘epistemological pluralism’), multiples domains of inquiry which are knowable (i.e. ‘ontological pluralism’), and that many different methods, modes or forms of inquiry are appropriate for these different ways of knowing and domains of interest, be they physical, mental, or spiritual (i.e. ‘methodological pluralism’). And it also accepts as co-foundational the role of subjectivity in inquiry—of individual inquirers, of a group of collaborating inquirers, and the wider world of potential recipients of the reported knowledge so created.

The question of what constitutes ‘integral methodology’ is especially important to practitioners, so some observations are in order. The term ‘methodology’ is used in this paper in a quite specific sense to refer to the overarching defining characteristic of a collection or body of practices. In contrast, ‘method’ refers to a particular individual “procedure for the conduct of an inquiry, which may undertake different courses of action (techniques) for the achievement of its aims, and employ different instruments (tools)” [36, p.164]. The key idea here is one of a hierarchy of forms of practice, ranging from particular *tools* (most specific), through different *techniques* which may be made use of in a variety of different inquiry *methods*, to the (most general) super-category of ‘methodology’, which is the broadest conception or characterisation of practices that are employed to generate new knowledge. The entries under ‘methodology’ in Table 1 show this broad categorisation of *how* knowledge-creation is undertaken, and what modes of such practice are considered valid in each paradigm. ‘Integral methodology’, therefore, involves the use of any or all of the methodologies—and thus also the specific methods, techniques or tools—of any of the paradigms, in an explicitly conscious fashion as appropriate to the domain of inquiry. So, ‘integrality’, as the term is used and understood here, does not primarily inhere in any single, particular paradigm-based methodology, method, technique or tool. Rather, it is inherent in the considered choice being made about which forms of practice are to be used, and in ensuring that these forms of practice are correctly and appropriately chosen.

In sum, a truly ‘integral’ approach to inquiry therefore seeks after the broadest possible perspective from which to operate. It is a consciously ‘meta-paradigmatic’ meta-perspective—a perspective which consciously seeks to stand outside of any single, particular perspective or view; to encompass and embrace as many other perspectives as it possibly can; to see their inter-relationships; to honour and value their own particular truths; and to draw them together into a higher-order unity in an integrated and coherent manner. It is a perspective which recognises the inherently limited nature of any singular perspective; and it is therefore a perspective which also consciously recognises the limited nature of its *own* perspective, no matter how broad it attempts to be. This is why a truly integral approach would always seek to consciously broaden the range of perspectives which it embraces—to ‘transcend and include’ (to use Wilber’s term) what has gone before. It would always seek to broaden the framework it employs to ensure that it is taking the broadest possible view of the object of inquiry.

One of the most integral frameworks yet developed—known as ‘AQAL’—is the one created by Wilber [52]. Its broadness arises partly by dint of history, in that contemporary work in any epoch always stands at the end of all of the work undertaken prior to it, and partly through the prodigious amount of original research which Wilber studied and synthesised. It is a framework which attempts to integrate the major findings and discern the ‘orienting generalisations’ of the human knowledge quest, ever since human consciousness first emerged and began to wonder—including art, morals, science, philosophy, psychology, politics and spirituality. In short, it takes as its canvas the entire ‘Great Nest of Being’—matter to body to mind to soul to spirit—and how it is manifested in self, culture and nature

[53]. The particular utility of Wilber’s model is that it is both a model of realms of reality into which inquiry can be made as well as a model of the very consciousness which perceives this reality and undertakes inquiry. In other words, the Wilber model attempts to map both the possible domains of inquiry as well as the structures of consciousness operating within inquirers. Wilber continues to work on expanding and elaborating ever more facets of the AQAL framework—in published works [52–54], in publicly-accessible works-in-progress,¹ and most widely through his online Integral Institute, Integral University and Integral Naked initiatives.² It is for this reason that so much of the ‘integral’ work reported in various domains of inquiry [e.g., 9] is based upon Wilber’s AQAL model—not because it is the *only* integral framework (for indeed there are many possible [e.g., 12]), but because of its broad scope and wide utility *as* an integral framework.

5 Integral futures

We are now in a position to focus upon the question of what constitutes Integral Futures. We saw in Section 3 that futures inquiry can be and has been undertaken within any or all of the broad classes of inquiry paradigm described in Section 2. The different paradigmatic commitments of those paradigms have yielded many different approaches to and methods of futures work. It is through the paradigmatic and philosophical commitments of those paradigms that the various forms of methodology which have been considered valid in futures inquiry have been chosen, and which has led to the existence of many different ‘traditions’ of futures work. The contention of this paper is that the emerging tradition of *Integral Futures* can (now) be seen as futures work which is undertaken using an integral *approach to*, or through taking an integral *perspective on*, futures inquiry. Thus, we have now reached a point where this apparently-simple statement, made early in the Introduction to this paper—and which we saw entails a considerable degree of complexity—becomes simple again; but this is now the “simplicity on the far side of complexity”.³

Integral Futures, therefore, is an approach to futures inquiry which is based on a meta-paradigmatic integral meta-perspective—an approach which attempts to take the broadest possible view of the human knowledge quest, and of how this knowledge can be used to generate interpretive frameworks to help us understand our images of what potential futures may lie ahead. Because futures inquiry is, by its very nature, a broadly inter-, trans-, multi-, meta-, counter-, and even *anti*-disciplinary activity [e.g., 26,27], it is well suited to the conscious use of more inclusive and integral frameworks, such as the one proposed by Wilber [52,53]. Several futurists have sought to incorporate integral approaches into futures studies [e.g., 17,18,22,44,47]. An example of the use of an integral approach to futures methods can be found in [47–51] where ‘foresight’ is regarded as a particular type of inquiry process which is a subset of futures work in general.

Integral Futures, thus, does not seek to take a singular perspective; rather, it recognises a plurality of perspectives. It is not confined to the use of a single tool, technique or method; rather, it is aware of the existence of an entire spectrum of practices, involving a plurality of possible methodologies, methods, techniques and tools. It recognises that there are many ways of knowing—many paradigms, epistemologies, and methodologies of knowledge-seeking—and that no singular approach, paradigm, methodology or form of praxis can be assigned pre-eminence. Integral Futures welcomes, embraces and values *all* careful and sincere approaches

¹ Excerpts from up-coming books may frequently be found on-line at his publisher’s web site: <wilber.shambhala.com>

² See respectively: <www.integralinstitute.org>, <www.integraluniversity.org>, and <in.integralinstitute.org>.

³ This expression is often attributed to Oliver Wendell Holmes, Jr.

to knowledge-seeking, in all spheres of human activity and experience, and in all domains of inquiry to which they are both appropriate and adequate—including analytical rationality, intuitive insight, and spiritual inspiration.

Central to this approach to futures is the role of human consciousness—images of the future require a consciousness in which to be held, so we cannot reasonably study the content of images of the future without also understanding the container. What we see going on ‘out there’ in the world is, in large part, conditioned by what is going on ‘in here’ in our minds. Our perspective creates our perception of reality. In other words, ontology and epistemology—being and knowing, existing and thinking—are merely two sides of the same coin. Integral Futures takes this simple but profound recognition as central to its program for understanding how the past was laid down, how the present has come to be, and what futures may yet come to pass.

6 Conclusion

In this paper we examined a typology of inquiry paradigms in order to understand how these paradigms have evolved over the course of time into newer and more expansive forms, as well as how they have been used in futures work over the last several decades. This examination set the scene for considering the overall shape and broad outline of an emerging form of inquiry—‘integral inquiry’—which is founded upon the taking of a meta-paradigmatic or ‘integral’ meta-perspective *on* the use of inquiry paradigms—a perspective, that is, which is not locked into any singular set of paradigmatic commitments but, rather, can range over multiple inquiry paradigms and select whichever is appropriate to the particular domain or form of inquiry being undertaken. As a result, this meta-paradigmatic approach to inquiry is characterised by *pluralism* in, among other things, ontological, epistemological, and methodological assumptions and commitments, so that no single set of such commitments can or does define this approach. Integral inquiry can also be used as a basis for undertaking futures inquiry, and it is precisely this activity which is what we have here called ‘integral futures’. Thus, a vast array of new methodological options and possibilities—all well-grounded and well-founded upon consciously-understood philosophical underpinnings—now opens up to futures practitioners who undertake to employ integral perspectives in or approaches to futures-relevant knowledge creation for informed action in the world.

Appendix

The various paradigms’ basic positions on the foundational issues of ontology, epistemology, methodology and axiology are shown in Table 1, while their stances on a variety of other issues are shown in Table 2. These Tables are based on a distillation of the positions taken and observations made in [14,15,20,29].

	<i>Positivism</i>	<i>Post-positivism</i>	<i>Criticalism</i>	<i>Constructivism</i>	<i>Participatory</i>
<i>Ontology</i>	naïve realism – ‘real’ reality but apprehendable	critical realism – ‘real’ reality but only imperfectly and probabilistically apprehensible	historical realism – virtual reality shaped by social, political, cultural, economic, ethnic and gender values; crystallised over time	relativism – local and specific co-constructed realities	participatory reality – subjective-objective reality, co-created by mind and given cosmos
<i>Epistemology</i>	dualist / objectivist; findings ‘true’	modified dualist / objectivist; critical tradition / community; findings ‘probably true’	transactional / subjectivist; value-mediated findings	transactional / subjectivist; co-created findings	critical subjectivity in participatory transaction with cosmos; extended epistemology of experiential, presentational, propositional, and practical knowing; co-created findings
<i>Methodology</i>	experimental / manipulative; verification of hypotheses; chiefly quantitative methods	modified experimental / manipulative; critical multiplism; falsification of hypotheses; may include qualitative methods	dialogic / dialectical	hermeneutical / dialectical	political participation in collaborative action inquiry; primacy of the practical; use of language grounded in shared experiential context
<i>Axiology</i>	propositional knowing about the world is an end in itself, is intrinsically valuable		propositional, transactional knowing is instrumentally valuable as a means to social emancipation, which is an end in itself, is intrinsically valuable		practical knowing how to flourish with a balance of autonomy, cooperation, and hierarchy in a culture is an end in itself, is intrinsically valuable

Table 1: Foundational stances of the five inquiry paradigms (adapted and distilled from [14,15,20,29]).

	<i>Positivism</i>	<i>Post-positivism</i>	<i>Criticalism</i>	<i>Constructivism</i>	<i>Participatory</i>
<i>Inquiry aim</i>	explanation: prediction and control		critique and transformation; restitution and emancipation	understanding; reconstruction	human flourishing
<i>Inquirer posture</i>	‘disinterested scientist’ as informer of decision makers and change agents		‘transformative intellectual’ as advocate and activist	‘passionate participant’ as facilitator of multivoice reconstruction	primary voice manifest through aware self-reflective action; secondary voices in illuminating theory, narrative, movement, song, dance, and other presentational forms
<i>Nature of knowledge</i>	verified hypotheses established as facts or laws	non-falsified hypotheses that are probable facts or laws	structural / historical insights	individual or collective reconstructions sometimes coalescing around consensus	extended epistemology; primacy of practical knowing; critical subjectivity; living knowledge
<i>Knowledge accumulation</i>	accretion – ‘building blocks’ adding to ‘edifice of knowledge’; generalisations and cause-and-effect linkages		historical revisionism; generalisation by similarity	more informed and sophisticated reconstructions; vicarious experience	in communities of inquiry embedded in communities of practice
<i>Values</i>	excluded – influence denied; considered to be extrinsic to inquiry		included – formative; considered to be intrinsic to inquiry		
<i>Goodness or quality criteria</i>	conventional benchmarks of ‘rigour’; internal and external validity, reliability and objectivity		historical situatedness; erosion of ignorance and misapprehensions; action stimulus	trustworthiness and authenticity including catalyst for action	congruence of experiential, presentational, propositional and practical knowing; leads to action to transform the world in the service of human flourishing

Table 2: Paradigm positions on selected issues (adapted and distilled from [14,15,20,29]).

References

- [1] R. Amara, Probing the future, in: Fowles [10], pp. 41–51.
- [2] P.L. Berger, T. Luckmann, *The Social Construction of Reality*, Penguin, 1966.
- [3] D. Chandler, B. Torbert, Transforming inquiry and action: Interweaving 27 flavors of action research, *Action Research* 1 (2) (2003) 133–152.
- [4] A. Courmand, M. Lévy (Eds.), *Shaping the Future: Gaston Berger and the Concept of ‘Prospective’*, Gordon and Breach, New York, 1973.
- [5] B. de Jouvenel, *The Art of Conjecture*, trans. N Lary, Weidenfeld and Nicholson, London, 1967.
- [6] N.K. Denzin, Y.S. Lincoln (Eds.), *Handbook of Qualitative Research*, Sage Publications, Thousand Oaks, USA, 1994.
- [7] N.K. Denzin, Y.S. Lincoln (Eds.), *Handbook of Qualitative Research*, 2nd edn., Sage Publications, Thousand Oaks, USA, 2000.
- [8] N.K. Denzin, Y.S. Lincoln (Eds.), *The SAGE Handbook of Qualitative Research*, 3rd edn., Sage Publications, Thousand Oaks, USA, 2005.
- [9] S. Esbjörn-Hargens, Guest editor’s introduction, *World Futures* 61 (1-2) (2005) 1–4. Editorial introduction to a special double-issue on Integral Ecology.
- [10] J. Fowles (Ed.), *Handbook of Futures Research*, Greenwood Press, Westport, CT, USA, 1978.
- [11] G. Gamba, *Previsione, potere e buongoverno: nel pensiero di Bertrand de Jouvenel*, Institute of International Sociology, Gorizia, Italy, 2003. Italian and English. Dual-language booklet in two inverted halves. English title: Prediction, power and good governance: according to Bertrand de Jouvenel, trans. M Brady.
- [12] S.J. Goerner, Editor’s note on the Integral Age, *World Futures* 60 (4) (2004) 271–272. Editorial introduction to a special issue of the journal.
- [13] T.J. Gordon, The Delphi method, in: J.C. Glenn, T.J. Gordon (Eds.), *Futures Research Methodology*, CD-ROM, version 2.0 edn., American Council for the United Nations University, Washington DC, 2003, chap. 3.
- [14] E.G. Guba, Y.S. Lincoln, Competing paradigms in qualitative research, in: Denzin and Lincoln [6], chap. 6, pp. 105–117.
- [15] E.G. Guba, Y.S. Lincoln, Paradigmatic controversies, contradictions, and emerging confluences, in: Denzin and Lincoln [8], chap. 8, pp. 191–215.
- [16] J. Habermas, *Knowledge and Human Interests*, trans. JJ Shapiro, Heinemann, London, 1972. From the original German: *Erkenntnis und Interesse*, 1968.
- [17] P. Hayward, Resolving the moral impediment to foresight action, *Foresight* 5 (1) (2003) 4–10.
- [18] P. Hayward, J. Voros, Creating the experience of social change, *Futures* 38 (6) (2006) 708–715.
- [19] O. Helmer, *Looking Forward: a Guide to Futures Research*, Sage Publications, Beverly Hills, CA, USA, 1983.
- [20] J. Heron, P. Reason, A participatory inquiry paradigm, *Qualitative Inquiry* 3 (3) (1997) 274–294.
- [21] J. Heron, P. Reason, The practice of co-operative inquiry: Research ‘with’ rather than ‘on’ people, in: Reason and Bradbury [34], chap. 16, pp. 179–188.
- [22] A. Hines, Applying integral futures to environmental scanning, *Futures Research Quarterly* 19 (4) (2004) 49–62.
- [23] I.R. Hoos, Methodological shortcomings in futures research, in: Fowles [10], pp. 53–66.
- [24] S. Inayatullah, *Questioning the Future: Futures Studies, Action Learning and Organisational Transformation*, Tamkang University, Taipei, Taiwan, 2002.
- [25] S. Inayatullah, Reductionism or layered complexity? The futures of futures studies, *Futures* 34 (3-4) (2002) 295–302.
- [26] A. Kumar Giri, The calling of a creative transdisciplinarity, *Futures* 34 (1) (2002) 103–115.
- [27] V. Lal, Unhitching the disciplines: History and the social sciences in the new millennium, *Futures* 34 (1) (2002) 1–14.
- [28] Y.S. Lincoln, Engaging sympathies: Relationships between action research and social constructivism, in: Reason and Bradbury [34], chap. 11, pp. 124–132.

- [29] Y.S. Lincoln, E.G. Guba, Paradigmatic controversies, contradictions, and emerging confluences, in: Denzin and Lincoln [7], chap. 6, pp. 163–188.
- [30] H.A. Linstone, W.H.C. Simmonds (Eds.), *Futures Research: New Directions*, Addison-Wesley, Reading, MA, USA, 1977.
- [31] D.N. Michael, With both feet planted firmly in mid-air: Reflections on thinking about the future, *Futures* 17 (2) (1985) 94–103.
- [32] J. Ramos, Action research and futures studies, *Futures* 38 (6) (2006) 639–641.
- [33] P. Reason, Three approaches to participative inquiry, in: Denzin and Lincoln [6], chap. 20, pp. 324–339.
- [34] P. Reason, H. Bradbury (Eds.), *Handbook of Action Research: Participative Inquiry and Practice*, Sage Pubs., Thousand Oaks, CA, USA, 2001.
- [35] P. Reason, W.R. Torbert, The action turn: Towards a transformational social science, *Concepts and Transformation* 6 (3) (2001) 1–37.
- [36] W.M. Sachs, Some thoughts on the mathematical method and futures problems, in: Linstone and Simmonds [30], chap. IV.4, pp. 164–174.
- [37] Z. Sardar, Dissenting futures and dissent in the future, *Futures* 31 (2) (1999) 139–146.
- [38] Z. Sardar (Ed.), *Rescuing All Our Futures: the Future of Futures Studies*, Praeger, Westport, USA, 1999.
- [39] T.A. Schwandt, Constructivist, interpretivist approaches to human inquiry, in: Denzin and Lincoln [6], chap. 7, pp. 118–137.
- [40] T.A. Schwandt, Three epistemological stances for qualitative enquiry: Interpretism, hermeneutics, and social constructionism, in: Denzin and Lincoln [7], chap. 7, pp. 189–213.
- [41] R.A. Slaughter, Implementing critical futures studies, in: Sardar [38], chap. 7, pp. 83–97.
- [42] R.A. Slaughter, An outline of critical futures studies, in: *Futures for the Third Millennium: Enabling the Forward View*, Prospect Media, Sydney, 1999, chap. 5.1, pp. 203–230.
- [43] R.A. Slaughter, From forecasting and scenarios to social construction: Changing methodological paradigms in futures studies, *Foresight* 4 (3) (2002) 26–31.
- [44] R.A. Slaughter, *Towards integral futures*, in: *Futures Beyond Dystopia: Creating Social Foresight*, RoutledgeFalmer, London, 2004, chap. 11, pp. 152–166.
- [45] W.R. Torbert, Transforming social science: Integrating quantitative, qualitative, and action research, in: F.T. Sherman, W.R. Torbert (Eds.), *Transforming Social Inquiry, Transforming Social Action: New Paradigms for Crossing the Theory/Practice Divide in Universities and Communities*, Kluwer / Springer, Amsterdam / Berlin, 2000, chap. 5, pp. 67–91.
- [46] W.R. Torbert, The practice of action inquiry, in: Reason and Bradbury [34], chap. 23, pp. 250–260.
- [47] J. Voros, Reframing environmental scanning: an integral approach, *Foresight* 3 (6) (2001) 533–552.
- [48] J. Voros, A generic foresight process framework, *Foresight* 5 (3) (2003) 10–21.
- [49] J. Voros, A generalised “layered methodology” framework, *Foresight* 7 (2) (2005) 28–40.
- [50] J. Voros, Introducing a classification framework for prospective methods, *Foresight* 8 (2) (2006) 43–56.
- [51] J. Voros, Nesting social-analytical perspectives: an approach to macro-social analysis, *Journal of Futures Studies* (in press).
- [52] K. Wilber, *The Collected Works of Ken Wilber*, 8 vols, Shambhala, Boston, 1999–2000.
- [53] K. Wilber, *A Theory of Everything: an Integral Vision for Business, Politics, Science and Spirituality*, Shambhala, Boston, 2000.
- [54] K. Wilber, *Boomeritis: a Novel That Will Set You Free*, Shambhala, Boston, 2002. Many footnotes, endnotes and sidebars are located at the publisher’s web site for free download. <wilber.shambhala.com>.