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knowledge creation, futures methodologies and the integral agenda

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For futures studies to progress toward a fully-fledged discipline its knowledge creation processes must be clear and comprehensible. They must be capable of being taught, learned, critiqued and modified. This paper provides a rationale for using a version of Wilber's four-quadrant model as one way of understanding the knowledge creation process in futures studies. It applies this structurally to knowledge creation through four contrasting futures methodologies. The latter are then recontextualized within the four-quadrant framework. It is suggested that a rapprochement between futures studies and an emerging 'integral agenda' provides a sound approach to the civilizational challenge facing humankind.

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One of the stumbling-blocks to the full emergence of futures studies (FS) as an applied metadiscipline has been the question of knowledge. Since the future is a problematic subject, how, it has been asked, may one know anything at all about it? Bertrand de Jouvenel gave his answer to this question in his classic work *The Art of Conjecture*¹. Much later Wendell Bell outlined the case for a 'critical realist' approach to the same question². I have argued that future-oriented enquiry is primarily symbolic, which is partly why I stress the primacy of interpretation in the forward view³. These and other approaches have illuminated aspects of the problem. Overall, there have been few attempts to understand how the process of knowledge creation works in a futures context. What kinds of knowledge are involved? Where do they fit? How can they be evaluated? To suggest some credible answers to these questions will help to substantiate the claim that FS involves disciplined enquiry. It can therefore be taken more seriously and applied to major world problems.

In earlier work I drew on Wilber's four-quadrant model of evolutionary development to propose a new understanding of the purposes of FS and to set out a new framework for environmental scanning⁴ (Figure 1). These were needed for the following reasons:

- Earlier accounts that foregrounded empiricist methodologies were seen as inadequate.
- Methods were needed to provide interpretive depth in futures work.
- The emergence of an integral agenda may provide new ways forward for FS.

..... Modifying Wilber's approach to knowledge creation

In *Eye to Eye: The Quest for the New Paradigm*, Wilber set out three central principles for the accumulation and verification of knowledge, as follows:

- *Instrumental injunction*. This is always of the form, 'if you want to know this, do this'.
- *Intuitive apprehension*. This is a cognitive grasp, prehension, or immediate experience of the object domain (or the aspect of the object domain) addressed by the injunction; that is, the immediate apprehension of data.
- *Communal confirmation*. This is a checking of results (apprehensions or data) with others who have adequately completed the injunctive and apprehensive strands⁵.

This approach went a long way toward reconciling different fields of knowledge and showing, for example, how both science and religion each fulfilled them in their own ways⁶. More recently Mark Edwards has shown how what has since been called the 'integral cycle of knowledge' originally proposed by Wilber paid insufficient attention to the centrality of interpretation. Clearly this is of great significance in futures work, since, as suggested above, interpretation is particularly central in the futures domain. According to Edwards the original 'three strands' model 'misses one absolutely key step in the process of knowledge acquisition'. He describes this step in the following way. It is:

An interpretive, reflective, assimilation phase that follows on from the empirical experience and the observation and the gathering of data. It cannot be reduced to any of the other strands because its source is the scientist-practitioner's own explanatory and interpretive agenda that moulds and contextualises the experience/data to enable it to be expressed and publicly presented.

1 B. de Jouvenel, *The Art of Conjecture*, Weidenfeld & Nicolson, London, 1967.

2 W. Bell, *The Foundations of Futures Studies: Vols 1 & 2*, Transaction Publishers, NJ, 1997.

3 R. Slaughter, 'An outline of critical futures studies', in R. Slaughter, *Futures for the Third Millennium: Enabling the Forward View*, Prospect, Sydney, 1999, pp. 203-30.

4 R.A. Slaughter, 'Transcending flatland', *Futures*, Vol. 30 No. 6, 1999, pp. 341-68; also 'A new framework for

environmental scanning', *Foresight*, Vol. 1 No. 5 1999, pp. 387-97.

5 K. Wilber, 'Eye to eye: the quest for the new paradigm', in *The Collected Works of Ken Wilber*, Vol. 3, Shambhala, Colorado, 1999.

6 K. Wilber, *The Marriage of Sense and Soul: Integrating Science and Religion*, Random House, New York, NY, 1998.

Figure 1 The four quadrants

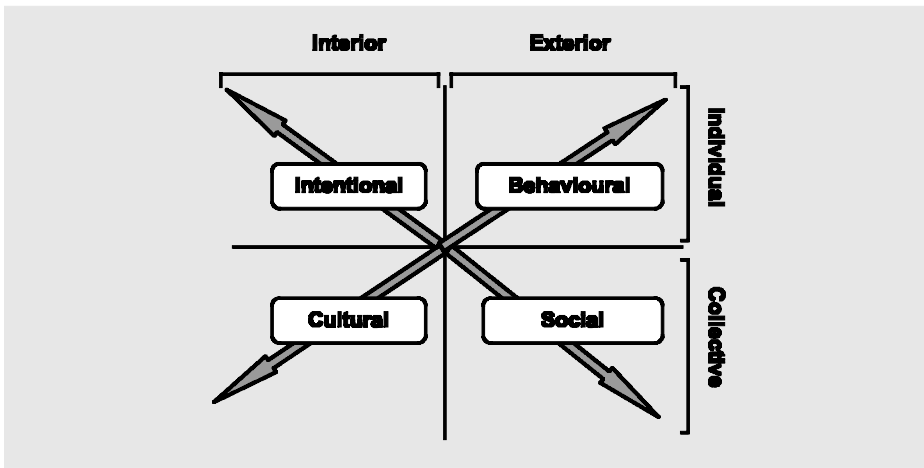
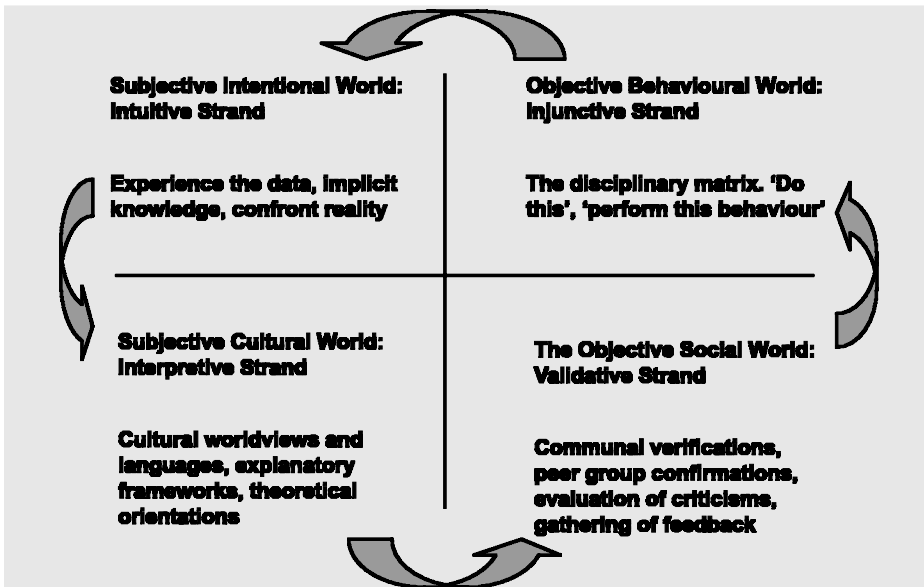


Figure 2 An integral cycle of knowledge



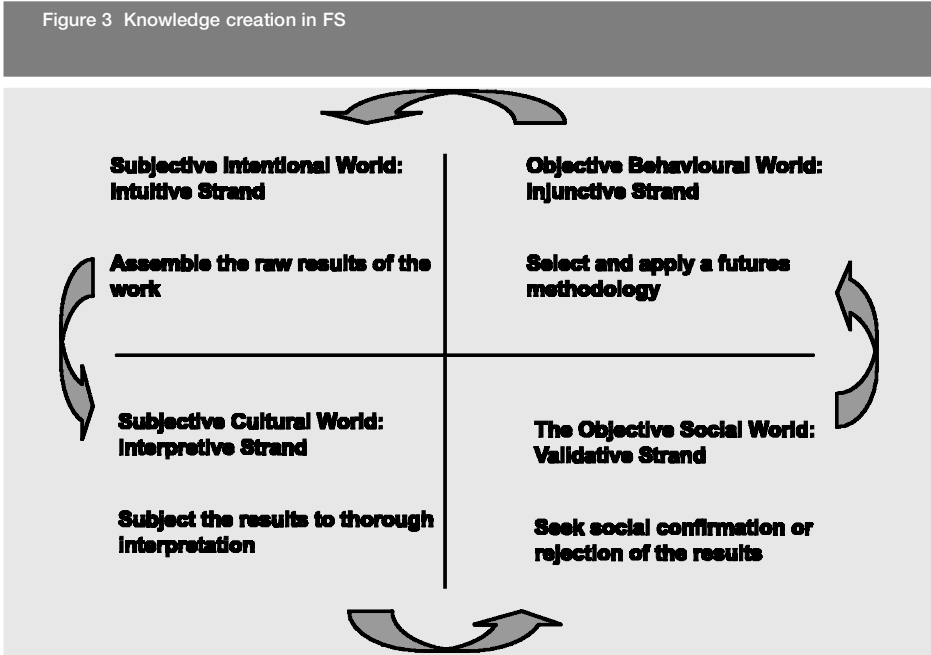
He adds:

The interpretive strand is the cultural means by which experience is mediated into some form of social or linguistic expression of that experience.⁷

By adding this fourth strand, Edwards is able to complete the outline of an Integral Cycle of Knowledge (Figure 2). He comments that:

Introducing an interpretive strand is the equivalent to including a subjective, collective, cultural component which offers an essential component in the knowledge cycle to explain how data get

7 K. Edwards, 'The integral cycle of knowledge: some thoughts on integrating Ken Wilber's developmental and epistemological models', p. 2. Frank Visser's Ken Wilber Web site: <http://www.worldofkenwilber.com>



filtered, structured, reshaped and interpreted before being expressed in a socially verifiable form. The resulting four strands can then be seen to represent the four validity checks or truth concerns of the four quadrants⁸.

He then relates the four-quadrant model to the formal components of what he calls 'scientific' reporting. These are:

- Introduction and literature review (lower right quadrant).
- Method (upper right).
- Results (upper left).
- Discussion (lower left).
- Conclusion (returning to lower right)⁹.

This integral model of knowledge creation allows us to consider a general model for knowledge creation in FS. Such a model is needed to bring greater coherence to the epistemological foundations of FS. The perceived lack of such foundations has arguably impaired the field's search for professional and social legitimisation. If it can be shown that knowledge creation in FS bears strong structural similarities to that in other fields, then FS can move closer toward wider acceptance and a necessary 'mainstream' status. Hence the following section explores this general model by applying it to four futures methodologies.

.....
The integral cycle of futures knowledge creation

Knowledge creation in FS can be seen to take place in the same four stages as outlined in Figure 3. In summary they are:

- Select and apply a futures methodology (upper right quadrant).
- Assemble the raw results of the work (upper left).
- Subject the results to interpretation (lower left).
- Social confirmation or rejection of results (lower right).

⁸ *Ibid*, p. 4.

⁹ *Ibid*, p. 6.

I will now briefly explore how this cycle of knowledge creation works in the case of four different futures methodologies (Figure 3). I want to stress that this is a provisional formulation. It is highly desirable that this account, and the models upon which it is based, be thoroughly critiqued by other futures practitioners and revised accounts be put forward in due course.

Forecasting

Step 1 involves selecting which forecasting method to use. Is it based on time series data, trend reading, genius forecasting or some combination of these? What models of change are considered applicable to the system under study? What assumptions are embedded in these? When such questions are resolved, the methodology is applied to a real world problem.

Step 2 concerns the assembling of results. How are they to be collated? What level of confidence is applicable to the raw data? Will sophisticated formulas and statistical methods be used? What constitutes the community of researchers to which this information relates? Are the work and its outcomes proprietary or not? Such operations and decisions rely greatly upon the accumulated inner knowledge of the researcher and the richness of his/her understanding.

Step 3 is an interpretive process. What do the data mean? Are there any clear patterns? Are the results expected or surprising? Are they likely to be welcome or otherwise; taken seriously or not? Will they challenge conventional wisdom or fall neatly into current paradigms and outlooks? Here the researcher takes the first step in the process of situating the results in the context of wider social and disciplinary frameworks of understanding.

Step 4 takes the interpreted results out into wider contexts: the sponsors of the work, professional peers, the wider futures community perhaps. In each case a series of judgements will be derived about the quality and usefulness of the work, its implications for policy. If its utility is deemed to be high, then validity is likely to be attached to the results and work moves into the public domain, where it may appear in such forms as journal articles, books or professional courses.

Delphi technique

Step 1 begins with defining the domain of interest and drafting a number of first round questions. A list of experts in the field is selected and the first questionnaire is sent out to them.

Step 2 sees the return of the first round questionnaires. These are collected and collated. Clusters of responses are noted and a provisional 'conceptual mapping' of emerging issues is undertaken.

Step 3 occurs when the meaning of the responses is analysed. This may lead to some of the first-round questions being modified. It may lead to the framing of new questions to be included in the second round. Hypotheses and generalizations may emerge at this stage.

Step 4 may see a modified questionnaire sent again to the respondents. They respond to the ideas, propositions, conceptual mapping that have occurred earlier. The Delphi method normally involves several such iterations. When the final one is completed those who have administered the survey attempt to summarize the results for clients or wider audiences. Judgements about the validity of the work emerge from these social contexts.

Scenarios

Step 1 consumes much time and effort when scenarios are done properly. That is, a very considerable amount of time is invested in studying the system (or organization) in question, understanding its internal dynamics (including the 'mental models' that govern its operation) and laying out a range of external influences.

Step 2 involves bringing the results of stage 1 together and mapping them on to a standard scenario matrix (or similar device). The matrix is normally built around two key uncertainties. From these four contrasting future scenarios can be derived.

Step 3 is where each of the possible future worlds is investigated. In other words, the raw architecture of the scenario frameworks is interpreted in depth. Once several contrasting worlds have been described a number of questions emerge. 'If we lived in this world, what would the implications be?' 'How might we respond to internal and external challenges?' 'What are the key strategic options?'

Step 4 again involves the verbal (or written) presentation of results to the sponsor and/or a wider community of peers. Occasionally digests of such work may be published and disseminated to obtain wider feedback and comment. Overall, at this stage judgements are made as to the validity and usefulness of the scenarios method in particular circumstances.

Causal layered analysis

Step 1 involves defining the problem or issue according to the very different frames provided by three or four layers, or levels, of analysis. These normally proceed from the obvious 'litany' (of common, taken-for-granted issues and questions), through pragmatic concerns to deeper epistemological and worldview factors.

Step 2 sees the raw material elicited from working groups assembled into a range of insights about what is going on at each level. Notice is taken of how differently the phenomena under study appear at each level.

Step 3 asks: what arises from viewing things at progressively deeper viewpoints? Do the deeper ones help us to shift our thinking? Do they reveal possible new solutions, ways ahead, new mental, imaginative or other frameworks? How does the original focus change in each of these frames?

Step 4 lays out the results for the participants and/or sponsors of the event or via publication. The utility of CLA is then determined by whether or not it helps to clarify thinking, shift mindsets and, overall, if it makes any difference to the way problems are perceived, studied or resolved. Its success will mean that it is taken up and used more widely. If it is seen as too esoteric, difficult, etc., then it will be set aside in favour of more immediate methods. Thus, CLA moves through its own legitimization process.

In each of these very different methodologies one can see each of the four stages in operation. Hence the notion that they can be related to a more universal model of knowledge creation has some credibility, even though, as is very likely, many of the details are subject to further elucidation and enquiry. This means that the attempt to gain knowledge in a futures mode shares many of the same characteristics as that in other fields. Thus it is no longer credible to portray FS as in any way less well-grounded than, say, history, aesthetics, law, theology and so on. This is a significant step forward.

..... **Implications of the integral cycle of knowledge for FS**

A general model stresses commonalities

The integral cycle of knowledge creation is one that is common to most, if not all, knowledge-seeking activities. This again confirms that it is unnecessary to claim FS as a science in pursuit of social and professional legitimization. Rather, knowledge creation in FS is one variant of a widely used pattern that can be described in terms of four general stages. This means that knowledge creation in FS should no longer be thought of as being radically different from that in other fields. Rather, it looks more like a variation upon well-known themes.

The model supports the centrality of judgement and interpretation

I have always considered the role of, for example, model building, trend reading and quantification in futures work secondary, and judgement and interpretation primary. The integral model shows why this is the case. Judgement and interpretation are, in fact,

involved at every stage. But they come fully into their own in stage three. One implication is that there is simply no objective place where futures workers can stand. Even the most highly quantitative work is heavily filtered through, and conditioned by, various personal, professional and cultural frameworks of meaning and value. Moreover, while the forward view is an exceptionally powerful heuristic device that can help transform action in the here-and-now, it nevertheless always remains a provisional social construct bereft of facts and the (often false) assurance they provide. The best futures knowledge is certainly informed by empirical data in the early stages and, perhaps, during implementation. But work of any type that requires a move into the future necessarily occurs within a symbolic domain in which numbers and facts give way to judgement and interpretation.

The model facilitates the juxtaposition of futures work with the integral agenda

The field of FS has arguably emerged as a result of social, historic and civilizational needs. Its central concern is to understand the pattern of opportunities and dangers that lie ahead, the better to engage positively desired ends in the here-and-now. This brings FS very close to what has been termed the 'integral agenda', which is an attempt to take an 'all level, all quadrant' approach to the same problem. Before taking this idea further I now want to consider some of the implications of the four-quadrant model for futures methodologies in general.

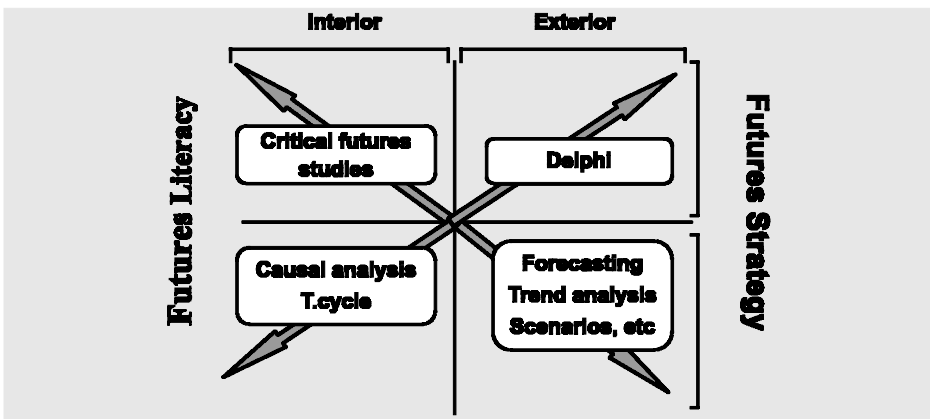
..... Recontextualizing purposes and methods in FS

Consider the classic methodologies used in FS: forecasting, modelling, trend analysis, scenario building, visioning and the Delphi method. What is striking about these tools is that they are all primarily right-hand quadrant methods and, indeed, mainly lower right quadrant at that. In other words, the primary focus of such methods was, and remains, that of the collective external world. Thus for many years, FS mirrored the overwhelming tendency of advanced Western societies to collapse left-hand quadrants (i.e. the inner worlds of individual and collective self-reference) on to those of the right. In other words, for its first two or three decades, FS was primarily concerned with understanding and extending what Wilber has called 'flatland'. This helps to explain both the heavy-handed 'diagnosis + prescription' work on 'global problems' promulgated, in particular, by over-confident Western writers, as well as the continuing elaboration of future high-tech products and infrastructures promoted by designers, engineers and the popular media. At some level people know that these forays omit so much of real significance to them that they have little credibility. Such futures are merely 'flatland' expressions of some of the external possibilities that lie ahead. They ignore the inner world and have thus produced visions that are technically overstated and humanly devoid of meaning.

Figure 4 shows this original cluster in the right-hand quadrants. It also shows some of the later developments that began to seek a more credible balance between 'inner' and 'outer'. For example, the work I carried out in the early 1980s as part of a PhD dissertation sought to lay the foundations of what I called 'critical futures studies'. These were, and are, centrally concerned with transformations of meaning. Such work was an early foray into the 'inner' or left-hand quadrants. It gave rise to a new methodology that I called the transformative cycle, or T-cycle for short, that considers breakdowns and renewals of meaning in social contexts¹⁰.

Elsewhere, Reed Riner and Victoria Razak were developing anthropological approaches to futures work¹¹. At the same time critiques of colonialism and Western domination were beginning to appear in the growing international futures discourse. The work of Nandy, Sardar and Inayatullah stands out here.¹² In fact, Inayatullah went a

Figure 4 Literacy, strategy and methodologies



step further and transformed my account of layers in futures work into a methodology in its own right: causal layered analysis.¹³

The upshot is that, while the futures arena was initially dominated largely by external ‘flatland’ concerns of predictability and control, in later times a number of practitioners have worked to correct this imbalance. Today a much more credible spread of methodologies is available that, taken together, addresses the inner and outer worlds in some depth. This suggests that the field is indeed moving towards maturity and increasingly able to consider aspects of the world that had been overlooked or marginalized.

Figure 4 also suggests a new way of understanding the relationship between futures literacy and futures strategy. Both are essential. In this framework the former is primarily associated with understanding, skill and capacity in the left-hand quadrants – the inner individual and collective worlds. By contrast, strategy focuses upon effective operation in the external world. Properly understood, there is a powerful dialectic between literacy and strategy or, more simply, between understanding and action. If this suggestion is accepted then it becomes clear why the shared knowledge base of FS needs to encompass all four domains. Training in methodology, which, in the past, has been seen as sufficient, is not enough. It leads to superficial practice. A thorough grounding in futures literacy is an essential prior task. Sadly, many practitioners have overlooked this fact and continue to tenaciously market their right-hand quadrant expertise to the uninformed. In so doing they risk bringing the profession into disrepute and exacerbating the very problems they are attempting to address.

This remains a serious issue for FS. We must ensure that futures programmes cease to turn out practitioners who have methodological competence yet overlook the arenas of interpretive understanding and capacity within which any such methods are properly grounded. In so doing it may be possible to discourage work that fails to engage in depth with the problematics of a rapidly transforming world. All practitioners need to understand that ‘thin’ approaches can only yield ‘thin’ understandings. Equally, however, there are other dangers for those who tend toward the more subjective and cultural

10 R. Slaughter, ‘Critical futures study and curriculum renewal’, PhD dissertation, University of Lancaster, Lancaster, UK, 1982; ‘The transformative cycle’, op. cit., Ref. 3, pp. 231-41.

11 V. Razak (ed.), ‘Anticipatory anthropology’, *Futures*, Vol. 32 No. 8, 2000 (Special issue).

12 A. Nandy, ‘Shamans, savages and the wilderness’, in R. Slaughter (ed.), *The Knowledge Base of Futures*

Studies, Futures Study Centre, Melbourne, 1996, Vol. 3, pp. 143-60. Z. Sardar, ‘Other futures: non-Western cultures in futures studies’, *ibid.*, Vol 1, pp. 217-33; S. Inayatullah, ‘Framing the shapes and times of the future’, *ibid.*, Vol. 3, pp. 113-19.

13 S. Inayatullah, ‘Causal layered analysis’, *Futures*, Vol. 30 No. 8, 1998, pp. 815-30.

paths. Their work is often equally ungrounded, self-indulgent, undisciplined and incapable of being used in real world contexts. Some become unsuccessful, would-be social innovators who are drawn towards the negative by the constant rejections that they, themselves, actually create. For them a healthy dose of instrumental reason – or, more likely, an in-depth ‘intensive’ workshop or six with the right facilitators – might be helpful. But, more seriously, the extreme subjectivism of those who live mainly in the left-hand quadrants does need to be tempered with real-world critique and accessible tests of practicality and significance.

With Figure 4 in mind, such dichotomies, traps and category errors can, in principle, be seen more clearly and perhaps resolved. Overall, to work successfully, futures practitioners must increasingly find ways to integrate futures literacy with futures strategy. They should be prepared to move between and across quadrants and to develop competence in all of them. In other words, the most productive ideal for FS is to aim for a truly integrative approach to futures work.

Futures studies and the integral agenda

The field of FS represents an evolving set of responses to perceived historical dilemmas. It is organized around such problems as: how does the forward view affect my family, my profession, my business? What do we mean by globalization, sustainability, the ‘triple bottom line’? How, in these circumstances, can we promote human and social development? How can we avoid dystopian futures and consciously create a stable, just and peaceful planetary society? Normative issues and issues of social design loom very large in this perspective. It is toward such ends that the knowledge base of FS provides symbolic, methodological, human and organizational support.¹⁴ On the other hand, the integral agenda has two main goals. The first of these is to provide encouragement and support to individuals, groups and societies seeking a more integral outlook at every level. Wilber puts it this way. He writes:

Because the health of the entire spectrum of consciousness is paramount, and not any particular level, this means that a genuinely universal integralism would measure more carefully its actual impact. I have long maintained that the real revolutions facing today's world involve not a glorious collective move into transpersonal domains, but the simple, fundamental changes that can be brought to the magic, mythic and rational waves of existence... The major problem remains: not how can we get everybody to the integral wave or higher, but how can we arrange the health of the overall spiral, as billions of humans continue to pass through it, from one end to the other, year in and year out.¹⁵

(Emphasis in original.)

The second goal of the integral agenda is to explore pathways toward a culture characterized by depth (inclusion of, and care for, all developmental levels) and balance (across all four quadrants). This leads to the notion of ‘integral transformative practice. For Wilber the basic idea is simple: ‘the more dimensions of our being that we simultaneously exercise, the more likely transformation will occur’. Yet arguably the practice is not quite so simple: ‘in short, integral transformative practice attempts to exercise all the basic waves of human beings – physical, emotional, mental and spiritual – in self, culture and nature’.¹⁶ There is, however, a clear link with one of the central methodologies of critical futures studies: the negotiation of meanings based on openness and critical/hermeneutic discourse. In Wilber’s terms: ‘Mutually respectful dialogue is

14 That is why it should become an explicit component of tertiary courses in FS. See Slaughter, op. cit., Ref. 12. Also, with S. Inayatullah (eds), *The Knowledge Base of Futures Studies*, Vols 1-4, CD-ROM, Foresight

International, Brisbane, 2000.

15 K. Wilber, ‘The integral vision’, (manuscript), part 3, *An Integral Vision*, Integral Institute, Boulder, CO, 2000, pp. 25-6.

indeed the time-honored method of linking self and other in a dance of understanding, a dance which is deeply conducive to the integral embrace'.¹⁷

Hence clear differences can be found between FS and the integral agenda. But, equally, the two initiatives can harmonize, because there is a significant overlap of purpose and intention. Both are seeking constructive ways forward. There is therefore much to be gained from seeing these activities as co-partners in a wider quest.

In practice FS covers somewhat different territory from the integral agenda and has involved a different social process to bring it into being. Integral thinking is still very much a product of the work of one outstanding individual – although this is changing.¹⁸ During 2000 an attempt to widen the parameters of integral thinking was taken with the creation of the Integral Institute (II) in Boulder, Colorado. A number of networks or 'spokes' belonging to II have been established in fields such as education, art, business and psychology. This means that the core ideas and practices are beginning to spin off into a much wider range of social contexts. Over time, integral thinking may well generate new capabilities, new human, organizational and cultural options.

The question of whether FS and the II each represent new fields of enquiry does, in some ways, miss the point. The point is to acknowledge all worthwhile expressions of the human desire to take responsibility for an imperilled world and find viable ways forward. That is precisely where the central purposes of both enterprises intersect.

The four-quadrant model and the integral account of knowledge creation are just that: models, abstractions. As is by now well-known, the map is not the territory. In reality the processes set out so neatly in such models are often confounded by the complexities of the real world. The former should not be elevated into an orthodoxy that becomes a prison. Nevertheless, humankind certainly faces an 'unprecedented civilizational challenge'. So I will complete this paper with a sketch of how that challenge appears from a futures-oriented integral viewpoint.

..... The 'real' global dilemma

The four-quadrant metaperspective allows us to see things together that have often been seen in isolation. In so doing it provides a view of what may be the central dilemma facing humanity. From this viewpoint the concern is not so much with a part of the whole but of unsustainable and uneven relationships between different domains. The implications are profound.

Consider the lower right-hand quadrant (representing the collective external world). Developments here occur very rapidly, in part because each successive technology builds upon the 'platform' provided by its predecessors. Moreover, this dynamic is currently being driven by the most powerful organizations in the world. There is no end in sight to the process of compulsive, competitive innovation. Yet if we switch our focus to the upper left-hand quadrant (representing the inner worlds of human beings) the dynamic is quite different. Here each child recapitulates the same developmental stages as its ancestors, every time, without exception. Overall 'progress' (toward higher levels of capacity and functioning), both here and in the lower left quadrant, are much slower, more problematic. Thus it is that our newly acquired God-like powers are currently mediated by personality structures and social forms that are inadequate to the task. So, at present, the most likely futures for humanity and the world are those where the species is overwhelmed by the products of instrumental reason.

In a response to a widely reported piece by Bill Joy,¹⁹ Wilber penned a rejoinder that attempted to go to the heart of the problem. He wrote:

16 K. Wilber, 'One taste', *ibid.*, part 7, p. 3.
17 *ibid.*, p. 4.

18 K. Wilber, *Integral Psychology*, Shambhala, Boston, MA & London, 2000.

*One of the greatest problems and constant dangers faced by humanity is this: the right-hand quadrants are all material and, once a material entity has been produced, it can be used by individuals who are at virtually any level of interior development. For example, the atomic bomb is the result of formal-operational thinking ... but those levels could not themselves produce the bomb.*²⁰

Both Joy and Wilber call for a combination of 'inner' and 'outer' controls, i.e. institutional and developmental initiatives. For Joy this involves new regulations, more robust social ethics and, maybe, somehow reaching agreement not to explore certain paths of technological development. Wilber seeks better integration at each level of individual and social development. He also questions the value and appropriateness of pursuing 'exterior technological wonders' on their own. In this, he is not alone. But Wilber's contribution, though significant, does not resolve the problem. His main conclusion is that 'whatever the solutions to these problems, the discussion must surely shift to an integral platform'.²¹

This is all well and good. But – and it is a huge but – what I have called the 'civilizational challenge' still stands. It remains the case that there is no real solution in sight. For those with eyes to see, humanity is clearly set upon a path in which individuals and groups at earlier stages of individual and collective development will have increasing access to powerful tools and technologies that emerge from later stages: genetic engineering, nanotechnology, nuclear weapons and the rest. Joy sees that such technologies provide 'enormous transformative power'. But who can safeguard the species from the misuse of this power?

Here, then, is the rub. I cannot, under any circumstances, imagine a world in which integral development has proceeded to the point where no individuals and groups possess the will or the means to hold the rest of the world to ransom, or worse. If our collective future rests upon ensuring that each stage of personal and social development is fully integrated, healthy and capable of taking its part in the whole panorama of evolution, then I would have to say that that is highly unlikely at the present rate of progress. Some new force or principle will be needed in history, if history is to proceed beyond the apparent impasse. Who can say if that will emerge through FS, through the integral agenda or some other, currently under-regarded source?

Conclusion

The context and challenge outlined above are historically unprecedented. It follows that perhaps the greatest conundrum of our time is that, currently, the resources devoted to dealing with them are minimal. The human species clearly needs all the energy and inspiration, all the individual and collective capacity it can find to discern ways forward. In part this may mean abandoning current technological fantasies of domination and power. It will also be necessary to abandon unsustainable patterns of thinking and practice, to correct huge imbalances of development (both in the conventional external sense and in that outlined here) and move on to more inclusive stages of personal and social development.

From this viewpoint, and notwithstanding the conclusion reached above, the most advanced forms of futures enquiry may be focused not just on avoiding dystopia, but in helping to clarify aspects of the next civilization. If those working with the integral agenda are correct, it could be a civilization characterized not only by further 'external'

¹⁹ Described in some detail by B. Joy, 'Why the future doesn't need us', *Wired*, April 2000. <http://wired.com>

²⁰ K. Wilber, 'The terror of tomorrow: a response to Bill Joy', <http://www.worldofkenwilber.com>

²¹ *ibid.*, p. 3.

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advances but also by healthy differentiation and integration of all its elements at every level. (Or, as Wilber would put it, an approach based on an 'all level, all quadrant' view.) Equally, a challenge for futurists is to reconsider what they have to offer on this level: transpersonal energies, organizational innovations, deep design and long-term sustaining visions in every area of human endeavour. The conclusion is as simple as it is obvious: futures practitioners and those working with the integral agenda should begin working together toward shared ends.