



Integral Sustainability Assessment: An Emergent Hierarchy of Principles

By William Varey - emrgnc (Founder)

Introduction

Sustainability assessment is the process which honours the intention of sustainability by determining whether what we are intending to do will be sustainable, before we do it. A partial approach that defeats that process also defeats our intention, and as a consequence, our hope for a sustainable world.

As different experiences of the Sustainability Assessment process are shared and the case-study anecdotal evidence accumulates, the complexity of the interrelationship of the issues involved entreats us to seek an integral approach to assessing sustainability.

In applying an integral approach we must first recognize that any whole concept is made up to holons – or whole parts. Sustainability as a whole concept must, to be treated in a whole way, be dealt with as a whole. The framing of sustainability around the four quadrants of a holon, being the intentional, the cultural, the social and the physical, is our place of beginning and end (Wilber 1995, 1996, 1997, 1998, 2000, 2001). Omitting our consideration of one quadrant, or one level in any quadrant, prejudices our consideration of the whole.

While the concept of sustainability is developing in the intentional quadrant (UL), is supported by objective analysis in the physical quadrant (UR) and is the subject of increasing collective concern in the cultural quadrant (LL), it is our social systems (LR) that are lacking in comparative development.

Four Quadrants – Lower Right Focus

In examining the social systems that support sustainability, we can view, but one fragment of the integral, in the line of development that maps the processes of sustainability assessment. This line in the Lower Right quadrant (LR) represents when sustainability is made visible in the patterns and processes of the assessment of the impacts and benefits that result from the intentions (UL), values (LL) and actions (UR) of sustainability.

The Lower Right quadrant represents all the exterior forms of social systems, forms that can be seen, forms that are empirical and behavioural. This quadrant refers to any of the concrete, material, embedded social forms of communities (the exterior forms of social systems) that are 'exterior action', where something is "really real" if its data can be seen empirically (Wilber 1995).

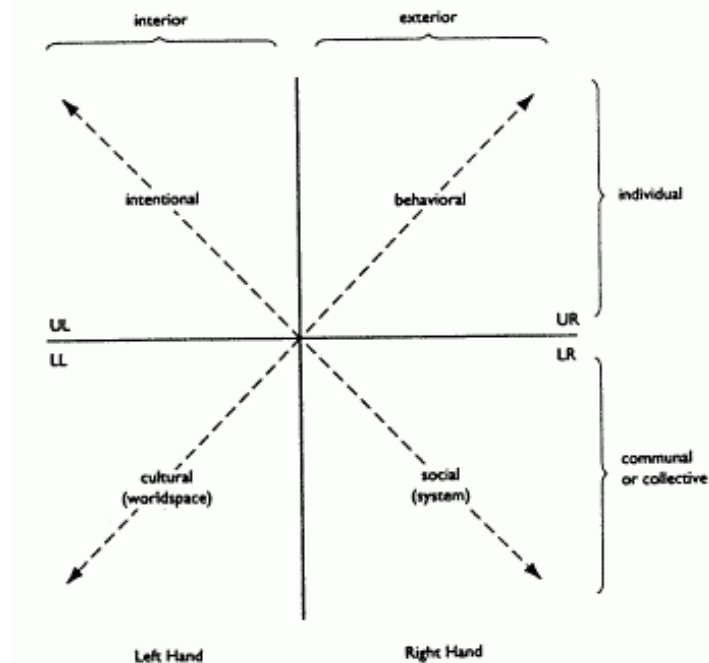


Figure 1: (Source: Ken Wilber (1995) Sex, Ecology and Spirituality: The spirit of evolution)

Sustainability assessment is where we prospectively assess and design for sustainability impacts. It differs from the assessment of environmental impacts of a prescribed solution only to have to mitigate those impacts retrospectively. Acknowledging the necessity for the social and structural in sustainability (ie "it is not sustainable because I think it is, or we say it is - but because we make it so") functional sustainability assessment is one part of the sustainability picture.

A barrier to the development of proficiency in sustainability assessment in existing social and political systems (and therefore our ability to enact sustainability) is the unfamiliarity of new processes within a significant diversity of situations. With no clear 'integral instruction manual' the emergent approaches are meshed into conflict with existing structures and can only hope to be partial. We have a pathology of the Lower Right in the system conflicts that develop.

This is often seen in conflicts of governance and in policy development, where we know something is not sustainable but decide to do it anyway, because the existing structures require it to be done.

Development of Assessment Principles

To provide some guidance within this complexity, one learning community in Western Australia has sought to develop a set of Principles for Sustainability Assessment. A workshop of practitioners from a range of government instrumentalities was held which yielded eighty three anecdotes of positive and negative (and categorically neutral) facets of different sustainability assessments on large infrastructure development projects with significant social and environmental impacts. This experience identified fragmented parts in this aspect of the emergent holarchy.

These many anecdotes were coded into a series of recurrent themes around the common issues. These included problems with process, decision-making, community consultation, policy development, scope and definition. Using a process of holistic structuralism, 7 levels of nested complexity that relate to integral levels of development of the principles of sustainability assessment were identified within these recurrent themes and the collective experience of the participants.

Holarchy of Levels of Assessment Principles

The levels identified within the holarchy as mapped along this particular line of development are:

A: Sustainability Definitional Principles: The definitional components of the conceptualisation of sustainability (e.g. the *'what* is to be sustained, for *who* and over *which* time frame).

B: Sustainability Core Principles: The degree of integration and trade-off of environmental, economic, social and other considerations that fall within that definition (e.g. whether the principles reflect weak or strong sustainability within the definition)

C: Sustainability Guiding Principles: The interpretation of the core principles into statements of sub-principle for each of the dimensions of sustainability (e.g. the approach to biodiversity, importance of indigenous social considerations etc).

D: Sustainability Assessment Design Principles: The principles that guide the selection of components in the design of a sustainability assessment framework (e.g. Issue Definition, Outcome Criteria, Decision Criteria, Assessment Scales, Impact Analysis etc).

E: Sustainability Assessment Process Principles: The principles which determine the number and order of stages in an assessment process in linear time order (e.g. role of community consultation, timing of decisions, follow-up assessments etc.).

F: Sustainability Assessment Policy Principles: The principles that determine at what level the assessment should be dealt with within socio-political structures (e.g. ie parliament, premier, cabinet, independent arbiter, advisory group, departmental policy, departmental program, proponent led internal decision making etc.).

G: Sustainability Assessment Holarchical Principles: The principles that prescribe the trans-level integration and management between levels to ensure an apithological holarchy without hierarchical or heterarchical pathology (e.g. principles for the alignment of each earlier level of principles).

Holarchy Integrity

Unlike the levels of other quadrants, the levels of the Lower Right Quadrant may not necessarily occur in structure in the order of their physical size, as systems in the Lower Right are by their nature non-physical, not being in the individual, instead being visible in the exterior as the sum of collective processes.

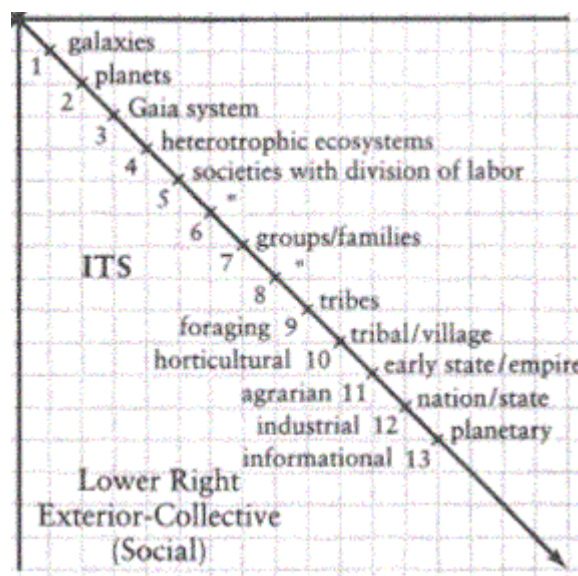


Figure 2: (Source: Ken Wilber (1995) Sex, Ecology and Spirituality: The spirit of evolution)

A similar pattern is seen along the line that indicates the development of the integral principles for sustainability assessment within a holarchy, with the increase by level in depth showing a decrease in the span, but not necessarily limiting, in number, the principles within each level.

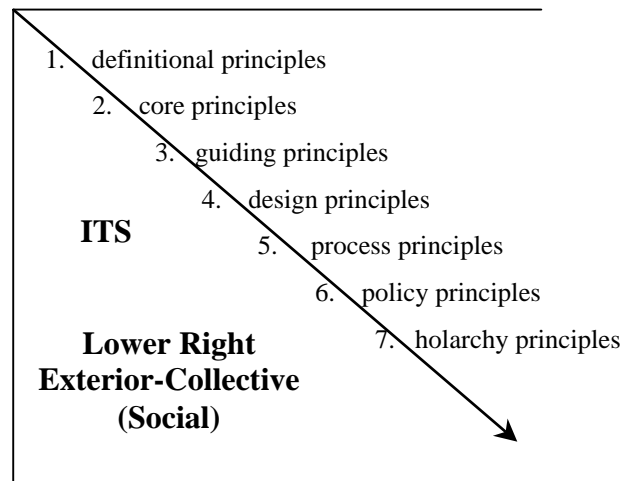


Figure 3: Levels of Integral Development in Sustainability Assessment Principles (LR)

The “levels” within one quadrant of a holarchy can be established by several objective criteria: by a qualitative emergence, by asymmetry, by an inclusionary principle, by a developmental logic; by a chronological indicator; all while recognising the purely arbitrary nature of the number of levels in a holon (Wilber 1995).

Using the test for holarchical development, that a higher level holon is composed of its lower level holons, and thus if we destroy any lower, level, we will also destroy any levels above it because we have taken away some of their component parts, we can confirm the levels of the particular line within the holarchy as described.

For Level G. on Holarchical Principles, if there are no policy levels there is no need for principles of inter-level interaction, and prior to trans-level integration the system can still function within levels. For Level F. on Policy Level Principles, if there are no processes, then there are no intra-policy level considerations. For Level E. on Process Principles, if there are no components of an assessment process there is no need for a process sequence. For Level D. on Design Principles, if there are no guiding principles then the assessment components cannot be determined. For Level C. on Guiding Principles, if there are no core elements, a complete set of guiding principles cannot be established. For Level B. on Core Principles if there is no underlying component definition of sustainability, there can be no delineation of degree of integration. For Level A. on Definitional Principles, if there are no fundamental elements that comprise the definition, the concept of sustainability is rendered meaningless and held only in the intentional, existing only as a neural synapse pulse, and as a vague cultural vibe, never to enter into the structure of language or any other structural element of the social systems in a ‘real form’ so as to become manifest.

Therefore if we lack one level of the holarchy, we compromise the effectiveness in terms of integral integrity of all the levels above. If we lack one part of this line of

development within the sustainability holarchy, we will not have the structural systems to manage all levels in the Lower Right quadrant, and may fail in the implementation and integration of the intentional, physical or common cultural elements that define our sustainable world.

Summary

The analysis indicates that a failure of clarity in the practice of sustainability assessment as one line of development in one quadrant of the whole impairs the ability for an integral approach to sustainability to succeed in its entirety.

The levels in the partial holarchy developed confirm the source of frustration in the community of sustainability practitioners at: 1. not having clear definitional principles for sustainability, 2. the differing principles for integration of definitional components in developing trade-offs in weak and strong sustainability concepts, 3. the lack of a definitive set of components for assessment frameworks, 4. the lack of transparency in the governance of assessment processes, 5. the lack of belief in assessment processes in representing community values, 6. the policy level conflicts that exist between assessment processes and 7. the non-integration of the whole system as a holarchy, suggesting the presence of a systemic pathology.

However, what should be remembered is that development within this Lower Right quadrant has both the benefit and the impediment of other established systems, providing a platform for new process to emerge, but finding a conflict within those existing systems to the extent they are closed to new ideas (seen in the EIA and SEA discussions of impact assessment). We get there faster, but find our path blocked sooner.

Partial approaches to the integration of the assessment holarchy (Varey 2003), the principles of definition (Varey 2004a, 2004b), the integrated delineation of components of assessment frameworks (2004c), the alignment of systems within policy levels (2004a) and a re-balancing of systemic pathology (2004d), begin a contribution to the integral map, but do not complete it.

As development occurs in the other quadrants in our individual understanding, shared community values and the validity of empirical analysis around sustainability, so too will development in our sustainability assessment systems naturally emerge.

The challenge in the meantime is not to lose focus on the whole while dealing with the frustrations of the development of the parts, and instead to simply nurture the emergence of the integrity of our entire growth in the ways we see, feel, act and think our way to a more integral and sustainable existence.

By William Varey

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Bio

William Varey BJuris., LLB(Hons), MLM (Distn) works in the development of sustainability frameworks in the state and local government, private industry and not-for-profit sectors. He is the founder of **emrgnc**, a forum for consciousness evolution. He is presently working on pre-doctoral research into the theories of growth of organisations and integrated models for sustainable organisational development, extending on his Masters research into the dynamics of generative learning in organisations. He is an Associate Fellow of the Australian Institute of Management (AFAIM) and a member of the Multi-National Alliance for the Advancement of Organisational Excellence (MAAOE) and the Association for Humanistic Psychology (AHP). He can be contacted at: william@emrgnc.com.au

Tel +61 8 9433 4255
Fax +61 8 9433 4155
Mail: PO Box 1402
West Perth 6872
Western Australia
www.emrgnc.com.au

References

Varey, W (2003) Sustainability: From Buzzword to Business Practice, *Reflections in Excellence Article Series*, Available online URL <http://www.fcg.com.au/reflections/sustex5.html> [Accessed: 17 October 2004]

Varey, W (2004a) *Transforming Sustainability: An integral leaders framework*, Spirituality Leadership and Management Network Conference, February 2004, Available online URL, <http://www.emrgnc.com.au/sustainability.htm> [Accessed: 17 October 2004]

Varey, W (2004b) *Definitions of Sustainability: The good the beautiful and the true*, Available online URL, <http://www.emrgnc.com.au/sustainability.htm> [Accessed: 17 October 2004]

Varey, W (2004c) *Integrated Approaches to Sustainability Assessment*, Available online URL, <http://www.emrgnc.com.au/sustainability.htm> [Accessed: 17 October 2004]

Varey, W (2004d) *Apithology: An emergent continuum*, Available online URL, <http://www.emrgnc.com.au/papers.htm> [Accessed: 17 October 2004]

Wilber K, (1995) *Sex Ecology and Spirituality: The spirit of evolution*, Shambhala, Boston.

Wilber, K. (1996) *A Brief History of Everything*, Shambhala, Boston.

Wilber, K. (1997) An Integral Theory of Consciousness, *Journal of Consciousness Studies*, (February 1997). 4 (1): 71-92

Wilber K. (1998) *The Marriage of Sense and Soul*, Gill and Macmillian Limited, Dublin

Wilber, K. (2000) *Integral Psychology: Consciousness, Spirit, Psychology, Therapy*, Boston, Mass: Shambhala Publications.

Wilber, K. (2001) *A Theory of Everything: An Integral Vision for Business, Politics, Science and Spirituality*, First Paperback Edition, Boston, Mass: Shambhala Publications