

Science, systems, spirit: Towards local and global societies with the sense and essence of inclusionality¹²

Anne Stijkel

Triple I-S, International Institute for Inclusive Science, The Netherlands

Introduction

With worldwide signs of growing awareness of inclusionality at all levels in science, systems and spirit, there are reasons of hope for our society. In this chapter, I first describe the concept of inclusionality and its impact for each of us and for our systems. What is the essence, does it make sense, and if yes, how does it make sense? I make use of the way the biologist Alan Rayner (2004) elaborates the concept of inclusionality. Cognate concepts as autopoiesis, holarchy and cocreation are also described. I shortly explore which attempts are being made by our Institute to bring inclusionality into practice. It can be seen as an unfolding process with many counterforces, from inside and outside, with nature as a mirror and a mentor, combined with lessons and tools from spiritual intelligence, nonviolent communication, as well as from the cocreators agreements, in the evolutionary process of 'being, becoming and dissolving'. It is an open-end story about 'how we can become (inclusive) intelligent enough to survive and convive as an interdependent society in bio-cultural diversity'.

Inclusionality

Inclusionality is, according to Rayner (2004):

an awareness that space, far from passively surrounding and isolating discrete massy objects, is a vital dynamic inclusion within, around and permeating natural form across all scales of organisation, allowing diverse possibilities for movement and communication. Correspondingly, boundaries are no fixed limits – smooth, space-excluding, Euclidean lines or planes – but rather are pivotal places comprising complex, dynamic arrays of voids and relief that emerge from and pattern the co-creative togetherness of inner and outer domains, as in the banks of a river.

¹² This chapter is a follow-up of my article on 'How Cocreation and Cocreation Sciences Can Help to Make the Transition Towards Endogenous Sustainable Development', which was written for the European Conference Moving Worldviews, November 2005 (Stijkel, 2006a). In that article 'self-inquiry' is described as a three stage process of awareness of and openness to: (1) inclusionality, (2) rebalancing, and (3) transformation (from reaction to cocreation). This chapter is a further elaboration of the concept of 'inclusionality'.

According to the biologist Rayner (2004), at the heart of inclusionality is a simple shift in the way we frame 'reality': from absolutely fixed to relationally dynamic. The shift arises from perceiving space and boundaries as connective, reflective and cocreative, rather than severing.

Though Rayner elaborated the concept of inclusionality, he was not the first who described elements of it. In earlier years, Teilhard de Jardin (1963) and Boerwinkel (1971) spoke about inclusive thinking, a 'new kind of thinking' as a response to the challenges of that time: new spaces, new worldviews, new (nuclear) power, new communication, new political awareness and involvement: 'there is no well-being at the expense of someone else'. Nowadays those challenges are still bigger, for example if we look at the developments in the worldwide web and in genetic engineering.

Boerwinkel (1971) compares the history of mankind with the leap of a river, with – from time to time – accelerations, waterfalls and cascades, which ask for new thinking, new attitudes, though in fact it is not new, but a recall to be applied in a more complex situation of nowadays, and that makes it feel new.

Inclusionality involves 'both-and' thinking, instead of the exclusive antagonistic 'or-or' thinking ('we-they'). Inclusive thinking takes off the illusion of (group) ego-assumptions about independency and power over because it has proven not to work. Inclusionality asks for making the transition of fighting for ourselves (or against the others) towards freeing of all. Survive is convive, or is not. There is no other dependency than interdependency: what we do with the other, we do with ourselves. There is no 'out-group'. This knowing requires learning beyond the purely materialistic (group) ego with only its five senses. Inclusive learning asks for a 'wholebody' approach, a learning with the mind, the five senses, accompanied by learning from heart and soul, including our intuition, our sixth sense, individually as well as at group/society level. It also can be seen as making contact with the higher mind, the mind that includes our ratio/brains, our purely physical body. These skills can be found beyond the borders of science in many spiritual-religious-mystic traditions, from christianity to sufi to voodoo, as well as in nowadays mystic approaches such as the 'light body work' that I am familiar with (see www.orindaben.com).

In light body work you get contact with your inner senses, your higher self and with the void, the space of pure potentiality. So religion here is used in the broadest sense, as reconnection (with outside and/or with inside), as spirit. Inclusionality implies a marriage between ego and soul, between darkness and light, between gravity and electromagnetism, of 'being one', 'becoming one', by dissolving the illusion of 'being two'. Or, in the words of Alan Rayner (2004):

We neither see the world and Universe about us as an incoherent assemblage of isolated objects surrounded by emptiness, nor do we lose ourselves in oceanic infinitude. Instead we feel ourselves, with others, as inhabited places, distinct but not discrete expressions, ever-transforming through the dynamic, reciprocally breathing relationship of inner with outer through intermediary space. Aware now of our place as local expressions of everywhere, we are not alone – we belong with, but decidedly not to one another, together, coherent through the connectivity of our common space, unique in our individually situated identities.

Concepts related to inclusionality

Two dynamic concepts deserve special attention in relation to inclusionality: *autopoiesis* and *holarchy*, as they give, each in its own way, a pure sense to the driving force, the natural evolution of 'being, becoming and dissolving', based on interdependency, without any 'power over'. Both concepts are not yet very common in current science, systems and spirit (religion), where reductionism, hierarchy and 'power over' are still in the foreground.

Autopoiesis literally means 'auto (self)-creation' (from the Greek: *auto* – *αυτό* for self, and *poiesis* – *ποίησις* for creation or production) and expresses a fundamental complementarity between structure and function. The term was originally introduced by Chilean biologists Humberto Maturana and Francisco Varela and in 1973:

the space defined by an autopoietic system is self-contained and cannot be described by using dimensions that define another space. When we refer to our interactions with a concrete autopoietic system, however, we project this system on the space of our manipulations and make a description of this projection.

The canonical example of an autopoietic system, and one of the entities that motivated Varela and Maturana to define autopoiesis, is the biological cell. The eukaryotic cell, for example, is made of various biochemical components such as nucleic acids and proteins, and is organized into bounded structures such as the cell nucleus, various organelles, a cell membrane and cytoskeleton. These structures, based on an external flow of molecules and energy, *produce* the components which, in turn, continue to maintain the organized bounded structure that gives rise to these components. An autopoietic system is to be contrasted with an allopoietic system, such as a car factory, which uses raw materials (components) to generate a car (an organized structure), which is something *other* than itself (a factory). More generally, the term *autopoiesis* refers to the dynamics of a non-equilibrium system; that is, organized states (sometimes also called dissipative structures) that remain stable for long periods of time despite matter and energy continually flowing through them. From this very general point of view, the notion of autopoiesis is often associated with that of self-organization.

Holarchy builds on the idea of autopoiesis and can be seen as the 'nested' nature of holons, where one holon can be considered as part of another; so-called 'embeddedness'. The universe as a whole is an example of a holarchy, or holarchical system, and every other holarchy we are aware of is a part of this larger holarchy. In her book 'Earth Dance' (1999) Elisabet Sahtouris writes:

Most creation myths begin with a whole – an undisturbed ocean generating individual waves, or a single being that divides into, or gives birth to, the different parts of the world. These parts may later rejoin as new wholes, or holons, within the great dance holarchy, in the repeating cycle of unity-> individuation-> conflict-> negotiation-> cooperation-> new level of unity. Living systems are in many ways the antithesis of machinery; images of dance fit many aspects of our new understanding of nature better than mechanical images do. Dance is a living, self-creative process as is nature in evolution. We may begin to create a dance spontaneously, as a natural expression of our energy that is not planned or designed in advance – as an improvisation. It may then evolve

as new variations on the same basic steps create ever more intricate and meaningful patterns, just as in natural evolution.

Tasting the sense and essence of inclusionality, autopoiesis and holarchy leave questions for us as man and mankind: how do we recognize ourselves in the repeating cycle of unity-> individuation-> conflict-> negotiation-> cooperation-> new level of unity? How can we change our attitudes and/or shape conditions in order to go through that cycle as harmless as possible, for ourselves as well as for others? What is the role (positive, negative) of science, systems, spirit in these, and how do they relate to each other, and how could that be, given the taste of inclusionality and its cognate concepts?

Inclusionality implies recognition and reconciliation of science and religion

'Science without religion is lame' and 'religion without science is blind'. With these quotes the Belgian philosopher professor Herman De Dijn (2006) summarizes Einsteins vision on religion and science, and on his scientific attitude that includes or embodies 'cosmic religious feeling', characterized by rapturous amazement, devotion, reverence, awe and humility, liberation from self; a humble attitude of mind toward the grandeur of reason incarnate in existence. Science according to Einstein is a process of creation of new concepts: 'there is no logical path to universal elementary laws; only intuition, resting on sympathetic understanding of experience, can reach them'. Einstein was, according to professor in physics Christiaen Maes (2006), not alone in his attempt to include the cosmic religious feeling in science. He found inspiration and comfort in Spinoza's 'amor intellectualis dei', which brings spirit in science. Both of them spoke during the conference 'The Dice of Einstein: About Cosmic Religiosity' in December 2005 at the University of Leuven in Belgium. This conference was held to celebrate Einstein who came with his epoch-making physical theories in 1905. Attention was given to Einstein's less-known side: his cosmic religiosity. My role at that conference was to tell of our experiences in The Netherlands with the postgraduate training on cocreation and cocreation sciences (Stijkel, 2006b).

From 28–31 August 2006 in The Netherlands (Antropia, Driebergen), a four-day conference was held by Foundation Interreligio, with the intention to have open and respectful dialogue from man to man in order to build bridges between world religions (Judaism, Christianity, Islam, Hinduism, African religion, Bahai and more), philosophical and mystical traditions (Buddhism, Sufism) and science. The common feeling of the speakers and the participants (I was one of them) was that – as long as there is real mutual attention, compassion and acceptance, like an ongoing co-inquiry, and no attempts to convince the other – new levels of mutual understanding emerge, leading to more fluidity in our beliefs, instead of rigidity. It deserves courage to go into that fluidity, and this is what we could learn: to be together in respectful presence with ourselves and with the others when feelings of anxiety or crisis may arise, in this ongoing unfolding process of 'being, becoming, dissolving'. This 'togetherness' challenges us to an open attitude towards 'difference': to discover through the diverse

perspectives a common, but many-stranded reality, all views of which are necessarily partial, but for that reason also unique contributions to the overall picture, as in a hologram. Alan Rayner (2004) sees this as a promising way to reconcile differences and to diminish threat, without abandonment of individuality. This 'togetherness' already was indicated by Teilhard de Jardin (1963) who was convinced of the idea that the evolution of mankind is one of 'ongoing socialisation': people are becoming more and more aware that for full maturity, he or she will not stay on his or her own, but to come and work together. Barbara Marx Hubbard (1998) takes the next evolutionary quantum leap by indicating that mankind is going from coming and working together towards cocreating; even from procreation to cocreation, in which love and respect play a crucial role. Cocreation is not only a matter of one by one, but may involve bigger numbers of people; it may even comprise the animals, plants, trees and the unseen spirits. She defines cocreation as:

the act of engaging in a conscious creative partnership with the innate impulse of creation, the intelligence of nature and natural systems design, the intuitive collective consciousness of humanity, and each person one encounters, from a place of essential heart-centered being; the fulfilment of the self-interest of the individual concurrent with the fulfilment of the self-interest of the whole (group, planet, universe) is at the core of the cocreative process.

So, there are seeds of hope, at the level of learning in consciousness, in communication and dialogue. Moreover, there are many practical healthy seeds of wholeness from yesterday, today and tomorrow at local and global scale, that have the potential to grow and ripen, beyond boundaries; manifestations of inspiring examples of visionary pioneering souls all over the world, in north, east, south and west. Nonetheless, there are many counterforces, in orthodox science, systems and spirit (religion). The most important thing that matters for us as human beings is our consciousness and our commitment to live – together – and grow and evolve to and through this level of inclusive being, becoming and dissolving, in our thinking, feeling, wanting and doing. And if not, sooner or later global evolution and human evolution both will come to an end. In the next section, I explore more about the 'how' of the learning in inclusionality.

An exploration of our practice in 'how to learn inclusionality in practice'

In the COMPAS conference (in November 2005, 'Moving Worldviews', in The Netherlands), we described two examples of inclusionality in practice; one in the practice of higher education (see Stijkel, 2006a), the other in the practice of farmer and citizens (see Verschuur and Stijkel, 2006). In the last one, 'Buurderij' as one example of a Dutch vital concept and initiative, was mentioned (Verschuur et al, 2005), and is still under construction by us. In a Buurderij, inclusionality is intended to be made sensible, as the five essences of life: agriculture, housing, nature, care and education, harmoniously come together through complex 'autopoiesis' and self-organization. In both practices, we are aware of the special attention that needs to be given to the web of communication, interrelations and exchange (of services, goods and money). Some

design principles seem to emerge, but no blueprints for future 'societal design'. All systems are unique in themselves by the combination of people that are involved. Especially at the level of structure, some contracts or rules can be given as a tool. As far as cultural aspects are involved, lists of communication and/or cocreation principles can be given, which however can not be imposed. Human evolution, biocultural diversity, earns more and asks for more than principles alone: on growing self-awareness and accompanying changes in attitudes (based on, for example, humility and compassion) in an ongoing movement of being, becoming and dissolving, and in respectful communication and cocreation with others. Some helpful tools in this respect are given by the Foundation for Conscious Evolution about the 'cocreators agreements' (2002; see Table 1), Rosenberg (1998) and Zohar and Marshall (2004). These might be helpful in overcoming 'dogmatism' in man, as well as in science, systems and spirit, the biggest enemy in transformation processes.

<p>Be Mindful My intent is to be myself, to be authentic, and to be fully present.</p>
<p>Realise our Potential My commitment is to realise my full potential and support others in doing the same.</p>
<p>Follow my Guidance I agree to attune with Spirit and follow the calling of my soul on behalf of the wellbeing of the whole.</p>
<p>Communicate with Integrity I agree to tell my truth with compassion for myself and others.</p>
<p>Act with Integrity I agree to keep my agreements and will do my best to follow my heart in making commitments.</p>
<p>Deep Listening I agree to listen respectfully to the communication of others and tune into their deepest meaning.</p>
<p>Honor One Another I agree to honor each person's process, acknowledging that everyone, including myself, is making the best possible choice or decision we are capable of in that moment.</p>
<p>Appreciate Our Contributions I agree to take responsibility for asking for and receiving acknowledgments and for acknowledging others.</p>
<p>Honor Our Differences I agree to come from a sense of cooperation and caring in my interactions with others, and from an understanding that objectives are often the same even though methods for achieving them may differ. I honor the diversity of all life.</p>

Table 1 The cocreator's agreements
Source: Foundation for Conscious Evolution (2002)

Principles or agreements like above are helpful, especially when people are aware of how they communicate. At that point, the theory and practice of nonviolent communication of Rosenberg (1998) might be relevant. Nonviolent communication (NVC) helps connect us with what is alive in ourselves and in others moment-to-moment, with what we or others could do to make life more wonderful, and with an awareness of what gets in the way of natural giving and receiving. NVC language strengthens our ability to inspire compassion from others and respond compassionately to others and ourselves. NVC guides us to reframe how we express ourselves, how we hear others and resolve conflicts by focusing our consciousness on what we are observing, feeling, needing and requesting. The language of NVC awakens empathy and honesty, and is sometimes described as ‘the language of the heart’.

Zohar and Marshall (2004) describe how we might create a way of working and living together based on cultivating spiritual intelligence and building spiritual capital, the one force capable of reversing the motivations of a culture that places material growth above all else, even at the cost of destroying social and natural capital. Spiritual Intelligence (SI) includes other forms of intelligence. Her approach with spiritual intelligence goes beyond the characteristics of self-organization, or, as called by Zohar and Marshall, of complex adaptive systems (see Table 2); SI includes the complex adaptive systems by adding the factor of human consciousness. In the cultivation and practice of these qualities and transformation processes lies our ability to use our whole brains, our ability to know and practice our deepest meanings and purposes, our ability to bring transformation to our lives and to the situations in which we operate, and our ability to think at the edge of chaos.

Complex adaptive systems	Spiritual intelligence
Self-organization	Self-awareness
Bounded instability	Spontaneity
Emergent	Vision and value led
Holistic	Holistic
In dialogue with environment	Compassion (feeling with)
Evolutionary mutations	Celebration of diversity
Outside control destructive	Field-independent
Exploratory	Asking why?
Recontextualize environment	Reframe
Order out of chaos	Positive use of adversity
	Humility
	Sense of vocation

Table 2 A comparison of the qualities of complex adaptive systems and those of spiritual intelligence

Source: Zohar and Marshall (2004)

So the ideas about spiritual intelligence and nonviolent communication, as well as the cocreators agreements, are helpful 'tools' to go through the repeating cycle of unity-> individuation-> conflict-> negotiation-> cooperation-> new level of unity, as described by Sahtouris (1999). Nonetheless, to apply a tool like the cocreators agreements asks for new awareness of someone's old programming, convictions and old attitudes, and to let these go. Moreover, everyone lives and/or works in a context where those old programmes are common, so new patterns in attitude, behaviour and communication will not be automatically recognized because they do not fit in the current social frameworks and status quo. In order to facilitate those multi-level changes, personally as well as as a group, explicit commitment and inquiry might be helpful; an exciting, dynamic process of mutual learning, which requires courage to be vulnerable in developing these new patterns.

Conclusion

Inclusionality, autopoiesis, holarchy and cocreation are concepts that are helpful in the unfolding process, nonetheless there are many counterforces, from inside and outside, with nature as a mirror and a mentor. These concepts can be combined with more practical tools on SI, NVC, as well as on the cocreators agreements, in the endogenous evolutionary process of 'being, becoming and dissolving'. The question that arises within the context of COMPAS's bio-cultural diversity conference is, can we become (inclusive) intelligent enough to survive and convive as an interdependent society in bio-cultural diversity? We can conclude that societies with real sense and essence of inclusionality are possible, though it requires huge steps, within as well between human beings or groups of human beings, or science, or systems, through layers of anxiety for contamination, for take-over, for dysfunction. Challenges for COMPAS partners are thus at the level of consciousness, attitude, communication and (common) action, towards a sustainable global community. It deserves the inclusion of the soul (or higher self) level, and many of the COMPAS partners, especially from the South are still familiar with that. It depends on the intelligence of the people involved. Many current sciences and systems are not yet ready for it. Nonetheless, there are reasons for hope because of pioneering souls with their vital 'seeds', examples, tools, as described here, inside and outside COMPAS. 'Natural' counterforces like dogmatism and resistance to change will come up. It is our conviction that as soon as mankind really gains in consciousness about inclusionality, and changes its attitudes and communication (from 'fighting' to 'freeing'), the systems will change too. Shall we overcome all the waterfalls and cascades? Whatever may be the outcome, my proposal would be to *be* the change as COMPAS partners, to embody the embeddedness. If we look at what happened during the Conference on Endogenous Development and Bio-Cultural Diversity in Geneva, there are reasons of hope because of respectful dialogues during those days, leading to the strong common agreements at the end, as well as the groups that were formed around special topics, like the European dimension (ENED) and gender issues. In terms of learning and evolution, there is no way back, only forward.

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