Integral Dynamics, A new integration of Wilber's Integral Theory and Spiral Dynamics

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Abstract

Currently we get caught up in deep crises that follow each other faster and faster. In this paper, we develop a coherent analytical framework that may tackle the major problems of our time in a coherent and integrated way. We present a new integration of Wilber's Integral Theory and Spiral Dynamicsthat provide more possibilities for analysis: IntegralDynamics. Upon these Integral Dynamics ourapproach is as follows. Wilber describes four holarchies from the perspectives of the quadrants. We move on to octants and we ascertain that the value systems of Spiral Dynamics, with their typical colours, fit in this extended scheme of Wilber. Clockwise, except beige and turquoise, the colours of these value systems follow the colours of the rainbow. With Integral Dynamics we are able to perform cyclical, diagonal as well as spiral analyses. Colour spectra help us. We use rainbow colours in the cyclical analysis, complementary colours in the diagonal analysis and the colour spectrum of Spiral Dynamics in spiral analysis. Integral Dynamics differs from Spiral Dynamics Integral. In Spiral Dynamics (Mind Coping Capacities) in the four quadrants of Wilber are overlapped bythe stages of Spiral Dynamics the (coloured) states of Spiral Dynamics(Life Conditions) in the eight octants of Wilber's extended scheme are overlapped by the (not-coloured)stages of Spiral Dynamics as concentric circles. This provides the opportunity to show the elements of Integral Dynamics also in a Grid.

Key Words: Integral theory, spiral dynamics, rainbow colours, cyclical, diagonal, complementary, analysis

1. Introduction

We live in turbulent times, in which many questions and problems are facing us. At the same time the interdependence of living things rapidly increase. We experience great climatic changes with rapid global warming that, inter alia, disrupt many agricultural patterns and the related economies. The free market economy often means 'freedom to operate'. Companies grow rapidly and on an unprecedented scale, dissipating the smaller companies. Both for public and private companies results are considered of paramount importance for shareholders and managers, not for workers. This leads to a focus on the short term and the consideration of labour/employees as a cost. Piketty(2014) emphasizes that the rate of return on capital is higher than the economic growth rate. As a consequence the distribution of income and wealth in the world is becoming more unequal. According to Piketty this stirs up discontent and undermines democratic achievements. These threats have negative effects on the environment and society and can cause a systemic collapse of our planet's natural resources.

The standard sciences focus a lot on specific partsand havelittle attention for consideration of these coherent qualities. This leads to ever-increasing devastating consequences. Integrated or integral approaches are of utmost important. More and more people believe that spirituality and intuition are central to the health of human society and of our organizations. Wilber (2004) understood this development in an early stage and he developed his 'Integral Theory' to tackle these problems in a cohesive way. His Integral Theory contains, inter alia, quadrants (Intentional, Behavioural, Social and Culture), levels and lines of development, whichcould describe the development of basically any phenomenon. Based on the work of Graves (1970), Beck and Cowan (2006) developed the interesting theory of 'Spiral Dynamics'.

Spiral Dynamics is a layered model describing the development of worldviews, wherein the interaction between the Life conditions and the Brain/mind capacities to cope with these conditions play a central role. Itypify both Integral Theory and Spiral Dynamics as models of social development characterized by distinguishing a number of milestones (states) and a number of development steps (stagesor levels) available to cope with these milestones.

In literature several attempts are undertaken to integrate Wilber's Integral Theory and Spiral Dynamics. So is 'Spiral Dynamics Integral' a method to incorporate Spiral Dynamics into Wilber's framework. This method, as I briefly outline the essence of it, is a combination of Wilber's four quadrants and the stages or levels of Spiral Dynamics. Also Cacioppe and Edwards (2005) soughtthe holy grail of a synthesis between Integral Theory and Spiral Dynamics by assuming that Spiral Dynamics focuses on the cultural quadrant and they placed Spiral Dynamics therefor fully in this quadrant. In this paper we follow a different approach. We assume that, like any phenomenon, also 'social development' can be described in Wilber's quadrant system that consists of four types of holarchies. By supposing a further division of theseholarchic developments in each of the four quadrants we distinguish between eight holarchic developments in eight octants. This division provides the possibility to look at eight different holarchic developments. And, consequently, we can in principle describe any phenomenon in these eight octants. In this paper we show that the Life conditions of 'Spiral Dynamics' fitin this octants framework. Remarkable in this approach is that, except for beige and turquoise, the typical Spiral Dynamics'colours in the octants clockwise follow the colours of the rainbow. Specification of the Life conditions(states) of Spiral Dynamics in the octants framework gives us opportunities for cyclical, diagonal and spiral analyses. Integral Dynamics differs from Spiral Dynamics Integral. In Spiral Dynamics Integral the (not-coloured) states in the four quadrants of Wilber are overlapped by the stages of Spiral Dynamics (Mind Coping Capacities) in the typical colours as concentric squares or circles. In Integral Dynamics the (coloured) states of Spiral Dynamics (Life Conditions) in the eight octants of Wilber's extended scheme are overlapped by the (not-coloured) stages of Spiral Dynamics as concentric circles. This provides the opportunity to show the elements of Integral Dynamics also in a Grid.

2. Integral theory

Wilber's (2004)'Integral Theory'examines both the culture of the organization and the industry, the motives/intentions of people and the structure and systems of the environment. Every concept that focuses on social development can only work when apart from focus on technology and behaviourthis also provides scope for individual transformations and collectively shared meaning and values.

Wilber brought together many models to propose a full range of developmental potentials that human consciousness is capable of, ranging from those of the neonatal period and infancy, through adolescence and adulthood, all the way to advanced levels of maturity and wisdom. These basic levels of development are also observed in social development and there are corresponding forms of collective levels that follow a similar growth pattern. With his theory of everything, Wilber (2004) tried to create a framework for a holistic approach to tackle the many problems we are faced with. The Integral Theory of Wilber assumes that the attitude and behaviour of individuals, and the culture of groups and systems in the environment, are all interrelated and that they influence each other.

Integral Theory has been applied in a variety of organisational settings.

Wilber (2004) sees reality as composed of holons. A holon is a whole that is simultaneously part of a larger whole.Koestler (1967) proposed the term 'holon' in his book 'The Ghost in the Machine'. The word is a combination of the Greek 'holos' meaning whole, with the suffix 'on' which, as in proton or neutron, suggests a particle or part. Each system consists of a number of components, which together form a whole (holon), e.g. the organelles of a cell. A number of cells together form an organ. This goes on until we reach an organism, a habitat, an ecosystem and ultimately the world. Each whole once again becomes part of a larger whole. The holon, then, is a part-whole. It is a nodal point in a hierarchy that describes the relationship between entities that are self-complete wholes and entities that are seen to be other dependent parts. A holarchy is a hierarchy of holons. This 'arrangement of values' (Wilber, 2004, p.50) is made up of a number of levels. This number is a measure of its 'depth'. At each level of the hierarchy there are a number of holons. The number of holons at a given level is the 'span' of the holarchy. In order to understand the aspects of reality, according to Wilber, there are five categories required, which together form his AQAL model: All quadrants, all levels, all lines, all states and all types. All Quadrants

The ontological scheme in figure 1 is a two-dimensional framework of an inside-outside dimension and an individual-collective dimension. The horizontal axis depicts the interior-exterior dimension that corresponds to the subjective/reflective experience in relationship with the objective or behaviour-based reality. The vertical axis displays the individual-collective dimension, which refers to the relationship of the experience of self-agency and that of community. The axes divide the system into the four quadrants of Wilber's (2004)ontological scheme. Wilber states that for everything that happens in the world four perspectives (ways to see the world) play roles. Linking all these perspectives together, create four quadrants: (I) intention (It) behaviour, (Its) social systems and structures, and (We) culture, see figure 1.

Inside Children We Its Solve S

Figure 1: Ontological schedule of Wilber

Source: Wilber (2004, p. 99)

Based on this ontological scheme Wilber presents a multiple view of the value states, which lays a foundation for a dynamic analysis. The integral approach of Wilber is in fact a universal outlook on values. This is an overview of the value systems from the following viewpoints, corresponding with the respective quadrants:

- Values seen from an overall level of awareness, the way values make sense and relate to the world (the Intentional values):
- Values seen from a collection of emotions, cognitive processing and all manifested actions (the Behavioural values);
- Values seen from the viewpoint of policies and social norms (the Social values);
- Values seen from a pattern of basic underlying assumptions (the Cultural values).

This scheme is the basis of the AQAL system. Both the right-upper (objective) and right-lower (inter-objective) quadrants contain observable, empirical, external aspects of holons. The left upper (subjective) and the left-lower (inter-subjective) quadrants deal with internal interpretations.

The intentional quadrant (top left) (subjectively) represents the feelings and inner self of individuals. These are, among others, personality traits, intelligence (s) (such as IQ, EQ and SQ) and its values and value systems. What experiences a holon from within is internal consciousness. The behavioural quadrant (top right) is the (objective) 'visual appearance' of an individual, such as observable behaviours and skills. It involves external descriptions. The social quadrant (lower right) concerns the (inter-objective) 'visible appearance' of the collective. This is about the social system, the environment, the economic base, the (management) systems of an organization, but also about the (economic) structure in which a business operates. These are the material basis and the external form of the collectivity. The cultural quadrant (lower left) (inter-subjectively) represents the shared values of a collective. It concerns the culture, worldview or governing mutual understanding within a group, organization, sector, region or country. These are internal opinions / meanings and values that are shared within the community. The left side (subjective) relate to internal interpretations. According to Wilber a fundamental cause of the crises in our society is that the notion of 'modernity' too much focuses on the right side of the schedule, and negates much of the left (Wilber, 2004, p.305).

These four quadrants are an important way to see and describe all entities. Different ideas all fit into the four different types or holarchies. For instance the ideas of Piaget, Freud and C.G. Jungfit in the Upper left quadrant, those of physicists and behaviourists fit in the Upper right quadrant, those of Marx and system theorists fit the Lower right quadrant and those of Gadamer and Max Weber fit in the Lower left quadrant (Wilber, 2004, p. 112). These theories and perspectives all suggested a developmental nature to the universe, see figure 2.

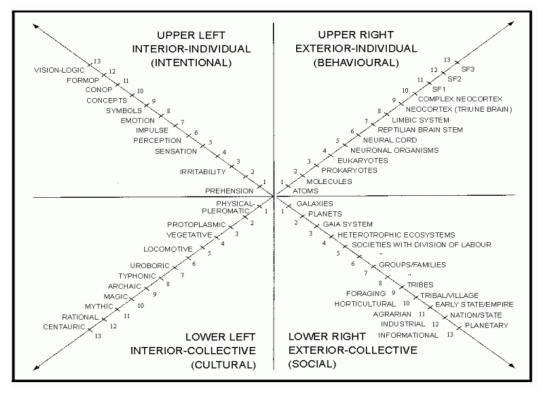


Figure 2: Holarchies in the quadrant schedule of Wilber

Source: Wilber (2004, p.100)

All Levels of development

Besides the four quadrants Wilber appoints levels of development (or relationships with the environment) as an important part of his Integral Theory. Within each quadrant there are levels of development. Within the inside quadrants there are levels of depth and in the outside quadrants there are levels of complexity. The levels are in fact 'probability waves' that reflect the dynamic nature of reality and the different ways in which the reality shows up under certain conditions.

A characteristic element in addressing Wilber is the notion that in a social system only progress can be made, as a certain level has been fully understood from the four perspectives. Figure 2 is basically a universal application. The levels in a particular quadrant are correlated with the levels in other quadrants. At each level or stage of development we find that:

- A higher order emerges in consciousness;
- The self identifies its being with that higher holarchy;
- The next higher order structure eventually emerges;
 - The self misidentifies with the lower level and shifts its essential identity to the higher structure.

This pattern of 'transcend and include' is a fundamental part of how cultures, people and systems evolve. Therefore the levels can be displayed graphically as concentric circles, as shown in figure 3. The levels are development steps. We can see these levels as 'growing up'.

All Lines of development

Lines are related to the multiple lines of development that all holons have, such as cognition, ethical, aesthetic, spiritual, kinetic, emotional, musical, spatial, logical-mathematical, etc.

Organizational lines may include internal culture, goals, customer and community relations, corporate ethics and morals, marketing, governance and leadership.

Each of these lines will develop through the spectrum or levels in each of the quadrants. Thus, the ethical line contains the levels/stages (of consciousness): egocentric, ethnocentric, world centric and integration-centric.Instruments to view the developmental lines are psycho- and socio-graphs. The lines in the different quadrants are interrelated. For example, in the development of the cognitive line in the upper left quadrant, there are corresponding behavioural and neurophysiologic developmental lines in the upper right quadrant, corresponding grammatical structures in the lower right quadrant, and corresponding inter-subjective capacities in the lower left quadrant.

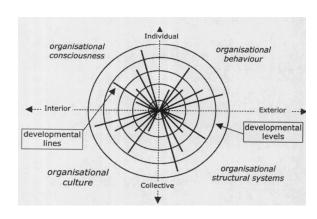


Figure 3: Basic features of integral theory

Source: Cacioppe and Edwards (2005, p.90)

Cacioppeand Edwards (2005) present a coherent overview of the relationships between the quadrants of value systems and the levels and lines of development, see figure 3.

All States of consciousness

Here the states relate to states of consciousness, such as waking, dreaming, sleeping and non-dual, corresponding with gross, subtle, causal and non-dual. The states come and go; they are temporary expressions. We can see these states as 'showing up'.

All types of development

Types relate to a variety of consistent styles that occur in different regions, regardless of the levels of development. They also have expressions in all quadrants. Types are e.g. male/female, the four Keirsey (2008) types, the nine Enneagram categories and the 16 Myers-Briggs' (1980) types.

Link betweenlevels of development and states of consciousness

Wilber and Combs combine the levels of development and the stages of consciousness because they relate to each other. They interpret the levels of development as stages of consciousness. The Wilber-Combs grid presents a combination of the states and stages of consciousness, see figure 4 (http://www.integralworld.net/brouwer2.html). In this grid, which has not been fleshed out, the stages of consciousness are derived from the structure-stages of Gebser (1991): archaic, magic, mythic, rational, pluralisticand integral. In this model, the states of consciousness (gross, subtle, causal and nondual) are associated with the psychological stages of consciousness. It is not about permanent traits of consciousness, but each individual peak can achieve them. The schedule shows how states can be experienced differently depending on the stage of consciousness in which one find them. The stages of consciousness can vary from (Wilber follows the colours of the rainbow), infrared, through magenta, red, amber, orange, green, teal, turquoise, indigo, violet to ultraviolet.

| Conjunction |

Figure4: The Wilber-Combs lattice

Source: www.integrallife.com

What we see in figure 4 is that a person in a certain stage of consciousness can have a peak experience of a gross (physical environment), subtle (observing consciousness of dreams), causal (deep sleep) or dual state. The person interprets that state depending on the stage at which he is located. A higher state of consciousness can be experienced at any stage, e.g. ego in the gross realm, soul in the subtle realm and spirit in the causal realm.

3. Variants and dynamics in Wilber's model

Model variants

Variants of the model of Wilber, wherein the vertical axis (individual - collective) is replaced by the axis: change - control, is the leadership model, developed by Quinn, and the 4-phase model, developed by Hardjono (1995). Quinn's leadership model is based on the Competing Values Framework. Based on statistical analysis of indicators of 'effectiveness'.Quinn and Rohrbaugh (1983)discovered two important dimensions. One dimension corresponds to the internal-external dimension of Wilber, except that the internal focus goes to the 'well-being and development' of the people in the organization and the external focus goes to the' well-being and development 'of the organization itself. The second dimension relates to the contrast between stability and 'control' on the one hand and flexibility and change on the other hand. Each quadrant also represents a well-known model from the organization and management theory: the human relations model, open systems model, rational goal model and the internal process model. Quinn suggests that effective leadership and guidance requires a simultaneous balancing of conflicting and paradoxical similar capabilities (Hart and Quinn, 1993).

Quinn and Rohrbaugh (1983) integrated in this 'competing values framework' a hypothetical model of eight leadership roles (eight categories of leadership behaviour):

- Human relations model: Mentor Role and Facilitator Role;
- Open system model: Innovator Role and Broker Role;
- Rational goal model: Producer Role and Role Director;
- Internal process model: Monitor Role and Coordinator Role.

We can consider the models of Quinn and Hardjono as variants of the model of Wilber. Each case deals with a limited subset of values.

Pollard (2010) presented a model on the basis of a four-quadrant diagram, which has parallels with the schedule of Wilber.Decision-making and actions begin with individual initiatives (left-upper quadrant), and go through intermediate stages of collective conversation (left-lower quadrant), via understanding and consensus (right lower quadrant), and end up with individual responsibility (right upper quadrant). What ultimately really is done is motivated by individual actions.

If we apply this chart to the schedule of Wilber we see interesting developments with the following consecutive transitions: Intentional, Cultural, Social and Behavioural. This first falling and then rising gradient we also recognize in the V-shape of the Reflexive Universe (Young, 1999) and in the U-shape of Theory U (Scharmer, 2007).

Dynamics in the ontological model of Wilber

The quadrants are connected with one another. In a dynamic perspective, we can detect transitions from one quadrant next to or opposite to the other quadrant. Between the dimensions of the adjacent quadrants we see a gradual transition and between the bipolar dimensions of the opposing quadrants we observe a degree of contrast. These are cyclical and diagonal patterns respectively.

Figure 5 presents an overview of the cyclical and diagonal patterns. The horizontal and vertical arrows depict the cyclical patterns and the diagonal arrows show the diagonal patterns. As an example of a cyclical pattern we mention the situation whereby an intention of an individual turnsintobehaviour. As an example of a diagonal pattern we mention the situation whereby the intention of an individual comes face to face with the behaviour of a group. Also the abovementioned model of Pollard contains an interesting cyclical pattern.

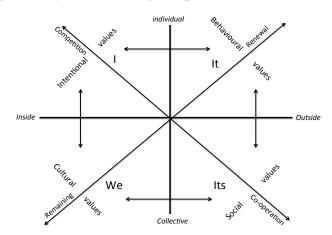


Figure 5: Cyclical and diagonal patterns in Wilber's model

Schwartz (2006) elaborated the bipolar dimensions within the category of basic human values. These show the oppositions between competing values at a certain level. It portrays the pattern of conflicts among or balancing between values. Partly based on the findings of Hardjono and Quinn we claim that his analysis has not only meaning for basic human values, but for values in general. So is the second dimension of Quinn's model to be seen as the bipolar dimension: Remaining – Renewal in figure 5.

The drive that connects the quadrants of the intentional and the social values is a natural force that seeks harmony between competition and cooperation. In living natural systems competition is a critical force. Regarding competition the individual that is better adapted to the environment will survive and pass on their genes to the offspring. Competitive interactions occur when a positive change of a component goes to the detriment of other components. This definition indicates that competing interactions will occur when an increase in profits by a component, means a reduction in the advantage or performance of other components. An example of competition in the natural system is the functioning of the immune system. If a lymphocyte encounters a new pathogen, which is a biological agent that causes the disease, the response will be slow in the beginning. The reason for this is that there are only a few lymphocytes, which are capable of binding to the new pathogen. In order to increase the efficiency of the immune system, the activated lymphocytes start cloning themselves, and thus grow exponentially. In the meantime, also the pathogens themselves replicate and grow. Therefore, there is competition between these two components. The pathogens are struggling to survive, while the lymphocytes fight to keep the pathogens from the body. This example does not mean that competition is the only force in natural systems. Also collaboration enables components of natural systems to do extraordinary things. Within natural communities close partnerships are formed that result in indirect benefits for all species. Cooperative interactions occur when a positive change of a component also enhances the collective benefit of a group of components. Therefore, cooperative interactions will occur when a component shares its price, or profit with other components. One example of collaboration is to find a shortest path between a food area and the nest of ants in a colony.

Deneubourget al (1990) showed that the ants that are faced with a choice of different paths from the nest to a food area choose the path with the strongest pheromone trail. While no path has a strong pheromone trail in the beginning, the ants that have chosen the shortest way will be back to the nest earlier than the ants that chose the longest way. New ants then choose the shortest way, because it has a much stronger pheromone trail. The pheromone trail in the shortest path thus increases in strength and most ants will choose this path. The driving force for many complex biological systems in nature is thus competition and cooperation. Balancing competition and cooperation is realized in nature. Natural organisms find a harmony between caring for the lives of themselves and the practice of working together. Understanding these relationships are also examples for controlling the balance between competition and cooperation in the human world. It is a struggle between individual capacities of the self and collective competences of the social.

The drive that connects the quadrants of the behavioural and the cultural values is a natural force that seeks harmony between renewal orinnovation and control. Margulis (1998) and other scientists argue that all life on Earth began from bacteria. As a consequence, the evolution of bacteria to all forms of life we find today is a reflection of the natural abundance and creative capacity of living organisms. Similarly to living organisms, societal organizations must maintain an abundance and creative mentality and increase their capacity to create. In nature performances, such as the 'birth' of a new species, are continuously embedded in the current abundance of the natural living systems. In societal systems innovation events occur that may contribute to economic prosperity, but also may have negative effects when these events are not correctly embedded in societal systems. E.g. an innovation in a new transport technology may have positive effects on logistic services, but may also have negative effects on biodiversity, if not correctly embedded. In practice some developments just happen, and afterwards comes the thinking. E.g. the worldwide Internet is realized in practice, and only now we are going to think about the use of it. The same is the case with social media. We notice two struggling forces: creativity and embedding new developments in living systems. We need to arrive at a certain weighing of these two forces. If not implemented correctly we may have to deal with unwanted developments. So is our post-liberal society, as seen by Sloterdijk (2013), a hybrid synthesis between a technological avant-gardism and eco-conservative moderation. Therefor we need a balancing effort between what is possible and what needs to be maintained. In this concept we need individual (creative) skills that flourish in the culture on the one hand and collective control capacities that allows (or even inspires) creativity on the other hand. Taborga (2012) depicted developmental levels also as diagonal arrows in a similar coordinates system. These diagonal arrows correspond to the stages of development that individuals and organizations go through as they are exposed to life experiences. They have to do with boundaries and levels.

4. Spiral Dynamics

Spiral Dynamics emerged from the development theories of Graves (1970) and was popularized by Beck and Cowan (2006). The following description is mainly based on Beck and Cowan (2006). Spiral Dynamics is based on research into the worldviews and value systems that people have over their lifetime. It's a growth model in subjective personal and cultural worldviews rather than a comprehensive model of social evolution. It uses worldview analysis to evaluate how and why events occur in social situations, both for individuals and groups.

Principles of spiral dynamics are:

- People and organizations at the same time have different value systems at their disposal;
- New value systems evolve towards greater complexity. They transcend and embrace all older value
- If the conditions ask, older systems will be active in humans;
- One system of values is never better than the other, just a more appropriate response to a particular
- People being in the same circumstances can and will develop different value systems;
- People may stress the same issues, but from the viewpoint of different value systems;
- Within Spiral Dynamics trying to understand and connect with the dynamics of the current value systems in people and organizations is seen as the main working method.

Spiral Dynamics describes human value systems that can provide answers to specific external circumstances or specific problems. Basic notion in Spiral Dynamics is vMemes (value memes).

The general term 'meme' was introduced by Dawkins (1989) to refer to a unit of cultural information. What biochemical genes are for DNA, memes are for the 'psycho-cultural DNA'. They are the units of information in our collective consciousness that spread the vision of our thinking. These may be social artefacts and symbols with great value that hold social systems. In a way that genes are the information units of physical beings, by passing on the characteristics of the species, the vMemes reproduce themselves through concepts, fashion styles, language trends, popular cultural norms, architectural design, art forms, religious expressions, social movements, economic models and moral regulations.

The specific term vMemes in Spiral Dynamics was defined by Graves from the psychology of man as the attractive and repulsive forces behind the development of values. In Spiral Dynamics vMemes are defined as organizational principles that act as attractors for the memes with a rich content. They define 'how' people think, not 'what' they think. They put themselves into a worldview, a value system, a psychological level of existence, a belief structure, an organizing principle, a way of thinking or a way of life. They structure the thinking, the value systems, the political forms and the worldviews of persons, corporate cultures and entire civilizations. At the same time new problems will arise from the new solutions having a higher complexity that again require new answers.

vMemes have the following properties:

- 1. vMemes contain the basic system of thoughts, motives and instructions that determine how we make decisions and set priorities. They determine the shape of the basic preferences in our lives. They represent core intelligences that form systems and influence human behaviour.
- 2. vMemes have a self-organizing capacity; they develop into coherent structures that affect all choices in life.
- 3. vMemesexpress qualities, whichare neither good nor bad in itself, healthy or unhealthy, positive or negative.
- 4. vMemes determine how people think and make decisions, not what.
- 5. vMemesare able to adapt to changing life circumstances.

We can see the vMemes as building blocks of values. The categories are value systems in humans. They have a certain general validity. The Spiral Dynamics model describes value systems and worldviews as deriving from the interaction or 'Life conditions' and 'Capacities of the mind'.

There are eight (or nine, if coral is included) value systems, see figure 6.

Brain/mind coping capacities A Survival N Instinctive Beige B Security O Animistic Purple C Power Red P Egocentric D Order Q Absolutistic E Success R Multiplistic Orange S Relativistic F Community Green G Synergy Yellow T Systemic H. Holism Turquoise U Holistic Coral

Figure 6: Summary of Spiral Dynamics

Source: Beck and Cowan (2006)

A person or culture is confronted with changes in life conditions (milestones) and is caused to react with coping mechanisms (development steps) in order to adapt to the new realities. Linking these two factors Graves called the 'double helix' model in which human psychological capacities higher and lower levels can recalibrate in response to changing life conditions.

The first vMemes series: Surviving

Beige: basic needs, a roof over your head, survive; I will survive.

Purple: security, pride, identification, tribal, magic, rituals, passage rites and traditions, clan-like; we, the clan.

Red: impulsive and self-centred, energy, power, survival of the fittest, respect; I, the mighty.

Blue: target / authority, truth, traditionally, under the rules, as they should, sacrificing yourself for the greater good, order, meaningful; we, the true believers.

Orange: strategic, individual expression, success, modern, universal human rights, rational, successful; I, skillful. Green: postmodern, community, equality, feelings, sensitivity, equitable distribution of the resources of the world, consultation and consensus, relativist; we, who are tolerant.

The second vMemes series: Being

Yellow: integral, synergy, flexibility, spontaneity, and functionality, system of systems, synergies, systemic; I, who knows.

Turquoise: holistic, experience the wholeness of existence, holistic, intuitive way of thinking globally; We, who are in the making.

Coral: No further completed.

It's being said that the colours are chosen randomly to overcome in any sense that earlier levels are inferior to later levels. At the same timeis said that some associations could be made: beige - savannahs, purple - royal colour, red - emotion, and blue - sky, orange - glow of blast furnace steel, yellow - solar, turquoise - oceans from space, coral - deep in the ocean. In this paper we argue that there is another reason to believe that the colours are not chosen randomly. Later in this paper, based on a different analysis of the value systems, wedevelop a sequence of values that, with the exception of beige and turquoise, follows the colours of the rainbow.

Figure 7 shows a further description of the Life conditions and the Mind coping capacities.

Figure 7: Summaryof Life conditions and Mind coping capacities of Spiral Dynamics

A State of nature and biological urges and drives; physical senses dictate the state of being.	N Instinctive: as natural instincts and reflexes direct; automatic existence.
B Threatening and full of mysterious powers and spirit beings, which must be placated and appeared.	O Animistic: according to tradition and ritual ways of group; tribal; animistic.
C Like a jungle where the tough and strong prevail, the weak serve; nature is an adversary to be conquered.	P Egocentric: asserting self for dominance, conquest, and power; exploitive; egocentric.
D Controlled by a Higher Power that punishes evil and eventually rewards good works and righteous living.	
E Full of resources to develop and opportunities to make things better and bring prosperity.	R Multiplicity: pragmatically to achieve results and get ahead; test options; manoeuvre.
F The habitat wherein humanity can find love and purposes through affiliation and sharing.	S Relativistic: respond to human needs; affinitive; situational; consensual; fluid.
G A chaotic organism where change is the norm and uncertainty an acceptable state of being.	T Systemic: functional; integrative; interdependent; existential; flexible; questioning; accepting.
H A delicately balanced system of interlocking forces in jeopardy at humanity's hands; chaordic.	U Holistic: experiential; transpersonal; collective consciousness; collaborative; interconnected.
I Too soon to say, but should tend to be I-oriented, controlling, consolidating if the pattern holds.	

Source: http://spiraldynamics.org/about-overview/

Spiral Dynamics is based on a focused development on consecutiveworldviews. In the future holism and spirituality will dominate. This provides us with the well-known spiral model of Spiral Dynamics, see figure 8.

postintegral consciousness integral consciousness modernist consciousness warrior consciousness tribal consciousness archaic consciousness

Figure 8: Spiralmodel of Spiral Dynamics

Source: http://www.circlesforconnection.be/wp-content/uploads/2007/02/Spiral-dynamics.jpg

The development of the worldviews shows a move back and forth between an emphasis on the individual and an emphasis on the collective. Depending on the conditions of life with respect to time, place, problems, and situations people can create new vMemes and vMemes can develop, forward or backward on the spiral. Thus, every person, every organization and every society at every moment has a unique vMemes system. Its strength is determined by moving back and forth along the spiral.

Both the Wilber's integral framework and Spiral Dynamics are theories of human development in its individual and social forms that can be applied to the micro, meso and macro levels of human organization. Both models are characterized by distinguishing a number of milestones and developmental steps. Both sets of conceptions assume that the level above integrates the characteristics of the level below it.

In Wilber's scheme the milestones are presented in the quadrants of value systems and the developmental steps are depicted as the levels of development. In Spiral Dynamics the milestones are represented by the Life conditions and the developmental steps are designated by the Mind coping capacities. In Spiral Dynamics Integral value systems in the quadrants of Wilber are combined with levels or stages of the value systems of Spiral Dynamics. This happens in a way that each level is viewed from the four quadrants, see figure 9.

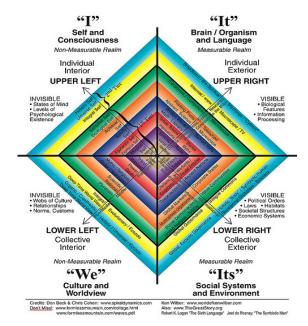


Figure 9: Spiral Dynamics Integral

Source: http://www.thegreatstory.org/charts/spiral-color.pdf

We point out that figure 9 contains milestones and development steps. The milestones are recorded as the value systems of Wilber's quadrants and the development steps are represented by the Mind coping capacities of Spiral Dynamics as - coloured -concentric squares in this quadrant.

5. Integration of the Life conditions of Spiral Dynamics in Wilber's model

Cacioppe and Edwards (2005) attempt to integrate the model of Wilber, Spiral Dynamics, Torbert's model and the model of Barrett (1998). All four models include the concept of the levels of evolution describing the progress of less adaptive and adaptive simpler forms to more and more complex shapes. The integral theory is used as the basis for the treatment of the theoretical angle of incidence of these models. Each of the four models provides a general summary of transformative development that applies to both organizational and personal spheres of human endeavour. While each model contributes to unique insights the Integral Theory is the only conceptual which is specially designed to integrate other models.

Based on the development principles that form the core of the Integral Theory, Cacioppe and Edwards (2005) describe a new definition of organizational development, using systems theory; developmental psychology, cultural theory, spirituality and other relevant disciplines. Cacioppe and Edwards (2005) sought the Holy Grail by assuming that Spiral Dynamics focuses on the cultural quadrant. They argue that the levels of worldviews form the basis of the Spiral Dynamics model in relation to the fundamental structures of the cultural quadrant. They placed Spiral Dynamics therefor fully in this cultural quadrant. We think that putting all Spiral Dynamics categories in the upper left quadrant is strange because Spiral Dynamics is really about social value systems, composed of elements with a general validity. We cannot go along with the idea of Cacioppe and Edwards (2005) that Spiral Dynamics analysis is limited to the domain of cultural worldviews. Spiral Dynamics indeed derived all of its explanatory concepts on value systems, but is not limited to cultural factors. We do agree with the statement of Cacioppe and Edwards (2005) that in explaining the transformative changes Spiral Dynamics puts little emphasis on the multidimensional conception of the development lines. They argue further that a number of important aspects of social development are not included in the Spiral Dynamics theory, and Spiral Dynamics strongly focuses on the formative influence of interior values systems. However, the opposite is true. The value systems of Spiral Dynamics are precisely suitable to respond to specific external circumstances. Cacioppe and Edwards (2005) indicate that the memetic scale of worldviews does not apply to Spiral Dynamics. That might be true for the general meaning of memes, but Spiral Dynamics memes are used in another sense, namely as a 'v(alue)-memetic' scale, which is not the same as a general memetic system. Finally, we do not agree with the observation of Cacioppe and Edwards (2005), that Spiral Dynamics is not suitable for assessing the impact of the risks of environmental and economic factors.

In this paper we follow a different approach. We assume that, like any other phenomenon, also 'social development' could be described in Wilber's quadrants system. By making a further division in each of the quadrants we distinguish between eight octants. This can be seen as a further generalization of Wilber's integral framework. We further generalize Wilber's model by incorporating the Life conditions of Spiral Dynamics in the octants of Wilber'sdiagram. We believe that, just as in any other system, we can look at Spiral Dynamics from the perspectives of the scheme of Wilber. In the scheme of Wilber four perspectives play a role. Those are four ways to see the world. If we replace the four quadrants in the diagram of Wilber by eight octants, in fact, there are eight ways of looking at the world, as is shown in figure 10.

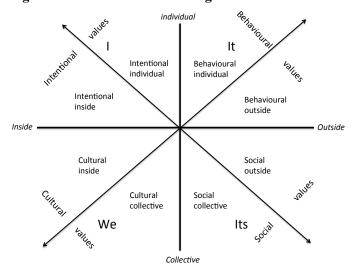


Figure 10: Octants in the ontological scheme of Wilber

With those eight worldviews in figure 10 there are also eight holarchies connected. Like the fourholarchies in the quadrants, these eightholarchies in the octants are in principle general holarchies or wholes. Holarchies consist of smaller components (holons) and each holon again consists of smaller components, etc. As an example we look at the Spiral Dynamics value 'power'. We can see this value as a whole. On the one hand Power is made up of different components, like e.g. scope of the world, status, specific forms to express the grandeur of the leader (Van Marrewijk, 2010). On the other hand Power is part of a larger whole. We can see e.g. life orientation, responsibility, power, etc. to be parts (holons) of a larger imaginary holarchy that we could name: Conviction. This means that in principle we can consider Spiral Dynamics'value 'power' as a holonor as a holarchy.

Let's first look at Spiral Dynamics' values as holons, parts of larger holarchies. If we look at the intentional values of Wilber's quadrant, we in fact look at the individual from the inside. This involves maintaining oneself. Maintaining of the self. Thisis the quadrant of the holarchy of self and consciousness (from instinctual self to integral self). We get a richer schedule when we split the intentional holarchy into two holarchies: intentional inside and intentional individual. Within the holarchies of this quadrant we recognize the Spiral Dynamics' values Survival (beige) and Power (red) as holons. Survival is more inward looking and Power is more focused on the individual. Survival is therefore seen as a holon within the holarchy intentional inside. Power is seen as a holon within the holarchy intentional individual. Survival and Power are therefore (clockwise) included in the top left quadrant in that order.

The behavioural values of Wilber's quadrant are the individual values, as they show outward, in other words, such as the individual manifests. In this quadrant we see the holarchy of brain and organism (organic states, limbic systems, neocortex, etc.). We get a richer schedule by dividing the behavioural holarchy into two holarchies: individual behavioural and behavioural outside. We recognize in this quadrant the Spiral Dynamics' values Success (orange) and Synergy (yellow). Success is more focused on the individual and Synergy is more outward looking. Success is therefore seen as a holon within the holarchy behavioural individual and Synergy is seen as a holon within the holarchy behavioural outside. Success and Synergy are therefore included in the right upper quadrant set out in that order.

The 'social values' of Wilber show how the community comes out. In this quadrant we see the holarchy of the social system and environment. We get a richer schedule when we divide the social holarchy into two holarchies: outside social and social collective. We recognize in this quadrant the Spiral Dynamics values Holisme (turquoise) and Community (green). Holism is more outward looking and community has a collective orientation. Holism is therefore seen as a holon within the holarchy outside social and community is seen as a holon within the holarchy social collective. Holismand Community are therefore included in the lower right quadrant in that order.

The cultural values indicate how the group works from the inside. In this quadrant we see the holarchy of culture and worldviews. We get a richer schedule when by splitting the cultural holarchy into two holarchies: cultural collective and cultural inside. We recognize in this quadrant the Spiral Dynamics' values Order (blue) and Security (purple). Order is collective directed and Security is more inward directed. Order is seen as a holon within the holarchy cultural collective and Security can be seen as a holon within the holarchy cultural inside. Order and Security are therefore included in the lower left quadrant, in that order.

In this paper we look at a specific Spiral Dynamics value as a holarchy in itself, consisting of a number of (not specified) holons as its components. In this way Spiral Dynamics can therefor be seen as a whole formed by eight holarchies. Based on the discussions above we specify octants and in the octants we place the Spiral Dynamics values. This provides the following overview, see figure 11.

Holarchies in the octants of Wilber's scheme		Spiral Dynamics value category (Life conditions)			
Intentional	Inside	Survival			
	Individual	Power			
Behavioural	Individual	Success			
	Outside	Synergy			
Social	Outside	Holism			
	Collective	Community			
Cultural	Collective	Order			
	Inside	Security			

Figure 11: Spiral Dynamics values in the octants of Wilber's scheme

The Spiral Dynamics values (Life conditions) can also be viewed in the coordinate system of Wilber see figure 12.

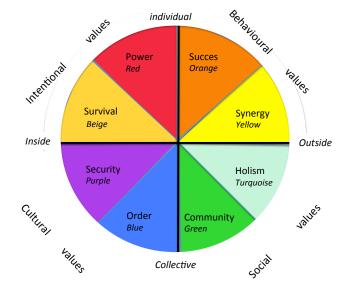


Figure 12: Spiral Dynamics in an ontological value scheme

Figure 12 shows an overall value scheme. It is noteworthy that by this approach we get a rearrangement of values relative to the value sequence of Spiral Dynamics. There is a surprising transition of the colours from the colour sequence in Spiral Dynamics to the colour sequence of the rainbow. Except the extreme colours beige and turquoisethe colours in figure 12 follow (clockwise) the spectra of the rainbow. It is therefor unlikely that the colours of Spiral Dynamics are chosen randomly, that is mentioned regularly.

In these eight ways of looking at the world, we also observe a targeted development. We go from inside to outside and, as with Spiral Dynamics, starting with individual and then constantly changing from individual to collective. In this way wealso can represent the Spiral; Dynamics values in the model of Wilber. See figure 13.

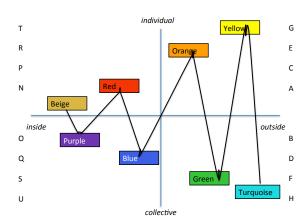


Figure 13: Spiral Dynamics as a spiral in the quadrant scheme

The Spiral Dynamics system is open-ended. We, however, should not consider the value development as leading to a set goal. Yet there is a general trend towards more integration and tolerance for complexity. In figure 13 we can clearly see the open nature of Spiral Dynamics. In the course of time a new value system could arise beyond turquoise. Figure 12 offers not directly a place for it. However, in that case we could transform turquoise as a new category. But in the case that a new value system presents itselfprobably the other value systems also will change and we may consider a reordering of value systems, to keep up with eight categories.

6. Cyclical, diagonal andspiral analysis

The Life conditions of Spiral Dynamics specified in the octants of Wilber's scheme offer various opportunities for further analysis. We distinguish between three types of analysis. Cyclical analysis is based on the transition from one octant to the adjacent octant. Diagonal analysis looks at oppositions between the bipolar octants. Cyclical and diagonal analysis in quadrants is already discussed in section 3. Here we expand this to octants. Spiral analysis looks at movements along the spiral, following a sequence as presented in figure 13. This corresponds to the usual Spiral Dynamics. Moving from one level of development to the next requires large transformational changes as a result of a significant experience and a process of reflection and inquiry. The analysis according to this generalized model has advantages with respect to the model of Spiral Dynamics or Spiral Dynamics Integral because we are now able to apply a cyclical and diagonal as well as a spiral analysis. In the next subsections we present successively more detail.

Cyclical Analysis

Horizontal and vertical lines of development indicate a cyclical analysis

The horizontal, vertical and oblique arrows in figure 14 show the dynamic development lines, that Schwartz (2006) in his study of basic human values mentions the cyclical development lines, portraying the pattern of relations of congruity among values. These arrows are telling us that the octants are not sharp divided, but there is a smooth path from one octant to the other. This also corresponds with the observation in living systems that there is a circular structure. In organizations these arrows symbolize the continuous and incremental change that organizations go through. These may include 'culture, goals, customer and community relations, ethics, corporate morals, marketing, governance and leadership' (Cacioppe and Edwards, 2005). Incremental changes typically occur from the co-evolution of the components (Edwards, 2010).

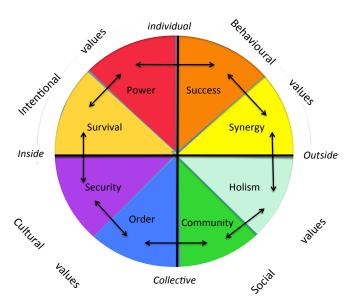


Figure 14: Cyclical Analysis

In natural systems cycles are the central mechanism to maintain the situation. Well-known is the life cycle of a tree. We recognize four periods: A tree has after fertilization a growth phase, than seed formation and ultimately the tree dies. This is also the case in the relatively simple systems of the geosphere, that James Hutton already observed in 1788, and that is described by Westbroek (2013), and in the more complex bio systems, like the well-known water cycle and carbon cycle.

The importance of cycles translated to societal systems means that we should not only look at static values, but at value 'streams and cycles'. We look at values streams and cycles from Heraclitus' thoughts that everything we see, not *is*, but arises, develops, 'streams'. We can look at value cycles from multiple viewpoints. In the example of the water cycle we view to one aspect when we look at singular values, we view to the chain or network of connections between river, land and sea, when we look at e.g. abundance of water or in case of a flood, and we view the whole when we look at the life area of the fishes, soil fertility, possibilities for transport and tourism. In societal systems value cycles are also mechanisms to maintain the situation in a sustainable way. In the short run we have the well-known product or business cycle: introduction, growth, maturity, satisfaction and decline. In the long run we have e.g. the Kondratieff's waves, driven by social or technological innovations thatranges from approximately forty to sixty years.

The cycles consist of alternating intervals between high growth and intervals of relatively slow growth. Also science develops in cycles. Research produces answers of the questions of the researchers and the answers demand for new questions. This is called the technological knowledge cycle (Westbroek, 2013). In the web of life living organisms continuously exchange matter and energy and what is waste for an organism is food for another one. Our social organizations are living systems too and we expect them to imitate the cyclical principle of nature so that waste of business production and consumption is to be raw material for further production and consumption. In the cyclical analysis we follow the colours of the rainbow (except the colours beige and turquoise). After beige the warm colours come, followed by turquoise and the cold colours.

Diagonal Analysis

Diagonal development lines allow a conflict or opposite analysis. These dynamics yield a relationship structure between values common to culturally diverse groups. In the diagonal analysis the complementary colours are opposite to each other, whereby beige is opposite to turquoise, see figure 15.

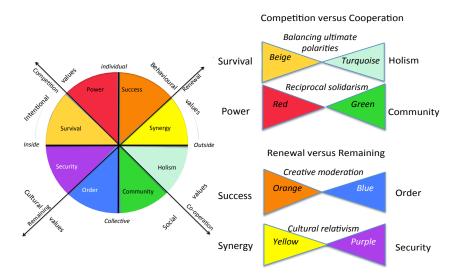


Figure 15: Diagonal Analysis

In section 3 we already paid attention to aspects of the diagonal patterns: cooperation – competition in the Intentional and the social quadrant and renewal – remaining in the behavioural and the cultural quadrant. We now split these quadrants in octants.

Concerning the opposite octants survival – holism we deal with 'balancing of ultimate polarities'. At this moment it is too premature to discuss this balancing item.

About the opposite octants power – community the balancing item is 'reciprocal solidarism'. It can be seen as a struggle between individual capacities for the self versus collective competencies for the social (Donkers, 2014). As long people live, there is the exercise of power. This can lead to, and has in the past led to many conflicts with the interests of communities. This concerns especially questions about the origin of power, the various forms and also its legitimacy: what makes the ruling power or authority to a legitimate power? (Galbraith, 1983). Looking at studies from the biologist De Waal (2013) and others we conclude that social beings only can survive in reciprocity. Power is studied intensively, however, little information is available about mutual influence of power and community.

Concerning the opposite octants success – order we deal with balancing of 'creative moderation'. It can be seen as a form of renewal of living organisms to survive in an environment versus control of groups of organisms for embedding in the same environment (Donkers, 2014). Since Schumpeter in the fifties of the last century developed the notion: Creative destruction, we now live in a different era with an abundance of technological and digital possibilities that run out of control (Arthur, 2009). Creative moderation is a balancing mechanism between our creative possibilities and the control thereof. About the opposite octants synergy – security the balancing item is 'cultural relativism'. It is the principle that an individual person's beliefs and activities should be understood by others in terms of that individual's own culture. The task is to achieve reconciliation between bringing and keeping stakeholders together and realizing that stakeholders may live in different cultures and may have different ideas and habits. Making everyone feels good in a fair wayin this arena is abig challenge.

Spiral Analysis

The spiral development lines give us an analysis as in Spiral Dynamics. If we follow the trends along the spiral as shown in figure 16, we get the same development as in the case of usual Spiral Dynamics. Spiral Dynamics assumes a spiral of successive worldviews. The development of the worldviews shows a move back and forth between an emphasis on the individual and emphasis on the collective.

Depending on the conditions of life with aspects of time, place, problems, and situations new human vMemes can be created and vMemes can develop, forward or backward on the spiral. In short, the entire philosophy of Spiral Dynamics counts.

Inside Fourity Order Community Security Order Community Holism

Figure 16: Spiral Analysis

http://www.dedic8.com/?tools/het-waardenprofiel.html

In practice we often deal with transitions from one value system to another. That relates to transitions from one value system to the adjacent value systems in cyclical analysis, from one value system to the opposite value system in diagonal analysis and from one value system to the next or previous in the spiral analysis sequence. In figure 17 these types of analysis are brought together.

Figure 17: Spiral, Cyclical and Diagonal analysis of value systems

	Beige	Paars	Rood	Blauw	Oranje	Groen	Geel	Turkoois
Beige	X	S C	С					S D
Paars	S C	X	S	С			D	
Rood	С	S	X	S	С	D		
Blauw		С	S	X	S D	С		
Oranje			С	S D	X	S	С	
Groen			D	С	S	Χ	S	С
Geel		D			С	S	X	S C
Turkoois	S D					С	S C	X

S Spiral analysis, see the elements of the first sub- and superdiagonals + last element of the first row and the first column

C Cyclical analysis, see the elements of the second sub- and superdiagonals + the first and last element of the first sub- and superdiagonals

D Diagonal analysis, see the elements of the antidiagonal

Confronting the three types of analysis with each other gives us a symmetric matrix of value analysis. In the matrix in figure 17, the first and second sub- and super-diagonals, and the anti-diagonal make sense. This also shows that the colour sequence of Spiral Dynamics and the colour spectrum of the rainbow are interrelated.

7. Integral Dynamics

The categoriesused in IntegralTheory, Spiral Dynamics and Integral Dynamics needclarification. In particular there are differences in the concepts of 'states' and 'stages'. In figure 18 we bringtogether the different features that are used in these models.

Wilber's AQAL	Wilber-Combs	General	SD	ID
Quadrants of value		Milestones	Life conditions	Octants or Statesof
systems		Milestolles	Life collations	value systems
Levels of development	Stages of	Developmental	Mind coping	Levels or Stages of
	consciousness	steps	capacities	value systems
Lines of development				
States of consciousness	States of			
	consciousness			
Types of development				

Figure 18: Categories in IntegralTheory, Spiral Dynamics and Integral Dynamics

The 'states' in Integral Dynamics display milestones of social development and refer to the Life conditions of Spiral Dynamics. They are specified in the octants of value systems of Wilber's scheme. The 'levels' or 'stages' in Integral Dynamics describe developmental steps of social development. This concept matches with the levels of development in Wilber's AQAL and there is a parallel with the stages of consciousness used in the Wilber-Combs lattice. These levels or stages refer to the Mind coping capacities of Spiral Dynamics. In Integral Dynamics the milestones (Life conditions of Spiral Dynamics) represented in the octants of Wilber's scheme are associated with the developmental steps (Mind coping capacities of Spiral Dynamics) represented as concentric circles in this scheme, see figure 19.

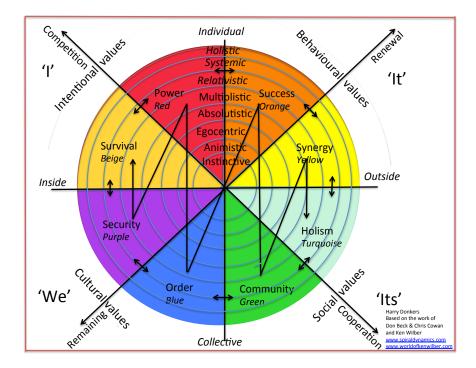


Figure 19: Integral Dynamics

Figure 19 is a combination of Wilber's integral theory and Spiral Dynamics. We call this combination: Integral Dynamics. If we compare figure 19 with that of Spiral Dynamics Integral in figure 9, the following emerges. Both figures show states and stages. In Spiral Dynamics Integral the (not-coloured) states in the four quadrants of Wilber are overlapped by the stages of Spiral Dynamics (Mind Coping Capacities) in the typical colours as concentric squares or circles. In Integral Dynamics the (coloured) states of Spiral Dynamics (Life Conditions) in the eight octants of Wilber's extended scheme are overlapped by the (not-coloured) stages of Spiral Dynamics as concentric circles. This provides the opportunity to show the elements of Integral Dynamics also in a Grid. In fact, we have described in figure 19 the GRID of Spiral Dynamics, without specifying the elements. We can figure 19, after all, also present in tabular form, see figure 20.

Figure 20. GRID of Spiral Dynamics

The diagram in figure 20 offers various possibilities of analysis. We did not find attempts to fill this GRID in literature. Van Marrewijk (2010) provides a number of tools as a first step towards filling of this GRID.

8. Final

We currently get caught up in deep crises that follow each other faster and faster. We used existing models of Integral Theory and Spiral Dynamics to develop a coherent analytical framework that the major problems of our time may tackle coherently. The integral approach of Wilber is a universal vision of values from four perspectives (quadrants in a coordinate system). From these quadrants we switched to octants that provide basically eight perspectives from which we can look at the reality. We observed in the eight octants general holarchies, and were able to consider Spiral Dynamics' Life Conditions as holarchies. By looking from this perspective to Spiral Dynamics, we have shown that we can place the value systems of Spiral Dynamics in these octants. Each value system fits into one and only one of the octants.

The combination of the models of Wilber and Spiral Dynamics led to a model that we could use for cyclical and diagonal as well as spiral analyses. We can execute these analyses within the same framework. Colour spectra help us. So we use the coloursof the rainbow in the cyclical analysis, the complementary coloursin the diagonal analysis and the colour spectrum of Spiral Dynamics in the spiral analysis. This new integration of Wilber's Integral Theory and Spiral Dynamics differs from Spiral Dynamics Integral and differs also from the approach to integrate these models by Cacioppe and Edwards. In fact, we have described the GRID of Spiral Dynamics, without specifying the elements.

Acknowledgement

The author thanks Geert Sturtewagen for various stimulating discussions

Literature

- Arthur, W. Brian, 2009. The nature of technology, What it is and how it evolves. Penguin Books. 247 pp.
- Barrett, Richard, 1998. The Barrett model.Barrett Values Centre.http://www.valuescentre.com/uploads/2010-07-06/The%20Barrett%20Model.pdf.
- Beck, D.E. &Cowan, C.C., 2006. Spiral Dynamics: Mastering Values, Leadership and Change. Blackwell Business.
- Cacioppe, R.&Edwards, M., 2005. Seeking the holy grail of organizational development: A synthesis of integral theory, spiral dynamics, corporate transformation and action inquiry. *Leadership & Organization Development Journal*, Vol. 26, No. 2, p. 86-105.
- Dawkins, Richard, 1989. The Selfish Gene (2nd ed., new ed.), Oxford: Oxford University Press.
- Deneubourg, J.-L., Aron, S., Goss, S. &Pasteels, J.M., 1990. The self-organizing exploratory pattern of the argentine ant. Springer Netherlands.
- De Waal, Frans, 2013. The bonobo and the atheist, In search of humanism among the primates.Norton & Company Ltd., New York.
- Donkers H., 2014. Living Societal Systems, Meaning and Multiple Values for Quality of Life, *International Journal of Applied Science and Technology*, Vol. 4 No. 3; May 2014, p. 137-
- Edwards, M., 2010. Organizational transformation for sustainability: An integral metatheory. Routledge, New York.
- Galbraith, John Kenneth, 1983. The Anatomy of Power. Houghton Mifflin, Boston, Massachusetts, U.S.A.
- Gebser, Jean, 1991. The Ever-Present Origin, authorized translation by Noel Barstad with AlgisMickunas (Athens: Ohio University Press, 1985, 1991).
- Graves, Clare W., 1970. Levels of Existence: An Open System Theory of Values. *Journal of Humanistic Psychology*, November.
- Hardjono, T.W., 1995. Ritmiek en organisatiedynamiek. Kluwer, Deventer.
- Hart, S. L. &Quinn, R. E.,1993. Roles executives play: CEOs, behavioral complexity, and firm performance. *Human Relations*. 46 (5) 543-574.
- Keirsey, David, 2008. Brains and Careers. Prometheus Nemesis.
- Koestler, Arthur, 1967. The Ghost in the Machine (1990 reprint ed.). Penguin Group.
- Margulis, Lynn, 1998. Symbiotic planet: A new look at evolution. Basic Books.
- Myers-Briggs, Isabel, 1980.Gifts Differing: Understanding Personality Type.Davies-Black Publishing; Reprint edition (May 1, 1995).
- Piketty, Th., 2014. Capital in the Twenty-First Century. Harvard University Press.
- Pollard, Dave, 2010. The lifecycle of Emergence. Retrieved from: http://howtosavetheworld.ca/2010/04/22/the-lifecycle-of-emergence/.
- Quinn, R. E. &Rohrbaugh, J. 1983. A Spatial Model of Effectiveness Criteria: Towards a Competing Values Approach to Organizational Analysis. *Management Science*, 29(3), 363-377.
- Scharmer, C. Otto, 2007. Theory U: Leadingfrom the Future as itEmerges. The Society forOrganizational Learning, Cambridge, USA.
- Schwartz, Shalom H., 2006. Basic Human Values: Theory, Measurement, and Applications. The Hebrew University of Jerusalem, *Revue française de sociologie*, 47/4.
- Sloterdijk, Peter, 2013. In the world interior of capital: Towards a philosophicaltheory of globalization. Polity Press, Cambridge.
- Taborga, Jorge, 2012. Leadership stage development and its effect on transformational change. *Integral Leadership Review*, Vol. 12, No. 4.
- Van Marrewijk, Marcel, 2010. A value-based and multi-level model of macro economies. *Technology and Investment*, 2, 35-48doi:10.4236/ti.2010.11005 Published Online February 2010 (http://www.scirp.org/journal/ti).
- Westbroek, Peter, 2013. De ontdekking van de aarde, Het groteverhaal van eenkleineplaneet. UitgeverijBalans, Amsterdam, pp. 336.Wikipedia, Various subjects.
- Wilber, K., 2004. Eenbeknoptegeschiedenis van alles, Lemniscaat, Rotterdam. Translation of: A brief history of everything (1996). Shambhala.
- Young, A., 1999. The Reflexive Universe; Evolution of Consciousness. Anodos Foundation; Revised edition (September 15, 1999), pp. 293.