



**Ken Wilber's *integral philosophy* and Educational Research: Fleshing out the
seventh moment (and beyond?)**

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abstract

Ken Wilber's 'integral philosophy' is described as a spiritual, humanist orientation which provides an excellent theory for conceptualising the connections between science, arts, and religion. In this paper, we argue that Wilber's framework in connection with *seventh moment of qualitative research offers* "space" to science education research to position itself more comfortably between the so-called "objective" sciences, including the natural sciences and some schools within the human sciences, and the "subjective" human sciences, without the need to privilege or reject either of them. We refer to a current doctoral study into the teaching of ethical issues in school science to illustrate the potential of an integral perspective on research in science education.

introduction

Ken Wilber's work, which combines apparently incompatible frameworks into an "integral" philosophy, is an exciting attempt to bring together Eastern and Western knowledge frameworks, especially science and spirituality. We believe that it offers science education a powerful alternative to traditional dualistic philosophical frameworks. With professional interests in science education, and personal interests in Eastern philosophies, yoga and spirituality, we have found Wilber's work to be a valuable referent for moving towards a more holistic model of education. Because science education stands between the "objective" sciences, including the natural sciences and some schools within the human sciences, and the "subjective" human sciences, it has an especially difficult task of trying to mediate between the two. Given the historical roots of the problematic relationship between science and religion, and the traditional proximity of science education to Scientism, proclaiming a value-free science, the teaching of ethical issues in science classrooms is simultaneously necessary and potentially contentious. On the one hand, referring specifically to qualitative research, and Wilber's philosophy, on the other, allow for ethics and spirituality to be reintegrated into educational research. In this paper, we (a) give a brief historical overview of the development between science and religion, (b) outline basic assumptions of Wilber's integral philosophy, and (c) use the first author's doctoral thesis, which is concerned with the teaching of ethics and values in a science education context, to illustrate key aspects of an integral study.

couple counselling? a difficult marriage between science and religion.

The controversy between Galileo and the Catholic Church reminds us that disputes between science and religion are not new (Hollinger, 1998). Galileo could not freely look through his telescope because science, art and religion were controlled by the Church, which defined what science could or could not see (Wilber, 1998). The era of Enlightenment changed all that, through the invention of the "controlled experiment which escalated science to a new order of power and exactitude" (Smith, 1997; p.56). The ensuing rise of modernity was characterised by the differentiation of the three cultural value spheres: (1) **arts-aesthetics**, representing the *interior-subjective* or the "I" domain of thinking and knowing, (2) **religion-morals**, representing the *interior, inter-subjective*, cultural or "We" domain, and (3) **empirical science**, representing the *exterior-objective* or "It" domain. This differentiation process is regarded by Wilber as constituting the *dignity* of modernity: from now on, each of the spheres could pursue its own goals without domination or violence from others. Science set out to reveal the truth, religion set out to generate meaning, and art set out to allow for the self to express itself (Wilber, 1998; 1999). But there was a price to pay for the dignity: values pertaining primarily to religion were thus severed from science, which ever since has had philosophers of science asking the question of whether science can or should be considered value-free.

Soon after dignity followed *disaster*, when a powerful science started to colonise and dominate the other spheres, mostly by denying them any real existence. René Descartes, the architect of the scientific revolution, in close collaboration with Isaac Newton, who suggested a mechanical view of the world, insisted on a sharp distinction between what is subjective and what is objective in order to acquire reliable knowledge of the world. The result was "flatland holism", when the only one "real" domain, that of empirical science, reduced the world to a flatland of "Its" with no consciousness, no interiors, no values, no meaning, no divinity. These "secondary qualities" do not belong in an objective account of the world unless they can be reduced to objective terms, or explained away as "illusory phenomena". The result was a philosophical movement known as Scientism (Hollinger, 1998; Wilber, 1998). This worldview inflicted a great blow on the human psyche by making it appear that life's material side is its most important side (Smith, 1997, p. 56). The negative effects of Scientism such as the misuse of technology during World War II, have led to counter-philosophies, the most influential being Postmodernism, which has successfully tried to re-establish the subjective domains and the importance of interpretation. For Wilber, the solution to the disaster of modernity lies in a re-integration of all three (!) cultural value spheres, thus remarrying science to morals/spirituality and aesthetics; integration but without the need to dominate the other (Wilber, 1998, 1999).

Ken Wilber's integral philosophy & qualitative research

"What comes (just) after post?", asks George Marcus (1994, p. 563-573) in the Handbook of Qualitative Research referring to Postmodernism. And he continues that "in this immediate post-'post' moment, there is no sign of an end to change." He wrote this in the context of the *fifth moment* in qualitative research. In the second edition of the Handbook, inform us that the *seventh moment* in qualitative research has arrived, a moment that is concerned with issues of moral discourse and the development of sacred textualities: Social sciences are to become a site for critical conversation about democracy, race, gender, class, nation-states, globalisation, freedom, and community. Under the heading "A bridge into the future: toward a sacred discourse", they explore the notion of a *sacred epistemology* which places us in a non-competitive, non-hierarchical relationship to the Earth, to Nature, and to the larger world. Quoting Christians, they inform us that the moral values that were excluded by the Enlightenment science project are now recovered by this sacred epistemology: "...we imagine a form of qualitative inquiry in the 21st century that is simultaneously minimal, existential, autoethnographic, vulnerable, performative, and critical. This form of inquiry erases the traditional distinctions among epistemology, ethics, and aesthetics; nothing is value-free. Unfortunately, they have not elaborated sufficiently the seventh moment framework for it to be user-friendly in terms of what research might look like within this framework. In our view, Wilber has achieved exactly that; his work not only matches the requirements of the seventh moment, but the two frameworks mutually support each other. Wilber has elaborated a holistic philosophical framework that can be seen as a post-postmodernist approach. The term *holistic* is used throughout the paper in accordance with the definition suggested by the Holistic Education Network of Tasmania (online document, 2001). Wilber's philosophy is described as *integral*, which can be interpreted as integrative, inclusive, comprehensive and balanced (Wilber, 1997). The basic tenets of Wilber's Integral Philosophy comprise Perennial Philosophy and the Four Quadrant Model of Consciousness.

A Spectrum of Consciousness

A worldview, called *perennial philosophy*, has formed the core of the world's great wisdom traditions; *perennial*, because it shows up across cultures and across ages with similar features. Central to this view is the *Great Chain of Being*, sometimes referred to as the *Great Nest of Being*: being and consciousness are composed of several different but continuous dimensions. Wilber uses mainly the Christian spectrum of consciousness, as described, for

example, by Huston Smith (1976), which in its simplest form consists of **body, mind and spirit**. (Sometimes the spectrum is used in the more elaborated version: matter, body, mind, soul, and spirit; with physics studying matter, biology the body, psychology the mind, theology the soul, and mysticism spirit.) The central claim is that our consciousness can evolve all the way up the hierarchy to Spirit, itself. These levels of development, from body to mind to spirit, are characterised by an increase in wholeness and integrative capacity. However, they are potentials only, rather than a given – Wilber sees them as "developmental space" (Wilber, 1997, 1999, 2000).

Given that there is a spectrum of consciousness, we have available a range of *different modes of knowing*, each of which discloses a different type of "world". An exclusive or predominant reliance on each one of these modes produces, in turn, empiricism (body), rationalism (mind), and mysticism (spirit). The integral approach recognises the "moments of truth" in each of these knowledge modes, but it rejects attempts to privilege empiricist knowledge only (matter/body). Importantly, bad data in the higher domains (mind, soul) are falsifiable only through further data in those domains, not by data from lower domains: data available to practitioners of Zen meditation cannot be verified from, for example, a physicist's point of view, as her research would be located on the "matter" level.

Thus, *integral* means that each of the different types of knowing offers some important "truths" about the world, and that all types are equally valid and important. This leads directly to a model that Wilber developed after having sifted through and grouped several hundred hierarchies of consciousness. Wilber found that they fell into four *quadrants*, which are related directly to the three cultural value spheres (arts, religion, science) that resulted from the differentiation process of the Enlightenment era.

four quadrant model of consciousness

First, Wilber distinguishes between the *exterior* (objective) and the *interior* (subjective), which he also calls the *left-hand path* and the *right-hand path*(see Figure 1). He further distinguishes between *individual* and *collective*, resulting in four quadrants: two subjective/interior quadrants, with (I) representing the individual/subjective and (II) the collective/intersubjective, and two exterior/objective quadrants, with (III) representing the individual/objective and (IV) the collective/interobjective.

INTERIOR Left Hand Path	EXTERIOR Right Hand Path
<ul style="list-style-type: none"> • Dialogical • Hermeneutic 	<ul style="list-style-type: none"> • Monological • Empirical, positivistic
I. Individual, subjective Intentional Aesthetics, art Language used: "I" Truth claim: <ul style="list-style-type: none"> • Subjective Truth ((sincerity, integrity, trustworthiness))	III. Individual, objective Behavioural science Language used: "It" Truth claim: <ul style="list-style-type: none"> • Objective Truth ((correspondence, representational, propositional))
II. Collective intersubjective Cultural Worldviews, morals , values Language used: "We" Truth claim: <ul style="list-style-type: none"> • Intersubjective Truth (cultural fit, mutual understanding, rightness)	IV. Collective interobjective Social science Language used: "It" Truth claim: <ul style="list-style-type: none"> • Interobjective Truth (systems theory web, social systems)

Figure 1: Four Quadrant Model of Consciousness (after Wilber, 1997, 1999)

The interior, left-hand quadrants (I, II) constitute *interpretive* approaches to consciousness. They include arts and aesthetics, on the individual level, and worldviews, morals and values, on a collective level. The individual quadrant (I) is also called the intentional, whilst the collective quadrant (II) is the cultural. From an **epistemological** point of view, the two left-

hand quadrants enable us to ask "How are events being understood?" (Nancy Davis, 2000, personal communication). Sciences situated in these quadrants are dialogical and hermeneutic. The truth or validity claim on the individual level (I) is *subjective truth*, with sincerity, integrity and trustworthiness as quality criteria. For the collective level (II), the truth claim is *intersubjective truth*, with cultural fit, mutual understanding and rightness as quality criteria.

The right-hand quadrants (III, IV) represent empiricist science and social science, and are characterised by *description*. Their *epistemological* question is, "What is happening here?" (Nancy Davis, 2000, personal communication). The truth claim on the individual level (III) is the "*objectivetruth*", with correspondence, representation and proposition as quality criteria. On the collective level (IV), it is the "*interobjective truth*" regarding systems theory web, structural functionalism, and social systems mesh.

With regard to the issue of **representation**, each of the three spheres of consciousness (art, morals, and science) uses a distinctive type of language, showing great similarity to Habermas' "I-Thou"-relationship. The expressive-aesthetic sphere (I) makes use of "I" language, the cultural sphere (II) uses "We" language, and the scientific-objective sphere (III, IV) is characterised by the use of "It" language. We use all three forms of language in representing our authorial voices in this paper.

Every phenomenon can be looked at from each of the four perspectives or quadrants. We use the example of "moral development" to illustrate the principles of the model: moral reasoning happens within my subjective consciousness and is unobservable to the outside world. I might communicate my thoughts, I might reflect on it and write about it. I might even draw a picture. The researcher relies on what I disclose to her. We are establishing my subjective truth (I). What can be observed by the researcher is my moral behaviour and any changes thereof. She tries to describe my behaviour as "objectively" as possible aiming at an objective truth (III). But, as we are part of a culture, our moral reasoning has a strong correlation to the values, worldviews we share within our cultural context. So, we are sharing an intersubjective truth (II). Like every cultural aspect, morality has also social correlates. The researcher might decide to use a quantitative study using questionnaires to describe the distribution of certain stages of moral development (IV). So we can say that, in any quadrant, the phenomenon of "moral development" has correlates in other quadrants.

This correlation has major repercussions and lies at the core of Wilber's integral thinking: if any system of thought attempts to ignore or deny any of the other three quadrants of consciousness, those alternative truths actually reappear as an internal and massive self-contradiction in the system. An example is postmodernism's claim that there are no absolute truth claims, resulting in an absolute truth claim, and thus contradicting the original claim itself! Integral philosophy, on the other hand, attempts to include the moments of truth in each of the four quadrants by using *vision-logic*, that is, by stripping these approaches to knowing of their claims to be the only type of truth in existence, and thus releasing them from their contradictions (Wilber, 1997; 1998; 1999).

Science education research as mentioned earlier, has an uncomfortable position between the objective, natural and human sciences, and the subjective, interpretive sciences. Pitt (1990) argues that the manner in which we teach science in high school represents an outdated positivistic conception of science. This is why traditionally, many studies in science education have been situated only on the right hand side (quadrants III and IV) of Wilber's model. The assumptions of Newton's mechanical worldview and Descartes' dualistic view of the world as an entity that can be studied objectively are still widespread throughout the science education community, which continues to largely promote the image of a value-free science.

Integral philosophy, using the Four Quadrant Model, offers science education research an opportunity to draw freely from all quadrants, including the subjective, left-hand domains. Without the need to reject either the objective or the subjective side, science education is offered the prospect of becoming a (more) holistic enterprise, thus educating the whole child, including a spiritual perspective. Wilber's idea of bringing science, art and spirituality back together sits comfortably with the concept of Holistic Education which, amongst other concepts, promotes a view of reality as an interconnected whole and values spiritual literacy which refers to a state of connectedness to all life (Holistic Education Network as well as to notion of a *sacred epistemology* which seeks to ground the self in a sense of the sacred, to connect the ethical, respectful self dialogically to nature and the worldly environment.

With regard to qualitative research point out that there is a tendency amongst researchers to move from one intellectual fashion to another which often includes the wholesale rejection of entire theoretical perspectives. They argue that it should not work that way and that, quoting Bruner, one should return to the originals of out-of-fashion texts and re-learn how the masters of the past did their work. One point of concern for them is the way that criticisms are "exchanged" amongst the proponents of different philosophical backgrounds, for example, Postpositivism and Poststructuralism: opposing sides are preaching to the already converted with no dialogue occurring and a discourse that does little to help people who seek to engage the world empirically. Instead of asking how best to describe and interpret the experiences of other people, there is a tendency towards mutual exclusion. Wilber's framework addresses exactly those issues and thus, in our opinion, prepares the way for the seventh moment of qualitative research, as described earlier, by offering an elaborated philosophy that might provide the basis for a more tolerant and mutually reflective orientation to the research process that Gergen and Gergen, (2000, p. 1034) are hoping for. The meaning of integral philosophy as a framework for research lies in the implementation of an integral practice.

integral practice and science education research

Integral, for Wilber, means to integrate, to bring together, to join, to link, to embrace, not in the sense of uniformity, but in the sense of *unity-in-diversity* using vision logic (Wilber 1995, 1998, 1999, 2000). Integral or (high) vision-logic is a dialectic of whole and part. It is a form of *Dynamic Dialecticism*, where one recognises and differentiates dialectical systems (e.g., contexts, cultures), and then integrates them by realising that all elements are interrelated and are reflections of the same underlying unity. Using contextual thinking, one derives meaning from the whole which would not be available to the parts. Thus, the "big picture" gives new meanings to the details that compose it. For research, integral practice means:

- to take the principles of the perennial philosophy (i.e., the Great Nest of Being consisting of body, mind and spirit);
- to combine them with the dignity of modernity (i.e., the differentiation of the three cultural value spheres - arts, religion, science);
- to recognise that each level of the Great Nest of Being is again differentiated into four dimensions (i.e., subjective/intentional, objective/behavioural, intersubjective/cultural and interobjective/social); and
- to position your research in the Four Quadrants Model of Consciousness (Wilber, 1999) according to its purpose, thus determining the appropriate truth claim/s.

To apply this model to research means that every phenomenon (e.g., moral education) can be addressed richly from the differing perspectives of all four quadrants. A truly integral study would include all four perspectives, which on the other hand, is rarely feasible because of, for example, time and/or financial constraints. For practical purposes, it is sufficient for us to remain aware of which quadrant/s we are operating in, as the quadrant determines

appropriate truth claims and quality standards, thus preventing us from claiming something we are not entitled to, for example, an interpretive study claiming an "objective truth". Positioning our research focus within Wilber's Four Quadrant Model also helps us to remain realistic about the shortcomings of our own research by acknowledging what other research would be required to cover the remaining quadrants. We have found that Wilber's Integral Philosophy provides an excellent theory for conceptualising the interconnections of science and morals/values within the Four Quadrant Model, which is the main focus of Elisabeth's doctoral thesis, which we now discuss as one possible example.

an integral perspective on values education in school science

Bringing values back to science is not only of importance in general but it is also the focus of my doctoral research. Due to an increased demand for ethics education in current curriculum frameworks, such as the Austrian National Curriculum (1999) the Austrian Youth Red Cross initiated a project on developing teaching materials for ethics education, in a broad sense, that is suitable for many different subjects. I was part of the research team (Gschweitl et al, 1998). My current study is an attempt to bring values back to science education, my own professional field, and to provide ways to approach critically contentious ethical issues in science classrooms, without condemning science. Despite the widespread (mis)conception of a value-free science, Allchin (1998) argues that there are (at least) three ways in which science and values intersect: the first set of values guides research itself, the second set is related to the "culture" of science, and a third set of values is actually produced by science itself. Hollinger (1998) argues along these lines when he claims that the idea of a value-free science is based on an inadequate conception of both science and values in as much as the interrelationships are neglected, for example, nobody (*within the science community*) is reluctant to distinguish between good and bad science, non-science and pseudoscience. This entails a value-judgment which is an (inter)subjective, cultural statement. Culture and values are part of the subjective realm which has been denied legitimacy within the framework of Scientism, thus leading to a contradiction of the original claim, as discussed earlier in this paper. By recognising the interrelationships as well as the legitimacy of all three cultural value-spheres Wilber offers a way out of this dilemma.

In my study, I am using Wilber's integral philosophy in combination with Lincoln and Denzin's seventh moment as the theoretical framework that provides a "cosy bedding" for the methodology of inquiry as well as for the argument of the necessity to bring values back into science education. These frameworks also inform, in addition to other sources (e.g., Kohlberg's (1984) and Gilligan's (1982) work on moral development, the Philosophy for Children movement, Reed & Johnson, (1999); Haynes (1998), work on ethical schools) the teaching and learning of ethics and values, as practised in the science classrooms that participated in this project. The study, which inquired into the experiences of students and teachers during a project focusing on ethical education in science-classrooms, involved developing moral dilemma stories and preparing teachers to engage students in critical discourse. However, this paper focuses only on the methodology of my inquiry.

In accordance with Denzin and Lincoln's (1994: 2000) model, I am using the metaphor of a *bricoleur*: a researcher who produces a pieced-together, close-knit set of practices, choosing from a range of research methods. The methods I have chosen can be linked to the subjective/interpretive domain in Wilber's framework, that is, quadrants I and II of Figure 2.

Methodologically, my study is positioned primarily in the lower left quadrant (II), with the main research focus on interpretation, on the learning of values and morals within a community of inquiry. But I am also interested in how individual students experience the learning of values through moral reasoning and moral discourse, and how the teachers

experience the teaching of dilemma-stories within their practice of teaching science. This second focus on subjective individual consciousness includes autobiography, phenomenology and action research, which is positioned in the upper-left quadrant (I) of Figure 2.

<p>I. Individual subjective</p> <p><u>Methodology:</u></p> <ul style="list-style-type: none">• autobiography-ethnography• writing as inquiry• phenomenology• action research <p><u>Philosophical framework:</u> radical constructivism, phenomenology</p> <p><u>Truth claim:</u> subjective truth</p> <p><u>Quality criterion:</u> trustworthiness</p> <p><u>Language:</u> "I"</p>	<p>III. Individual, objective</p>
<p>II. Collective Intersubjective</p> <p><u>Methodology:</u></p> <ul style="list-style-type: none">• herm-phenom study of teachers' and students' experiences of moral education• ethnographical case study• study of students' classroom discourses• evaluation of teaching approaches <p><u>Philosophical framework:</u> critical constructivism (e.g. Taylor, 1998; Kincheloe, 1998)</p> <p><u>Truth claim:</u> intersubjective truth</p> <p><u>Quality criteria:</u> fairness, authenticity, consensus agreement</p> <p><u>Language:</u> "We"</p>	<p><u>Truth claim:</u> objective truth</p> <p><u>Language:</u> "It"</p> <p>—</p> <p>IV. Collective Interobjective</p>

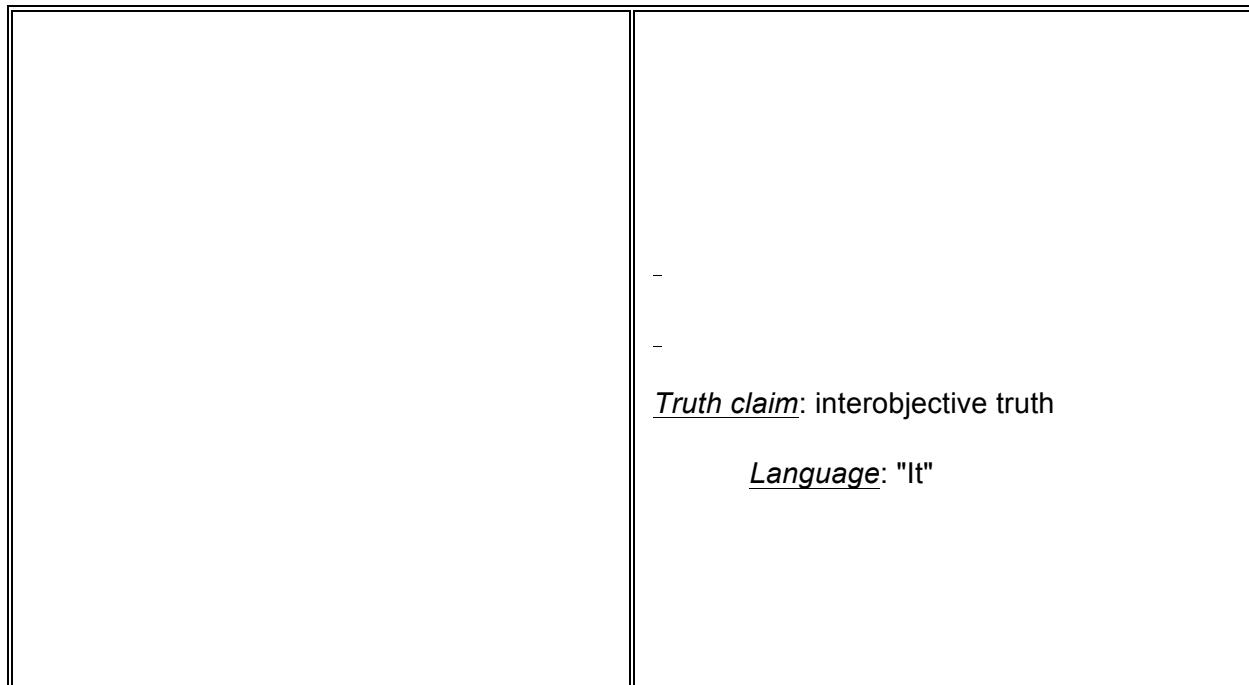


Figure 2: Integral study of values education in science classrooms

(modified after Ken Wilber, 1998; 1999; Nancy Davis, pers. comm, 2000)

I am aware that, given the position of the research strategies of my study in Wilber's framework, I will gain information on only about "half of the picture", that is, about the two left-hand quadrants. Thus, I can aim only at subjective and intersubjective truth. In case I wanted to engage in a "more" integral study, I could approach the same phenomenon (i.e., values education and moral learning) additionally through, for example, descriptions of observed moral behaviour located in quadrant III, and through survey-research using questionnaires located in quadrant IV of Figure 2. The former type of inquiry would yield behaviour patterns, the latter normative data about, for example, the distribution of levels of moral development across the population of a school or a class. Wilber's framework helps me to position my study as well as to define the truth claims I can aim at.

summary

Wilber's integral philosophy is described as a spiritual, humanist orientation, with the Four Quadrants Model of Human Consciousness, the "Great Nest of Being", being its main characteristics. We think that, in combination with Lincoln and Denzin's seventh moment framework, it offers an opportunity to science education research, to qualitative science education research in particular, to move toward a holistic, inclusive education, recognising science and its merits, but also including values and aesthetics, without privileging one over the other, thus providing for actual polyvocality.

references