On the Autonomy and Influence of the Cognitive Developmental Line: Reflections on Adult Cognitive Development Peaking in Dialectical Thinking

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Abstract

I explore the history, theory, tools and benefits of dialectical thinking, a way of thinking adults grow into to different degrees after mastering formal logic (Basseches, 1984, Laske, 2009). My goal is to show that dialectical thinking is a natural outcome of adult cognitive development and that, pragmatically speaking, it is learnable. In order to give the broadest possible introduction to dialectical thinking, I detail the reverberations of the dialectical tradition in developmental psychology and introduce a set of hypotheses as to the nature of dialecticism. My outline is based on the notion of *Four Quadrants of Dialectic* (Laske, 2009) each of which is associated in human thinking with a particular "class of thought forms", or ways of making sense (rather than meaning) of the world. With regard to Wilber's work, the Four Quadrants of Dialectic are seen as inhering each of the four integral quadrants.

In a short Appendix, I briefly detail how dialectical thinking can be learned today, extrapolating from my work at the Interdevelopmental Institute (IDM).

Keyword: Dialectic, dialectical thinking, dialectical thought forms, negativity (négatité).

Introduction

While much is presently being made of the importance of the cognitive developmental line, there are, at this time, few, if any, reliable tools either for separating it out from the social-emotional line (Loevinger, 1976; Kegan, 1982) or for using such tools for boosting individuals' actual understanding of complexity, whether in or outside of themselves. Distinguishing between stance and tools (Martin, 2007), where *stance* refers to one's epistemic and social-emotional positioning in the world, and *tools* to actual means for grasping complexity, one might say that the tools aspect of "good thinking" has not essentially progressed beyond the teaching of logical and abductive thinking (R. Martin,

2007), recent dialectical philosophies as those by Hegel, Adorno, Sartre and Bhaskar notwithstanding. As a result, developmental theory as a whole has remained lopsidedly social-emotional (or, in the case of M. Commons and his followers, lopsidedly cognitive), lacking the comprehensiveness and depth that only an *intrinsic* link between social-emotional, epistemic, and cognitive strands of development could bestow on it. The absence of dialectical thinking in adult developmental research is palpable (if not *criant*).

Forebears of Western Dialecticism

The hypothesis that **the adult cognitive line peaks in dialectical thinking** (and nothing else) is borne out by the history of Western philosophy from Plato to Hegel, as well as by the personal development of individual philosophers (e.g., Th. W. Adorno 1903-1969). A useful entry to comprehending, teaching, and practicing dialectical thinking as an advanced form of "good thinking" is indicated by Stephen Houlgate's work (2006). Houlgate suggests that dialectical thinking is *pre-suppositionless* in the sense of an attitude of mind open to being aware of, and critical of, its own assumptions, and encourages untrammeled thinking beyond the constraints of formal logic.. As Hegel himself put it (SL70/1:68-9):

> [all that is present] is simply the resolve … that we propose to consider thought as such. Thus the beginning … may not presuppose anything. … Consequently, it must be purely and simply an immediacy, or rather merely immediacy itself … The beginning therefore is pure being.

In short, any content, when considered from a pre-suppositionless stance, will spontaneously unfold its implications following the dynamic inherent in untrammeled thought itself (Adorno, 1993; 2008).

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Good Thinking is Thinking Aware of its Own Structure.

In his *Science of Logic* (1812-1816)., Hegel, following Kant, set out to show that in order to make sense of experience as an experience of **Reality** the human mind is in need of categories such as "being," "reality", "cause", "limit" and others. In critiquing Kant he maintained that such categories can not simply be "found" in formal logic (as Kant had done) but have to be unfolded in their linkages with each other through dialectics. The essential tool Hegel employed to do so is *preservative negation* in terms of which no concept stands on its own but, being part of a constellation (Adorno, 1966, 162), calls for its "other", or negative, to make any sense.

Between 1806 and 1816 Hegel unfolded a small number of general categories in their extensive relatedness, granting that not all of them had been fully available in prior historical periods. He thought developmentally in the sense of his *Phenomenology of Spirit* (1806; 1977) in which subjective spirit (as he called individual consciousness) gradually gets to know the world in all of its complexity through the tribulations of experiencing the unstoppable dialectic of what appears as REAL, based on the dialectic of consciousness itself.

Dialectic was seen by Marx, Adorno, Sartre, Bhaskar, and other followers of Hegel as a dynamic that "runs the world", not simply as a reflection happening in individual human minds. As Sartre made clear in his *L'être et le néant* (1943), the sense of negativity (preservative negation) is given to *thinking* human beings alone (l' être pour-soi). It is the human mind that brings negativity into the world and accepts the burden of living with it. The central message of consciousness thus is: "nothing is simply itself but is always already on its way to its other, its negation."

Reverberations of Dialectic in Developmental Psychology

When about the time of Sartre's death (1980) North American followers of Piaget took up the latter's question of how logical thinking develops from middle childhood to early adulthood and beyond, the only researcher who harked back to the dialectical tradition from Plato to Hegel was M. Basseches. In his book "Dialectical thinking and adult development" (1984) Basseches took the pioneering step of bringing the question of "what is dialectical thinking?" down to earth. He designed a qualitative research project for which he interviewed students and faculty of a North American university in his quest for discerning to what extent different phases of cognitive development become manifest in different degrees of what he named *dialectical thinking*. Basseches operationalized this term to refer to the use of what he called *schemata,* "found" by him in the philosophical literature (thus following Kant with a historical twist).

Basseches defined a *schema* purely epistemologically, as a *patterned movement in thought that plays a role in dialectical thinking* (Basseches, 1984, 72), -- a somewhat circular definition since schemata are meant to define that thinking. This aside, he saw them as tools for "focusing attention" (ibid., 75), more specifically on negativity in all of its forms, thus as tools for opening one's own or others' mind to what is missing in an argument or articulation of a perspective. Basseches thereby returned, without knowing it, to Plato's analysis of untruth and lying in *The Sophist (350 BC).*

Basseches' purpose was to gather empirical evidence through semi-structured interviews about the use of schemata by individuals of presumably different cognitive-developmental level who had differing social deliberative skills. His research indeed seemed to show that, while dialectical thinking began in late adolescence, it reaches its full development only in later adulthood. More specifically, he showed that dialectical thinking grows in adults over 4

phases defined by the number of schemata used by an individual in a one-hour semi-structured interview, as well as the degree to which the individual is able to "coordinate" schemata of different classes. Each class lets individuals view the world from a different vantage point.

Over a decade of making developmental assessments I have validated Basseches' hypothesis, finding that one and same social-emotional stage – whether expressed à la Kegan or Loevinger – is typically associated with a large variety of different cognitive profiles. This implies that a social-emotional score is *less specific* to an individual than is his or her cognitive score. This is not surprising. There are millions of people residing at the same social-emotional level, while their cognitive profile is not predicted thereby. (The lesser specificity of social-emotional profiles is covered up by importing all kinds of psychological and cognitive [or even spiritual] elements into social-emotional evaluations *in an ad hoc fashion*, as typically happens in applications of Loevinger's and Kegan's work today.)

By contrast, the cognitive profile – in the sense of a dialectical thinking profile -- is much less generic, thus more unique to individuals and their potential at a particular time point. Given that it is also more open to pedagogical and mentoring influence, the privileged nature of *cognitive* interventions (compared to arbitrarily amplified and bloated social-emotional ones) becomes evident. The conclusion is simple: only when clearly separated, and then integrated through dialectical thinking, do both profiles *together* reveal "who the individual is developmentally". This is borne out by all case studies submitted to the Interdevelopmental Institute in the Assessment Certification program since 2000 (http://www.interdevelopmentals.org/certification.php).

<u>Refinements of Basseches' Approach and Scoring Method Between 1999 to 2009</u>

As a student of both Adorno and Basseches (with a rather deep knowledge of Hegel since my twenties) I have continued and refined Basseches' research, as comprehensively shown in a book entitled <u>Measuring Hidden Dimensions of Human Systems</u> (IDM Press, 2009). Influenced by both Sartre's <u>L'être et le Néant</u> (1943) and Bhaskar's <u>Dialectic: The Pulse of Freedom</u> (1993) as well as by Houlgate's interpretation of Hegel's <u>Science of Logic</u> (2006), I introduced the notion of *Four Quadrants of Dialectic* as the ontological grounding of the four classes of schemata (or, as I decided to call them, "thought forms") that reflect them in the human mind.

Thinking adult-developmentally along Basseches' lines, I refined Basseches' Table of Thought Forms and scoring system Manual (Ross, 2010; Merizalde, 2010), and carried his research question into organizational contexts characterized by E. Jaques' theory of *Requisite Organization* (1989). In this way, I was able to show that the stratification of accountability levels that define the *size of organizational roles* in requisite organizations are matched by the stratification of levels of dialectical thinking in those acting in respective roles, and that the phase of dialectical thinking they are in is part of their present *size of person*. With Jaques one can say that I outlined in terms of an empirically (at least partly) validated hypothesis what it means to match adult-developmental "size of person" (both in the social-emotional and cognitive sense; see below) with organizational "size of role".

In this paper, I outline in more or less detail:

- In what way dialectical thinking transcends and enriches formal logical thinking, being itself very much in continuous need of logical thinking from which it is torn by what Hegel called *effort of the concept*.
- What is dialecticism as a form of mature adult thinking.

- What is entailed, both in research and practice, is measuring levels of dialectical thinking for purposes of coaching, consulting, talent management, leadership development, and other pursuits.
- How dialectical thinking can be learned today (see Appendix).

The Four Quadrants of Dialectic

My view of dialectic, deriving as it does from Frankfurt School teachings (Laske, 1966), differs from Basseches' view in that for me the *Four Quadrants of Dialectic* -- found both in Bhaskar (1993, 392 f.) and Basseches (1984, 74) but not in Adorno -- are not simply epistemological but also *ontological* categories. That is, they do not simply reside "in the mind" and **describe** the world – as thought forms do – but **determine** the unfolding of reality from the minutest to the macroscopic level of what humans perceive as "real". The Quadrants of Dialectic form the following constellation (Laske, 2009, 192):
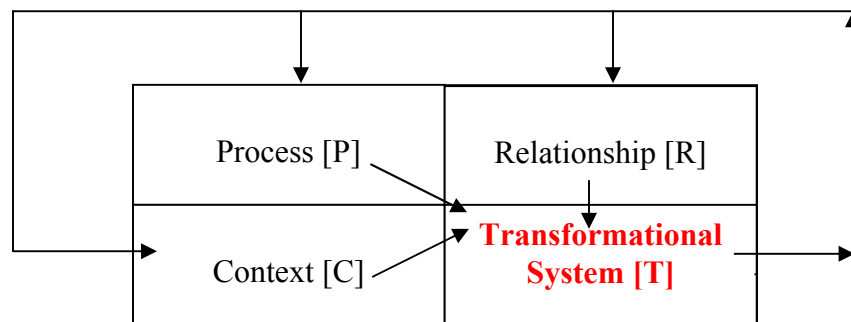

Fig. 1. The Four Quadrants of Dialectic as the basis of human dialectical thought
in terms of four classes of thought forms

As the arrows aim to indicate, the real world manifests itself in terms of four aspects that human thinking is able to grasp, called *Process (*P), *Context* [Basseches' *Form*](C), *Relationship* (R) and *Transformational System* (T). The latter resides on a meta-level compared to the other three, since in terms of thinking it requires the coordination of thought forms from at least 2
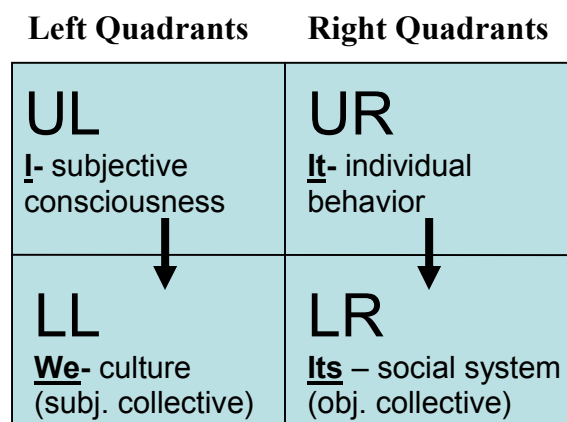
of the 3 non-transformational thought form classes to grasp transformations, of whatever kind.

The Four Quadrants form a system, in the sense that – in epistemological terms -- conceiving of reality in terms of process, motion, and change (P) already requires the implicit or explicit reference to stable contexts (C) and to relationships between or within them (R). In short, Process, Context, and Relationship already presuppose their "other" or negative, Transformation.

As Bhaskar, following Hegel, sees it, in human thinking, dialectical negation is *preservative*, meaning that what is negated in dialectical thinking is *preserved in a memory store* (rather than being pushed out of memory and then branded "false", as in formal logic), and is transcended toward its higher form or manifestation, thereby becoming a mere *moment* of the continuing thought process.

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When choosing to see the world in terms of Wilber's quadrants, shown below:

Left Quadrants   **Right Quadrants**

UL	UR
I- subjective consciousness	**It**- individual behavior
LL	LR
We- culture (subj. collective)	**Its** – social system (obj. collective)

Legend: UL = upper left: LL = lower left: UR = upper right: LR = lower right

Fig. 2. Wilber's Quadrants

dialectical intuition already tells us that a full exploration of each of the quadrants, say, of

UL, in an individual's mind, would decidedly benefit from using as "mind openers" not only

thought forms of class Process, but also of Context, Relationship, and Transformational

System. **Each individual quadrant is inherently transformational [or has a core**

dialectic] and must, if not to be logically flattened, be unfolded in terms of dialectical

thought forms. To do so requires education in dialectical thinking. Thinking in terms of

Wilber's quadrants by definition requires dialectical thinking, that is, attention to the

structure, not simply the content, of thinking (however enticing).

This insight and practice is absent from most uses and discussions of Wilber's quadrants

today, whose use *de facto* remains for the most part yoked to purely logical thinking. Since in

the last analysis Wilber's Left and Right quadrants are based on a *dichotomy* of Subject and

Object (harking back, as does Kegan's work, to Kant rather than Hegel, but without the

existential urgency of Sartre's *l'etre pour-soi*), their dialectic is thoroughly disavowed when in

breadth-first fashion the mandate followed is simply to *all quadrants, all levels*. Although "all

quadrants" sounds breadth-first, and "all levels" sounds depth-first, the two-pronged

dialectical thinking this mandate requires is rarely shown in action, even in Wilber's own

writings.

However, the gathering required by Wilber's mandate is itself a *dialectical act*, and where this is

not recognized, dialecticism is absent. This gathering can be accomplished only superficially

if the dialectic of each quadrant is not seen *from the start*, as shown by how concepts are used.

Dialectic cannot be imported by giving assurances or examples, but only by pre-

suppositionless thinking manifesting in the use of language itself (Adorno, 1963, 89-148).

("Show me the language used in speaking and writing about Wilber's quadrants, and I will

tell you whether the thoughts it expresses do justice to the dialectic of the quadrants or not".)

In summary, a dialectical conception of Wilber's quadrants is based on the principle **that each of Wilber's quadrants fully embodies the Four Quadrants of Dialectic**, however few individuals might be able to do justice to what that requires of human thinking. In fact, it is this assumption alone that makes it possible to take the next step beyond the lip-service notion that the cognitive line is the crucial foundation of adult development (which in itself is not a pre-suppositionless notion since it misses the dialectic of cognitive and social-emotional profiles in relation to each other, and thus makes non-dialectical assumptions about origins).

The Relationship between Three Strands of Adult Development

We can deepen the notion of the dialectical core of Wilber's quadrants further by hypothesizing that the 3 presently best researched dimensions of adult development together form a transformational system of the following form (where phase of cognitive development can be measured by an index describing fluidity in the use of dialectical thought forms (Basseches, 1984; Laske, 2009, 297)):
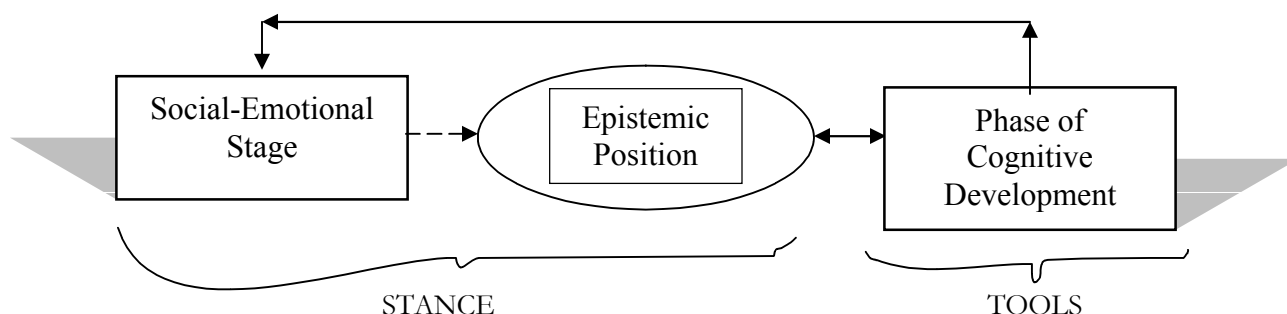

Fig. 3. The Relationship of social-emotional stage
to phase of cognitive development based on epistemic position

As shown, social-emotional stage and stage of reflective judgment (epistemic position) define **Stance** (frame of reference), while cognitive development regards the development of **Tools**, more precisely, social-deliberative skills. According to this hypothesis, social-emotional stage of meaning making (Kegan, 1982; Loevinger, 1976), while informing epistemic position, does not directly determine cognitive development, but does so only indirectly, via epistemic position (or stage of reflective judgment; King & Kitchener, 1994). However, phase of cognitive development in the sense of dialectical thinking exerts a direct and major influence on social-emotional development (however measured), being itself indirectly mediated by it via epistemic position. In light of the fact that individuals are subject to their stage, the systemic influence of cognitive on social-emotional development is of outstanding pragmatic relevance in all forms of process consultation (Schein, 1999) such as coaching and leadership development, but no contemporary teaching program in these fields, outside of IDM, reflects that.

The relationship of cognitive and social-emotional development outlined above notwithstanding, there is a sense in which both strands of development are always *commensurate with each other* in an individual. That is, it is unlikely that an individual can make use of cognitive tools that his or her social-emotional and epistemic stance does not empower them to use *consistently*, so that there may be cognitive tools that are waiting to be fully used but can presently only be espoused by an individual. (This used to be referred to as sophistry, but here is developmentally occasioned.) Influence of developmental strands upon each other is thus not the same issue as the consistent use of cognitive tools.

Hypotheses Introduced

In what follows, I will make explicit some of the important consequences of seeing the Four Quadrants of Dialectic as the linchpin of cognitive development:

1. *Stance* and *Tools* are always commensurate with each other, in the sense that what cognitive tools an individual can consistently use depends on his/her social-emotional [indirectly] and epistemic stance [directly] (Laske, 2009).

2. Stage of reflective judgment – epistemic position – is the mediator between the two best researched lines of adult development (although as formulated by King and Kitchener it falls short of taking into account dialectical thinking; Laske, 2009).

3. The separation of *Stance* – frame of reference – from *Tools* – schemata or thought forms – is crucial for research in cognitive development both theoretically and practically. Theoretically, if these two aspects of adult development are not distinguished, precise questions about how they relate cannot be formulated. (This is where contemporary developmental psychology reaches its limits.) Pragmatically, while Stance cannot be taught and we are subject to it, Tools can.

4. Not separating social-emotional from cognitive development leads to what can be called the *Loevinger Fallacy* -- practiced by Cook-Greuter, Kegan, Torbert, Wilber and others, – J. Loevinger having been the first to subsume cognitive under social-emotional development by (unwittingly) broadening the interpretation of social-emotional stages in cognitive terms.

5. *Tools* are deliberative social skills whose use depends on phases of cognitive development, defined by degree and quality of dialectical thinking (Laske, 2009).

6. Phases of adult cognitive development (beyond formal logic), defined in terms of Tools, can be empirically discerned through semi-structured interviews focused on the structure of thinking, and scored on the basis of a system of four classes of thought forms (P, C, R; T; Basseches, 1984; Laske, 2009).

Four Eras of Adult Cognitive Development

After more than 30 years of prevarication, it is time to make a decisive distinction between social-emotional and cognitive development in adulthood, if only for the sake of being able to ask more precise empirical questions about how the two lines relate to each other (Laske, 2009; De Visch, 2010). (As Hegel would say, one can only link what one has previously separated.) In addition, in order to understand the trajectory of cognitive development, it is necessary, not just desirable, to have a notion of its possible peak or peaks. Where no peaks are envisioned, no valleys can be seen, and everything becomes a flatland, to speak with

Wilber. (Present adult developmental research is such a flatland.) For this reason, I propose

the following hypothesis regarding the discontinuous progression of cognitive development
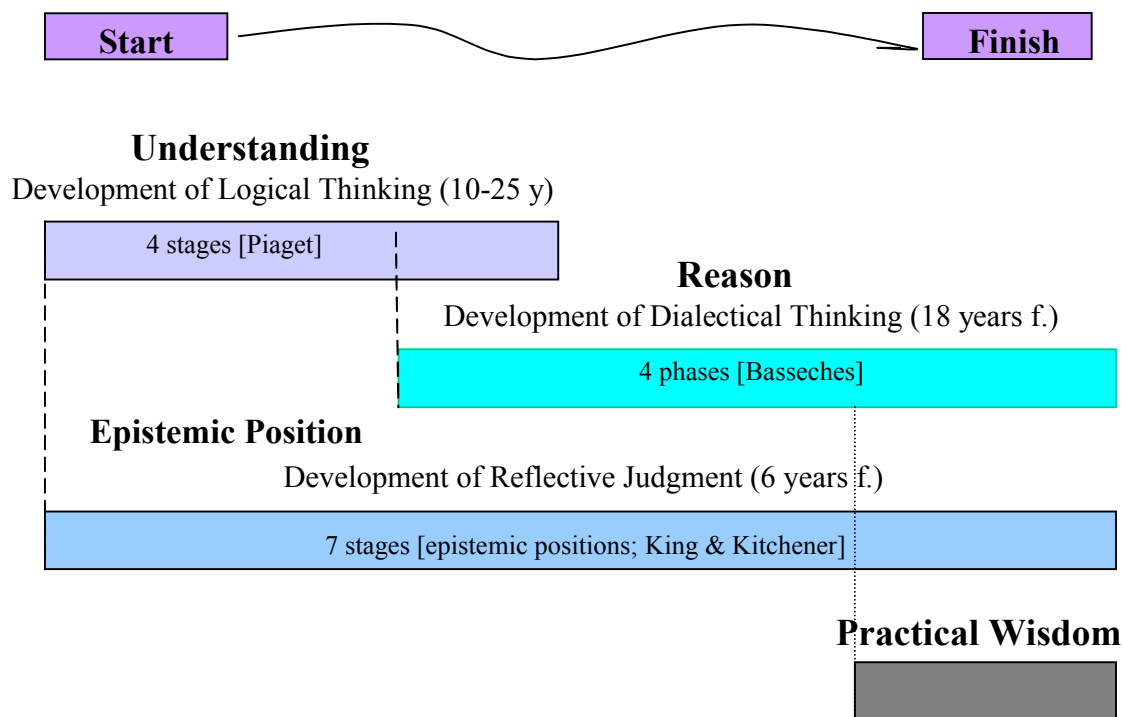
(Laske, 2009, 208):

Fig. 4. Overlap of epistemic, logical, and dialectical development
in cognitive development over the adult lifespan

Fig. 4 depicts 3 of the 4 *Eras* of cognitive development: Understanding (Verstand), Reason

(Vernunft), and Practical Wisdom (Sophrosyne) (see also Bhaskar, 1993, 22). The diagram

does not show the first Era, *Common Sense*, -- a deep ability no computer has been able to

simulate. (Computers cannot, nor do they need to, tie their shoes.) Here, Common Sense is

treated as a "boundary variable", namely the background of "pre-reflective reasonableness"

(Bhaskar, 1993, 21) from which Understanding (based on formal logical thinking) in the

sense of Kant and Piaget arises.

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According to Piaget, between ages 10 and 25 formal logical thinking matures in tandem with the physical maturation of the brain's frontal lobes. Even before it reaches full maturity, the late adolescent mind begins to use dialectical thought forms (phase 1), however weakly these are initially articulated (Basseches, 1984, 158 f.). Increasingly, however, these thought forms carry the conscious mind toward an increasingly more comprehensive use of dialectical thought forms, and this transformation toward dialectic defines *Reason* (Hegel's *Vernunft*). Those who fully develop Reason – modeled, e.g., by Adorno, Sartre, and Bhaskar – are able to reconcile Understanding and Reason in a form I refer to as *Practical Wisdom*. (Laske, 2009, 127 f.).

In the latter, dialectical thought forms, now second nature, assume utter simplicity and often are outwardly indistinguishable from formal logical thinking (except for the transformational context in which they occur). In its full unfolding the human mind returns to a simplicity Hegel circumscribed metaphorically as a *return to life* (Bhaskar, 1993, 21), based on which the world is seen as a comprehensible but nevertheless mysterious organized whole that embeds the human mind without subjugating it to objects like Kant's impenetrable *Ding an sich* or an equivalent Subject-Object dichotomy. What initially stood over against the mind as something "out there" has become something deep "in here".

The Transition from Understanding to Reason via Dialectic

I have implied above that the crucial cognitive transition in all adulthood is that from *Understanding* (U) to *Reason* (R), that is, from exclusively formal logical thinking to holistic thinking pervaded by dialectic. The diagram below may be useful in situating this transition in a map of the universe of thinking (Laske, 2009, p. 179). It shows that abductive thinking

(Martin, 2007) is a bridge from logical to dialectical thinking, but no more; it does not leave closed-system thinking behind.
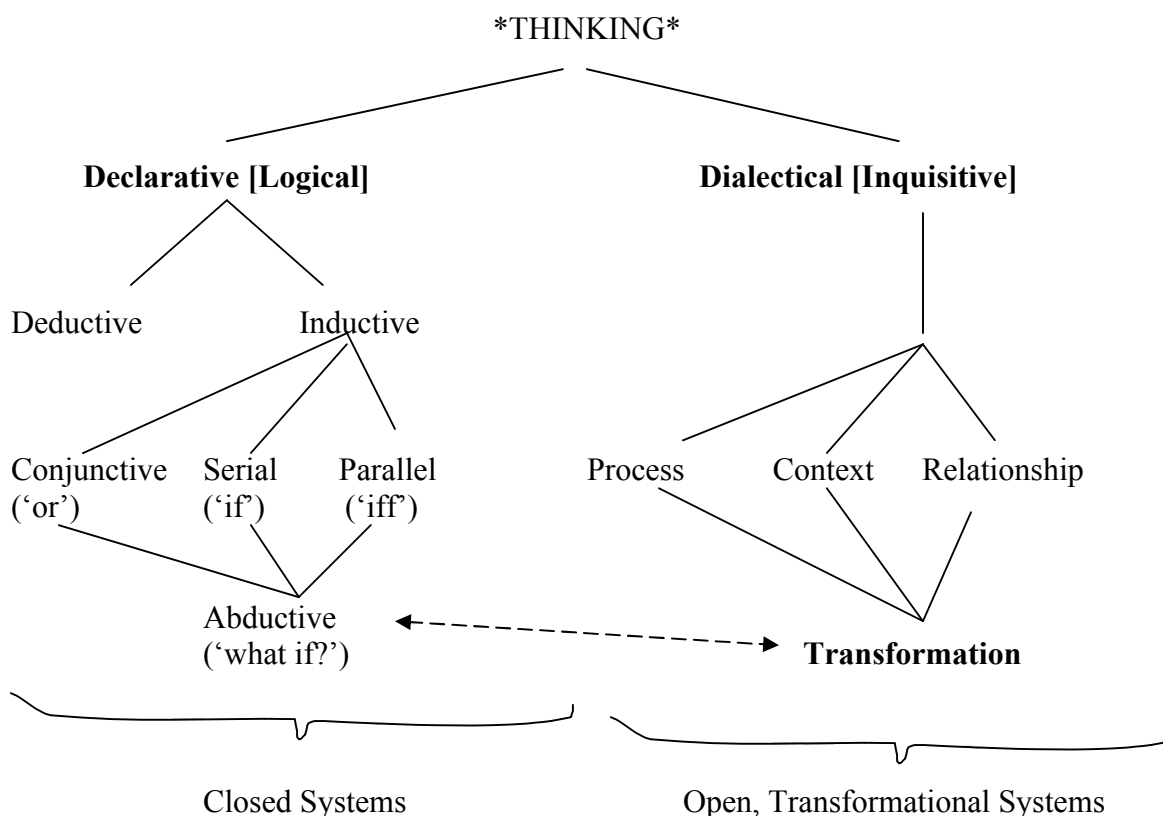
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                              *THINKING*


          Declarative [Logical]              Dialectical [Inquisitive]


    Deductive          Inductive


Conjunctive    Serial    Parallel      Process     Context    Relationship
('or')         ('if')    ('iff')


              Abductive        ← - - - - - - - - - →
              ('what if?')                              Transformation

       _____/      _____/

          Closed Systems                  Open, Transformational Systems
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Fig. 5. Varieties of *Thinking*

Reflected in self-awareness, the transition from logical *Understanding* (U) to dialectical *Reason* (R) is in itself dialectical. It performs a *preservative negation* on logical thinking by carrying it over into dialectical thinking as a mere illumination tool, as shown in figure 6 (Bhaskar, 1993, 29, 33; see also Laske, 2009, 149):
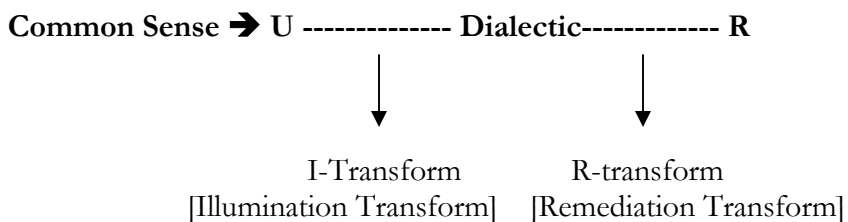
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Common Sense ➔ U -------------- Dialectic------------- R
                    |                               |
                    ↓                               ↓
              I-Transform                     R-transform
         [Illumination Transform]       [Remediation Transform]
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Fig. 6. The dialectical movement toward cognitive equilibrium

In commenting on this figure, Bhaskar says (1993, 21):

> Now it is clear enough that if we stay at the level of the understanding, we will not find or recognize contradictions in our concepts or experience – in general it takes an effort or quantum leap – in what we may call an ... *I-transform* – to find the contradiction(s), anomalies or inadequacies in our conceptualizations or experience, – and another quantum leap – which we call the ... *R-transform* to resolve them. And … dialectic is just this method or practice of stretching our concepts to the limit, forcing from and pressing contradictions out of them, contradictions which are not immediately obvious to the understanding (hence the need for a … transform).

Bhaskar adds (ibid.):

> This is one of the reasons why Hegelian dialectic is so "difficult" to *understand*; and a respect in which Hegel's talk about the self-development of the concept, as if it were automatic [understanding-like], is at the very least disingenuous.

A *transform* thus refers to "the conceptual work done in the identification and repair of an inconsistency, leading in general to the expansion of the conceptual field" (Bhaskar, 1993, 406). Relatedly, dialectical *error* – so woefully widespread today – lies in the one-sidedness, incompleteness, and abstraction of thought in which this conceptual work (Hegel's *Anstrengung des Begriffs*) is absent, as in purely logical thinking (ibid., 22), including in Wilber's work.

The Core of Dialectical Thinking
It is fair to say, then, that dialectical thinking is based on the great advance of formal logic as a way of thinking "beyond the pre-reflective reasonableness of ordinary life which readily tolerates contradictions without finding anything problematic in them" (Bhaskar, 1993, 21), and equally, that dialectical thinking preserves the essential gift of formal logic – making distinctions – but subordinates the latter's "A is always A" to the notion that **"A is never only A but always already non-A, and therefore always tends toward synthesis in A-prime",** whether this synthesis equals blossoming or demise.

In other words, no A can be conceived of, or "understood", outside of the association with its "other," non-A. This "other of A" is conceived of as an *integral part of A*, something intrinsically linked to it. From the synthesis of A and its other, non-A, arises A-prime which embodies the true richness of A, only to become thesis again for a subsequent cycle of dialectical motion and comment. However, one need not fear the "bad infinity" Hegel found in formal logical thought since A-prime is a qualitatively transformed A, not something that remains on the same level of complexity that A was located on.

To give an example, when working with a coaching client using illuminative thought forms (P, C, or R, or a combination of these), the move away from his or her initial consciousness, achieved by introducing thought forms as *mind openers*, leads to both parties sounding their deeper-level Self in UL, and their deeper-level We in LL. When moving into a third-person perspective in UR (whether extended into LR or not), dialog using dialectical comment performs preservative negation on UR, so that the "objectivity" of data characterizing the coaching client can be related to the client's own reaction to this "assessment data" (third-person perspective) in UL. Going into depth rather than breadth, the conflation of different readings of the client's consciousness then blossoms, in the best case into entering a transformational domain where both UL and UR have become mere *moments* of a transformative dialog that carries the promise of achieving a synthesis of all four integral quadrants. Without a consistent use of dialectical thought forms, this synthesis remains impossible or merely espoused (rather than embodied and demonstrated by the thinker).

Depth-First versus breadth-First Thinking

Adopting a distinction made in algorithmic search, dialectical thinking equates to a *depth-first search* compared to integral thinking which is largely *breadth-first*, trying to fit 4 disparate quadrants into the same mental moment (without realizing that it is a mere moment of an ongoing mental process). **That is, integral thinking fails at the preservative negation of what it negates and then transcends, missing the dialectical moment while transcending.** As a consequence, integral thinking cannot articulate what actually happens in the transition from breadth to depth in terms of concepts used or implied. And while one can easily transition from depth-first to breadth-first by conjuring up "bigger pictures" (e.g., by way of Context thought forms), the opposite path, from breadth to depth – whether process- or relationship-focused -- is cumbersome or very difficult for most – for me the essential *practical* limitation of integral thinking.

As shown in Fig. 6, above, the transition from Understanding to Reason via Dialectic is performed by way of two separate *transforms*, I and R, both of them depth-first, although the second comprises an exit to breadth-first search. In the *Constructive Developmental Framework* (CDF, Laske, 2006, 2009), the *Illumination Transform* (Bhaskar, 1993, 21) uses thought forms of type Process [Bhaskar's "2nd edge], Context [Bhaskar's "1M"], and Relationship [Bhaskar's

"3L"; 1993, 392] in order to clear the way for the *Remediation Transform* which, by coordinating illuminative thought forms of different class, fully realizes transformational thinking [Bhaskar's "4D"]. Remediation (of absences), then, moves further away from logical abstractions than ever, using Hegel's *Anstrengung des Begriffs* (effort of the concept). This effort embodies human agency in its purest form, as *animal rationale* (Sartre's être pour-soi).

Historical Precedent

The transition from U to R via D (dialectic), indicated above, does not come out of nowhere but is imbued with the history of Western philosophy from Plato to Hegel. It was exemplified by Hegel when he responded to Kant's philosophy (which means pedagogically that if you study Kant and then take in Hegel's critique of his work you have made the transition we are talking about here).

To give an example, Kant, the high priest of Understanding, posited that human understanding is limited in that we can *think* (in his terms: find Reality) only prompted by sensory input, and that therefore thinking without such input leads us astray, into mere "speculation". (He pointed to categories of thought that make our perceptions *objective* in the sense that they point to Reality). Hegel answered this statement about limits – which pervades and shapes all of Kant's fractured philosophy – by saying that if you posit a limit you have already apperceived what is beyond, due to the dialectical quality of limits from which you cannot exclude what lies beyond them, strictly due to the intrinsic dialectic of *limits of thinking*.

In the good old North American fashion you will ask me: "What can we DO with this NOW?" What I say below is meant to respond to that question, at least indirectly.

About Dialecticism

Let me begin with a comment on the history of dialecticism. Western dialecticism is really only a poor cousin of Asian dialecticism. As Nisbett demonstrated in his "The Geography of Thought" (2005), when you show Asian-born individuals a fish tank, they "see" many different things that Westerners do not see. Westerners typically construct reality based on the notion of *objects having attributes* as you hear any North American mother point out to her child to whom she is showing that "this fish is blue".

Essentially, what Asian individuals nurtured by common sense dialectics pervading their culture "see" is much broader than the objects swimming in the tank because it includes the entire environment that fish swim in as well. For Asians, the fish tank is an *organized whole*, and while on account of their schooling they may not be able to spell out a broad range of dialectical thought forms (in the sense of Basseches and my own work), they have an "intuitive" grasp of a transformational whole that Westerners lack. And therefore the notion that cognitive development in adulthood leads "beyond" logical to dialectical thinking (and seeing) is entirely germane to our global world. Today, Asians are learning the Western analytical tradition (based on formal logic). It by now behooves Westerners to study their own as well as Asian dialectical traditions (which has only begun to happen, and in the West mostly without adequate preparation for transcending formal logical thinking).

What is Dialecticism?

Dialecticism, Western and Asian, has important things to say about the nature of change, development, and crisis which -- thinking merely pragmatically, not ontologically -- contemporaries claim has urgency unseen before. Dialectical traditions have always known more about "change" than any other, seeing change as a mere aspect of transformation from the ground up.

From an adult-developmental vantage point, dialecticism is a *frame of reference* that becomes accessible to adults only after formal logical thinking has been mastered in early or middle adulthood (although some never master it). However, even then dialecticism remains a closed book for the majority of adults in the Western world, while in Asian cultures, nurtured by Buddhism, it more easily assumes a common sense form.

Dialecticism is based on the *experience* (stance) – not simply "thought" -- that the world (including people) is in itself contradictory and full of crevices or, to speak with Bhaskar (1993), is "punctuated by absence" (by what is *not* there, unfulfilled, hidden, etc.). In the

Asian frame of reference, negativity (absence, Sartre's négatité) is acknowledged and considered an integral part of Reality (as distinct from mere Actuality).

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A simple-minded "definition" of *dialecticism* would be that it is a way of seeing the world in which contradiction lies in the nature of things as *finite* things (things that contain their own demise), and that wherever reality is thought about *holistically*, the mature perception of contradictions – say, between whole and part, self and other, subject and object -- enforces a privileging of larger organized wholes over isolated individuals and entities that, by definition, will vanish. This would seem to have been Wilber's original intuition before it got "logicized" by him into four only externally related quadrants (associated with an adhortation but no tools to follow it).

Felicitously put, dialecticism lets us perceive Reality as pervaded by negativity or *absence* (Bhaskar, 1993), simply because any *Something*, as a finite entity, is defined as being both itself and not itself (its absence), and this "not itself" stems from its intrinsic relationship *to Something Else without which Something would not be what it is* (Houlgate, 2006, 370-435). This is borne out by the notion of "adult development". **If individuals, finite as they are, were not deeply torn over their non-being (unfulfilled potential), they would not experience any *development* whatsoever. What is missing in them at any moment (négatité) is the real motor of their unfolding before their finite nature manifests itself in death (in which they reach their true infinity).**

Misleading Positivity of Western Thinking

While Asian dialecticism is largely part of people's Common Sense, in Western culture dialecticism has never pervaded culture as a whole but has remained a sometimes flowering,

sometimes forgotten, philosophical tradition. Due to this fact, Western dialectical thinking

has retained a semblance of "high-brow" thinking (if not leftist ideology), and has set itself

apart from *Understanding* (including scientific understanding) as *Reason*. This distinction has

been elucidated by 20th century studies in cognitive development which, even when not

venturing into dialectical territory (Commons et al., 1982), have shown empirically that

adults' thinking increasingly tends to re-fashion logical tools as a means of dialectical (meta-

systemic) discourse and dialog.

A not immediately obvious consequence of this is that a purely *positive* definition of reality –

as if no contradictions (*négatité*)) existed – robs reality of its potential for change since

contradiction represents negativity or otherness on which change thrives. Change is nothing

but an "othering" of things compared to the way they presently are (or are understood), and

is not something that is external but rather intrinsic to them as *finite* things undergoing

transformation (Houlgate, 2006, 370-435).

Practical Consequences of Dialecticism for Process Consultation

It would be disingenious to say that dialecticism is a matter of philosophical discourse alone

and thereby relegate it to dusty book shelves. In my view, "dialecticism" is of enormous

value especially to practitioners of process consultation (Schein, 1999) – consultation to

clients' mental process – irrespective of whether they are coaches, leadership development

experts, psychologists, social workers, mediators, management consultants, or teachers of

integral thinking.

This is the case because dialecticism – taught, if at all, only in high-class philosophy

programs, and mostly in Europe -- puts behaviorist, logicist, and even integral, notions of

reality squarely upside down, thereby creating ways of opening minds that are nowhere else

to be found. This is due to the core notion of any dialecticism that *contradictions and absences are an integral part of any piece of the world worth calling Reality* (rather than Actuality, a faint Xerox copy of it). In my 10-year experience of teaching developmental theory from the vantage point of dialectical thinking (www.interdevelopmentals.org), once a student is epistemically ready for such thinking (i.e., has reached at least epistemic position 4), developmental theory enriches not only his/her "thinking" (Tools), but promotes his/her social-emotional development (Stance) as well. In my view, this happens by way of the *Anstrengung des Begriffs* (effort of the concept) that is required for making it through the IDM Program I and II curriculum.

Negativity and Preservative Negation Revisited

I have implied above that what we speak of as *Reality* – that which deeply engages me both social-emotionally as well as epistemically and cognitively -- cannot be separated from what we presently "*language*" as being real for us. By speaking our thoughts in one way or another, we are creating a frame of reference – not merely a context -- that is difficult to escape as we continue to think about the events we are focusing on. We are here encountering insights most clearly elaborated by Hegel (Houlgate, 2006; Liebrucks, 1966):

1. In language, spoken or written, *thought* and *being* are identical.
2. Only as we go on speaking and thinking about what we say (re-flecting it), any "being" unfolds as something increasingly complex and real, moving away from its initial identity with nothingness (lacking specificity) on account of preservative negation in which what we start out with what is never forgotten nor branded as "false".

Put *grammatically*, the relationship of subject to predicate in dialectical thinking is not a matter of describing a fixed subject and assigning to it some attribute (like "the rose is red"), but the rose -- the subject -- remains *undetermined* until the attribution "red" is expanded to other attributions that take into account the process by which the rose grows, the context in which it grows, the relationship in which it stands to the soil and other plants it is found near to (or it forms an ecological environment with), and the transformations it undergoes from its first sprouting in the soil to being fully developed in its blossom. In short, the predicate comprises not a single attribute but *an entire process of dialectical commentary and dialog*, inner and/or outer (see also Bhaskar, 1993).

It might seem to you, living in a nominalistic world introduced by William Seach (*c*. 1285– 1349) as if the issue of negativity, and of subject and predicate in dialectical commentary, is purely a matter of thinking, rather than of reality. But although we can build a whole philosophy on the dichotomy of consciousness and being (as Kant and Sartre have done and as the sciences do), this assumption is not cogent because we only know reality on account of expressing our thoughts of it through language. As *speakers*, we never leave the identity of thought and being behind.

So, then, what is *Reality*?

Reality as we *experience* it is our creation, no matter what it might be "absolutely," independently of us. Moreover, Reality is every individual's personal creation that differs from realities seen by other individuals. While this seems to lead to a chaotic world in which many realities clash with each other, it is rather the multiplicity of meanings that reality has for us as a community that we encounter. What is more, these many realities are actually CONTAINED within -- share common ground in -- the social totality in which we produce

them, whether we call this totality CULTURE or SOCIETY or otherwise. We are thus dealing with a well-structured, languaged totality in which change and crisis are experienced by us (Adorno, 1999). Nothing falls outside of this totality, and it is up to us to find our way in and through it by following the thread of concepts, using natural language as best we can. You might say that this is an impossible task. **But thinking specializes in dealing with impossible tasks**. That is its defining nature.

Transformational Systems

At this point it becomes clear that dialectical thinking has a survival function. Most likely, we would not be at the turning point we are -- defined by global warming and other geopolitical issues -- if a larger part of humanity would muster Hegel's *Anstrengung des Begriffs*. Life on Earth requires "understanding" transformational systems, one type of which is our own body in its connection to what is vaguely called "the ecology". (Obesity is a reflection of the mind.) We could say, then, that the supreme task of human thinking is to acknowledge and grasp transformational systems, -- systems that maintain their identity by constantly changing it (that is, by never being identical with themselves except in a transitory moment of personal and cultural history). Grasping transformational systems seems to be the only possible avenue of "good thinking", on account of the following:

- In its logical structure, social and physical Reality are not uniformly positive but rather are what they are only as punctuated by the absences (negativity) they comprise. (If that were not so, change would be impossible and never an issue.)

- Life is based on negativity (absence) which is its potential.

- *Negativity* essentially refers to what is missing, absent, or hidden, both ontologically (in the sense of Hegel) and epistemologically (in the sense of Sartre's *l'être pour-soi*).

- In human thought as well as any conceivable world, *negativity* comprises three interrelated and inseparable aspects: Context (existence), Relationship, and Process (motion), and these aspects point to transformation which is already presupposed in them.

- When gathered dialectically, these three aspects enable the human mind to think grasp *Reality* as a transformational system.

Thinking dialectically, one could thus define Reality as *a movement through forms or contexts* that is naturally powered by Relationship whose dialectical mandates are carried out by Process (even regardless of time which materializes only within a context rather than creating context; Houlgate, 2006). In this view of the world, Reality brims over with negativity that opens contexts to change, unfolding their absences (what is missing in them), including their potentials.

Through its pervasive negativity, Reality also enables "adult development" which otherwise would have no grounding "in reality" (*in res*) but would remain pure fiction. In reality, what appears to the Understanding as a fixed entity is rather a MOMENT of a movement in which every entity is simply an element, and thus *ideal*. The unceasing movement away from stasis "remediates" the absences that previously existed in the context, and this is perceived by humans as "change" -- an abstraction from everything else that remains the same, without which the notion of "change" would make no sense since change is always relative to what is <u>not</u> changing.

See the Appendix for some thoughts on how to actually learn dialectical thinking.

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APPENDIX

How to Learn Dialectical Thinking

I personally learned dialectical thinking in advanced philosophical seminars (Hauptseminare) of the Frankfurt School, conducted by M. Horkheimer and Th. W. Adorno between 1956 and 1966. I believe today that there are better and quicker ways of learning such thinking, not only due to internet technology, but also because of empirical research on dialectical thinking and its development in the meantime (Basseches, 1984; Laske, 2009). Based on this research, at the Interdevelopmental Institute I have created a comprehensive program for learning about adult development which is pervaded by instruction in dialectical thinking. In a one year program (Program One), I explore with an international study body the Four Quadrants of Dialectic in terms of their associated four classes of dialectical thought forms, and how they pervade adult development, whether considered cognitively, social-emotionally, or psychologically (behaviorally).

In my view, the best way to learn dialectical thinking today is by semi-structured cognitive interviewing of clients who agree to serve as volunteers in students' learning of dialecticism, volunteers who receive feedback from the learner once their case study has been accepted by the IDM Director of Education. In order to write such a case study, the student also studies

social-emotional interviewing and, in addition, learns to work with a psychoanalytically based workplace questionnaire called *Need/Press* (http://www.interdevelopmentals.org/assessment-certification.php).

Starting with an introductory self study course called "Gateway", students learn a range of social deliberative skills whose core is dialectical thinking. Through semi-structured interviewing supported by reading the textbooks for Program One Module A and B (Laske, 2006; 2009), students learn to elicit valid information about an interviewee's social-emotional and cognitive potential and present level of development. Once transcribed, interviews are evaluated in terms of a refined form of Kegan's stage theory (Laske, 1999) and Basseches' phasic theory of cognitive development (1984, refined in Laske 2009). The IDM program, mostly attended by experienced consulting professionals, concludes with the IDM *Certificate of Developmental Assessment* or, alternatively, with a *Certificate of Integrative Thinking in Management*. What, in my view, is most beneficial in this course of study is that developmental interviewing and listening skills, whether social-emotional or cognitive, naturally transfer to all kinds of communication, spoken or written. They become social deliberative skills *tout court*. This is so since the thought forms acquired through the study of dialectical thinking are all "mind openers", both for oneself and others, that change one's habitual ways of thinking and listening, and help one focus on the structure – in contrast to the mere content – of one's own and other people's thinking.

As a matter of fact, the changes to one's listening are probably the most relevant of all benefits of the program described.