

Holarchical Development: Discovering and Applying Missing Drives from Ken Wilber's AQAL Model

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Abstract:

Ken Wilber's AQAL theory synthesizes the partial truths of many fields of development such as evolutionary biology and sociology, developmental psychology, and perennial and contemporary philosophy to name only a few. Some observers, however, have critiqued AQAL's static nature and its overemphasis on the ascendant (versus descendant) path of development. I relate the dynamic drives of Ken Wilber's AQAL model (part of the Twenty Tenets) to its static quadrants and levels. This allows for the quadrants and levels to predict additional drives not specified by Wilber. Thus the model becomes more dynamic. Internal consistency of the model also requires clarification of some key definitions (height vs. depth for example) and assumptions of the model (regarding transcendence and inclusion). The result corrects for the ascending bias. I add that Wilber better integrates the individual-collective duality in his analyses than he does the interior-exterior, a problem that is also corrected with the full set of drives.

1. INTRODUCTION

Contemporary philosopher, and leading integral theorist Ken Wilber has developed a celebrated model called AQAL that is capable of synthesizing and orienting the partial truths of many fields of development such as evolutionary biology and sociology, developmental psychology, and contemporary and perennial philosophy to

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I would like to acknowledge my twin brother, Craig W. Bowman, Ph.D., for his essential role in this endeavor by introducing me to the field of transpersonal psychology, the work of Ken Wilber, and the authors of critiques of the Wilber approach. The benefits of immersing myself in Wilber's writings and of other work in the field have been greatly enhanced by my discussions with Craig.

name only a few.¹ The result provides a powerful mapping of scientific studies and mystical insights that allows for both checks upon the validity of their claims and inclusion of their partial contributions in an integral framework.

This paper refines the AQAL model in important ways by first relating the four total dynamic drives of the AQAL model (part of Wilber's Twenty Tenets) to its static quadrants and levels. This allows for the quadrants and levels to then predict additional drives not specified by Wilber for a total of 24 drives (8 neutral drives, each with 8 corresponding positive and 8 corresponding negative drives). Thus the model becomes more dynamic. The full set of drives then demands clarification of some key definitions (height vs. depth for example) and assumptions of the model (regarding transcendence and inclusion) in order for the refined model to be internally consistent.

The result, what I will refer to as the holarchical model of development, corrects for AQAL's ascending bias (a bias which overemphasizes the path from lower to higher stages of development relative to its dual-opposite path, development of individuals or societies from higher to lower).

Thus, this paper addresses three objections to Wilber's model while including its tremendous contribution. Others have made two of these objections (without correcting for them). One of which is that AQAL is not a dynamic model of development and the other is that Wilber's model or analysis tends to reflect an ascending bias. In *Transforming Voyage*, Peter Collins has claimed that AQAL is a static model and does not lend itself to dynamic modeling of reality. I agree that AQAL is primarily static, yet I disagree with Collins that it does not have the potential to be included in a dynamic version. Other theorists have criticized either Wilber's model in general, or his use of it in practical applications as reflecting what can be grouped as an ascending bias. For example, Wright (1998) believes the model should better include the feminine

¹ The model's name is short for All Quadrants, All Levels, All Lines, All States, All Types. It was introduced in *Sex, Ecology, and Spirituality*, which was first published in 1995 and subsequently revised in 2000. The model incorporates his previous, important work such as a unified field theory of consciousness. His book *A Brief History of Everything (BHE)* is a more popularized, condensed version of SES. Wilber wrote *A Theory of Everything (TOE)* as an overview of his prolific writings (hundreds of articles and over twenty books), while including new applications. Wilber continues to write of his deepening vision of the universe. Draft versions of excerpts (posted on his website) of what he refers to as the second volume in the Kosmos trilogy (where *SES* is the first volume) is tentatively called *Kosmic Karma and Creativity (KKC)*. I refer to *KKC* to point out directions of Wilber's evolving theory, but Wilber does not wish it to be quoted. I assume that the reader has working knowledge of the levels and quadrants of the AQAL model.

perspective. Ascending and descending drives are further refined correcting for the ascending bias in this paper and thus accommodating the Wright critique, at least in part, since Wilber associates ascending with masculine and descending with feminine (*Brief History of Everything, BHE*, p. 232). Washburn (1998) argues that the model is too linear and that the importance of higher levels is over emphasized. On this I agree, although I do not agree with Washburn when he claims that the number of levels is over specified in AQAL.² Yet, by allowing for differing relative intensities of development among developmental stages, Washburn's partially valid point can be honored. For example, the relatively higher stage of development, the integral stage needs to include a *deeper essence* of lower levels.

We will see that this better matches data from Spiral Dynamics. Spiral Dynamics is the model of development by Don Beck and Christopher Cowan, who have continued the work of Clare Graves. Wilber often refers to the Spiral Dynamics stages of development, which are called memes, as he would with his own stages within AQAL, what are called fulcrums. Specific memes are denoted by colors. From lower to higher, they are beige, purple, red, blue, orange, green, yellow and turquoise. The latter two are called second tier stages, while the first six are first tier. Although development proceeds along various lines of development (such as cognition, values, needs, etc.) through stages, and development can be uneven (high cognitive development and low moral development for a particular individual, for example), these stages are referenced by Wilber generally. The memes were, at least initially, developed for the values line of development. Yet the memes can be used to represent the correlative stage of development in various lines. I will refer to the memes this way unless I specify a particular line of development.

Data shows that individuals at yellow or integral, a relatively very high level of awareness, are at the first stage at which individuals can honor the perspectives of all lower stages. This implies that lower levels can be better included at the yellow stage than they were at previous stages. For example yellow better integrates blue than orange

² I agree with Wilber that three levels are needed at a minimum to distinguish the transpersonal from the personal and pre-personal levels.

does. Better inclusion can be described as positive descending development, while transcendence to higher stages is positive ascending development.

The third objection is that Wilber's analysis may also reflect an interior bias, or at least a lesser synthesis of the interior-exterior duality compared with the individual-collective one. His recent draft of *Kosmic Karma and Creativity* contains a claim that reality is composed of perspectives rather than his earlier contention of reality comprising holons. McIntosh (2007) argues that this is a form of reductionism that reduces reality to the interior realm. The discovery, here, of drives corresponding to the interior-exterior axis provides a check on reductionism to either the interior or exterior realm. We will also see that since positive and negative drives are associated with each axis (with examples given for each here), a check is in place for what Zimmerman (1998) describes as Wilber's polemical style with his disproportionately critical and harsh comments on what Wilber describes as descenders or flatlanders.³ Although Wilber's insight of modernity's reductionism of reality to the exterior quadrants is an important insight, the polemical style and interior bias may both reflect an imbalance in working with the interior-exterior axis.

The approach in this paper acknowledges, therefore, that there are perspectives of lower stages such as those from tribal, agrarian, and traditional cultures that can be better included, without indiscriminately accepting their limiting awareness, in a truly integral society. This would better orient (if added to Wilber's incorporation of level-specific pathologies) the point that Kremer (1998) makes with regards to the exploitation of indigenous cultures, and the negative aspects of development that receive insufficient attention in the formal specifications of AQAL. The resulting model may also encourage us to answer Puhakka's (1998) call to play, her thought provoking challenge to Wilber, to more often play with the positive descent.

The objections to AQAL stated above do not imply that the AQAL model is inherently deficient. On the contrary, it seems to be the most inclusive, most transcendent available. So let us work to improve it (rather than merely deconstructing it) to allow the user of the model to better analyze developmental data and to better

³ Zimmerman was referring to Wilber's writings in the original version of *Sex Ecology and Spirituality*, (1995). In my reading of the revised edition, this style is still evident.

determine which directions of development would have the highest benefits in excess of the time and energy costs of investment in those movements.

2. STATIC SPACES AND DYNAMIC DRIVES OF DEVELOPMENT

In *Sex, Ecology, and Spirituality, the Revised Edition (SES)*, Wilber lists approximately twenty stylized dynamic facts of overall development, what he calls the Twenty Tenets. They are listed in the appendix.⁴ Wilber states that they should not be considered exhaustive and that some may not hold up. Tenet 1 states that reality is composed of *holons*, which are *whole/parts*. Reality is not atomistic (only parts), nor is it holistic (only wholes). Rather, there are *wholes* that are *part* of larger *wholes*. There are also *parts* that are relatively independent, while similar *parts* may join and be taken up in larger *wholes*.

According to Tenet 2, all holons have four pulls or drives, two of them are horizontal, agency and communion, and two are vertical, self-dissolution and self-transcendence. Horizontally, autonomy represents the holons separateness while communion represents its togetherness. There needs to be a balance between them for growth according to Wilber. Too much autonomy is characterized by alienation while too much communion results in indissociation. Thus Wilber, it can be said, describes two horizontal drives, both with healthy and pathological versions. With balanced autonomy and communion there is the opportunity for one of the vertical drives, self-transcendence. This is when a new wholeness/partness (integration/differentiation) emerges. The holon reaches a higher and deeper level. Without balanced autonomy and communion, there is a chance for the negative vertical drive, self-dissolution. This is when the holon breaks up into its constituent parts in the order they were initially built up.

2.1 Development and the Relation Between Drives and Axes

Wilber writes that interactions involve processes of translation (changes in the horizontal dimension), transformation (changes in the vertical dimension), and transcription (the relationship between translation and transformation). We will see that

⁴ There are actually nineteen tenets counting the sub-parts of each numbered tenet. Tenets 2, 3, 4, 10, and 12 (including their sub-parts) are strictly dynamic tenets, according to my reading. The other tenets provide constraints on dynamic possibilities.

the additional drives allow horizontal and vertical changes to more completely connect these processes to the 4-quadrant, many level approach.

Again, Wilber does not relate the drives necessarily to the static components of his model: the quadrants, level, states, lines, or types. I will first show how the two horizontal drives of holons can be related to the quadrants of any particular level. The four quadrants are divided by two axes, the interior-exterior axis and individual-collective axis. Reality cannot be reduced to only one quadrant, a violation that Wilber calls quadrant absolutism. Since autonomy and communion are specified by Wilber as horizontal drives, they should be thought of as two drives into the individual quadrants and collective quadrants, respectively. Autonomy is the drive to become more individual (more separate) while communion is the drive to be more connected in the collective (more together). This avoids confusion because there are also vertical drives relating to greater partness and wholeness, which will be addressed in Section 3.2.

In order for a higher level to emerge, there must be a transcendence of the limitations of the lower, but inclusion of the partial truths of the lower. This implies greater differentiation at any existing level, which is integrated from a new, higher level. This results in greater relative autonomy and communion for the entire holon. Thus, development is not just a matter of balanced autonomy and communion, but rather beneficial ways to increase autonomy *and* communion.

I consider *positive drives as ones of holons that tend to develop the holon*. Therefore, they tend to emerge from healthy aspects of holons. *Negative drives (within or between holons) are drives or actions of holons that are not consistent with further development*. Negative drives may emerge from pathological aspects of holons. *Actions and their corresponding drives can also be neutral without the tendency to develop a holon or prevent the holon to grow*. As we proceed, examples will demonstrate that drives can occur within or between individual holons.

We can think of indissociation or *indiscrimination as a negative drive into the collective quadrants*. Conversely, *dissociation is the negative drive into the individual quadrants*. This mapping can be beneficial. Take for example an individual holon that is imbalanced with too much agency. We would like to pinpoint the source of pathologies that tend to prevent movement towards greater communion. After all, there should be

greater individual benefit in the form of development if the imbalanced individual holon communes relatively more. The great advantage is that there are data on development in self, society, and culture. Mapping of drives link them to the stocks of development along various lines.

I describe the neutral drives associated with the individual-collective axis as individuation and collectivization, respectively. Autonomy represents positive individuation while communion represents positive collectivization. An example of autonomy (in society) is the implementation of religious freedom that honors the individual's choice to worship as one pleases. Communion includes individuals working to learn the language of the collective so that one can understand the shared meaning of the collective and to be able to communicate one's ideas in that shared space. Dissociation exists when, for example, there is alienation from the collective. This could occur perhaps because the individual does not work to understand the place for which it fits into the collective, and instead tunes out. The collective could also play a role in ignoring the unique contribution the individual is capable of making. An example of indiscrimination is when a baseball coach uses a random process to choose positions for the players irrespective of their differentiated abilities and preferences.

Table 1 summarizes the axes of holons and their corresponding dynamic drives. Only the drives associated with the individual-collective axis has been articulated so far. In the next section, I will address the drives associated with the interior-exterior axis. The internal-external duality and its corresponding drives will be formally defined in Section 2.3.

Table 1
The Four Static Axes and
Their Neutral, Positive and Negative Dynamic Drives

<u>Horizontal Axes</u>	<u>Horizontal Drives</u>	
<i>1. Individual-Collective</i>	<i>Into the Individual</i>	<i>Into the Collective</i>
Neutral	Individuation	Collectivization
Positive	Autonomy	Communion
Negative	Dissociation	Indiscrimination
<i>2. Interior-Exterior</i>	<i>Into the Interior</i>	<i>Into the Exterior</i>
Neutral	Interiorization	Exteriorization

Positive	Reception	Transmission
Negative	Introversion	Extroversion
<u>Boundary of Holon</u>	<u>Border Drives</u>	
<i>3. Internal-External</i>	<i>Into the Internal</i>	<i>Into the External</i>
Neutral	Internalization	Externalization
Positive	Positive Internality	Positive Externality
Negative	Negative Internality	Negative Externality
<u>Vertical Axis</u>	<u>Vertical Drives</u>	
<i>4. Senior-Junior</i>	<i>Senior Pole</i>	<i>Junior Pole</i>
Neutral	Ascension	Descension
Positive	Transcendence	Inclusion
Negative	Submission	Repression

2.2. The Interior-Exterior Drives

Having established drives associated with the individual-collective axis, there must exist, in my opinion, two neutral drives associated with the two poles of the interior-exterior axis as well, each with positive and negative versions. I call them, in a neutral sense, *interiorization (into the interior quadrants) and exteriorization (into the exterior quadrants)*. Although Wilber does not associate interiorization specifically with the dynamic drives, or more generally with the Twenty Tenets, he does do more work at differentiating the interior-exterior quadrants in the online draft with the working title *Kosmic Karma and Creativity (KKC)*. In *Integral Psychology (IP)*, Wilber refers to Piaget's concept of interiorization. "Piaget speaks of interiorization when schemes of action - meaning rules for the manipulative mastery of objects - are internally transposed and transformed into schemes of comprehension and thinking."

Positive interiorization I term reception, whereas negative interiorization is called introversion. An example of reception is reading a book such as Wilber's *SES* that expands one's awareness. Introversion may take the form of over identification with the interior such as a new-age claim that an individual can change his entire reality in this relative world if he recognizes that (exterior) form is illusory. A slave, however, cannot remove his physical shackles and live a free life with only that realization. He can only choose to change his reception of it, such as his emotional and mental response to it.

I'll refer to positive exteriorization as transmission while negative exteriorization is called extroversion. Putting a brilliant insight into writing is an example of transmission. Extroversion, on the other hand, tends to over identify with the exterior such as insisting that our thoughts are purely by-products of chemicals in the brain implying that we never have a choice in how we think and react to exterior stimuli. Thus, when Wilber describes versions of flatland in which perceptions of reality are collapsed into only the exterior world, he is referring to what I'm calling extroversion.

2.3. The Internal-External Duality

Following Whitehead, Wilber considers the highest level of the holon to be acting as the leader of the holon. For individual holons, this leadership location, from which subholons take their cues, is referred to as the *dominant monad*. Collective holons, on the other hand, have a *regent-nexus* (analogous but different from the individual's dominant monad) *that guides the behavior of the members*, such as rules, customs, and directives of the leader. *Only the intersections of the co-members are internal to the collective holon.* For example the laws and norms of the community guide the intersections of the members who are internal to the community when they follow them.

A subholon is internal to the dominant monad or regent nexus of a holon whenever it is following the agency of the holon. Tenet 12.e states that development has increasing telos (increasingly, "the end point of the system tends to 'pull' the holon's development in that direction" (SES)). When self, culture and society are not fully actualized, Tenet 12.e implies that there exists, by involution degrees of integration and differentiation that have yet emerged.⁵ These degrees are external to self, society, and culture. Those degrees of differentiation and integration that have been actualized are internalized. Thus internal-external duality must be integrated into the AQAL model and have corresponding drives.

⁵ I refer to self, society, and culture as the Big Three while Wilber often refers to self, nature, and culture as the Big Three. In Bowman, K. J. (2008) I argue that the evidence suggests that Wilber's four quadrants should be re-collapsed such that the two individual quadrants become the self or simply the individual, while culture represents the collective-interior quadrant and society represents the collective-exterior quadrant. Wilber collapses the two exterior quadrants into nature leaving self to be represented by the interior, individual quadrant and culture is the collective-interior quadrant. Regardless, this distinction has no bearing on this paper.

The distinction between internal and external can be thought of as the membrane or boundary of holons. Internalization is a neutral drive into the agency of the holon from without (becoming internal to the holon) and externalization is the corresponding drive away from agency of the holon from within (becoming external to the holon). Neutral internalization and externalization can have positive and negative versions. *I call the positive versions simply positive internality and negative internality and the negative versions negative internality and negative externality.* When education of worker A makes worker B more productive because B learns from A, A's acquisition of education is a positive internality for B originating from A. Yet worker A does not lose the skills associated with that education, only B's skills are made more effective. When a firm pollutes a river, this is a negative internality for the town downstream that must spend more to filter its drinking water, which it gets from the river. As long as there is no enforced law that prohibits the pollution, this pollution is not acting against the agency of the collective holon, the town. The polluted river water is within the intersection of the town.

An enforced tax on pollution will induce the firm to consider the costs of pollution in its decisions. It will lead to less pollution when the cost of reducing pollution is less than the savings from fewer tax liabilities from not polluting as much. The taxation that leads to less pollution, but more taxes, is a negative internality for the firm and a positive externalization for the downstream town. There is a net benefit to society when the costs of reducing pollution are less than the societal benefits of cleaner water, which comes from forcing the firm to internalize the pollution. If so, the tax policy is, on net, a positive internalization for society as a whole. Dynamic benefits could be larger if the firm is better at developing technologies to reduce the cost of eliminating pollution at the source than is the town downstream. We can also think of releasing limiting thoughts or the destruction of a virus by antibodies as positive externalities. The loss of awareness by not maintaining insights from a peak experience, or a regression to a more limited view are examples of negative externalities. Table 2 summarizes some of the examples previously given for each holarchical drive.

Table 2
Examples of Holarchical Drives

1. *Interior- Exterior Axis*

<u>Interior Pole</u>	<u>Exterior Pole</u>
POSITIVE DRIVES	
Reception Reading a book that expands your understanding	Transmission Putting into writing a brilliant idea
NEGATIVE DRIVES	
Introversion Over identifying with the interior such as projecting a new-age thought that we can change <i>all</i> of our reality by recognizing the exterior is illusory	Extroversion Over identifying with the exterior such as maintaining that thoughts are only a product of chemicals in the brain so that we have no power to change them with conscious effort

Table 2 (continued)
Examples of Holarchical Drives

2. *Individual-Collective Axis*

<u>Individual Pole</u>	<u>Collective Pole</u>
POSITIVE DRIVES	
Autonomy Honoring individual choice; respecting the individual perspective for its partial truth.	Harmonization Being respectful of the collective; contributing to social value; learning the language of the collective
NEGATIVE DRIVES	
Dissociation Alienation from the collective; or not honoring or understanding the individual perspective	Indiscrimination Indiscriminately accepting all individual choices as equally valid

3. *Internal-External Axis*

<u>Internal Pole</u>	<u>External Pole</u>
POSITIVE DRIVES	
Positive Internality For society, taxing gas to make drivers bear the cost of pollution	Positive Externality Releasing limiting thoughts; the destruction of a virus by antibodies
NEGATIVE DRIVES	
Negative Internality The absorption of pollution by an innocent bystander	Negative Externality The loss of awareness from a peak experience that is not maintained; regression to a more limited view

1. *Senior-Junior Axis*

<u>Senior Pole</u>	<u>Junior Pole</u>
POSITIVE DRIVES	
Transcendence Releasing the attachment to the notion that demons cause illness in order to be open to the germ theory	Inclusion Enjoying to eat healthier such that the lower hunger drive is satisfied along with a rational understanding

of disease

of how food affects the system

NEGATIVE DRIVES

Submission

Denying the ability to attain higher awareness with integrative transformative practice (rather, thinking only through death can one go higher)

Repression

Denying greater potentials of the lower (e.g., one *must* abstain from sex to transcend lower expressions of it)

3. VERTICAL DRIVES AND OUTCOMES OF DEVELOPMENT

3.1. Holarchical Outcomes

Wilber's vertical drives of self-transcendence and self-dissolution, part of the Twenty Tenets, can be relayed to the levels and quadrants of *AQAL* by recognizing them as outcomes rather than drives. *According to Tenet 12.b, positive development results in greater differentiation (a new partness according to Wilber) and integration (a new oneness).*

So self-transcendence takes a positive connotation while self-dissolution is negative. *Taking self-transcendence and self-dissolution as drives alone would reflect an ascending bias since there is only a positive ascending drive and a negative descending drive. Considering self-transcendence and self-dissolution as outcomes of holarchical drives corrects for this bias.* Self-transcendence is a result, one with greater integration and differentiation. Self-dissolution, on the other hand, is a result with less integration and differentiation. This is just as greater or less development (integration-differentiation) are results or outcomes of drives. This is not to say that integrating and differentiating cannot be described as drives.

3.2. The Ascending-Descending Axis and Drives

Greater vertical integration and differentiation is only possible with inclusion as well as transcendence according to Wilber himself, in Tenet 5. I consider transcendence to be the positive ascending drive while inclusion is the positive descending drive. As with the other drives, vertical drives should include neutral and negative versions as well. In neutral form, they are called ascending and descending drives. I let submission label the negative ascending drive and repression as the negative descending one.

Transcendence supercedes the limitations of the lower. It sees a greater order requiring a letting go of a lower perspective and the lower's autonomy. Inclusion retains the partial, but also deeper essence of the lower and thus includes greater communion with the lower.

Transcendence can take the form of de-identification with the limitations of the current worldview allowing for a more expansive one. Suppose that an aid worker from the World Health Organization is trying to convince villagers in a poor country to boil their water prior to drinking it. The aid worker will not be convincing in explaining the germ theory of disease if the villagers cannot transcend their beliefs that demons, for example, cause illness. The villagers must detach and transcend these beliefs in order to accept the scientific explanation.

The aid worker may be more successful in the short-term in preventing illness by converting the reason for boiling water into their existing worldview. She may ask the local medicine man to tell the villagers that boiling water protects the food from being manipulated by demons. This is an example of inclusion, getting more out of the lower. A more successful outcome is achieved by including a healthier mythical view more consistent with the rational view. Here demons are merely a symbol for germs.

For another example of inclusion, suppose a rational person knows how to eat healthy but eats unhealthy to satisfy his bodily tastes. Inclusion would permit the lining up of the bodily tastes to conform to the rational knowledge of a healthy diet. That person could begin to enjoy eating healthier while starting to crave healthier tastes.

One way of describing imbalances between ascension and descension, according to Wilber, is over identification with the other world or this world. There seems to be confusion and disagreement about his integration of this essential duality. We can think of the negative ascending drive as attributing past change or need for change as too much "from this world" or "toward the other world". This attributes too much to evolution or transcendence and can be referred to as an *ascending bias*. Meanwhile, the negative descending drive equates to attributing development too much "from the other world" or "towards this world". It attributes too much to involution or inclusion and can be described as a *descending bias*. Hopefully, the dynamic vertical drives will help avoid the confusion.

Consider the emergence of three-dimensional perspective in art. This was the result of a cognitive development in evolution that allowed for the ability to see in three dimensions and to be able to represent it on a two-dimension surface. A third dimension pre-existed from involution. It would be a descending bias to assert that at the time that these drawings appeared signals that a third dimension came into being at that time. Thus it was not a contemporaneous descension of the third dimension that suddenly allowed for the advance in art. Rather it was an evolutionary (ascending) development of cognition that allowed for a pre-existing dimension to be recognized. Only in that sense did it descend, three dimensions were made more understandable to man with this development.

Evolutionary biologists that attribute a new species entirely to random mutations have an ascending bias if, in fact, the new species owes any of its emergence to the potential of a more complex, higher developed species given by involution. According to tenet 12 listed in the Appendix, this involutory potential acts as a magnet that pulls evolution through higher levels if development is balanced.

Alienation or dissociation (negative autonomy), fusion or indiscrimination (negative communion), extroversion (negative exteriorization), and introversion (negative interiorization) are examples of *pathological heterarchy*, unhealthy relations within a level of a holon. *Pathological hierarchy* is where there is an unhealthy relation between levels within a holon. Submission and repression are examples.

Submission (negative ascension) does not accept that the holon can reach a higher level of awareness within itself. It acts as if its impulses are the highest attainable, precluding higher aspirations to drive it higher. Or, it submits to a higher power without letting go of its limitations or undergoing the work needed to be within, feel, think, or experience a transcendent awareness. Higher levels can be overwhelmed by lower impulses such as when the lower sex drive acts arrogantly and does not allow for movement towards higher aspirations.

As with all drives, the expression a drive takes depends on the level of the holon's development. One may take no responsibility for one's lot in life, for an example of submission from the Blue meme, and merely pray for a better life. An example from the Orange meme is attributing emergent evolution to random genetic mutation rather than

involutionary potential realized by progress in the gross realm (i.e., nature does not inherently contain the raw ingredients to generate the proper circumstances for emergence when properly enacted, it must come from a random, mutation, external to a potential, higher agency of an existing holon).

Repression (negative descension) denies the lower's basic structure, its partial truths (whether in its existing, less inclusive form or in its potential form). When a church denies that its patrons can have a personal relationship with God without translation from the clergy, who alone are more "God-like", those patrons are repressed. When one believes that the sex drive must be sacrificed forever for continued development even though sex may be used to express higher union, or for a connection between opposing polar energies, that drive is repressed. When a totalitarian regime (the higher level of social hierarchy) attempts to stifle free speech of the media (a lower level of the social hierarchy than the ruling regime), the capabilities of its citizens to question its leaders are repressed.

Table 3 summarizes outcomes such as *self-transformation*, my preferred term for positive overall development (rather than self-transcendence to distinguish it from the drive of transcendence), which results from balanced, healthy drives of holons, and *self-dissolution* that results from negative, pathological drives.

Table 3
Long Run Outcomes of Drives

<u>Outcomes</u>	<u>Drives (facilitating the outcomes)</u>
<p>1. <i>Self-Transformation</i> More: a. integration-differentiation b. complexity c. structuration-organization d. (depth)X(span)</p>	<p><i>Through Positive Drives:</i> i) autonomy-harmonization, ii) transmission-reception. iii) positive internalization-externalization iv) transcending-including</p>
<p>2. <i>Self Dissolution</i> Less: a. integration-differentiation b. complexity c. structuration-organization d. (depth)X(span)</p>	<p><i>Through Negative Drives:</i> i) dissociation-indiscrimination, ii) extroversion-introversion, iii) negative internalization-externalization, iv) submission, repression</p>

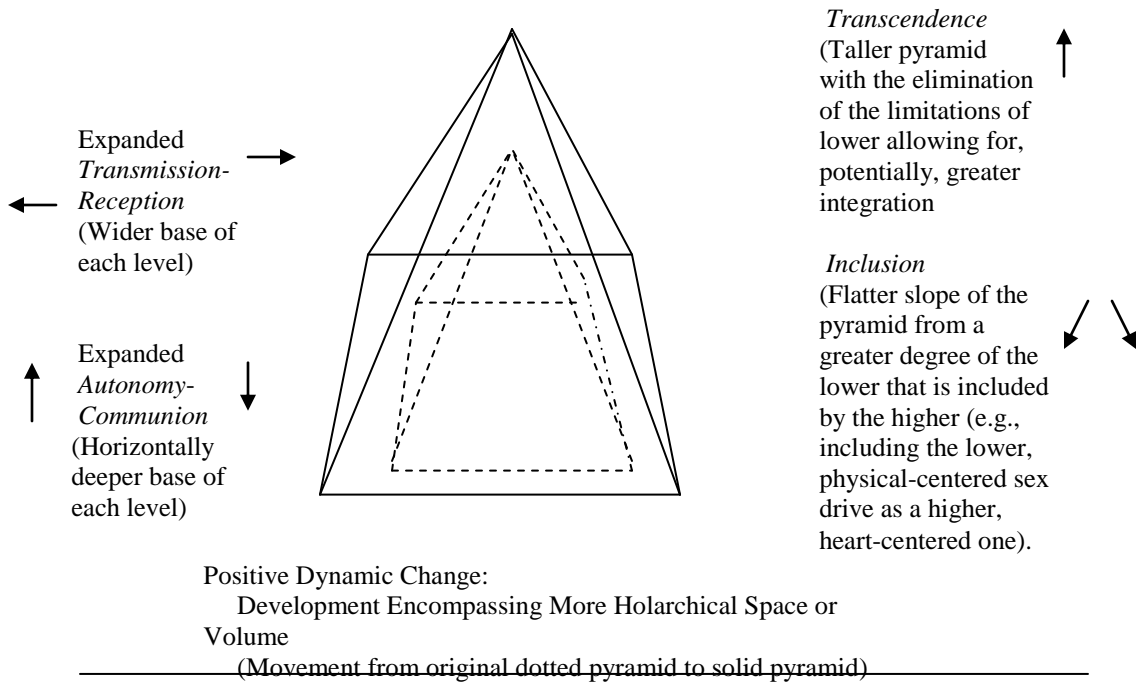
3.3. Balanced Development

So, positive, balanced interiorization (reception), exteriorization (transmission), individuation (agency), and collectivization (communion), likely result in transformation of the holon (individual, societal, or cultural), which implies positive ascension (transcendence) and descension (inclusion). Greater integration and differentiation are internalized while pathologies and limitations are externalized.

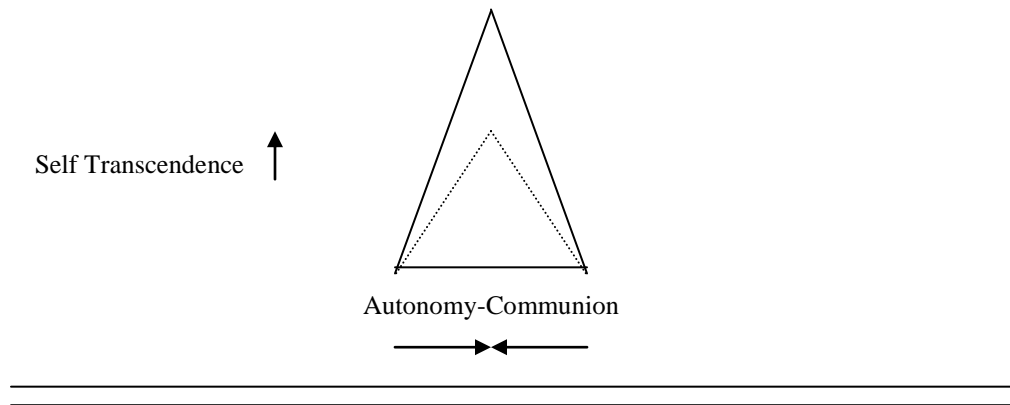
Negative, or imbalanced interiorization (introversion), exteriorization (extroversion), individuation (dissociation), and collectivization (indiscrimination) prevent transformation of the holon. Negative ascension (submission) and descension (repression) occur. Therefore there is lesser integration and differentiation (through negative externalization for the holon) while limitations and pathologies are internalized (negative internality). Self-dissolution becomes more likely.

Balanced development in the holarchical specification of dynamic drives can be represented geometrically as a three-dimensional pyramid growing in volume with expanding geometric height, width, and depth. Wilber states that his many-leveled four quadrant diagram on p. 198 of *SES* and also be drawn, “as a series of interfolding, or nested pyramids, so that several of the multidimensional relationships within each quadrant could be better indicated.” Therefore, we should also have dynamic drives that are capable of representing movement to a larger pyramid that envelops smaller ones. Here, the base of the pyramid gets larger at a given level with greater horizontal development. Transcendence allows for a taller pyramid, and greater inclusion allows for a steeper slope to include more of the lower. This is shown in Figure 1. Essentially, Wilber's drives alone describe balanced development as a two dimensional triangle increasing in area as drawn in Figure 2. This is because he does not formally fully distinguish between positive ascending and descending development, nor does he incorporate the drives of the interior-exterior axis. Development is always associated with movement to higher levels. The lower levels are not made more expansive. They are not included in a deeper embrace, just included as-is in these dynamic specifications.

Figure 1. Balanced Holarchical Development



**Figure 2
Balanced Development from Positive Drives in Wilber's Formal Dynamics**



4. DUAL VERTICAL DEVELOPMENT

4.1 On the Distinction Between Height and Depth

I will now attempt to formally show, even in Wilber's less formal dynamic analysis beyond his twenty tenets, that there are some inconsistencies in is vertical

development. According to Tenet 6, the lower sets the possibilities of the higher; the higher sets the probabilities of the lower. Therefore, within the lower, there is the possibility for higher levels than have yet emerged. Balanced self-transformation requires, vertically, transcendence of a given probability, which is associated with greater inclusion of corresponding degrees of possibilities. It is Wilber's contention that height and depth have equivalent meaning and both can be given by the number of levels in a holon (*SES*, p. 66). Tenet 7 includes this definition. This does not allow for relatively healthy, but skewed vertical development. *I define the height of a holon as the level at which the dominant monad or regnant nexus resides* (presumably the upper point of the pyramid in Figure 1), *while depth is the degree to which the lowest level is included* (the slope of the pyramid).⁶

Differentiation and integration are not always simultaneous (nor are transcendence and inclusion, reception and transmission, and autonomy and communion). Perhaps sustained, long run development over several stages requires transcendence and inclusion in cycles (as well as cyclical reception and transmission, and cyclical autonomy and communion). So, it is also possible that in the given levels specified by Wilber's fulcrums or Spiral Dynamics' memes, there may be natural movements to another stage that represents greater transcendence relative to the degree of inclusion (Blue to Orange, perhaps in some sense like transcending a dogmatic religious believe that one must be a member of the "only correct" religious denomination to be saved), compared with movement to another stage (such as Orange to Green in a corresponding spiritual sense such as including meaningful symbolism of Mother Earth, that we must protect the environment in order for Spirit to continue sustaining our way of life). The full set of drives more formally allows for Spiral theories of development. Wilber states that levels can be as finely divided as one would like, but that levels cannot be skipped. But the finer we divide the levels the more likely that the sequence of basic structural development is not perfectly balanced. So in fact, equating height and depth implies that one must divide the levels wide enough such that increased differentiation and integration must be equally attained for sustained self-transformation, if that is even possible.

⁶ Alternatively, in theory, we can think of height as the highest actualized level, while the center of gravity is the level at which the dominant monad or regnant nexus resides.

Wilber writes that the lower and higher have equal *ground value* as manifestations of Spirit. Meanwhile, the lower has more *extrinsic value* (as a more fundamental part, it has great value for others), and the higher has more *intrinsic value* (the greater the height, the greater the consciousness and relative wholeness and partness). This is a nearly wonderful integration, but I am still uncomfortable with the definitions. I make the following distinctions. *The greater the height, the greater the probability of relative wholeness* (not wholeness and partness as with Wilber) *and therefore intrinsic value since it allows for greater integration of the actualized lower. Greater extrinsic value, conversely, represents the potentially greater fundamental partness from greater differentiation at a given level.* I'm suggesting that relatively greater transcendence brings about what was the potential from greater intrinsic value of that height. This is developing higher (for example cognitively thinking reasonably instead of mythically). Conversely, relatively greater inclusion actualizes what was potential extrinsic value at the lower level, i.e., developing deeper (for example, treating animals humanely instead of sacrificing them to the gods, or, creating children's books with spiritual truths translated as myths more consistent with further development – Spirit, in which we are a part, is always creating Earth - than other myths – God created Earth in six days).

A molecule transcends and includes atoms. In order for an autonomous atom to join others to form a molecule, the limitations of that atom must be transcended. The atom's generality, in the sense that it is an independent unit responsible for all its atom-ness, is turned off. What is turned on is a more specialized function that in combination with other specialized functions of other atoms allow for the emergent aspect of the molecule. The sum is greater than the parts. The excess, the emergent surplus is not entirely due to transcendence - overcoming the limitations for a higher generality of the dominant monad residing at the height of the molecule, some is due to inclusion of a deeper, specialized function of the atoms.

As higher cognitive theories in physics have been developed, we have learned more of fundamental particles allowing for the splitting of the atom unleashing unheard of energy from something so small and fundamental. The potential for this pre-existed in matter as did the mathematics to $E=mc^2$. So going higher cognitively allowed for fuller inclusion of the lower atom and subatomic particles. But the subatomic structures were

not included in their present state to build a nuclear power plant; they were included in their deeper essence (assuming nuclear power from and for human society is more significant than the combinations of these atoms prior). With string theory, there is the possibility that we have learned of physical dimensions that may pre-exist. The string theories are capable of synthesizing quantum mechanics and relativity theory. This extremely complex, integrative, cognitive realization in our consciousness is associated with the delving deeper to uncover even more fundamental particles.

Not to fully appreciate the difference between higher and deeper might be associated with the over identification of the interior, or with the incomplete integration of the interior-exterior axis of the model. Balanced development occurs with the transcending to higher levels and then including matter, not in its present form, but in its deeper form. Again, transcending and including are opposing vertical forces and they will result in two opposing outcomes. Greater transcendence results in a higher holon and greater inclusion results in a deeper holon. If one views matter as not capable of getting deeper, one may tend to exaggerate Orange, rational, empirical views as pathological, as over identification with the exterior and lower realms. A nondual and spiral approach would better allow for this to be a natural counter balance to the overly interior, ascending view of the Blue meme. Acknowledging this does not preclude one from still concluding that modernity has included severe pathological reductionism.

I hope that these refined vertical dimensions of the holarchical model help us better understand the eloquent words of Wilber, “that the Ascending and Descending currents need to be integrated in the nondual Heart” (*BHE*, p. 229) since the heart chakra tends to be lower than the mental chakra. In *SES* p. 607, Wilber cites Da Avabhasa who has shown that those experiencing, “the surpa-individual causal Witness has its bodily correlate in the heart region.” Perhaps, we can say, at least figuratively, that this is a relatively high, deep, and wide experience with its epicenter in the central chakra.

4.2. Planes from Involution

Visser (2003, cited in C. Bowman, 2006) argues that Wilber's model could benefit from the inclusion of creation planes, which abound in the theosophical literature. Planes, according to Visser, can provide a needed ontological basis for psychological

development. Here, I do not rely on channeled material. Although channeled teachings and other theosophical literature support planes, I argue that planes are necessary for internal consistency in an *AQAL* model that includes involution, and the tenet that evolution has directionality, a) increasing complexity, b) increasing differentiation/integration, c) increasing organization/structuration, d) increasing relative autonomy, and e) increasing telos.

In *KKC*, Wilber rightfully critiques the metaphysicists for attributing too much of development to awakening to pre-given higher levels rather than to our pluralistic paths that carve them out. Yet Wilber's model describes involution as Spirit differentiating from Spirit to Soul to Mind to Body to Matter, from higher to lower. This, he states, is prior to the evolution from lower to higher, from Matter to Spirit. The descent or involution, however, is described entirely as occurring in the past. Our development forward in time is purely evolutionary in this description. Involution, I believe, can also be used as a correlate to inclusion. Greater inclusion is the actualization of the lower's greater potentials given to us by involution. In one sense when pioneers explore the higher, they are accessing "planes" that pre-exist from involution. Mystical philosopher Sri Aurobindo has written in detail of these planes. Yet he may have a descending bias since he often states that his realizations automatically and newly make higher potential accessible. Rather, his writings and co-developments in culture and society increase the probability that others will open to higher and deeper consciousness.

Since higher levels must have the potential to integrate the lower levels and allow for greater differentiation of the lower levels, then this is a pre-given of higher planes prior to actualization through transcendence and inclusion. *If the Nondual actualizes in the relative world first by involution from Spirit to Soul to Mind to Body to Matter followed by evolution in the reverse direction, then planes of existence are laid down as potentially higher, emergent actualized levels of development.* This theoretical construct helps explain how the emergent newness of higher holons can come into existence, how dirt can eventually get up, walk, and think. Balanced autonomy and communion allow for it according to Wilber. I add transmission and reception, but these horizontal drives are still inadequate to explain emergence. A pre-given involuted plane that is one level

above that which has already actualized can explain how a healthy holon with balanced, positive drives can resonate with an existing, higher, subtler plane.

According to Aurobindo (1995), with the ascent to a higher level, at least to the level to which we must ascend in the future, there is also a descent of something that pre-exists and the lower is made more magnificent. This is detected in the following passages (the first from pages 22-24 and the second from page 5):

"Spirit is a final evolutionary emergence because it is the original involutory element. ...if Matter which is a blind form of the Spirit were to become more alive with the hidden power within it and to offer more readily the secret sense of things...this would be an immense change promising greater changes in the future."

"It is only the full emergence of the soul, the full descent of the native light and power of the Spirit and the consequent replacement or transformation and uplifting of our insufficient mental and vital nature by a spiritual and supramental Supernature that can effect this evolutionary miracle."

I agree with Wilber that the characteristics of actualized higher levels are probabilistic (a contribution of postmodernity) as they depend on our paths and how the pioneers carve out morphic grooves. They will depend also on how the experiences are transmitted into society and received by culture. But it is my contention that *there are greater degrees of both determinism and free choice than we can conceive of in our developmental paths*. This is how we can reconcile the age-old question of determinism versus choice. There is more relative autonomy at higher levels according to Wilber, but in order to access a higher level, a holon must be capable of communing with higher planes. There are pre-existing, limiting potentials of higher levels with which one must resonate to ascend. The higher must be able to integrate aspects of the lower, that is, in part, deterministic. To the extent there are more than one way the lower can be integrated by the higher, especially given the way the lower has unfolded, we can think of actualization of the higher as probabilistic. Also the expression this integration takes will be highly varied given the many possible circumstances of its integration leading to a

probabilistic interpretation of higher levels even if, in some meaning, there is only one possible way for integration to take place.

The concept of planes implies that before there was life on earth, when in actualization there was only the physiosphere, there was a biospheric plane of existence, the realm of possibility for life laid down by involution. Metaphorically, this biospheric plane pulled on matter prior to the emergence of life, and descended into it once life began (including matter), the polar complement to matter ascending into the biospheric plane. This metaphoric pull fits nicely with Wilber's tenet that evolution shows increasing telos. If one does not object to involution, then one should not object, solely on the grounds of limited evidence, to the construct of planes. Planes and involution are compelling constructs that are generated by the Nondual vertical approach.

The clarification of the ascending and descending paths of this paper and the inclusion of planes in the *AQAL* model may help to critically analyze theosophical literature. C. Bowman (2006) agrees that pre-existing planes, which allegedly differ by varying rates of vibrating energy, appear necessary to show how higher and lower levels of self commune with one another. In his integration of contemporary channeled material, C. Bowman goes further suggesting that planes themselves can change and allow for greater actualized potential at lower planes. He argues that the New Age is one in which the physical or material plane is changing in many ways at a time when the collective level of development is between two qualitatively different stages, therefore allowing for a quicker shift that will greatly expand our possibilities.

His work helps sort out the commonalities in the theosophical literature, which can be used to analyze the material with a clear distinction between positive ascending and positive descending development, both of which may theoretically contribute to changing planes. Some New Age theorists (and some of the channeled material itself) may attribute the alleged degree of the change too much to descension, a descending bias, if they (it) attribute(s) too much of the change from changes independent of the path we are on (where that path may hypothetically include cyclical motions of galactic objects, the expansion of the universe, or socio-cultural changes that better reward higher, even transpersonal tendencies). To this extent, Wilber's critique of The New Age and new paradigm approaches is appropriate. He writes that "they do not engage the rational

worldview in a way that can transcend and include it; rather, many of them end up regressing to various forms of mythic-imperialism (and even tribal magic)" (*SES*, p. 609). On the other hand, by reading the literature without an ascending bias, the literature may provide insights into descending development that is made possible by a pre-given deeper essence of the lower (positive descending development) that may in part be enacted by positive ascending development.

5. THE IMPORTANCE OF POSITIVE DESCENDING DEVELOPMENT FOR ADDRESSING THE ECOLOGICAL CRISIS

Let us take Wilber's remedy for the ecological crisis as an important example of his analysis that reflects an ascending and interior bias, biases that, in part, contribute to rifts in the integral and transpersonal fields. The solution to the crisis, in his view, is to get more individuals to higher levels of development, so that they can make the necessary changes individually and in society. Granted, I am also a big believer in promoting investment in the development of people to achieve higher awareness, but this is a partial remedy at best. We may not have enough time for only that remedy considering the rapid industrialization with appalling pollution of China and India.⁷ Solutions to the problem exist if we could just agree to enact them. In the developed world, they include taxes on pollution (to encourage cleaner consumption and production), subsidizing investment into the production of alternative fuels (to make them cost effective in their development and use), campaign finance reform to diminish the power of special interests that, in part, prevent collective responses to social problems with free rider issues (the free rider problem is evoked in the statement, "why privately pay for environmental cleanup if I benefit very little and just as much when some other person pays the same amount"), etc.

Educating the public of these issues must be done in a way that converts the Green meme drives into practical ones that do not bring about the defenses of Orange and Blue memes. This is the task of those at second tier consciousness, yellow and above. Beck and Cowan, as evidence to support of my argument that each level does not necessarily represent equal degrees of transcendence and inclusion, state that second tier

⁷ Even if the path we are on does not predict with very high probability ecological disaster, it is an outcome with an enormous downside risk.

consciousness is unique in that it is the level at which all lower level perspectives can begin to be fully honored (included). In other words, transcending to Orange does not typically fully include Blue (let alone include it on a deeper level). We can only say that Orange includes Blue at least to the minimum degree needed for further development to Orange as we know Orange to be.⁸

Yellow must include. We need not wait to raise the lower to the higher, but to bring the lower into a yellow system, if yellow can be influential and powerful enough. Yellow must convert its ideas in language that the lower can understand and act on to help save us from ecological collapse. We need an approach that transmits yellow integrative capabilities by aligning the incentives of people at differing levels of values. For example, an Integral political movement could attempt to include the religious right by stressing actions to help to bring Heaven to Earth rather than leaving Earth for Heaven. Of course the environmental platform would appeal to Green. Appealing to Orange requires solutions to these problems with smart, targeted tax and subsidies, without greater intrusion than necessary into what the private market does well such as innovation and bringing those with knowledge of needs and abilities together.

It is the government's responsibility to encourage positive internalities (such as financing of, not production of, education and research into alternative fuels) and discourage negative internalities (such as pollution) and negative externalities (such as over depletion of natural resources). Since the current administration has abandoned fiscal responsibility by running enormous government budget deficits, the Integral political movement could also appeal to Orange by pledging to greatly reducing wasteful pork barrel spending. A yellow movement with a balanced, inclusive approach should have credibility on this issue since it would stress relatively small sacrifice by all for great long-term gain for all.

This is an exterior and inclusive approach relative to Wilber's interior and transcendent approach (of integral transformative practice to encourage further

⁸ One may say that values development is not a basic structure and it does not develop through transcendence and inclusion as do the basic structures such as cognitive development. Here, again, I am using the memes in their general sense to represent correlative stages through which various lines develop. Regardless, even if we confine our analysis to values development, the fact that it is not a basic structure should not be a criticism of my refinement of the drives. Wilber's twenty tenets, which include his limited dynamic drives, are not constrained by him to apply to basic structures. The fuller specification of drives should help pinpoint those forces that propel development in various directions.

development of individuals, for example) that should be equally promoted by the integral community. Successes in the developed world towards creating new environmental-friendly technologies reduce the cost of cleaning the environment in the developing world (the part of the world more concerned with pressing short-run problems such as poor health, sanitation, and generally low standards of living). Taking action in advanced countries allows for moral authority when asking developing countries to do more.

6. CONCLUSION

6.1 Summary

The contribution of this paper is to more easily recognize the healthy or pathological expressions within the structures of holons. This is done with a careful mapping of the drives of holarchical development emanating from and to the quadrants and levels of holons. I started with the incomplete specification of four drives from Wilber's Twenty Tenets and matched them to their AQAL sources. That allowed unmatched AQAL spaces to predict a full set of eight neutral drives. Wilber's analysis of progress and regress suggested that positive and negative versions of each drive were necessary. Once fully specified, the drives allowed for the reworking of some definitions of key polar, stationary dualities (such as intrinsic versus extrinsic value, and height versus depth) within the AQAL model.

We have seen examples of how an incomplete specification of drives can lead to confusion in the application of the model. Zimmerman (1998) considers the most disturbing aspect of *SES* its polemical, rhetorical style. He argues that Wilber is disproportionately critical and harsh on descenders and flatlanders (modernist empiricists) and McIntosh (2007) argues that Wilber's recent writings of reality being composed of only perspectives reflect reductionism to the interior quadrants. I believe that the harsh judgment of descenders is due to Wilber's defensiveness surrounding his ascending bias while his harsh judgment for flatlanders that collapse reality to the exterior world reflects his interior bias. Yet Wilber himself shows that many researchers in the transpersonal field tend to have a romantic, descending (and I would add, interior) biases. Since, I claim transpersonal and integral have interior biases (they have not fully recognized the inclusive potential of the lower exterior world) they do not bicker about

this. I believe that the interior biases stem from the relative interior intensity of higher levels at any given time that may be sensed correctly by metaphysicists but expressed as repression of higher potential expressions of the exterior for any given level. This is argued in a working paper of mine.

I have shown that Wilber's formal dynamic drives do not reflect a completely nondual approach to these dualities, but that this paper helps corrects for this problem. In given aspects of development we may have had greater transcendence than inclusion, greater differentiation than integration, greater autonomy than communion, etc. This is not made possible in the AQAL model if, by definition a higher level must differentiate and integrate the lower level and the lower level must have balanced horizontal drives. Any imbalances are, instead pathological. This does not add as much insight into the source of these pathologies, which must be relayed to the incentives and partial perspectives that drive holons in imbalanced directions.

Or, even with balance, a given level can have relatively greater autonomy, communion, reception or transmission when that level is differentiated and integrated into a larger whole. The analysis of the ecological crisis in Section 5 demonstrated the value of reconciling the ascending and descending currents. Positive descending development, such as aligning the incentives of each level towards a solution, is needed as much as positive ascending development, such as encouraging the further development of individuals to higher levels, levels historically associated with more care for the environment. It is my sincere hope that these specifications can lead to a better understanding and integration of ideas among integral and transpersonal theorists.

I really cannot describe any bias of Wilber's as anything more than mild since he has done more to bring a nondual perspective to the major, important dualities of the Kosmos. Unlike others such as Washburn (1998), I do not think these biases are inherent problems with the statics of the model such as distinctions between pre-personal and trans-personal basic structures. Rather, I believe they stem from a constricted view of the range of dynamic possibilities in the course of awakening. This is understandable; we must work out the statics prior to setting the model in motion. I've had the benefit of learning from AQAL after studying growth and development models in economics. I, unlike Wilber, have not had to work out the statics and the dynamics from scratch. As a

result of the fuller specification of drives, the consequences of, and interplay between, the choices of individuals and socio-cultures that emanate as holarchical drives, are more fully appreciated. I hope that the linking of drives to the AQAL spaces contributes to a healthier exchange between theorists that have important points to transmit, but where opposing biases may prevent reception and communion.

6.2 Directions for Further Research

The refined drives allow for differing intensities in development, which is further explored in a working extension of mine. There I argue that higher levels at any given time are interior and collective intensive. This helps to rectify some fallacies that are common in analysis of development (one fallacy was referenced with the interior biases in the previous Section 6.1). It may also be fruitful to further relate personality types with the dynamic drives. For example, positive and negative behaviors associated with Carl Jung's personality types of introvert and extrovert can be accommodated with the holarchical, positive and negative versions of exteriorization and interiorization. In a separate working paper, I've proposed an approach to integrating all drives by the One-Many duality. Masculine and feminine drives are differentiated by opposite drives of each axis.

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APPENDIX

The Twenty Tenets (from SES)

1. Reality as a whole is composed of holons.

2. Holons display four fundamental capacities or drives: a) self-preservation (autonomy), b) self-adaptation (communion), c) self-transcendence, and d) self-dissolution.
3. Holons emerge.
4. Holons emerge holarchically.
5. Each emergent holon transcends and includes its predecessor.
6. The lower sets the possibilities of the higher; the higher sets the probabilities of the lower.
7. The number of levels a holon comprises determines its depth; and the number of holons on any given level determines its span.
8. Each successive level of evolution produces greater depth and less span.
9. Destroy any type of holon, and you will destroy all of the holons above it and none of the holons below it.
10. Holarchies coevolve.
11. The micro is in relational exchange with the macro at all levels of its depth (same level relational exchange)
12. Evolution has directionality, a) increasing complexity, b) increasing differentiation/integration, c) increasing organization/structuration, d) increasing relative autonomy (increased capacity of the holon for "self-preservation in the midst of environmental fluctuations," i.e., agency, e) increasing telos ("the end point, of the system tends to 'pull' the holon's actualization, or development, in that direction").