Deconstructing Developmental Constructs:
A Conversation

Thomas Jordan[1] and Tom Murray[2]

Thomas Jordan has been a valuable appreciative critic of the STAGES model and of ego development models in general. In his publications over many years he describes a variety of skill sets important to higher level adult development, for skillful dialog and deliberation, and for dealing with the complex ("wicked") problems that our society faces. What follows is an edited and cleaned up version of a series of email exchanges between Thomas and Tom Murray. We initiated this dialogue in early 2019 with the hope that it could be turned into something publishable in this special issue. Our only guideline was that we tried to end each segment with a question. Murray posted the first question. We have added section headings post-hoc to help organize the conversation.

Note that subsequent to this email exchange, Thomas and Terri O'Fallon had a videoconference conversation about her model, which has been transcribed and is available at: http://www.perspectus.se/tj/ConversationOFallonJordan.pdf.

A. Differentiating Developmental Theories

TM: What do you see are some of the dangers or drawbacks of developmental models such as Kegan's, Cook-Greuter's, and O'Fallon's, that describe a single developmental construct or trajectory that is supposed to capture many aspects of human meaning-making (as opposed to models with multiple "lines" of development)?

TJ: The most immediate problem I see is related to the conception of late stages of development. I have followed research and theory building in the ego development and hierarchical complexity fields for several decades now. I believe that there is a fair measure of correlation between levels of cognitive complexity, in the social and

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psychological domains, and stages of ego development in the preconventional and conventional parts of the spectrum, and maybe also in the early postconventional stage. However, I think that what is really significant about late postconventional, and even more transpersonal, stages cannot be explained by increasing complexity and levels of abstraction of mental representations. There is a quite different dimension of development that has to do with noticing internal processes and gradually disidentifying with the thoughts, emotions, desires and other goings-on in the mind and the body, giving rise to an increasingly strong capability for witnessing.

I am sure that the patterns described by O'Fallon's framework do exist, and maybe the stage sequence she describes is the most common pattern for people who reach the later stages. But I believe it can be misleading and confusing to use a framework that assumes that there is a single line of development that accounts for all transformative shifts in adult development. I believe a person can be capable of very complex cognitive operations without having much of a capacity for witnessing the self's processes. And conversely, I believe that a person can have a well-developed capacity for witnessing internal processes without having a capacity for or habit of constructing meaning in very complex ways. (For example, see Jordan (2011, 2018) in the References). I find the ego development frameworks you mention very meaningful as heuristic devices, but I think that they should not be taken too seriously.

I have a hard time believing that a framework that posits a single line stage sequence, which the STAGES model seems to do, can adequately represent the variability in how people evolve in their capacity for handling complexity as described by theories of hierarchical complexity (Commons, Fischer, Dawson and others) on the one hand, and their ability to witness the constructed nature of their experience on the other hand. What do you see is the relationship?

TM: I think this is a really important inquiry, and I confer with your concerns and probably with many of your opinions about the later levels. Regarding the role of different theories, first I will say that I put Kegan's theory of meaning making maturity in the same boat as the ego development theories – Kegan implies in his writing that they are very similar constructs (with different measurement methods; cutting up the same developmental spectrum in different ways). Let's call it meaning-making (MM) for now (ego development for Loevinger; and O'Fallon sometimes calls it "perspective taking" levels). I will also use CC as shorthand for cognitive complexity (i.e. hierarchical complexity) – so what is the relationship between MM and CC? – that seems a central question for us.

Speaking *theoretically*, putting aside the empirical correlations for a moment, I see two key differences between MM theories and theories of CC development in the hierarchical complexity tradition (HCTs).[3] One is that MM theories map what happens when you take cognitive complexity (CC) and turn it *inwards* to understand the world of

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[3] I am framing some of this from the perspective of the model I am developing on "Wisdom Skills," which draws heavily on Terri's STAGES model but is also influenced by Bonnitta Roy, the neo-Piagetian models (Fischer, Commons, Dawson).

I/my/you/we/our/them/theirs – i.e. the everything that is not an "it" (social, emotional, and self skills). (I hesitate to call this "interiors" because it does not quite capture it – but it is close Wilber's "LH side.") Lets call it the domain of the "*ego-involved*" – i.e. all occurrence or proposition that are emotionally tied to "me" – which includes relationships to me, as in my, you/our, we/us, they/them; all of which are ego-involved because they are defined in relationship to, and often in tension with, the self.

The second difference is that MM theories incorporate aspects of *unlearning* as well as growth (learning) in hierarchical complexity. Despite the common idea that the developmental arc starts with building the ego and then moves to deconstructing the ego (which does contain a lot of truth), I think ego development has moments of unlearning all the way up – something must be let go of and transformed at each major fulcrum. The two moves are related, one turns CC toward the self; then one does the subject-object move of seeing some new aspect of the self, and then, for ego development to happen, one "sees through" that old pattern and releases or re-contextualizes it (this picture is missing an important element having to do with state-stages but I'm skipping that for now). Unlearning is related to shadow work and contemplative practice – with deconstruction, de-centering, healing etc.; and (I say more about this in the Wisdom Skills work) in the unlearning one re-claims or re-members something that was always true about the self that one had hidden from the self.

This turn inward is related to Wilber's notion that "the cognitive line leads" – since CC is generally built up in learning about the exterior world first. This is built into the STAGES model that posits that learning generally happens with exteriors before interiors.[4] For example, one learns about the concepts "angry" (concrete) or "prejudice" (abstract/"subtle") first when adults point to it in others – the first step is to recognize it "out there." Only later does the child realize, oh! "*I* am angry" or "*I* am prejudiced" (which can instigate deconstruction of some narcissistic belief, i.e. an ego growth).

An important piece here is that certain aspects of the interior (or the self) are more *complex* than others. So one can't really grasp them until one has built up enough CC. The CC is usually first developed in reference to exteriors because that is usually a safer context in that it does not threaten to destabilize the self. Also, seeing things outside the self is more concrete, vs. interiors are more subtle. For example, understanding that "I can do bad things while not being a bad person" is a big step for a child; it requires a certain level of complexity (differentiation and integration of certain concepts), and until that happens the child will have an ego structure compelled lie about her socially unacceptable behaviors. At an even more complex level, to see the self-structure as a

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[4] Interior/exterior, the fourth parameter in the STAGES model, is not as often mentioned as the other three: Tier, individual/collective, and active/passive. The stage is defined by the primary three parameters. The fourth parameter helps determine early/late within a stage, but this level of granularity is not used in our statistical studies, and unlike the other parameters, we have no empirical evidence as yet about the validity of that part of the model. But the principle of exterior before interior coordinates with other psychological theories (and see Mark Forman (2012): "All the stages of identity development, therefore rely on different forms of outer-directed cognition eventually being used in the inner world of the self" (p. 80).

collection of interacting drives/voices (or, even more complex, sub-personalities) allows the ego to mature, or move closer to what we might call spirituality (or complex ethics). The ability to see "systems" of this complexity (first in exteriors) is a prerequisite to developing this type of self-knowledge.

Does this notion of unlearning relate to your understanding of the nature of adult development?

B. Shadow, Developmental Tiers, and Spin-outs

TJ: I have not thought about that angle, it certainly seems worth considering. And it could possibly make for an interesting dialog with adherents of the hierarchical complexity theories on adult development, since the conception of stepwise processes of differentiation and integraton on higher levels of complexity is not well suited to account for what you call unlearning. So please go on elaborating how you see the relationships between unlearning, shadow, ego development and cognitive complexity.

TM: Terri (and Kim Barta) use the concept of shadow and healthy horizontal development to account for some of this. That is, ego development level shows something about one's capacity to understand shadow material and the deeper self in more complex ways, but it does not say whether one uses that capacity to heal their shadow and do the hard work. As we all know, you can reach late levels of ego development (based on the assessment) and still have a lot of shadow. No one as far as I know has a good assessment for shadow (of course we would need to define shadow better) – that is another area at our community's leading edge. This relates to what I said before RE one difference between HCT and ego development is that the later is better able to theorize about shadow work.

Terri, and especially Kim, use the STAGES model to talk not only about growth, but to identify the developmental level associated with shadow elements. Horizontal health (what Kim calls full "surface area") at each foundational level is more important than how "high you climb." In a similar way, I think what advanced contemplative practice is doing is deconstructing assumptions that are so deep in the psyche that they are the basis of our *perceptual* constructions of time and space (and self) that formed in infancy. Psychotherapy deconstructs developmental phenomena like attachment dynamics, usually from the first few years, and contemplative practices target even earlier development like basic sense of self, time, body boundaries, the subject-object split, etc.

So MM (ego) development is about the growth of CC in a particular domain – the self. MM development and CC development *should* correlate empirically because MM relies on CC (that is, increasing complexity contributed to increasing ego development, but ego development is more than that). MM development seems better equipped than to talk about (1) the phenomenology and nuanced of self-growth, (2) shadow-work and de-centering; and (3) the more spiritual, esoteric, and state-based aspects of later level ego development. HCTs are tuned to talk about the mechanisms of building complexity in *any* domain, and when applied to some domains include movements of reflective abstraction (self-knowing); but they are weak in talking about the unlearning moves that

are so essential to ego development. Ego development, on the other hand, is weaker on describing the precise cognitive mechanisms of building complexity. It does include unlearning in its understanding of growth, but neither of the theories has a very solid model of unlearning. Unlearning is better covered in theories of psychotherapy and contemplative practice, but in general mechanisms of unlearning are not as well understood as mechanisms of learning. I think the challenge of bringing all of these together is at the leading edge of our theories.

As you imply, the MM assessments don't explicitly separate out the complexity of "out there" objective content from ego-involved (more interior) growth. Do you know of studies that empirically study the correlation the various aspects of development we are talking about?

TJ: Unfortunately, there is very little empirical research that tests whether different aspects of adult development, such as hierarchical complexity, ego development stages and self-awareness are strongly correlated or not. The few studies I know of have very small sample sizes and have methodological problems. It would be very interesting to see what happens if a reasonably large number of persons were tested with 3-4 different types of tests: sentence completion tests, analysis of complexity levels in spoken or written discourse, performance in tasks that require high levels of cognitive complexity and something like Kegan's subject-object interviews, but developed to look for advanced forms of self-awareness, witnessing and ego transcendence.

I do not advocate scrapping ego stage frameworks in favor of only operating with multiple lines, but I would like to see more recognition among theorists that there is a large variability in the late forms of adult development. I look forward to the publishing of far more empirical data and richly described case examples from those who use the STAGES framework. So my question would be what reasons you have for believing in the validity of using a linear sequence of stages that positions the transpersonal stages on top of the most sophisticated postconventional stages?

TM: Totally Thomas – the empirical evidence on all this is insufficient and we need lots more. RE whether the transpersonal capacities follow directly after the cognitively sophisticated postconventional stages...I think I agree that it does not *have to* (it depends on the meanings of these terms of course). One aspect of Fisher's (and Dawson's) model that I like, that Commons' model does not have, is the idea of increasing levels of abstract object types (sensorimotor, representations, abstractions, principles), and within each such "tier" there is increasing complexity (single objects, object relationships, systems, new wholes). The STAGES model has this same kind of structure. (You speak to this in your 2018 paper).

TJ: Is Terri's "subtle" tier really the same as Fischer's/Dawson's abstract tier, or are there differences? I would also ask how the Metaware objects represent an advance that directly builds on the abstract tier.

TM: We don't have much empirical evidence on how they correlate yet, but theoretically, the STAGES 3.0/Expert maps to Commons "Abstract" and to Fischer/Dawson's "9. Single Abstractions." "9-Single Abstractions (Abstract), 10. Abstract Mappings (Formal), 11. Abstract Systems (Systematic) maps to STAGES 3.0/Expert, 3.5/Achiever, and 4.0/Pluralist (completing the STAGES subtle tier we have 4.5/Strategist, which maps to "12. Single Principles (Meta-systematic)."

But that is not the whole story. As I mentioned, the Fischer/Dawson/Commons models only measure CC, while MM requires CC *applied to* the inter/intra-subjective domain, so you can be high on CC and not have the equivalent MM stage if you don't apply the CC self-reflectively. So the models diverge in that way.

RE the metaware tier: I think at each tier there is a whole new emergent set of phenomena, so it does not build in the same way. For example, formal operations jump into a world of abstractions that are not a straight continuation of what is going on in the concrete tier. One can continue getting more hyper-complex with concrete reality, and not develop abstract thought. Yet abstract thought *requires* concrete thought.

Given that CC growth is necessary but not sufficient for MM growth, the CC of understanding the exterior world can increase indefinitely without necessarily applying it to those realms of experience that tug on (threaten or create dissonance with) the ego. I, my, you, us, ours, they, theirs – this is the realm where the ego has its attachments and aversions and blind spots. Ego defenses keep us (all of us!) from applying our CC from knowing certain "truths." (You know all this, I am just building up an argument here).

Terri talks about a pattern she calls horizontal "spin out" which happens at the top of any person perspective (PP) – one can keep getting more and more complex and not grow in terms of ego development. So I would hypothesize that there is some *minimal* level of complexity needed to robustly understand some aspect of I/us/they. The minimum is necessary but not sufficient; and more than the minimum will deepen I/us/they insight; *but* there may be diminishing returns so that beyond a certain point it may not add to development very much and more complexity so it spins out horizontally.

For example, at the concrete level (2nd PP in STAGES) one can understand and create super complicated mechanical devices (like a genius mechanical engineer) but still not have developed much abstract thinking (a 2.5 spin-out). With abstractions and hypothetical thinking (3rd PP in STAGES) one can develop super complex scientific, philosophical, or technological ideas, but they may still be linear in the Newtonian sense, may still have that "there is one best answer" feeling, and not move into groking the realities of mutual-dependence, feedback loops, ecosystems, fractal structures, etc. The interdependence, fractals, and comfort with multi-perspectives characterize 4thPP thinking. Terri also points out that from 4th PP you can spin out into super-complex "systems of systems of systems..." (at 4.5) without getting into the space of more emptiness-of-self and construct awareness of the Metaware tier.

We don't have to be wedded to the STAGES levels, but this idea that complexity can increase and spin out horizontally without creating the next level of hierarchical ego development is very useful.

Does that relate to your question?

C. Questioning Holistic/Wide Lines vs. Specific Skills

TJ: In part, but I still believe that the whole ego development theory tradition rests quite heavily on the assumption that there is something like an ego as a "structured whole", and that it therefore makes sense to talk in terms of, for example, a "center of gravity". Theo Dawson maintains that this is an erroneous assumption, given the empirical fact that people display different levels of complexity when grappling with tasks in different domains. But Theo belongs, I believe, to the scholars who are strongly convinced that levels of complexity is the one and only significant variable explaining different patterns of adult development. If you believe this, and you know from empirical studies that individuals' performance in terms of complexity varies significantly in different domains and under different situational conditions, it follows logically that the notion of ego development stages must be untenable. Of course, ego development theorists don't accept that interpretation of the nature of adult development. You specifically address this issue elsewhere. However, even if you don't accept the premise that adult development is only a matter of cognitive complexity, it would be a good thing if you and other ego development theorists can address this kind of criticism and provide sustainable arguments for the idea of the ego as a structured whole.

TM: These are really valid concerns. Ego development (and Kegan's MM system) is what I call a "wide" developmental line – Loevinger called it a "holistic" construct, in contrast with the narrower lines or constructs of other theories. It is an ongoing issue RE whether wide lines are legit. The MM (ego) developmental construct overlaps with, i.e. includes or correlates with, many other constructs or "lines," including spiritual intelligence, reflective abstraction, leadership maturity, social-emotional skill, self-control, self-understanding, etc.[5]

In one sense, the argument can be answered statistically/psychometrically. The ego development measurement has shown itself to grow "as a whole." When looking for component sub-lines in ego development data of large(ish) populations, there is a consistent finding of no sub-lines being found (in a factor/component analysis it "loads on a single factor" – as found repeatedly in studies). But that may not be a satisfactory answer because that type of analysis assumes that different subskills might be captured by different items in an assessment; but in a sentence completion test all of the items tend to be looking for the same things; or better said, the scoring method scores them all the same way (in all MM theories). The scoring methods in STAGES don't ask the scorer to note specific sub-skills (though it allows for, but does not require, recording the

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[5] More on that topic in Murray (2017) **here** in sections "On multiple intelligences and wide vs. narrow skills" and "One skill to rule them all – is ego development one thing?"

"quadrant" – I, we, it, its – of the text). So the data does not exist to factor out the subskills, and it would probably be expensive to re-score (though possible and a valuable study).

Loevinger takes the assumption that there is "master trait" of "personality…a holistic process, a striving for meaning and self-consistency over time," (a habitual organizing frame of reference) "[that] involves many dimensions of personality development"[6.] Even among Loevinger's followers there is controversy about whether it is one underlying capacity or a collection of sub-capacities.

So a big question in the developmental field is whether specifying narrow vs. wide skills/lines has construct validity or "ecological validity" – i.e. whether they can be said to really exist in a form that can be measured. The HCT theorists would critique ego development as a super vague fuzzy construct--something one can't really even define in a short space. This has been used to argue that wide lines are not valid. But I think I can use HCT to argue *for* (some) wide lines in the following way (as I have done in Murray, 2017).

Fischer and Commons are clear that any developmental "skill" must be defined in relation to a *real task.* I have argued in some of my papers (Murray, 2019) that you can't find real life tasks that just use, say, "abstraction" or "creative thinking" but that these sub-skills are always *an inseparable part* of real tasks (like parenting, doing good at work, making friends, etc.), so HCT actually predicts that when real-life has only wide-*tasks* its just as hard to measure narrow skills as wide *skills*. When the sub-skills are massively interacting, you can't "see" them individually. One can invent separate constructs like "critical thinking" and "creativity" and create a test, a fake task, to measure them, and then look for correlations between those constructs. But do those constructs really exist? Playing a musical instrument, or playing sports, or foraging for food, or finding a mate, are real tasks they hardly overlap as tasks, so you can define and measure real solid independent skills based on them. But there is no "self-understanding" *task*, rather self-understanding is an abstract construct we can see used across many real life tasks. Some would say, "that construct exists for many tasks so its a 'general higher order skill'! – that should make it very important and also easier to measure." But my reading of HCT implies that you can't infer in that direction – you can only define the complexity of a task, and the skill is the ability to do that task.

I am unsure about all this though. If one can identify a generic sub-skill (or micro-skill) that is a component of many tasks and super-skills, it seems important to study and measure it. I'm just not sure if all such skills are arbitrary abstract inventions unconnected with underlying cognitive mechanisms (brain studies might help answer that). Ego development is one such made-up construct of course – a "wide" one. What I am wondering about is whether the narrower ones are actually taking one *further* from reality into speculation, even though they seem to be honing in more closely to the underlying mechanisms. Like Ptolemy's epicycles, one can use abstract reasoning to find detailed

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[6] From p. 229 of Jespersen et al. (2013).

patterns that explain phenomena, but which are not actually related to causal mechanisms.

Actually, it could be argued that STAGES, in contrast with Loevinger and Cook-Greuter's models, is not at all fuzzy in defining the construct. For Loevinger and Cook-Greuter the stage definitions, in a sense, change with each level. *Something* grows, but what that is cannot be clearly defined in those models. STAGES "defines" each stage simply using three parameters. But still, determining the value of each of those 3 parameters requires a detailed scoring manual and a year of training. You can say each stage can be given a concise definition using the three parameters, but to *operationally* define each of the three parameters (in a specific way) is pretty complex (so it kicks the can to the next level down).

No one is claiming that all of human psychological maturity or cognitive complexity can be captured in one assessment or model (though the neo-Piagetian theorist do claim that all cognitive development can be captured by one mechanism and structural logic). And of course we all acknowledge that it is absurd and dangerous to assume that any person can be well described with one measurement or category. MM, as described by Kegan and the Loevinger tradition, seems to make a lot of sense to a lot of people, so I think if one had to pick just one measurement, MM would be adequate. But if we were going to assess multiple things, what should we include? As you know, there are so many assessments and constructs out there in academia. Do you have ideas for what would work better?

TJ: RE: "HCT implies that you can't infer in that direction – you can only define the complexity of a task, and the skill is the ability to do that task" – this deals with very interesting issues that would warrant a thorough scrutiny. I believe you are on to something valid, that there are indeed some "general" tasks that have wide and pervasive implications for how a person makes sense of him-/herself and the (social) world.

Regarding your final point, I think there is a lot of empirical research to do. In my 2018 Integral Review paper, I argue that there are several quite distinct components of adult development that don't necessarily walk in step on a developmental stairs. I briefly describe cognitive complexity, complexity awareness, construct awareness, perspective awareness, self-awareness, meta-awareness and the phenomenon of spiritual awakening. It is an empirical question to what extent the developmental patterns of these components are closely correlated or not. My concerns regarding ego development frameworks is that they seem to assume that there is a single developmental trajectory, and I believe this to be misleading, or at least not proven.

I think in the paper I make a good argument that such competencies can develop quite independently. My argument is not based on empirical research results, because we don't have much of that yet, but describes types of people that have various mixes (weak and strong) of these skills.

Do you agree that it can be an unproductive or misleading thing to try to pack all of these types of capacities into one developmental line?

TM: Yes, it can be. Professionals who use MM assessments are (usually) careful to make sure they are not abused to label people into categories and make high-staked decisions (like hiring/firing). The intent is to use them to support self-reflection and mutual understanding (at individual and team levels). If used well, nobody is forced to agree with their scoring – they are taught about developmental levels and invited to reflect upon how their own strengths and challenges line up with the sequence of growth the theory describes. Anecdotal evidence is that most people feel quite "seen" and gain some insight when coaches/consultants use these assessments. But I'm sure there are counter-cases to that. But in working "on the ground" with people I expect that that many people would be confused if they were shown the results of 3 or 4 tests that then had to be coordinated in some complex way by the coach/consultant.

MM frameworks, like the one presented in Kegan's "In Over Our Heads", seem to add so much to our general understanding of the human condition, by just getting people to think about the developmental dimension. People naturally want to place themselves at some chapter in this story of human growth. On the other hand, we both know of the dangers and overshoots of consultants and pundits overgeneralizing based on these models.

Is that a fair description of the trade-offs?

TJ: A similar argument could be made (with some justification) for personality typologies, such as the Myers-Briggs Type Indicator, the Enneagram types, or even astrology. They can scaffold a process of self-reflection and insight. But that is a rather different thing than claiming the model in question adequately represent how people actually work. My main interest here is in the *science* of figuring out what *late* stage development really is (and isn't). Our world needs more wisdom, cognitive complexity, compassion, and perspective taking – we need to better understand what these things are and how to support them.

I still believe that it makes sense to be careful about collapsing increasing complexity/increasing abstraction of concepts with witnessing capabilities into one stage sequence. At least I believe that when operating with models like the STAGES framework, you should take care to point out that people in real life vary far more in those different dimensions than can be represented using single line stage models.

Are you arguing that from a *theoretical* perspective, it is defensible to lump together the different lines or components of development?

TM: Good, we can separate the pragmatics of assessment for coaching and organizational development from assessment for more rigorous and scientific inquiry into human potentials (understanding that there will be some overlap between them).

Any theory that uses simple categories or linear sequencing to describe the human condition is problematic. And one can always break up a phenomenon into sub-phenomena, ad-infinitum. E.g. one can define 8 elements of "reason" or "wisdom" – let's say one is "perspective taking." Then you can find a theorist who has broken perspective taking into 5 more facets (in both theory and measurement); and for each one of those facets you can probably find another who has broken it down even finer. All of these conceptual "cuts" are rather arbitrary, and have fuzzy overlap, and there are diminishing returns with increasing specificity in the "human sciences." Often, the more specific the skill, the more artificial is the assessment task or instrument assessing it. So the question becomes pragmatic as well as theoretical: what is the appropriate level of granularity for any purpose?

These subskills are hard to define precisely because they seem to overlap (as constructs) and influence each other (as processes) – e.g. "critical thinking" has significant overlap with "self reflection" – we can create separate tests for each of these but are they really such separate skills "in the brain" (or in behavior)? – or better, *to what degree* are they separate? MM theories (Loevinger and Kegan) make the assumption that a bunch of these sub-skills are so tightly interrelated that they *tend on average* to grow together and form a kind of gestalt phenomena (while obviously per individual there are differences in how they track with each other). I am pretty sure that this hypothesis will not be "proven right or wrong" but rather we can (and should) empirically determine *how much* the factors correlate and influence each other. This is your question I believe, and it deserves empirical study. But in addition to whatever the empirical findings say, one still must grapple with the ontological question of whether and how the constructs are actually separate processes or human attempts to break up a continuous field of phenomena into arbitrary chunks.

In terms of your list of six high level capacities (I had to go back to your article to refresh my memory) – in theory I like the idea of breaking it down to look at sub-components, but there seems to be a lot of possible overlap and cross-influence in these six categories. The question of whether sub-skills are separate-but-correlated, or whether one can be described as a "component" of another, is really hard to answer (this is related to ego development having a much less than 0.5 correlation with IQ – see Cohn & Westenberg, (2004); but here brain science might help answer the question).

It would take some work to get to a place where your constructs were well-defined as fairly independent skills, which then had a measurement protocol for (or all or any subset of the six). Loevinger struggled with this in coming up with what she eventually called the "master trait" of ego development. This is how Manners describes it: "an increasingly complex synthesis of impulse control, conscious preoccupations, cognitive complexity, and interpersonal style" – a list to which others have added: motives for behavior, moral reasoning, character development, and self-concept. Wow, what a long list of diverse skills. Its amazing that anyone tried to combine them into one construct and "got away with it" – yet 100's of studies have indicated that the construct is sound psychometrically.

TJ: Up to mid-postconventional, yes ... Still, my questioning concerns the highest stages, and I argue that it is completely misleading to correlate Commons paradigmatic and cross-paradigmatic stages with the (half hypothetical) very highest stages of ego development.

TM: Ah, yes – sorry I was not clear on this earlier. Though you will see these correlation tables mapping one theory to another (Loevinger, Commons, Fischer, Kegan, Wilber, Aurobindo, Piaget, Graves, Kohlberg, etc.) in countless papers in our community, they are mostly misleading, especially those that map a MM model to a CC model. Theories of CC are more valid in this mapping, as they are trying to measure the CC alone of various constructs, which is a central aspect of them, but, I would argue, does not capture the entire phenomenon. The discovery that CC is a rigorous and valid metric for all of them is very important, but some make the mistake of assuming it explains the entire phenomenon. Those in the Loevinger tradition (including papers by Susanne, Terri, and I) do include these types of concordance tables, which is misleading – you are right. They basically say that the CC *aspect* of MM maps as indicated. As described above, one can have a horizontal "spin out" and increase CC without increasing MM, so Terri is explicitly saying that they don't map completely, and diverge in this way. We do have some evidence that Metaware meaning-making includes 4.5/Strategist cognition (within the STAGES model), but we don't have much evidence on whether Metaware (5.0...6.5) meaning-making includes "12. single principles" or "13. paradigmatic" cognition. I agree with your suspicion that they may not correlate well, but am not sure what Terri would say.

        Maybe it is just that all of these sub-components are so tightly interwoven that one could have taken any of them as the master trait and get the same type of results – I doubt it would work as well but it is possible. Here I think we bump up against the leading edge of science methodology. The traditional (i.e. "modern" 3rd PP) scientific paradigm is to separate things into their components and then see how they correlate, as if they were separate but related. But can they really be separated? Again are the parts things we make up arbitrarily? Like you can describe any color using the RGB system or the CMYK system – neither can lay claim to being the "right" way to break it up into independent dimensions. In the hard sciences "complexity science" (what I would call 4thPP science) has been able to work better with emergent non-linear patterns. For psychological sciences I think complexity is largely used just as a metaphor (though in social sciences "social network analysis" does produce quantitative results).

        I am not sure: what is gained and lost from trying to measure each of the component constructs separately, and from moving away from using a holistic construct? As you know, researchers have done these comparisons with many of the psychological constructs we have assessments for. It's a lot of work and it adds *something* to our understanding of ego development (and the other constructs), but my take is that few if any of these studies yielded results that changed how people (still) understand ego development.

        Also, one thing that is exasperating about defining ego development, from a measurement perspective, is that the basis for describing it keeps changing with each level. For

example, at the lower levels it includes "impulse control," but the relevance of that part fades away in differentiating later levels. Ego (or MM) development is what is seen to *emerge* as people mature (get wiser with experience). You can't predict what the next level (or branching set of emergent phenomena) would look like based only on the qualities of the prior levels (that is one definition of emergence – e.g. you can't predict the properties of water/H_2O based on the properties of H and O). We *can* predict that it will be more complex and nuanced, etc., but not the observable psychological phenomena are emergent.

You are concerned with the later levels, do you think my argument applies for them?

D. Complexity vs. Witnessing; States vs. Stages; and the Logic of Development

TJ: RE "the basis for describing it keeps changing with each level" – I think that is a good and significant point. Common's uses the same "rule" for moving to each level. Fischer changes the type of object with each tier, so that is somewhat similar. But you are right, in Loevinger's system at least, there is no transition rule that specifies how each stage goes to the next.

Anyways, you may be making things more complex than is needed Tom. I agree that my six capacities would need a bit of work to be turned into solid theory or science (some of them should overlap, but others should be more independent). But, to repeat from my prior email "I still believe that it makes sense to avoid collapsing increasing complexity/increasing abstraction of concepts with witnessing capabilities into one stage sequence, in favor of allowing for different combinations of different dimensions of development/awareness."

I think the transpersonal stages cannot be explained by increasing complexity and levels of abstraction of mental representations. There is a quite different dimension of development that has to do with noticing internal processes and gradually disidentfying with the thoughts, emotions, desires and other goings-on in the mind and the body, giving rise to an increasingly strong capability for witnessing.

What if we just focus on those two aspects? Do you, or does Terri, think that they can be lumped together?

TM: OK, I may have gone off the deep end there RE the wide lines :-). I share your intuition that there seems to be two separate things going on there at the higher levels (Terri's Metaware tier), something related to complexity and something related to something more spiritual or transpersonal. First, what I can say from experience is that I have been at gatherings of people most of whom scored in the STAGES Metaware tier, and I would have to say there really was something palpable about the "ego development" (including an extra nice sense of humility and humor), but, though they were all pretty intelligent and nuanced, there were a lot of people there who had not developed (and maybe were not interested in developing) the abstraction skills it takes to understand really obscure philosophical discussions, write academic papers or rigorous scientific explanations, or

design a large scale systemic change in an organization. I think a group of people who score high on "paradigmatic thinking" in the HCT model would feel very different to be with vs. this group (with, maybe 30-50% overlap). I might learn more and be more intellectually impressed with such a group, but probably would not enjoy myself as much and fall in love with them all as easily.

Terri has assessed many people with advanced spiritual practices and stages. She also finds that ego development is relatively independent of all that spiritual stuff, and that it captures the complexity *with which* someone understands what is revealed by those spiritual/contemplative experiences pretty accurately. The assessment does not put those advanced state-stages at the top – it puts a certain sophistication of one's *interpretation* (meaning making) of them is at the top. There are many ways to interpret the "no self" experience, and only certain ways will rate in the Metaware tier. Same with the emptiness of conceptual meanings, emptiness of time, or space, etc. The assessment (and theory) do not measure the state-stages, but the theory does say that having certain state stages is a prerequisite for Metaware stages. I think there is some interesting research that could be done to try to prove this – its just a hypothesis at this time (Terri's paper in this issue says more about the theory).

Also Terri's theory of *States* is related here. We understand from the Wilber-Combs principle that one can experience states associated with "awakening" at any of the developmental levels. Terri asserts (it's not always clear whether Wilber agrees) that certain stable state experiences are *necessary but not sufficient* for solidifying certain stages of development. State here seems related to modes of *perception*, like "metacognition" or "awareness of awareness." But Terri extends the concept of state-stage (or view) down earlier than the usual "spiritual" associations, to include things like holding focused attention, and hypothetical thinking (fully controlled internalized perceptions, free of memory) as state-stages.[7] Relating it to what I said above about exteriors before interiors, it could be that the "necessary" is about purely cognitive ability, like witnessing, but to be "sufficient" to create ego development the awareness has to be applied to deconstructing and understanding the self. The findings you mention in your paper about the "Mysticism Scale" not correlating with ego development measures fits right into this extended interpretation of the Wilber-Combs principle.

TJ: Well, this is all very interesting. I believe it can be fruitful to consider the relationships between increasing capacity for dispassionately witnessing internal processes, gaining a more complex understanding of causality regarding those processes and the role of shadow aspects in ego development. However, that seems to be a whole new area of exploration. I am still questioning if it isn't potentially problematic to operate with a one-line sequential stage framework in the more sophisticated forms of adult development.

       I.e. the question that is prominent for me is that if the Stages framework really captures a developmental sequence, what is the logic that explains that the Metaware tier requires having mastered the Subtle tier first? Any thoughts about that? As I have said before, in

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[7] This topic is covered in more detail in two articles in this special issue, one by O'Fallon on stages and stages; and the other by Churchill and Murray, on Indo-Tibetan contemplative practices.

Fischer's and Dawson's frameworks, there is clear intelligible *logic* in the sequence of the tiers, each new tier representing a higher level of abstraction by creating mental constructs that condense complexity into higher-order concepts. It still seems to me that the Metaware objects you talk about are not concepts that represent very complex relations among concepts on the preceding levels.

Also, I would be interested to hear your comments on the late stage awareness profiles I sketch in the 2018 IR article (see section "Five Prototypical Late-stage Awareness Profiles"), in particular regarding person D and E. Do you think that such profiles exist? If yes, how could they be expected to show up in a SCT and in relation to the STAGES stages?

TM: Referring back to what I said above on wide lines (and the link to more discussion). Maybe the two of us could come up with a list of pros and cons of wide (all-encompassing) vs. narrow (multi-) lined approaches. There are a bunch of tradeoffs I think, in terms of (a) comprehensibility/usability; and (b) ability to demonstrate validity.

But, RE the logic of ego development, tying together several points I've come to, I said there were two necessary but not sufficient conditions for ego development into any level: the requisite complexity capacity and the requisite stable stage-stage. It *might* be that these two *together* are sufficient. Hmmm...as I think of it I would propose that if we include a third thing that would cover the whole picture (maybe): the *unlearning* part. So I'm thinking that ego development requires (1) the stage-stage to have awareness into a certain depth of the self; (2) the complexity capacity to comprehend patterns at that level; and (3) the application of that awareness and complexity to unlearn whatever stands in the way of progressing at any given fulcrum. (Oooh – I will have to put this in the paper I am working on with Churchill in this issue!)

So, in terms of whether a wide/holistic/single line is a good idea, we could ask what is *lost* by using a model with one holistic line? Referring to the three things I just proposed as prerequisites for ego development, we could say that what ego development *assessment* misses is that it does not register: (1) state-stage achievement without the other two parts – i.e. spiritual realization without ego development (maybe called the "spiritual enthusiast"!); (2) complexity capacity by itself – i.e. the horizontal spin-outs; and (3) late stage narcissism – one who has spiritual realizations, and the cognitive complexity for deep understanding of what is revealed there, but has not *applied* it to deconstructing enough of the self (such a person uses his capacities to evaluate and manipulate others). We might say that ego development construct is *defined* as a combination of the three things, so it does not measure growth that does not combine all three. (This is only partially true as, the STAGES assessment at least, the assessment final score value may miss these things but the human process of assessing the sentence completions and preparing a personal analysis does note some of these nuances, such as spin-outs).

RE your question about the profile sketches of person D and E in our paper – I will copy that here:

Table 1. Profile sketches.

	Cognitive complexity	Perspective awareness	Construct awareness	Self-awareness	Pure aware-ness self
Person D	Weak	Weak	Weak	Strong	Moderate
Person E	Weak	Weak	Strong	Moderate	Strong

I will have to think about this more, but I think my analysis above of the spiritual enthusiast, the 4.5 spin-out, and the late stage narcissist is close. The first and last have weak CC and perspectival awareness; the first has strong pure-awareness. One thing we have not touched on much is the difference between the aware-ness of awareness and construct awareness aspects of 5th PP. Terri would have more to say on this I am sure.

But I think those three things above define what you call the "logic" of the ego development sequence. The simplicity of the logic behind HCTs is either misleading because, as I said, it does not differentiate different types of meta-moves, or, in some cases it implicitly uses a limited type of meta-move which is rather cognitive (CC) and thus would not capture all of what is going on in ego development.

I would have to think about this more, but, given what I said above, it may be possible to specify the types of meta-moves involved in ego (MM) development: (1) Witnessing, or any awareness that perceives a deeper aspect of self; (2) reflective abstraction or subject-object move which uses complexity capacity to see how the now-seen part fits/operates within the self as a system; (3) a releasing ("emptiness") move (Bonnie Roy would call it "insight generation") that unlearns an old assumption to allow for new emergent understanding of the self-system (and thus a new understanding of self/other/world).

What is not worked out here (but see the other papers in this issue by O'Fallon and Churchill) is specifically *what* is witnessed, comprehended, and released at *each* developmental fulcrum. Also, the STAGES scoring method could be enhanced to more explicitly pull out separate sub-indices for these moves – witnessing, CC, and unlearning – or any of the other sub-skills like the ones you mention in your paper.

I would guess that move #1 is related to "quieting down" and "witnessing" in your words, and your "disidentifying" maps to the third part – what do you think?

E. Skipping Stages and Meta-move Types

TJ: I think in part what you are saying is that there is a lot in the STAGES theory that is not directly related to, or assessable by, the STAGES assessment. I think the difference between what is proven, or even provable in theory, should be clarified in the descriptions of STAGES. I am also interested in pinpointing what descriptions are really supported by empirical evidence of any type, and what statements are more intuitive or

speculative. And I am really more interested in qualitative data than quantitative, even though the latter is important for stringency and reliability.

As you know from previous exchanges we have had (and my 2018 IR article), one of the questions I have is whether the model adheres to the idea that no stage can be skipped, following the principle common in ego development models. This seems to be what warrants your Metaware stages being stacked on top of the Strategist stage. Has this hypothesis been proven?

TM: Hmm ... for me the issue of skipping stages is more complicated than it seems at first glance.[8] HCT specifies that the next level comes from *any* operator that operates on one level to coordinate the prior level into an emergent next level. But there are many possible meta-moves for building one hierarchical layer upon another, and it seems that HCT is mute on which ones are involved in any application. The subject-to-object move is one; synthesis is another, abstraction is another, witnessing may be another meta-move. The way HCT is usually used (e.g. in Lectica assessments) I think there is an unexamined assumption that sticks with a certain type of meta (hierarchical) move (reflective abstraction), even though they portray it as covering all possible types of hierarchical moves. I think a lot of people in our community confuse that with the specific, and most popular, evaluations used by Dawson and colleagues at Lectica, which are specific instantiations of MHC for specific (task) domains. I.e. they don't measure "hierarchical complexity" they measure it *in* some area.

IMHO though Lectica folks say they are measuring "hierarchical complexity" in the actual practice of their better-known assessment tools they are measuring a specific cluster of meta-moves, all of them related to the single concept (meta-move) of "reflective abstraction." Fischer's and Common's theories can account for *any* type of meta-move, but the Lectica assessments we are familiar with measure a small cluster of moves. Lectica actually combines two meta-moves: the conceptual abstraction of the object, and the structural complexity of the idea (single>mappings>systems). Note that Lectica *can and has* built assessments that measure other meta-moves, like the hierarchical moves in learning ever more complex math or science. Here is another example, put yourself in a room of people scoring at the "paradigmatic" level in mathematical theory, and see if they seem overall extremely "mature."

RE the above idea of horizontal spin-outs, but they are only "horizontal" from the perspective of the ego development model! From a strictly cognitive model, things just keep getting higher in complexity – its not horizontal, its vertical, and the ego-developmental move of applying a given cognitive capacity to the domain of ego-involvement may seem a *horizontal* move! (See my IEC 2018 slides.)

One can imagine that if one kept to a single type of move as constant then you would have a very clearly defined hierarchical sequence. Stages could not be skipped, because each level builds upon the prior, by definition. But if one's developmental model

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[8] This next part is something I presented in my IEC conference talk in 2018.

incorporates several types of moves then its more complicated. From level X of complexity you can get to level X+1 by making moves A or B or C, and by the time you get to level X+3, is there a risk that you are comparing apples to oranges? This is the case if you are comparing just cognitive complexity at level X with ego development at level X.

But regarding the question of whether "no stage can be skipped" – I addressed it from a theoretical (or construct aware) perspective, but it can also be addressed empirically for the STAGES model. I will send a draft of the paper going in this special issue, titled "Summary of STAGES validation research." In it we mention a longitudinal study that seems to show that the metaware stages do follow on top of the earlier levels.

TJ: You said above that "there are many ways to interpret the 'no self' experience, and only certain ways will rate in the Metaware tier." So, yes, but does the sophistication in interpreting the perception of awareness as such reflect a level of abstraction that builds upon (requires) and goes beyond the level of complexity at the Strategist level? – that is a core question for me.

TM: OK, and now I am also noticing that you wrote "Fischer's and Dawson's frameworks, there is clear intelligible logic in the sequence of the tiers, each new tier representing a higher level of abstraction by creating mental constructs that condense complexity into higher-order concepts." So the concept of higher *abstraction* is important to your question. I will answer from my understanding (I wonder what Terri would say here – and also, I am in early phases of on a whole other paper just on the topic of "Abstraction and Metamodernism," and don't have these ideas fully baked yet).

As I said, HCT builds layer upon layer based simply on each level operating on or coordinating the prior level. Abstraction is only one such operation. Formal operational thought is sometimes defined as the combination of *abstract* thinking and *logical* thinking – which both come on line at 3.0 (3rd PP) in STAGES. Abstraction and logical complexity are defining moves through the whole Subtle tier, but starting with the Metaware tier a new type of awareness and object appear that is not defined by an abstraction move. The objects that emerge at each tier may be theoretically unpredictable based on the prior tier – this is the nature of emergence. E.g. given just matter you can't predict life, and given life you can't predict mind/culture – though you can always go back and *explain* how the later builds upon the prior, the emergent level is a kind of surprise.

The move into Metaware is an *emergence* move, not an *abstraction* move. Like the emergence of abstract thinking on top of concrete thinking, we can say that it is what is *observed* to happen, not what *must* happen. Our data shows that metaware thought does come after (e.g. 5thPP comes longitudinally after 4th PP); and Cook-Greuter's and Torbert's work has always included the idea that construct aware and unitive come after Strategist. I can try to explain *why/how* we think 5th PP builds on top of 4th PP, but I think our explanation of this is still forming (and not as good yet as the literature that explains how formal operations builds upon concrete operations).

Within 4th PP one increasingly builds deeper understanding of the parts of the psyche/mind, ideally including the embodied perceptual deepening as well as cognitive complexification. What emerges at Metaware is a coming together of the parts, as their relationships and interpenetrations are seen and deconstructed and integrated – into a new level of holistic apperception of the self. The witnessing state or "awareness of awareness" is also an awareness of all those parts of the self that are held *by* awareness, i.e. are *not* awareness (as awareness becomes object). If you don't do the emergence move, and keep going with abstraction, then you get the 4.5 spin-out, and this may be why HCT and STAGES seem to diverge at the Metaware tier. (Again, increasing abstraction beyond 4.5 levels may be an important *vertical* move for *some* models, but not for STAGES or ego development.)

I think that this happens at *each* tier – a new object emerges and then abstraction and complexity are the logic that build CC in that tier (first individuals then collective/systems) until the next tier emerges – which is an emergence move not an abstraction (or complexity) move. The idea of "simplicity on the other side of complexity" is *different* for conceptual/abstraction moves vs. for emergence moves (this is what I am working out in that new paper).

Anyways, we have opened up a lot of questions here. What would be some good next steps?

F. STAGES Empirical Studies and Longitudinal Analysis

TJ: I have now read the paper you sent me, with a good deal of interest, even though I am very weak on statistical analysis (and not so very interested either). I do think it is a very good thing that you and the statisticians you have worked with have critically examined the statistical properties of SCT testing and reviewed and developed the methodology for arriving at scores. The article will be a valuable contribution to the field in these respects. Having longitudinal data is indeed very significant. The analysis of the statistical properties of the test offers a number of valuable and corroborating conclusions, that's fine.

As you can imagine, the major question marks I have about the Stages model are not addressed in the article (which was not to be expected given its purpose). Here is a somewhat different way of approaching what I have asked before.

Since I am not intuitively convinced that inhabiting the metaware stages, in the sense of being aware of and preoccupied with pure awareness, necessarily comes after one has mastered the late "Subtle" stages (I don't like the term subtle, hence the quotation marks), it would be helpful to know if people who are scored at Terri's metaware stages always convincingly display evidence of being at home in the preceding stages. So what would be interesting, and would provide support for the Stages model's assumption about a linear stage sequence, is, at its simplest, to see if everyone who scores at one of the Metaware stages also fulfills the requirements for being scored at stage 4.5 (and possibly 4.0). It would be of particular interest to look more closely into any cases of people who

were scored at 5.0 or higher and who don't fulfill requirements for stages 4.5 and 4.0, if such cases exist. I.e. if you (a collective you here) can report empirical evidence that people who get scored at Metaware stages have a significant number of *individual items* scored at the late "subtle" tier, so that it is evident that the Metaware stages transcend *and include* the previous stages in a linear sequence.

My intuition is, as you know, that awareness of awareness is very weakly linked (if at all) to cognitive complexity, and that there are surely people who have a well-developed witnessing capability without having a very complex cognitive world. So, do 100% of the people who score at Metaware stages fulfill the requirements for stages 4.5 and 4.0? If a lower percentage, how low? If there are Metaware people who don't fulfill requirements for stages 4.5 (or 4.0), what do their item distributions look like?

Ideally you would show this in relation to the scoring procedure, so that people who are deemed to be at Metaware stages have mastered the kind of cognitive complexity and levels of discourse abstraction characteristic of the later postconventional stages. I.e. if the assumption is that you only reach the Metaware stages after having matured into the Strategist stage, then I think it would make sense to include a rule in the scoring procedure that you only get a summary score on the Metaware stages if you also have a substantial number of individual items scored at the late Subtle stages.

TM: OK Thomas. This is a great idea. If there is time between doing all the other things I need to do for this issue, I will run this data analysis. If not soon, then later.

But I do have a guess. The paper I shared with you shows that scores tend to cluster around an average in a normal bell-curve distribution. If the average was at 5.0 then there would probably be a lot at 4.5 also. I will check. But the cutoff method to determine the final score (TPR or 'center of gravity') only looks at the top scores, which for the metaware tier is looking for only 4 scores at or above a level to say the person is at that level (Susanne uses a similar method). So given that, it is almost guaranteed that there will be many more scores below the "center of gravity" score (at 4.0 and 4.5). I think to answer your question I should also look at the percentages of scores at each later level (sort of like looking at the straight sum of scores and ignoring the cutoff method).

Also, in Table 4 of the Research Summary paper ("Longitudinal: Prior Scores vs. amount of change to next score") you can see the longitudinal transitions for all surveys, starting at each level, how many went up, stayed the same, or down for the next longitudinal test by how much. That gives some indication of your question, but this is all data at the survey level, and your question asks at the item level, which is a great idea.

TM: OK, I have done that analysis and here is a figure below. We would not have thought to do this if you did not ask your question, so thanks. Here is a chart showing, for protocols with center of gravity values (ogives) of 3.0 to 6.5, what percent of the 36 item scores are at each level.
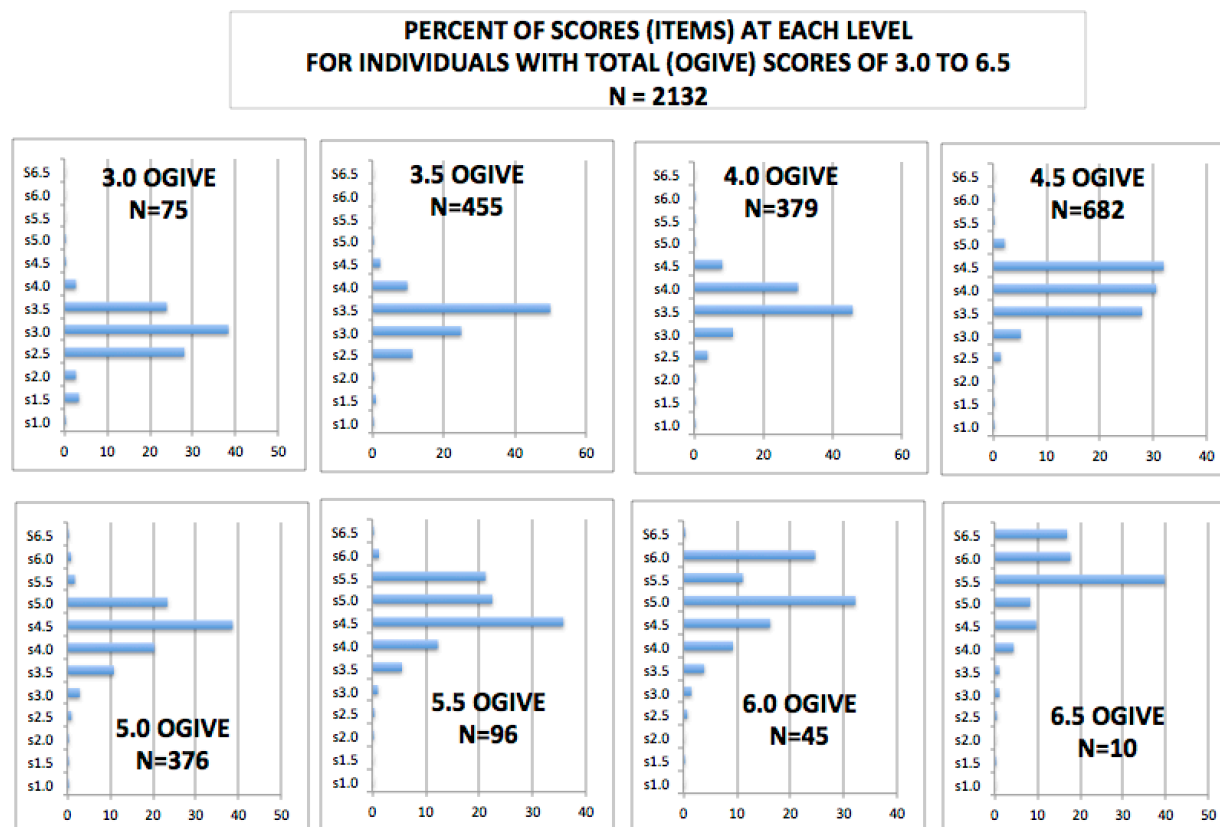
Figure 1. Ogive tables.

This is what I am noting:

You can see that for 5.0, 5.5, and 6.0 there are many scores at 4.5 (Strategist). (Recall that the ogive cutoff method prioritizes the higher scores, so the total score is not the average, and is often not the mode, i.e. top of the bell curve.)

However, the scores do tend to follow a normal distribution around the average, so at 6.0 and 6.5 there are naturally less and less in the Subtle tier.

The 6.5 graph by itself might seem to confirm your suspicion that the meta tier does not have many subtle tier scores, but (1) there are not as many scores there so its a weaker data point, and (2) as mentioned above, people tend to write close to their center of gravity or average, even if the have the capacity to write lower.

Recall that with each tier the type of object changes, so the complexity about that object can start again at low and build up from there – so there may actually be a kind of reduction in horizontal complexity starting at 5.0 (as in Fischer's model). (We are finding that in general the scoring system puts more in the X.5 (active) vs the X.0 (passive) scores. We think this is because people in passive phases have a harder time finding he words, and drop down to the prior level for content).

Compared to a normal distribution, 4.5 scores have a lot of 3.5 scores, 5.5 surveys have a lot of 4.5 scores, 6.0 surveys have a lot of 5.0 scores; and 6.5 surveys have a lot of 5.5 scores – this many indicate that for higher levels, a person with a active (X.5) center of gravity uses more active language in general (and vice versa for passive (X.0)).

But overall this should answer your question. Scores in the metaware tier (at least 5.0, 5.5, 6.0) have substantial scores in the subtle tier, and in particular a substantial number of scores at 4.5/Strategist, which tend to have complex language.

TJ: Thanks so much Tom. These are important data if you want to strengthen the plausibility of the linear sequence. So it is a valuable addition to us outsiders knowledge about what results you are getting. It would also be interesting to know if there are protocols scored at 5.5 or higher with no or almost no items scored at 4.5 (and 4.0). The pattern for the few 6.5 individuals is curious. For those of us who are interested in the highest stages, it would be a good thing to look more closely into the meaning-making worlds of people scored at 6.5 and 6.0, both in terms of looking at the actual responses as whole protocols, and, of course, to talk to them (interview) about a whole range of matters, and get a sense of how they navigate life. There are of course confidentiality issues here, and also problematic, from a scientific point of view, that the number of individuals is small.

G. Qualitative Analysis and Digging Deeper in Future

TM: Yes, I think this points really well at possible next steps we could explore in the next year or two. Most of the study's we have done with STAGES are statistical and look at averages and numbers; including comparison with another framework (Susanne's MAP). Terri has written a lot about the qualitative patterns seen within the inventories, but more could be done at the text level to compare with other models. For example, Terri is scoring children's protocols now and separating out different patterns and themes she sees. (See that paper in this special issue). More could be done actually to look at the *outliers* – the text that does not fit the norm, for instance "spin out" text that would score late in HCT but not reach Metaware in STAGES, or vice versa. We could learn a lot from that type of analysis.

Also, I just noticed you said "I am really more interested in *qualitative* data than quantitative" analysis. So maybe what we can do is share some of the actual sentence completions of people who are outliers (vs. the figure above) in that they have a lot of metaware scores but *not* many 4.0 or 4.5 scores. We can all think together about what this means. How does that sound?

There is a lot that is not shown in the "score." The total inventory score hides the pattern of levels (the histogram) over the 36 stems, and the score of each stem hides a lot of what goes on inside the completion. STAGES scoring looks at the level of complexity for the *most* abstract/subtle object in the sentence completion. Some completions are one or more paragraphs long. A 5.0 completion person may include some complex language about subtle tier objects, and then some simple or passive (receptive) language about a metaware object – the metaware phrase trumps the subtle phrases. If the metaware object

is spoken of in more active/agentic/complex language then the score goes up to 5.5. But at any rate, the 4th PP activity in the completion is hidden from the score.

TJ: That is certainly interesting and would be informative. What I mean with qualitative is more in the line of doing something like Kegan's subject-object interviews with people, in order to get the opportunity to get much richer accounts of how people who score at certain stages experience themselves, relate to emotional and cognitive dynamics, react and act in social interactions, how they function in work and life, etc. I have not been in a position to thoroughly scrutinize Terri's stage descriptions for the Metaware stages and compare those descriptions to what I know from elsewhere. I think there is a lot of work to do before we can get a more grounded sense of the status of those stage descriptions in relation to real people's meaning-making patterns, subject-object balances and ways of navigating social relationships.

OK Thomas! This points to some rich inquiry possible going forward, especially in looking into specific examples of text – and maybe comparing how outliers would be scored by different systems. There would have to be a special agreement with Stages International on looking at specific text, as our agreement with subjects is that specific text examples are analyzed in-house and not shared publicly. But another option we have used is to combine elements of several responses to create generic examples that don't reflect the text on anyone in particular. It would also be interesting to separate out the different aspects of a given level within text, such as the abstraction vs logical moves in the Subtle Tier; or the awareness vs construct aware moves at 5thPP – I think much of this comes down to the STAGES scoring of early vs late *within* a level, which has not been written about much yet. Also, I mentioned the aspects of text that are "lost" in the numerical scoring, that could be re-analyzed.

Also, as side comment, while I have it in mind, not directly related to this: I have not had time to really look up how different Terri's stage description of 4.5 Strategist is from Torbert's description of the Strategist (E8). I would guess that there are significant differences, not least related to what status is given to cognitive complexity and what I would like to call "context awareness." This relates to the general question if it makes sense to see the Strategist stage as something that has to be inhabited before one can develop the Metaware stages.

But let's try to put this thing to rest for now!

TM: OK Thomas! This points to some rich inquiry possible going forward, especially in looking into specific examples of text – and maybe comparing how outliers would be scored by different systems. There would have to be a special agreement with Stages International on looking at specific text, as our agreement with subjects is that specific text examples are analyzed in-house and not shared publicly. But another option we have used is to combine elements of several responses to create generic examples that don't reflect the text on anyone in particular. It would also be interesting to separate out the different aspects of a given level within text, such as the abstraction vs logical moves in the Subtle Tier; or the awareness vs construct aware moves at 5thPP – I think much of this comes down to the STAGES scoring of early vs late *within* a level, which has not been written about much yet. Also, I mentioned the aspects of text that are "lost" in the numerical scoring, that could be re-analyzed.

   Note that subsequent to this email exchange, Thomas and Terri O'Fallon had a videoconference conversation about her model, which has been transcribed and is available at: http://www.perspectus.se/tj/ConversationOFallonJordan.pdf

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