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Linking Two Lines of Adult Development: The Developmental Structure/Process Tool (DSPT(tm))

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Introduction and Theory

For some time, assessing individuals' developmental position has been undertaken from either a "stage" or "non-stage" perspective without explicating more fully the deep link between the two assessments. In the most general terms, both assessment perspectives determine an individual's awareness, either of self (stage score) or of complexity (non-stage score). I created the Developmental Structure/Process Tool (DSPT(tm)) in order to put the emphasis squarely on the two developmental lines that research has shown exhibit clear sequential movement--namely, the line of self-awareness and the one of cognition (Wilber, 2000). Employing for this purpose Kegan's and Basseches's work, I conceived of the self-awareness profile (stage score, or SAP) as determining types of balance and of the complexity awareness profile (non-stage score, or CAP) as defining types of imbalance (Laske, 1999a). (The meaning of balance/imbalance is discussed shortly.)

The linkage between self-awareness and cognition that is realized in the DSPT(tm) is proving fruitful in those developmental interventions in organizations, such as leadership training and executive coaching, that require assessments which lead to the design of strategy, or actionable knowledge. The linkage between stage and nonstage aspects of development defines a client's habitual or preferred mental processing (complexity awareness) that is associated with a particular developmental level (self-awareness), even though development along the cognitive line is necessary, but not sufficient, for determining that of self-awareness (Wilber, 2000). The stage/nonstage linkage articulated by the DSPT(tm) score also facilitates the integration of assessments which connect development to behavior In terms of personality, style preference, work context 360 feedback, and others. (360-feedback surveys are evaluations made of an individual in his or her work role by subordinates and peers as well as superiors.)

The Developmental Structure/Process Tool (DSPT(tm)) is based on two hour-long, semi-structured interviews. It combines Kegan's self-awareness profile (SAP), enhanced by the action-science notions of Argyris, with Basseches's dialectical schemata profile (referred to as complexity awareness profile, or CAP), further enhanced by P. M. Senge's work on systems thinking (Kegan, 1982; Argyris, 1999; Basseches, 1984; Senge, 1990). The underlying balance/imbalance hypothesis that the DSPT(tm) articulates is "the higher the balance (SAP), the less the imbalance (CAP)." This hypothesis can best be understood by adopting the following notation for the comprehensive score yielded by the DSPT(tm):

L{r:c:p}[m,f,r;t](%)

In this notation, L{r:c:p} is the balance score (SAP), while [m,f,r;t](%) is the imbalance score (CAP). In the L{r:c:p} component, L is the developmental level situated in a range of neighboring levels (L-1,L,L+1). It is Lahey et al.'s (1988) single overall score, whose (metaphorical) power is expressed by the three components in curly brackets, where {c} indicates the clarity with which the level L is expressed in a subject-object interview, or "embeddedness in level," while {r} indicates the tendency of regression to L-1 (a prior level), and {p} indicates the potential for advance to L+1 (a higher level).

Together, {r:c:p} makes up a regression-risk/clarity/potential index, or RCP for short. In a group of individuals holding the same level, L=4, for example, this index differentiates their individual developmental characteristics. Pragmatically, the RCP index indicates the "intervention challenge" that a consultant can expect to encounter when assisting the individual. With coaching, for instance, the RCP might indicate the resistance a coach could encounter, due to the client's deep embeddedness in his/her present self-awareness level ({c}), or the client's significant risk when under environmental pressure, of operating at a lower developmental level ({r}).

The RCP index states a proportional relationship between {r}, {c}, and {p}. It typically sums to a range of 15 to 20, which is the number of structurally relevant passages in subject-object interviews. For instance, a balance score (SAP) of 4{3:10:4} refers to an individual at Kegan level L=4 with an associated RCP index showing that the individual's risk of regression to L-1 (that is, Kegan's 4(3)) is slightly lower than his or her potential for developmental advance to L+1 (that is, Kegan's 4(5)). This depicts a person who is considerably embedded in a present level of self-awareness. The interpretation of the clarity index {c=10} in terms of either stuckness or resilience depends on the associated CAP score as much as on collateral behavioral data. In terms of action-science, the SAP score empirically determines an individual's theory of action, or theory-in-use (Argyris, 1999)--that is, what an individual actually does in contrast to what he or she says or "espouses."

Associated with the SAP score is the CAP score, which indicates the individual's present complexity awareness profile (CAP). It results from the [m,f,r;t](%) term in the above expression. The CAP score is formulated in terms of Basseches's (1984) dialectical schemata framework. In a nutshell, this framework consists of four dimensions of post-formal thought or "process categories"--namely, motion [m], form [f], relationship [r], and transformation ("meta-form") [t]. Each of these categories comprises a variable number of "schemas," or thought forms. Schemas together form a system, and are intrinsically related to each other. The [t] (which is shown separated from the other factors by a semicolon) is a CAP subscore that reflects an individual's transformational capacity. Since schemas in the process category of transformation [t] presuppose schemas in the categories of [m,f,r], the transformation subscore [t] can be viewed as a synthetic score, in that it reflects the CAP as a whole and does not simply represent a single process category.

CAP interviews are scored on the basis of a total of 24 thought forms or “schemas” unevenly distributed over 4 dimensions of dialectical thought or “process categories.” Each schema can potentially be weighted from 1 (weak use) to 3 (strong use) for an entire interview. Process category motion [m] comprises eight schemas (maximum weighting 8x3=24), the form category [f] has three (maximum weighting 3x3=9), relationship [r] consists of four (maximum weighting 4x3=12), and metaform [t] consists of nine (maximum weighting 9x3=27). When all weights of all schemas are summed, an absolute score called an “index score” results. The maximal index score is 24x3=72/72=100%. However, this absolute score indicates only the overall level of dialectical thinking of an individual, undifferentiated as to schema uses relative to individual process categories.

In order to spell out imbalances between uses of schemas in different process categories, a relative score, the CAP score, is introduced. An individual's CAP score is composed of four components (subscores), each of which expresses the total weighting of schema uses per category, stated in % of the total permissible maximum weighting in that category (m=24; f=9, r=12; t=27). To demonstrate, a totally even CAP score of 50% in all process categories, [50,50,50,50](%), unlikely as it is in reality, refers to relative total weightings of 24/2=12 (m), 9/2=5 (f), 12/2=6 (r), and 27/2=14 (t), respectively.

As this shows, the CAP score is a relative score that potentially reveals imbalances of schema use per process category. An uneven relationship of schema uses (in the four process categories) to each other indicates what Basseches refers to as an "imbalance" of schema use, taken by him to indicate a "partial developmental path" toward a fully post-formal capacity. For instance, an individual with a CAP score of [m=46,f=0,r=17;t=21](%) constructs the world for himself by favoring schemas of the motion category over schemas of the other categories [f,r;t]. The individual shows no grasp of systems (form), and only a faint grasp of relationships. The individual’s transformational capacity [t], as different from the overall level of dialectical thinking expressed by the index score, is a moderate 21%. (Since the maximum weighting of schemas in category (t) is 27, 21% of 27 amounts to a total weighting of transformational schemas of 21% of 27=5).

Only the index score, being an absolute score, can be said to fall into a range, typically 0-15 (very low) to 55-72 (very high). Speaking of "range" makes no sense in regard to the CAP score, since what matters in this relative score is the *relationship of all four percentages that make up the total CAP score*.

Following Basseches (1984), the DSPT(tm) distinguishes three kinds of developmentally one-sided ways of constructing the world, or cognitive imbalance:
* non-formalist imbalance
* formalist imbalance
* meta-formalist imbalance
These briefest way to characterize these imbalances Is to say that they force a discrepancy between an individual’s critical (m, r) and constructive (f, t) thought forms

or mental tools. In the case of a meta-formalist imbalance, constructive tools are used in excess of both critical and formal logical tools.

As shown in Laske (1999a), an executive with a formalist imbalance can be predicted to have a cognitive preference for framing organizational events and situations in structural terms--in terms of the division of labor and organizational hierarchy, for example. Such an individual would tend to exhibit a concomitant neglect of dynamic aspects of reality (motion), such as organizational change processes. A relativist imbalance, often surfaces as a value fixation on human resources, while a meta-formalist imbalance typically shows up as a preference for seeing organizational events in terms of corporate culture at large while neglecting structural and political issues of leadership. In all of these cases, multiple perspective taking is not a strength of the "imbalanced" individual, and integrated leadership therefore cannot be realized.

In short, CAP imbalances predict the way in which organizational events are framed by an individual, as well as the action scenarios the individual associates with such frames. The more balanced the CAP profile, the stronger the likelihood that an individual is able to take multiple perspectives on organizational events and situations and refrain from personalizing systemic issues.

The task of the DSPT(tm) user is to "marry" an intuitive picture of the client to the analytical one represented by the SAP and CAP scores. This presupposes the ability to reason about the links that exist between the two developmental lines tracked by DSPT™ scores and their subparts. Pragmatically, the links indicate intervention challenges and the likelihood of intervention effectiveness. Awareness of the links contributes to the strength of the actionable knowledge that a coach or consultant brings to bear on interventions.

Some important links between the two parts of the score (the L{r:c:p} and the [m,f,r;t] are:

(1) L/[t] (balance linked with transformational capacity)
(2) {p}/[t] (potential for developmental advance linked with transformational capacity)
(3) {r:c:p}/[t] (regression-risk/clarity/potential linked with transformational capacity)
(4) {r}/{p} (risk of regression linked with potential for advance)
(5) {c}/{p} (clarity linked with potential for advance)
(6) [f,t]/[m,r] (structure vs. process, or "constructive" emphasis versus "critical" emphasis)
(7) [m,f,r]/[t] (authentic vs. "false positive" transformational capacity).

Link (1) spells out the balance/imbalance hypothesis according to which "the higher the level of self-awareness, the higher is complexity awareness" (Laske, 2000b). Typically, one would not expect an individual who is not advanced in terms of the balance score (L) to score high in transformational capacity [t]. Those who score high on [t] but not L are typically burdened with a highly imbalanced [m,f,r] score, making the high [t] score a

“false positive.”

Links (2) and (3) are prognostic. They speak to the likelihood that an individual's potential for developmental advance may fuel an increase in transformational capacity and a better grasp of complexity. This prognosis is of particular importance in organizational environments, where the ability to think in terms of systems-in-transformation (whether "system" is the self or the organization) is a potent indicator of systemic leadership capacity.

Links (4) and (5) address, respectively, intervention challenge and the likelihood of intervention effectiveness. Here, "effectiveness" refers to interventions as "attempts to assist a client in reaching the subsequent level of mental growth" (Laske, 2000c). When r>p, there is likelihood of a higher intervention challenge than when r=p or r<p. In contrast, the configuration {c:p} speaks to the ease with which embeddedness in the level might be lifted in favor of advancing to the subsequent level of self-awareness.

Links (6) and (7) both speak to the developmental pathway toward transformational capacity that an individual is taking. Link (6) regards the proportion of constructive [f,t] and critical [m,r] cognitive tools available to an individual, while link (7) focuses on the extent to which transformational capacity [t] is grounded in an overall balance of [m,f,r], rather than representing a false positive where transformational capacity is more of a pretense than actual (Laske, 1999a).

When interpreted in an action-science perspective (Laske 2001b, 2000b), these links, and the scores they embody, differentiate organizational actors' "theory-in-use," or the way that actors construct the organization internally, frame organizational events, and follow action scenarios based on their particular theory-in-use. Theory-in-use cannot be gauged by merely behavioral assessments, since it is a "program in mind/brain" (Argyris, 1999) that underlies behavior. Theory-in-use contrasts with what individuals either do unconsciously or "espouse" regarding their way of acting (espoused theory). By using developmental assessments aimed at theory-in-use, one can transcend how-descriptions and answer why-questions about behavior (Laske, 2001c; 2000a).

Organizational Applications

The research responsible for establishing the DSPT(tm) is a study, undertaken to tease apart organizational learning and adult development, on the transformative effects of coaching on a team of six executives (Laske, 1999a). Results showed, first, that the use executives make of coaching (as well as the way coaches coach) is a function of their developmental level (self-awareness profile, or SAP) and second, that the developmental compatibility of coach and client is crucial to coaching effectiveness. Less mature and more highly CAP-imbalanced individuals are content with using coaching primarily for skill acquisition and performance enhancement. In contrast, more highly developed and CAP-balanced individuals additionally use coaching for personal development. Such individuals also show a greater ability to take

multiple perspectives on their organization and are less likely to mistake maps for the territory itself. Pragmatically, the study showed that if a developmental baseline is available, as well as a follow-up score of the client (a year or more later), then becomes possible to determine coaching effectiveness and, beyond that, assess and monitor entire coaching and development programs company-wide over the long run in terms of their return on investment.

As an example of how DSPT(tm) scores are used to design customized coaching interventions, consider the developmental profile of members of an organizational team (given, as before, as L{r:c:p}[m,f,r;t](%)). As shown above, the first part of the score is the self-awareness Profile (SAP) associated with a risk-potential index, while the second part is the complexity awareness profile that delineates the relative usage, in %, of four classes of thought forms (schemas) that together account for a person's complexity awareness (systems thinking ability).

Executive 1: 4{3:9:2}[25,33,42;19(%)]
Executive 2: 4{1:8:5}[46,0,17;15]
Executive 3: 4{1:9:0}[29,22,0;0]
Executive 4: 4{0:5:3}[21,1,0;26]
Executive 5: 4(5){2:4:7}[0,0,50;44]
Executive 6: 4{2:9:4}[17,33,0;41]

In my conceptualization (Laske, 2000a), this is an *upwardly divided 4-group*. As shown by the scores, its majority is immersed in its own ideological system (L=4), while its (tiny) minority of one has an incipient capacity to stand back from its governing variables of action (Executive 5 with L=4(5)).The large variety of CAP-profiles, above, points to significant differences between team members in construing the organization internally--in cognitive terms--and consequently in implementing action plans (theory-in-use). (As explained earlier, these differences only come to light through the CAP score, not the index score, since the latter is based on the total weighting of schemata uses without differentiating schema classes, or process categories.

In the example above, the CAP scores lead to the following high-level conclusions. As "motionists" ([M,f,r;t]) emphasizing change and human interactions, Executives 2 and 3 prefer action scenarios casting the organization in a political light--of coalitions negotiating for power--while as "relativists," Executives 1 and 5 tend to emphasize human-resource issues. By contrast, as a formalist," Executive 6 (but also Executive 1) emphasize in their thinking hierarchical, stable structures. In short, team members tend to see the organization in terms of three different perspectives which, by themselves, lead to one-sided action scenarios. Since transformational capacity in the team as a whole is low to moderate, except for Executives 5 and 6, the likelihood of comprehensive systemic view of organizational matters in the team is low. In addition, Executive 5's higher ability to take multiple perspectives, and thus model more inclusive team views, is compromised by a lack of a sense of change (motion) and stable structure [m=0;f=0]. Although she seems to be ahead of the rest of the team in terms of

transformational capacity--thus leadership capacity, her RCP shows a tendency to "overreach" her present self-awareness level ({c=2,p=7}), while her CAP score indicates a fixation on "the big picture" ([t=44]) without adequate grounding in the specifics of the change and structural dimension of cognitive complexity. Her low [m] and [f] scores testify to a lack of critical ([m]) as well as constructive tools ([t]). This lack does not bode well for Executive 5's ability to win over the rest of the team, especially Executives 1, 2 and 6, who have strong critical and constructive capabilities. The team may use these capabilities to take a defensive stance toward Executive 5's leadership that, from their self-authoring perspective, threatens to "open the floodgates" and thus put them at risk of losing their integrity as they understand it.

A possible ally of Executive 5 in establishing leadership within the team is Executive 6. Both executives share the ability to view "the big picture" (high [t]), but with a different emphasis on the specifics. In terms of the SAP score, Executive 6 is more deeply embedded in his present level ({c=9}) and shows a lower potential for developmental advance. In terms of the CAP score, however, Executive 6 lacks precisely what Executive 5 excels at--seeing events and situations in their intrinsic relationships ([r=0]). Tending to be fixated on stable systems, Executive 6 acts mostly as a dualist (formalist) who does not relate inner and outer systems, either personally or organizationally, and who favors a hierarchical view of organizations.

Overall, the substructure of the team, in terms of the [t]-scores, groups together the first three and last three members of the team. This team structure determines team dynamics. In addition to being upwardly divided in terms of self-awareness level, the team is also split along lines of transformational capacity.

From this developmental analysis of DSPT(tm) sub-scores, interventions such as coaching can be derived rather straightforwardly. Peer coaching of the team by Executive 5, the leader, is not an option given her fragile hold on leadership. (However, co-leadership of the team by Executives 5 and 6 is a possibility.)

The major coaching challenge regarding this team is its overall lack of transformational capacity [t] combined with the high degree of embeddedness within level {c} possessed by the first subgroup (Executives 1, 2, and 3). The second significant coaching challenge is the relativist and formalist imbalance distinguishing the two potential leaders (Executives 5 and 6) in the second subgroup. This second finding might work in favor of a collaboration between these two executives. However, it can also work to its detriment should Executive 6 side with the rest of the team. Due to the diversity of process profiles and RCP indexes, individual coaching (as opposed to fashionable "team building") is the intervention of choice. In the process, particular care must be taken to support the fragile, but promising leadership of Executive 5. If team members work with different coaches, this requires a collaboration among the coches, who need to keep the overall team dynamics in mind. (In other words, a single coach who understands the team's individual dynamic might bea better choice in this case.)

As this application shows, DSPT(tm) scores can be of great utility in the developmental coaching of both individuals and teams. In addition, through the use of the DSPT(tm) methodology as a follow-up (at least a year later), the effectiveness of a particular coaching technique or method can be assessed longitudinally. In short, the DSPT™ is a useful tool for gauging adult development in the work place.

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