

POSITIVE PSYCHOLOGY AND CONSTRUCTIVIST
DEVELOPMENTAL PSYCHOLOGY:
A THEORETICAL ENQUIRY INTO HOW A DEVELOPMENTAL
STAGE CONCEPTION MIGHT PROVIDE FURTHER INSIGHTS
INTO SPECIFIC AREAS OF POSITIVE PSYCHOLOGY

by

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ABSTRACT

Constructivist developmental psychology (or developmental structuralism), pioneered by Jean Piaget and including scholars like Lawrence Kohlberg, Jane Loevinger, Robert Kegan and Kurt Fischer, postulates the existence of qualitatively different stages of development through which individuals move as they mature and grow. The humanistic psychologist Abraham Maslow, a major precursor and early proponent of a 'positive psychology' (Maslow, 1954), also proposed his famous hierarchy of needs, which similarly follows a developmental, hierarchical trajectory.

Psychology in general, however, has seldom included or recognised stages of development in its overall framework, and positive psychology is no exception. This dissertation argues that there is a wealth of evidence, added to by the emergence of new and more sophisticated stage models and methodologies, that supports the notion of developmental stages, and that a stage conception of individual (especially adult) development might help shed greater light onto certain constructs and concepts in positive psychology.

The dissertation begins with an introduction that outlines the reasons for undertaking this theoretical study and considers why the timing may now be right for the incorporation of the notion of developmental stages. Chapter two and three offer a literature review and critical appraisal of constructivist developmental psychology, while the remaining chapters consider how a developmental stage conception might be profitably applied to five areas within positive psychology: individual conceptualisations of well-being, values, strengths, leadership and positive adult development. Each of these remaining chapters gives an overview of the area's current treatment within positive psychology and then reflects on how a developmental perspective might be able to offer further insights.

CHAPTER ONE

INTRODUCTION

TIME FOR A VERTICAL DIMENSION IN POSITIVE PSYCHOLOGY?

This dissertation involves a theoretical investigation into how the stage conceptions of developmental structuralism (or constructivist developmental psychology), as applied especially to adults, might potentially give a more nuanced understanding of five specific areas studied by positive psychology: individual conceptualisations of well-being; values; strengths; leadership and positive adult development.

While studying the various concepts and constructs of positive psychology I was struck by the absence of any real vertical dimension, or developmental stage perspective. Such a dimension or perspective, I intuitively felt, might offer a rich source of new interpretations and understandings of several of these constructs. Through a process of intuitive hypothesis, or 'abduction', followed by rational analysis and comparative reflection, I focused first on the intuition that one factor that would likely influence an individual's notion of well-being was his/her developmental stage (at least in some domains). Then I progressively began to see how a person's developmental stage might also influence many others areas, finally restricting myself to the five stated areas.

The area of psychology most concerned with developmental stage is developmental psychology and, within that, the developmental structuralism (or constructivist developmental psychology) first pioneered by Jean Piaget and

continued by such figures as Lawrence Kohlberg, Jane Loevinger, Robert Kegan, and Kurt Fischer. The field of developmental structuralism thus serves as the developmental or vertical lens through which to consider the five chosen areas of positive psychology, with chapters two and three providing an overview, literature review and critical appraisal of this field.

In addition to this intuitive connection, a further reason for investigating this combination of constructivist developmental psychology (CDP) and positive psychology was the similarities in their underlying conceptions of human nature. Both are positive and progressive and see the development of human nature as the unfolding of inner structures or potentials. CDP conceives individuals as developing through stages / structures of ever-greater complexity, differentiation and integration, towards greater internal freedom, awareness and self-actualisation - and self-transcendence in some models (see chapter two). Positive psychology, combining Aristotelian and humanistic psychology notions of human nature, sees individuals as possessing innate 'virtues' or potentials that can be cultivated and expressed or actualised – an “innate constructive developmental tendency” that leads to well-being when given expression and pathology when thwarted (Linley and Joseph, 2004). CDP has mapped some of these structures and positive psychology concerns itself with the study of what conditions, interventions and institutions best facilitate healthy growth towards developmental fruition. A dialogue between the two could therefore be constructive and mutually beneficial.

I believe such an investigation comes at an appropriate moment, due to several recent developments. First, adult developmental psychology has, for a number of reasons (see chapter two for a discussion), only relatively recently become a thriving area of research. Second, the notion of stage conceptions has gone through surges of influence and decline, with a new resurgence appearing quite recently.

Until around 1980, the classical structuralism of Piaget, Kohlberg and others enjoyed significant influence within developmental psychology. But its inability to adequately account for the growing evidence of variability in development, due largely to its static view of psychological structure and its tendency to conflate structure and form (Fischer and Bidell, 2006), together with the fact that organicism – the worldview underlying cognitive-developmental psychology – largely remained at the abstract, generalisable level and neglected the particularities of time and here-and-now context in development (Witherington, 2007), meant that its influence, including its notion of stages, began to decline.

In its place came contextualism – the worldview underlying behaviour-analytic approaches to development - and a narrowing of focus on specific behaviour in specific contexts. Yet just as organicism runs the risk of reified structuralism, so contextualism runs the “risk of complete dispersion and total abandonment of integration”. Its “horizontal cosmology.... dispenses entirely with hierarchy, valuing instead the levelling or flattening of all systems of thought that rely on multiple, vertically structured levels of analysis or organisation” (Witherington, 2007, P.132).

As a result, there has recently been a move in developmental psychology towards a metatheoretical integration of these two worldviews, with the dynamic systems approach, and its key notions of nonlinearity, self-organisation and holism, at the centre (Witherington, 2007; Overton and Ennis, 2006). Witherington (2007) traces two major camps within this dynamic systems perspective: one 'purely contextualist' approach that focuses only on the local, micro, here-and-now, championed by Thelen and Smith¹; the other, most cogently put forward by Marc Lewis and Kurt Fischer and his colleagues (e.g. Fischer and Bidell, 2006), that aims at integrating organismic and contextualist worldviews by including both local context and higher-order form.

This dynamic systems approach also offers new tools and nonlinear dynamic growth models for analysing development, allowing for greater precision and understanding of the complexities of development. By using these models to study both micro- and macro-development together (e.g. Fischer and Bidell, 2006), for example, it is possible to integrate the core difference between the organicist (which reveals an ordered, irreversible, stage-like picture of *macro*-development) and contextualist (which reveals a variable and reversible portrait of *micro*-development) worldviews and approaches. Both are real, both are interdependent and neither can be reduced to the other.

Other recent advances that have given greater force to the notion of hierarchically integrated stages include the use of Rasch models in developmental psychology (Dawson et al, 2005), which are ideally suited for

hierarchical development; the development of a common scale or 'ruler' to measure an underlying dimension of development (hierarchical complexity) (Commons et al, 1998; Fischer, 1980; Dawson et al 2005); and recent studies that show correlations between the discontinuities of brain growth with the hierarchical growth curve for psychological development (Fischer and Bidell, 2006).

A final reason why the 'timing' might be right for including the notion of nested hierarchical, or in systems theory terms *holarchical*, stages within the study of positive psychology is that, after several decades of horizontal, contextualist hegemony, the dialectical swing seems ready for a new, higher-order synthesis that includes both vertical stages and horizontal, contextual variability. This synthesis would allow for both stability and variability, commonalities and differences, uncovering the underlying unity-in-diversity. If this is so, then the notion of hierarchical stages would more easily be seen not as potentially oppressive forms of ranking but as natural, fundamental parts of development, present in all natural systems, and vital for growth. Investigated and handled with sensitivity, ethics and responsibility, research findings related to stage development can be used to honour each specific stage as an integral part of any sequence and to facilitate healthy growth at each stage and through the spiral of development. That, I feel, should be a fundamental aim of positive psychology.

CHAPTER TWO

CONSTRUCTIVIST DEVELOPMENTAL PSYCHOLOGY: A LITERATURE REVIEW

Introduction

This literature review will begin with a brief overview of adult developmental psychology to give the appropriate context, and will then focus more specifically on developmental structuralism or constructivist developmental psychology (CDP). CDP will be its main focus since the dissertation's fundamental objective is to reflect on how the developmental stages mapped out by CDP models might offer further insight into specific areas of positive psychology. It will consider first the earlier, more classical stage models of CDP, like Piaget's stages of cognitive development and Kohlberg's stages of moral reasoning, and will subsequently focus on more recent models and theories, for example Robert Kegan's 'orders of consciousness' and William Torbert's action logics. Even newer models and metrics, those of Kurt Fischer, Michael Commons and Theo Dawson based on the notion of hierarchical complexity, will be considered in the next chapter (see also chapters seven and eight and Appendix C).

The review will finish with a discussion of two attempts to bring coherence and connection between all the disparate stage models, including a look at how the stages of each model fit into more general, broader stages.

Adult Developmental Psychology

Developmental psychology originally focused on child development and then moved on to include adolescence and, only relatively recently, adult development. Hoare (2006), in her *Handbook of Adult Development and Learning*, outlines a number of reasons for this late interest of researchers in adult development. The first is largely due to the influence of Freud, who not only maintained that psychosexual development ended when adolescence ended, but also framed adult development in negative terms, emphasising what an adult should not do or be. Psychology thus failed to study what positive adult development involved and what facilitated it.

Another reason is that adulthood was, until recently, seen as linear and marked by certain key events – like starting work, marriage, having children and retiring. This meant that such things as qualitative changes, movement towards greater complexity, the realisation of deeper potentials and changing worldviews and meaning-making were left largely unstudied – CDP proves the exception here. Hoare's final reason is the simple fact that at the beginning of the twentieth century life expectancy, in the US for example, was only 47. In 1933 it was 59 and in 1959 it was 69. Now life expectancy is around 80 and there are many more people in middle adulthood and late adulthood than ever before.

Adulthood is now no longer seen as development into midlife which is then followed by gradual physical and mental decline. Instead it is seen as a process of continuous development until senility or death. Consequently, researchers

are now starting to focus on what constitutes and facilitates positive adult development and well-being. This is, of course, ideal terrain for positive psychology and CDP, which together might be able to make solid contributions.

Constructivist Developmental Psychology

There are many different theories of adult development and several ways of classifying them. Alexander and Langer (1990) make a useful distinction between hierarchical and non-hierarchical theories. Hierarchical theories postulate stages of development that are ordered sequentially, cannot be skipped and are unidirectional. The stage theories of CDP are generally of this type. Non-hierarchical theories include Daniel Levinson's Seasons of Adulthood (Levinson, 1986), which agrees that logical thought develops hierarchically through childhood and adolescence but claims that there is no such hierarchical development in cognition and ego development during adulthood. Another non-hierarchical theory of adult development is Paul Baltes' Life-Span Perspective (Baltes, 1987), which assumes there is no unidirectional development overall or in any domain or any age.

Piaget, Kohlberg and Fowler

There are more theories within developmental psychology, however, that present an invariant sequence that is unidirectional. The towering figure here is Jean Piaget, and it was he who pioneered developmental stage models (Beilin, 1992; Brainerd, 1996; Flavell, 1996; Crain, 2005). He showed that children's

reasoning changed qualitatively over time and that the way in which they know and understand the world evolves and develops. He postulated that these qualitative stages form an invariant, irreversible, hierarchical sequence with each posterior stage integrating the previous stages and each anterior stage serving as the necessary condition for the emergence of the next higher stage. CDP stems from his work and is so called because it sees individuals as actively *constructing* knowledge through their interaction with the world, actively interpreting and trying to make sense of their ever-changing experience of reality.

Piaget's contribution has been enormous and his four stages – sensorimotor, preoperational, concrete operational and formal operational – have withstood intense scrutiny and appear to be universal (see chapter three for some critiques). However, there are many developmentalists that posit stages beyond early adulthood and beyond Piaget's 'final' formal operational stage (see e.g. Commons, Richards and Armon, 1984) and there is also a general consensus that there are other aspects of development relatively independent of cognitive development. Lawrence Kohlberg, who closely followed Piaget's overall framework, was among the first to extend Piaget's stages – both beyond adolescence into adulthood and beyond logico-mathematical cognition into moral reasoning. He outlined six, with a possible seventh, stages of moral reasoning (Kohlberg and Ryncarz, 1990), two under each of three broad stages: preconventional, conventional and postconventional. These broad stages will be discussed more fully below. Kohlberg's stages have been criticised, especially by Carol Gilligan (1993), for being male-oriented and

overemphasising rules, rights and abstract principles rather than the more female-oriented emphasis on interpersonal relationships, compassion and care. There are two other major criticisms of Kohlberg's work. One is that it shows a Western cultural bias by placing more emphasis on individual considerations of moral judgements, in contrast to more collectivist, non-western cultures. The other is that moral reasoning does not necessarily lead to moral behaviour, which is perhaps more important. Kohlberg assumes it does but evidence for the link is not clear. Kohlbergians have often neglected the role that emotional and motivational components of morality play in turning reasoning into action. (Peterson and Seligman, 2004).

James Fowler (1981) is another developmentalist that has expanded developmental structuralism into both adulthood and another line of development, this time 'stages of faith'. He has delineated six stages that follow the development of a person's tacit worldview, of how we relate to what we see as most important in life – of our 'master story'. His stages of faith are therefore not necessarily religious: they are broader and can embrace agnostic beliefs as well. This model bears many similarities with Kohlberg's and Piaget's models in that it aims at the underlying structure of faith, not its content, and that they form an invariant sequence with each subsequent stage being more encompassing. But Fowler's stages go beyond cognition and include self-reflection and meaning-making.

Broader models: Loevinger and Kegan

Jane Loevinger and Robert Kegan, two other key developmental structuralists, also include self-reflection and meaning-making. Kohlberg and Armon (1984) make a useful distinction between *functional stages*, like Erik Erikson's, that follow the development of individuals as they face new roles and cultural and social demands; *soft structural stages*, like Jane Loevinger's, Robert Kegan's and James Fowler's, that include affective and/or reflective elements; and *hard structural stages*, like Piaget and Kohlberg's, that have all the formal properties of a stage that Piaget maintained. (These formal properties are: the stages are 'structured wholes' that represent qualitatively different ways of thinking; they are hierarchical integrations that progress in an invariant, irreversible sequence and are cross-cultural universals). A similar distinction, between 'minimalists' (hard stages) and 'maximalists' (soft stages) is made by Noam (1993). Both point to the gradual broadening of the structures being examined since Piaget's original studies of cognitive development.

Jane Loevinger's theory of ego development is broader than all the theorists mentioned so far. It describes the evolving self or ego and its progressive reorganisation and meaning-making in response to its changing experience with the world. It is often claimed that Loevinger's concept of ego is indebted to the psychoanalytic view (e.g Noam, 1993), but Loevinger herself denies such a connection (Loevinger, 1993). Although she never gives a precise definition of the ego, she sees it broadly as a 'master trait' of personality that covers cognitive, affective and behavioural aspects (Cook-Greuter, 1999). The most

general ingredients cited by Loevinger as components of ego development are cognitive style and cognitive complexity, impulse control and conscious preoccupations, all of which are “dynamically connected in specific ways along a continuum of increasing self-integration, differentiation and complexity of thought” (Hauser, 1993, p. 25). This progress towards greater differentiation, integration and complexity is the direction towards which psychological growth (and evolution in general) moves and is an essential element of CDP.

Loevinger’s achievement is widely recognised, not least because she has produced not only a theory of ego development but also a psychometrically robust assessment measure, the Washington University Sentence Completion test (WUSCT), which uses a series of 36 sentence beginnings like: Crime and delinquency could be halted if or Raising a family , that participants then have to complete. This test has been rigorously refined and validated and has been called “one of the most sophisticated tools that has ever been built for the assessment of personality” (Blasi, 1993, p. 17).

Both her theory and her test have been critiqued. As to the theory, it has been claimed that the underlying logic behind the stage sequence lacks sophistication, especially in comparison to Kegan’s theory (Cook-Greuter, 1999); that her concept of ego is too broad and encompasses substructures that may have their own developmental lines (Noam, 1993); that there is no psychometric proof of ego development as a ‘master trait’ (Torbert et al, 2004); and that her integrated stage is too vague (Cook-Greuter, 1994, 1999). As to the test, the validity has been criticised for being just a question of verbal

fluency, given that people at later stages write much longer protocols. This critique has been countered by the claim that a) individuals at later stages possess greater verbal fluency due to their greater complexity and creativity, which require longer responses and b) ego development as measured by the WUSCT includes many more factors than verbal fluency (Torbert et al, 2004). Notwithstanding these criticisms, her contribution to the study of personality and psychology as a whole is undisputed. A further reason for spending some time on Loevinger is that her stage model and sentence completion test is used as the basis by two other key developmentalists to be studied in this review later on: William Torbert and Susanne Cook-Greuter.

Robert Kegan's 'Orders of Consciousness' is similar in some ways to Jane Loevinger's model – together they form Kohlberg and Armon's 'soft' and Noam's 'maximalist' stage models; they both conceive the self or ego as a totality, as a meaning-making system in relation with the world and others and as consisting not only of cognitive but also affective, interpersonal and intrapersonal aspects – but it is more rooted in the Piagetian tradition (Kegan, 1980, 1994). His theory, based on what he calls the subject-object relationship (see Appendix A), is arguably more comprehensive and psychologically nuanced than Loevinger's. In this respect, Cook-Greuter (1999) points to its coherent description of how development moves in a constant dialectic between various types of opposites like self and other, differentiation and integration, autonomy and communion. Clare Graves, another important developmentalist that will be discussed below, describes a similar dialectical movement.

Kegan's model also describes not just the stages but also the transitions between stages, and also stresses the price of development: the move from one way of knowing the world to another can be experienced as a loss of meaning and relation to oneself and the world (Kegan, 1980). These two significant elements, however, are absent in Loevinger's model. Nevertheless, Loevinger's stages are more nuanced since she describes nine levels whereas Kegan has only five. His fifth 'interindividual' stage comprises three discrete ones within Loevinger's model: individualist (actually more equivalent to his 4/5 transition stage), autonomous and integrated.

A final difference is Kegan's measuring instrument. Whereas Loevinger uses a sentence completion test, Kegan uses a structured-interview format: the subject-object interview (SOI). There are advantages and disadvantages to both. Both aim to assign a specific stage and thus tend to omit answers or self-descriptions that are outside the overall frame; and the SCT answers often result in considerable 'stage scatter', with some answers scoring at earlier, other at mid and still others at later stages (Noam, 1993). Both have good validity, although Loevinger's has been used and analysed much more than Kegan's. On a practical level, a downside of Kegan's SOI is its greater length and expense.

These two stage models are of particular importance to the proposed dissertation precisely because of their robust measuring instruments, which can be used in research to compare stage development with specific aspects of interest to positive psychology like well-being, values and leadership.

More recent models based on Loevinger: William Torbert and Susanne Cook-Greuter

William Torbert draws on Jane Loevinger's stages and applies them to professional development. From this base, he has developed his nine 'action logics' and Leadership Development Profile (LDP). Each action logic shows how an individual, especially managers, interpret their own and others' actions and how they keep power or protect against threats (Rooke and Torbert, 2005). These stages were devised by using Loevinger's WUSCT and Cook-Greuter's theoretical and empirical refinement of Loevinger's model, including her additional outline and scoring system of two discrete 'post-autonomous' stages (see below) (Torbert and Associates, 2004).

Torbert and colleagues have applied his action logics to personal and organisational transformation and have found that the first three action logics displayed below-average performance, much less so than the mid-level 'achievers', and that the last three stages showed consistent ability to successfully transform their organisations (Rooke and Torbert, 2005). They have also gone on to the important study of what facilitates movement to a later stage. These findings are very relevant to several of the areas of positive psychology considered below, especially leadership and positive adult development.

Susan Cook-Greuter has been researching the higher stages of Loevinger's model for some twenty years. She has refined both the theory of Loevinger – by incorporating aspects of Kegan's dialectical stage movement described above – and, above all, Loevinger's final stage, by concentrating on SCT scores above the 'autonomous' stage. Loevinger already outlined one post-autonomous stage, which she called 'integrated', but it remained vague. Cook-Greuter's main contribution has been to define in detail two discrete post-autonomous stages, 'construct-aware' and 'unitive' (Cook-Greuter, 1994, 1999, 2005). As mentioned above, she has worked closely with William Torbert in the development and refinement of the LDP.

Needs and Values: Maslow, Graves and Spiral Dynamics

Two further, related models are Abraham Maslow's 'Hierarchy of Needs' and Clare Graves' 'Levels of Existence'. Maslow is a significant figure in psychology and relevant for this study and research proposal since he is a mediator between developmental structuralism, or CDP, and positive psychology, being one of its major precursors. His theory of motivation and hierarchy of needs (Maslow, 1943; 1954) cannot, strictly speaking, be said to belong within the ranks of CDP since it has not gone through the rigorous empirical testing of the other stage models. Nevertheless, the theory appears solid and after over 60 years still remains influential today. Several other theories have been based on his hierarchy, including political scientist Ronald Inglehart's (2005) extensive study of values (see chapter five).

Initially, Maslow's final need was the need for self-actualisation, but he later added the need for self-transcendence, which coincides with the later stages of Cook-Greuter and Wade (1996) (see below). This later need is discussed in Maslow (1993) and its implications by Koltko-Rivera (2006).

Clare Graves was an early pioneer in developmental psychology, beginning his research in the 1950's. His work initially began as an attempt to validate Maslow's hierarchy of needs, but it expanded into his own theory of 'Levels of Human Existence', which concentrated more on people's changing systems of values (Graves, 1981). Just as Maslow distinguished between deficiency needs (the first four needs) and being needs (self-actualisation and, later, self-transcendence), so did Graves highlight a clear distinction between subsistence values (the first six) and being values (the last two).

While the data that Graves' collected was much more extensive than Maslow's it was from a narrow sample - male, Caucasian students, perhaps understandable in the 1950's - and he died before he could publish all his research. Nevertheless his interpretation of the data included a rich dialectical dynamic, similar to Kegan's, whereby stages oscillate and spiral between individual and group, inner and outer (Graves, 1981, 1974). His stages also correlate closely to Loevinger's and Kegan's (See Appendix B for a comparative table of all the stage models discussed in this literature review).

Graves' work has been continued and popularised by Don Beck and Chris Cowan (1996) in their theory of spiral dynamics. One major shortcoming of

Graves' model, however, one that clearly differentiates it from Loevinger and Kegan's, is the lack of any robust measure.

Attempts at Integration and Coherence

This literature review has discussed a number of developmental structuralist stage models, each with their own specific focus and perspective. There have been two serious attempts at bringing some kind of coherence and connection between all these various models.

The first is Jenny Wade's study of all of the stages discussed here (except Fowler's) and several others (Wade, 1996). She outlines nine stages, giving a summary of much of the developmental research done to date, placing the corresponding stage of each model into her general stages.

A different approach is taken by Ken Wilber (2000b, 2006), who uses the notion of an 'integral psychograph' that theoretically maps an individual's development in all the different stage models. It reflects research that shows that the various developmental lines mapped by CDP, and other models, are relatively independent, meaning that an individual's overall development can be, and usually is, quite uneven. The lines, however, are not completely independent. It would seem that the cognitive line is necessary-but-not-sufficient for the other lines so that, for example, it is possible for someone to be at a high stage of cognitive development but at a low stage of moral development. The opposite, however, would not, according to Wilber, be possible. Wilber also believes that

Loevinger's line of ego development and Kegan's orders of consciousness, mark a person's 'centre of gravity'.

Several of the stage theorists talk of broad stages of development. Kohlberg, especially, talks of preconventional, conventional and postconventional and Cook-Greuter adds a fourth broad stage, which she calls transcendent. Maslow and Graves divide their stages into deficiency/survival and being needs/values. These are useful delineations that can be used to compare generally all the various stages in the different models. So, for example, we can compare the postconventional stages of Kohlberg (stages 5 and 6), Fowler (conjunctive and universalising stages), Kegan (stages 4/5 and 5) and Loevinger (individualist, autonomous and integrated stages). See Appendix B for a comparative table of the various stage models.

Conclusion

This review has discussed some of the major theorists of developmental structuralism, bearing witness to its rich history and rigorously researched stage models. These models have their shortcomings (see chapter three), but can be profitably used, I propose, in the five areas of positive psychology considered in this dissertation to gain greater precision and further insights. Particularly useful are the broader models and measures of Loevinger (and Cook-Greuter and Torbert), Kegan and those that have developed more recently that use a general 'ruler' based on hierarchical complexity (see chapter three).

The stage models outlined in this review all point in a direction of greater care and complexity, with further growth, in general terms, being beneficial to both the individual, in terms of greater inner freedom and autonomy, and the community, in terms of an expanded circle of care. Using these stage models to illuminate further certain areas of positive psychology, and studying means by which growth can be facilitated through these stages are two key aims of this dissertation.

CHAPTER THREE

CONSTRUCTIVIST DEVELOPMENTAL PSYCHOLOGY: A CRITICAL APPRAISAL OF THE PARADIGM

INTRODUCTION

This chapter aims to present the broad philosophical context in which constructivist developmental psychology is embedded and then discuss the various critiques of the paradigm and controversies that surround its stage theories. The critiques are divided into two main areas: philosophical and empirical. The controversies centre around the notion of stages.

PHILOSOPHICAL AND EPISTEMOLOGICAL CONTEXT

Constructivist developmental psychology (CDP), or developmental structuralism, forms part of the wider movement of structuralism, which is defined by its belief that there are structures underlying all human behaviour and mental functioning (Gardner, 1972). Structuralism has gone through several periods and covers vast terrain, which is largely beyond the scope of this essay. In cognitive psychology, Jean Piaget was one of the pioneers of structuralism and he challenged the dominant empiricist and behaviourist paradigm, advocating a *constructivist* mid-position between the traditional empiricist / rationalist divide (Piatelli-Palmarini, 1980).

Developmental Constructivism

Underlying constructivism is the notion that the world is not just perceived but in some way *constructed*, a notion that emerged in full force with Immanuel Kant who claimed that what we see is the result of ‘categories’ of the mind acting upon “the thing in itself”. This key notion of *construction* was then combined with the equally crucial notion of *development*. In philosophy, this was first highlighted by Fichte, who observed how Kant’s a priori structures developed over time, and elaborated by the other great German Idealists Schelling and Hegel, who constructed their grand, evolutionary philosophies around Fichte’s developmental insight (Wilber, 2000a). The development of a priori structures was also traced, in their different ways, by Dilthey and Foucault who considered themselves, as did Piaget, ‘dynamic Kantians’ (de Mul, 1997).

Within psychology, this developmental unfolding was studied empirically in children and adolescents by Piaget. His ‘genetic psychology’ (genetic here being used in the mid to late 19th century sense of *development*) traces the developmental processes that underlie mental functions (Piaget and Inhelder, 1969 / 2000), while his ‘genetic epistemology’ examines the “formation of knowledge itself, that is to say of the cognitive relations between subject and object” (Piaget, quoted in de Mul, 1997, p. 231). Kohlberg, Loevinger, Kegan and many other developmental psychologists then extended Piaget’s original investigations beyond adolescence into adulthood and beyond cognitive development into broader stage theories that included affective, interpersonal and intrapersonal aspects and also meaning-making.

The cognitive constructivism of Piaget and others is one manifestation of a broader constructivist epistemology, one which includes, in psychology, Kelly's personal construct psychology (Ashworth, 2008) and Vygotsky's social constructivism (Crain, 2005; Vygotsky, 1986). Beyond psychology, it embraces the broader field of social constructionism¹.

Constructivism and postmodernism

Constructivism as a whole has been linked to postmodernism through its abandonment of *representationalism* or the *correspondence theory of truth*, which claims there is an objective reality that can be directly perceived – as opposed to being interpreted or constructed by the mind. Ashworth (2008) quotes Kenneth Gergen who pinpoints this rejection of representationalism as the one common area of agreement between the myriad expressions of postmodernism and the point of divide between the modern and postmodern. Wilber (2000b) adds two further key tenets of postmodernism: first, meaning is dependent on context and contexts are boundless²; second, and as a result of the first, no single perspective should be unduly privileged – since it is likely to be partial and distorted. The more precise relation of constructive developmental psychology to postmodernism will be discussed after a consideration of postmodern critiques of it.

PHILOSOPHICAL CRITIQUES OF CONSTRUCTIVE DEVELOPMENTAL THEORIES

Despite this link with postmodern thought, major philosophical critiques of development in general and developmental structuralism in particular have come from postmodernism. Some of these critiques, as well as a hermeneutic critique, will now be considered.

Critiques from structuralist-hermeneutics

With respect to Piaget's 'genetic epistemology', which underlies much of constructive developmental psychology, there have been several critiques. One, from a Diltheyan perspective (de Mul, 1997), points to three main areas. While both Dilthey's and Piaget's visions of development have much in common – they are both 'dynamic Kantians' who see development as a continuous process of differentiation and integration - the a priori structures whose development Piaget traces are overly intellectual and formal categories while Dilthey adds both feeling and will to rationality. This I feel is a valid critique and one that recent developments in CDP have tended to mitigate³. A second critique is that Piaget didn't stress sufficiently the influence that the social 'life-world' has on a child's cognitive development. This I think is accurate and Vygotsky's position would seem the more appropriate. More recent theories, like Fischer's dynamic skill theory (see below), also incorporate Vygotsky's observations. Finally, de Mul stresses the lack of understanding Piaget had of how his own 'hermeneutic situatedness', his own stage of conceptualisation,

influences his interpretation of the developmental stages he studied. Again, a valid critique, I believe. (For additional critiques of Piaget's Hegelian dialectics and teleology, see endnote ⁴)

'Hard line' Postmodern Critiques

Other critiques come from the more 'hardline' postmodernists Lyotard, Foucault and Derrida. Jos de Mul and Michiel Korthals (1997) trace many of their criticisms back to Nietzsche and Heidegger's damning appraisals of Enlightenment rationalism and optimism. Whereas the Enlightenment philosophers saw mankind evolving towards a positive, more reasonable world, Nietzsche and Heidegger saw the opposite, a movement towards decay.

De Mul and Korthals outline three areas of criticisms. The first focuses on the empirical claims of developmental theory, claiming that development does not follow a linear path towards an increasingly moral society and that, if anything, regress is more accurate. However, if we view human history over the long term, a strong argument in favour of social progress can be made⁵.

The second area involves normative claims made by developmental theories. Both Lyotard and Foucault, say de Mul and Korthals, deny any developmental patterns in history, claiming instead - here Foucault - that history is a battle of conflicting and biased interpretations that serve specific interests of power. For Foucault knowledge is inextricably linked to power and also social practices, forming 'power-knowledge complexes' like education (via, for example,

developmental theories) and health services that discipline individuals. In answer to such criticism, it is quite plausible to argue that the structures and stages outlined by developmental theories, rather than being negatively disciplinary and repressive are, to the contrary, a road map to liberation. They help reveal the general, underlying paths of development through which individuals, each in their own unique way, move towards the fulfilment of their own potentials. The research done to date suggests that the further people move along the developmental spiral, the greater their awareness, internal freedom, overall well-being, and ability to cope with the complexities of life in the twenty-first century (e.g Kegan, 1982; Cook-Greuter, 1999).

The final area of postmodern criticism discussed by de Mul and Korthals concerns certain conceptual objections which include developmental theories' claims of universality, teleology and its foundational thinking (belief in a 'transcendental signified', in some criteria beyond the cultural-linguistic framework of interpretation). The question of teleology is discussed in endnote 4, and the other two points, while containing much truth (e.g we *are* all embedded in cultural frameworks that govern our conceptions and perceptions) reflect two aspects of deconstructive postmodernism that, if taken to an extreme, lead to a radical, morally paralysing relativism and a number of paradoxes. They deny the existence of any objective truth or reality (Derrida's 'there is nothing outside the text') only interpretations, and there are an infinite number of relative perspectives where no value or qualitative distinctions can be made. David Ray Griffin (2007) points out that the acceptance of perspectival relativism as truth entails a number of paradoxes: first, "the truth claim that truth

does not exist”; second, “the universal truth about the human condition is that no one can know universal truths”. (p. 99).

Deconstructive postmodernism versus constructive postmodernism

Wilber’s (2000b) distinction between extreme, deconstructive postmodernism and constructive postmodernism is a useful one. The former falls into a paralysing ‘aperspectival madness’ where all perspectives are equally valid, while the latter embraces all the multiple perspectives that its pluralistic insights have liberated and, furthermore, integrates them into interconnected networks and natural hierarchies. Constructive postmodernism includes both respect for individual differences and recognition of underlying commonalities between humans. From this perspective, because of their constructivist epistemology and interconnecting networks of stages – stages that map universal deep structures or patterns while at the same time allowing for pluralistic surface structures / patterns - I think it is reasonable to place Piaget and later developmental structuralists in the constructive postmodern camp.

However, as well as certain philosophical shortcomings discussed above, the CDP paradigm has been criticised on a more empirical level which points to further limitations. These empirical shortcomings will now be discussed and appraised.

EMPIRICAL CRITIQUES OF CONSTRUCTIVIST DEVELOPMENTAL THEORIES

The structural stages of CDP have been criticised on several grounds, with many developmental psychologists challenging CDP's fundamental notion of cross-cultural, hierarchically integrated, discontinuous, invariant stages of increasing complexity. Instead, they claim that development is continuous or non-hierarchical or displays no qualitative change or lacks cross-cultural validity.

Hierarchical or non-hierarchical?

These different claims and critiques come from several quarters. Life-span developmentalists like Erikson (Crain, 2005; Fowler, 1981) and Levinson (1990), for example, see development as more *epigenetic*, a maturational notion of development Erikson borrowed from biology, where the development of capacities unfold 'on schedule'. Their 'stages' (Erikson) or 'periods' and 'eras' (Levinson) are consequently closely linked to chronological age. They are invariant, but non-hierarchical, although Levinson agrees there are hierarchical stages of growth in preadulthood - in cognitive complexity, adaptive capability and character formation for example. There are interesting possibilities for integration of Erikson and Levinson's models with structural CDP models, which both Levinson (1990) and Fowler (1981) discuss⁶.

Gardner et al (1990) also believe that creative development follows an epigenetic process rather than one of successive hierarchical integrations. Others, like Dittman-Kohli and Baltes (1990), for example, while agreeing that 'mechanical intelligence' develops hierarchically in cognitive Piaget-like stages that are universal, believe that 'practical intelligence' – a combination of cognitive, affective and reflective intelligence – shows no such hierarchical development.

Piaget's stages critiqued and expanded

The cross-cultural validity of Piaget's four stages has been replicated in many studies, although Alexander et al (1990) discuss how some studies indicate that formal operations is virtually absent in non-literate cultures. They also mention, however, that further studies in non-technological societies, using culture-appropriate tasks, do show evidence of formal operations. Nevertheless, it would seem that formal education fosters formal operational thinking.

The global nature of Piaget's stages has come under severe criticism and few would now defend it. His 'logico-mathematical' stages are no longer seen to underlie all development since *décalage* (uneven development across domains) has been repeatedly shown. Fischer (1980; 2006), for example, believes *décalage* to be the norm. Moreover, many neo-Piagetians like Kegan (1982; 1994) have broadened Piaget's exclusively cognitive focus to include affective, intrapersonal and interpersonal aspects. Loevinger's notion of ego development (e.g. 1987) offers a similarly broad conception⁷.

As well as broadening Piaget, many theorists within the structuralist tradition have critiqued and expanded Piaget's endpoint, and have provided evidence for up to four stages beyond formal operations (e.g Commons and Richards, 2003; Cook-Greuter, 1999; Kegan, 1982, 1994).

Conflicting empirical evidence from constructivist and empiricist approaches

Further criticisms come from Piaget's epistemological antagonists, the behaviourists, who reject any theoretically ordered sequence of knowledge acquisition and especially object to Piaget's notion of stages being emergent (Commons et al, 1998). This is largely a philosophical issue, but Alexander et al's (1990) suggestion that Piaget (and, presumably, his fellow-travellers) have ignored evidence from both the preformationist-nativist and empiricist-environmental camps, rings true. His philosophically mid-way constructivist position, discussed at the start of this chapter, seems to have led him to underestimate their evidence, reacting against their deterministic implications where genes or the environment would restrict the child's creative construction of its understanding of reality.

Fischer and Silvern (1985) review the evidence for both universal discontinuous structural stage development and continuous development with different developmental patterns, suggesting an interesting integration. They conclude that the data strongly validates *both* positions and the problem lies in the two

opposing developmental models – organismic-structural (CDP) and mechanistic-functional (empiricist/behavioural) - upon which research is based, each one finding evidence that fits their model. This relates back to Alexander and Langer's observation about Piaget's epistemological bias but points to a similar bias in the behaviourist / empiricist position⁸.

A promising integration

Fischer and his colleagues have constructed their own promising theory, originally called *skill theory* (Fischer, 1980) and now *dynamic skill theory* (Fischer and Bidell, 2006), to integrate the two approaches - as well as research findings from information-processing psychology and skill learning - and account for conflicting empirical evidence that shows development as continuous in some conditions and discontinuous and stage-like in others. His theory has continuously developed since 1980 and Fischer has aligned his theoretical model with Commons et al's (1998) Model for Hierarchical Complexity (MHC) and Dawson's Lectical Assessment System (LAS) (e.g Dawson-Tunik et al, 2005) to produce a very interesting approach to the conflict between domain-general and domain-specific development. While most cognitive-developmentalists agree that development proceeds at different rates through different domains, some believe that different domains involve different processes (e.g Kohlberg) and others, while acknowledging that specific domains are associated with unique structures and processes, also claim that a single developmental process based on hierarchical complexity underlies all domains. This is Fischer, Commons and Dawson's position (Dawson et al,

2005). A detailed discussion of the Fischer-Commons-Dawson approach is beyond the scope of this chapter but see endnote⁹, the introduction and chapters to follow, and Appendix C for details of Dawson's LAS.

In summary, there are many differences within the field of developmental psychology and while developmental structuralists need to deal with the shortcomings described in this section, interesting progress is being made.

CONTROVERSIES SURROUNDING CONSTRUCTIVIST STAGE THEORIES

This section will briefly discuss three 'controversies': first, the question of determinism and then the question of what constitutes qualitative change and whether higher stages are 'better' than lower stages, which are both related to the notion of hierarchical complexity.

Determinism

As already mentioned, the very notion of constructivism in itself is a safeguard against rigid determinism¹⁰. Nevertheless, structural stage conceptions conceive stages as developing in an invariant sequence of hierarchical integrations and in that sense could be called 'deterministic'. But, as systems theory highlights, such nested hierarchies are found throughout systems in general, and the whole of life has evolved through such nested growth (e.g atoms to molecules to cells to organisms). Furthermore, Laszlo (1996) points out that a nested hierarchy is what distinguishes a 'whole' from a 'heap'. Such a

structure is required if qualitative development (see below) is to occur. In fact, without such structural organisation living organisms die, societies collapse and human minds become incapable of facing everyday problems (Fischer and Bidell, 2006). Within these general structures, however, enormous variability can and does occur.

Nevertheless, early stage conceptions of CDP were somewhat static since they failed to separate dynamic structure from static form (Fischer and Bidell, 2006) and the logic of development from the dynamic of development (Kothals, 1997; Van Haaften, 1997). The conflation of structure and form helped account for stability in development but failed to explain a consistent pattern of variability in development that research has revealed. Separating psychological structure from form, as does the dynamic systems approach expounded by Fischer and Bidell, helps track both variability and the underlying order. Similarly, only by separating the logic of stages and their interrelations from the psychological processes that belong to the dynamic of a theory can phenomena like regression be more easily seen and accounted for.

Qualitative development and hierarchical complexity

Stein and Heikkinnen (2008) trace a century of constructivist developmental thought that has characterised stages, in general terms, as involving increased differentiation, integration, complexity and abstraction¹¹. And it is these properties that define qualitative development¹².

The key notion here is hierarchical complexity which, in Dawson's metric (LAS) for example, can be observed in performance on tasks and separated from conceptual content. In conceptual development, this hierarchical complexity reflects a hierarchical integration of concepts by which concepts of an earlier level are coordinated (or integrated) into concepts at a new level. Dawson gives the example of the notions of *play* and *learning* which are then integrated at a subsequent level as *learning as play* (Dawson, 2006). Fischer, Commons and Dawson have built on Piaget's notion of *reflective abstraction* to create a more generally applicable measure that is analytical and content free. Each researcher has their own levels of complexity that are equivalent, and there is empirical evidence of correlations with the levels/stages of domain-specific scoring systems (Dawson, 2006).

Apart from development from one level of complexity to another there is also what could be called quantitative or 'horizontal' growth, although such a sharp distinction denies the complex interdependence between the two forms of growth. Fischer, Dawson and others' view of development as a combination of both learning and structure (hierarchical complexity) is pertinent here¹³.

So qualitative change, for CDP, is based on different levels of hierarchical complexity and integration. This inevitably leads to the next controversy: are more complex and integrated stages 'better' than less complex and integrated stages?

Are 'higher' stages 'better' than 'lower stages'?

When considering such a question, it is important to distinguish between 'reconstructive' claims and 'evaluative' claims (Van Haaften, 1997a and 1997b; Korthals, 1997a and 1997b; Boom, 1997). The former is a description of specific aspects of an observed developmental pattern, while the latter is an additional, normative claim as to whether later stages in that pattern are 'better' or not. In practice, it is often assumed that later stages *are* better than earlier stages, which, as Van Haaften (1997b) points out, "amounts to a genetic variation of the naturalistic fallacy" (p. 77). Reasons beyond the mere fact that a stage occurs later than an earlier one are needed to justify it being 'better'.

Piaget, for example, uses the pragmatic argument that later stages are more adaptive ways of viewing reality and Kohlberg has used the formal criteria of greater differentiation and reintegration (Van Haaften, 1997b). Others simply point to the fact that later stages are more fulfilling (Miller and Cook-Greuer, 1994) or more individuated and progressively less embedded in subjective structures (Kegan, 1982). All explicitly state that later stages are more complex and hierarchically integrated. They are cumulative, each later stage building upon earlier stages, differentiating from and reintegrating or incorporating prior stages.

Because later stages include yet transcend, differentiate from and reintegrate earlier stages at a new, emergent level, then we can say that they are 'better' or more adequate in the sense of being *more inclusive and holistic*. But each

earlier stage is necessary for the construction of each later stage and in that sense all stages are equally valuable, all irreplaceable parts of the whole.

We could perhaps also claim that since later stages lead to greater internal freedom and fulfilment for the individual and greater social harmony, due to an increasing ability to take multiple perspectives, for the collective, then positive institutions like schools, that facilitate such development - at natural speeds and all the while respecting the integrity and value of each stage – would be desirable.

CONCLUSION

This chapter has briefly outlined the philosophical and epistemological context of constructivist developmental psychology and discussed some major philosophical and empirical critiques of the paradigm. It noted some shortcomings of its original framework and mentioned several ways in which the field has attempted to overcome such limitations. Finally, it considered a number of controversies that have caused tension within and without the area of adult development. It is hoped that such tensions and shortcomings will gradually yield further progress through theoretical contemplation and the constant integration of current and new research findings.

CHAPTER FOUR

INDIVIDUAL CONCEPTUALISATIONS OF WELL-BEING

Having reviewed constructivist developmental psychology, the rest of this dissertation will consider how its developmental stage conceptions might be applied to the study of five areas of positive psychology. The first of these is the varying conceptualisations of well-being held by different individuals.

There are many different notions of happiness or well-being and many attempts have been made to conceptually capture its essential components and to measure it. A common distinction made is between hedonic and eudaimonic well-being (e.g. Waterman, 1993; Ryan and Deci, 2001; Ryan, Huta and Deci, 2008). Hedonic well-being, linked philosophically with the Utilitarians like Jeremy Bentham, is equated with happiness and pleasure, and studies what makes experiences and life pleasant or unpleasant (Deiner, Lucas and Oishi, 2005). It is defined in terms of maximisation of pleasure (positive affect) and minimisation of pain (negative affect). Most current measures of well-being, like the SWLS (Satisfaction with Life Scale) and PANAS (Positive Affectivity and Negative Affectivity Scale) reflect more the hedonist conception of well-being and illustrate the hedonic notion of Subjective Well-Being (SWB). SWB consists of both a cognitive component – a global assessment of satisfaction with one's life – and an affective component, which involves one's experience, in terms of positive or negative affect, of momentary events (e.g Deiner, 2000).

Eudaimonic well-being (from the Greek *eu*, 'well-being', and *daimon*, 'spirit' or 'inner self'), on the other hand, is linked philosophically with Aristotle (especially his *Nicomachean Ethics*), the Stoics and existential philosophy, as well as with humanistic psychology, and has a very different flavour. Aristotle equated true or authentic well-being with the human good, the expression of virtue and the realisation of human potential; the stoics stressed self-discipline; and Carl Roger's *actualising tendency* and Abraham Maslow's notion of self-actualisation (Linley and Joseph, 2004; Maslow, 1954 and 1968) both stressed the importance of growth via the realisation of one's potential.

There are many competing conceptions of well-being within the eudaimonic camp, including Carol Ryff's psychological well-being (e.g. Ryff and Keyes, 1995), which consists of six components: personal growth, self-acceptance, autonomy, environmental mastery, positive relationships and purpose in life; Ryan and Deci's self-determination theory (e.g. Ryan and Deci, 2000; Ryan, Huta and Deci, 2008), which claims there are three fundamental psychological needs – autonomy, competence and relatedness – and that the fulfilment of these needs is essential for well-being, as well as psychological growth; and Seligman's authentic happiness (Seligman, 2003), a model that consists of three, or rather four, different levels of well-being: the pleasant life, the good life, the meaningful life and the full life. Mihaly Csikszentmihalyi's notion of flow is also said to lie within the eudaimonic camp (Nakamura and Csikszentmihalyi, 2005)¹.

This cursory overview of current notions of well-being gives an initial idea of both the theoretical diversity and the prevailing lack of overall conceptual coherence. Linking the notion of stage development with individual conceptualisations of well-being might provide an opening towards greater conceptual coherence, bringing perhaps the various definitions of well-being into correlation with different holarchical stages.

For example, hedonic well-being is viewed largely as being the result of a reaction to *external* events, whereas the source of eudaimonic well-being is essentially *internal*. For some people, happiness consists predominantly of hedonic pleasure, for others it is contingent upon external conditions like money and power, and for yet others it results more from internal factors like meaning and purpose in life. This move from external contingency to internal self-direction is also seen in the move from earlier to later stages of development, which is characterised by ever-greater internal freedom and autonomy (e.g. Kegan, 1982, 1994; Cook-Greuter, 1999). The different responses correlate roughly with Maslow's hierarchy of needs (Maslow, 1954) and Seligman's implicit hierarchy of the pleasant, the good and the meaningful life (Seligman, 2003).

There have been some attempts to link individual notions of well-being with Maslow's hierarchy of needs. One study, for example, speculates how the many different meanings of happiness given by the study's participants might be organised according to Maslow's needs (Boniwell, 2006). Ryff and Keyes (1995) lament the dearth of theory-based formulations of well-being and

mention the sub-field of developmental psychology and Maslow, but their own theory of psychological well-being is a completely horizontal one.

The stage conceptions of CDP might shed further light on this issue. This would be quite complex, however, as it is now clear that no one stage model can capture the full complexity of an individual. As was seen in chapter two, there are many different stage conceptions, many concentrating on specific domains (or lines) like faith (Fowler), moral reasoning (Kohlberg), values (Graves) or needs (Maslow) and any one individual can be at different stages in different lines – as well as vary quite considerably in specific lines depending on the current context, level of support and emotional state (see e.g. Fischer and Bidell, 2006).

Nevertheless, there are some stage conceptions, mentioned in chapter two, that have attempted to capture a broader area - like Loevinger/Cook-Greuter's stages of ego development or Kegan's Orders of Consciousness. Furthermore, recent metrics based on the notion of hierarchical complexity have been developed, the most robust being Dawson's LAS (Lectical Assessment System). The LAS (see Appendix C) has been shown to tap into a cross-domain 'core structure' or 'latent dimension' of complexity of conceptual reasoning that underlies several different domains, including Kohlberg's moral stages, Perry's epistemological positions, Kitchener and King's stages of reflective judgement and Armon's good life stages (Dawson, 2006). (Armon's good life stages are particularly pertinent to notions of happiness/well-being).² Using these models and measures to study this hypothetical correlation

between stage development and an individual's conceptualisation of well-being, would be much more feasible.

For example, a questionnaire could be devised to assess people's conceptualisation of well-being - or appropriate, existing questionnaires used - together with the use of Kegan's subject-object interview or Loevinger's sentence completion test. With Dawson's LAS, the process would involve interviewing people about their conceptions of well-being and then scoring the interviews for their 'lectical' or complexity of reasoning level. At the same time the conceptual content of the interviews would be coded and then the correlation between the content and the level of complexity could be analysed. In this way a general picture of what well-being consists of at different levels of complexity could be drawn. A combination of all three systems would bring a great deal of interesting data to the field that could lead to a more nuanced overall picture. In this way, a mutual dialogue between the two fields could be established, with CDP elucidating the effects of stage on conceptualisations of well-being and positive psychology offering and possibly adjusting its existing models and interventions accordingly.

It is worth repeating, for reasons of ethics, that in any research using developmental stages, it should be realised that no one assessment tool captures the essence of a person, that variability is the norm and is affected by context, emotional state and level of support during a task, and that stages are not fixed since development through the stages is always open. A fundamental aim of developmental assessment in positive psychology, I feel, should be to

discover in what ways development leads to greater flourishing and how such development can be promoted.

CHAPTER FIVE

VALUES

Within positive psychology, the notion of values is also generally treated in a horizontal fashion, with no hierarchical stage progression. One of the major models of human values is that of Shalom Schwartz (e.g. Schwartz, 2008), which organises ten universal values in a circumplex model with two underlying dimensions that shows the dynamic relationship between them. Schwartz's model has brought greater clarity to the notion of values and their interrelationships, and it has inspired other similar cross-cultural models, for example a two-dimensional circumplex model on the closely-related concept of goals (Grouzet et al, 2005). These models, despite their dynamic, clarifying nature, still remain horizontal models and might benefit from a developmental structuralist perspective that adds a vertical dimension. For example, taking Kohlberg's broad classification of stage development into pre-conventional, conventional and post-conventional we could hypothesise, and then test, a predominant correlation of Schwartz's hedonist value with pre-conventional; security, conformity and tradition values with conventional; and self-direction and universalism values with post-conventional. This corresponds to the general nature of developmental progression outlined by the various stage models of developmental structuralism. By using specific models, we could gain more precise correlations. While Graves' developmental stage model (1974) deals specifically with values and maps how individuals' value systems develop hierarchically, its lack of a robust assessment tool rules this model out for this specific research proposal. Nevertheless, other stage models and assessments

tools like Loevinger's, Kegan's or Dawson's could be used to study how a person's stage development affects their predominant values. This could be done in ways similar to those suggested in the previous chapter to study the correlation between a person's stage and their conceptualisation of well-being.

The accumulated data from such developmental stage studies could also be used to see how they correlate with the work of another positive psychologist working on values: Tim Kasser (2002, 2004, 2006). He has focused on materialist and non-materialist values and their relation to well-being, with his research supporting humanistic psychology's view that materialistic values tend to undermine well-being. They also correlated with poorer physical health and narcissism. There is a link between his work and CDP since he links values to psychological needs based closely on Maslow's hierarchy (and also on Ryan and Deci's, 2000, self-determination theory). He postulates that materialistic values predominate in those people whose needs have not been met. Specifically, materialistic values a) predominate when the needs for safety and sustenance are unfulfilled; b) negatively affect the needs for self-esteem and competence and c) interfere with the attainment of quality relationships and sense of inner freedom and authenticity. A combination of CDP and positive psychology could research how materialist and non-materialist values, if at all, correlate with developmental stage.

Like Kasser, political scientist Ronald Inglehart has also based his values research on Maslow's hierarchy of needs. He distinguishes between survival values and self-expression values, which is similar to Maslow's (1968) two tiers

of deficiency and being/growth needs - and also Graves' subsistence and being values. With his colleagues, especially Christian Welzel, Ronald Inglehart has been studying cultural values and their relation to socio-economic and political development for over three decades. Together they have developed updated versions of modernisation theory (Inglehart and Welzel, 2005) and human development theory (Welzel, Inglehart and Klingemann, 2003), giving both greater conceptual integration. In doing so, they made use of the massive data base gained from the World Values Survey which, having started in 1981, now covers 85% of the world's population from 81 countries.

The essence of their research and theory is that socioeconomic development (modernisation) leads to an increase in individual resources which facilitates the emergence of emancipation and self-expression values first in the individual and then in the culture as a whole. This in turn leads to the demand for civil and political liberties and the creation of effective democracy. They argue that there is a direction to human development, which moves towards greater human choice and autonomy, greater tolerance, quality of life and self-expression. The direction, however, is probabilistic and reversible since the underlying cause of development is socioeconomic and so unexpected economic collapse could arrest and reverse it. The direction is also non-linear: while industrialisation led to bureaucratisation and secularisation, development in postindustrial societies has led to a very different cultural process of increased individual autonomy and self-expression values, including spiritual concerns of meaning and purpose. They also point out how in agrarian societies religion predominated, but this was a more institutionalised, dogmatic religion. Similarly, in poorer societies

where economic resources are scarce and survival is a priority, self-expression values are constrained and authoritarian regimes are the norm. So cultural change and variation in people's values occur, they point out, in response to significant changes in existential conditions and experience - also one of Clare Graves' key points.

Their impressive studies also test whether their theory of human development translates across a three-level nested hierarchy of nations, regions and cultural zones. They conclude that "the effects of individual resources on emancipative values and of emancipative values on effective democracy remain highly significant across nations, even controlling for diffusion within cultural zones" (Welzel, Inglehart and Klingemann, 2003, p. 363). They continue: "The human development syndrome [the three components of socioeconomic development, emancipation values and effective democracy] is strikingly evident at the cross-cultural level. It is present there to an even higher degree than cultural zones homogenize nations: cultural zones capture nearly 85 per cent of the cross-national variance of each of the three components of human development, but the linkages between these components explain more than 90% of the cross-cultural variation. In conclusion, the linkages of human development are not culture-specific but universal. Cultural zones differ from each other in ways that reflect the logic of human development" (p. 365-366). For Welzel, Inglehart and Klingemann, then, effective democracy is an 'evolutionary phenomenon' that requires the existence of emancipative and self-expression values on a mass level, which are, in turn, facilitated by socioeconomic development. And

alongside effective democracy and self-expression values comes greater happiness and quality of life (Inglehart, Foa, Peterson and Welzel, 2008).

These are clearly concerns relevant to positive psychology and there is room for an exciting conversation between socioeconomic, cultural and political development on the one hand, and individual development as studied by developmental structuralism on the other¹. Both postulate a development that is cross-cultural and universal and both suggest a probabilistic direction - especially Fischer and Bidell's (2006) organismic-contextualist model and Dawson's approach and metric - that is non-linear. Incorporated within positive psychology, this would contribute to a 'positive social science' – something that the founder of positive psychology Martin Seligman has recently alluded to - that also benefits from a vertical dimension. Inglehart, Welzel and their colleagues' empirical evidence gives strong support in favour of the notion of social and economic progress, a notion that cultural relativism and aspects of postmodern philosophy (see chapter three for a fuller discussion) have undermined in recent years. As Inglehart and Welzel stress (2005), although the ideology of cultural relativism arose in protest against the implication that some societies are more advanced than others, "it has a deeply pernicious aspect: it justifies all patterns of social relations, no matter how repressive or damaging to human dignity. Slavery and genocide were once accepted in virtually all cultures; torturing prisoners and treating women as second-class citizens is still widespread. Consistent cultural relativism would reject the claim that these practices are incompatible with human rights, branding such claims as ethnocentric" (p. 300). Similarly, developmental structuralism shows a

progressive, directional development towards greater autonomy, tolerance of diversity, expanding care and respect for human rights.

There are other important studies on values, like sociologist Paul Ray's twenty-year study of values and lifestyles and political values (Ray and Anderson, 2000; Ray, 2008) and Brian Hall's (2006) more than thirty-year study of the relationship of values to human and organisational development. Both offer a directional progression of values: Hall describes four phases (survival, belonging, self-initiating and interdependent) and Ray covers three main groups (traditionals, moderns and cultural creatives – which reflect Inglehart and Welzel's traditional, secular-rational and self-expressive values). An integration of developmental structuralism's stage models and the various directional studies on social, cultural, political and organisational values might lead to fruitful results of interest to positive psychology.

CHAPTER SIX

LEADERSHIP

Leadership has been studied from many perspectives over the years, including frameworks that study the personal qualities of effective leaders; leaders' behavioural styles; the dynamics between leaders and followers, especially with charismatic leaders; and organisational psychology's study of performance effectiveness (Peterson and Seligman, 2004). In positive psychology, leadership is studied as a strength (see next chapter) and also in organisational settings, especially the workplace, with a special interest in transformational or authentic leadership. Sivanathan et al (2004), for example, present a model that links transformational leadership and employee well-being and effectiveness, while Luthans and Avolio (2003) present a model of 'authentic leadership development'. This latter model integrates positive organisational behaviour, transformational leadership and ethical and moral perspective-taking capacity. Luthans and Avolio take a "developmental assumption" that "core attributes of [authentic] leaders can be developed, including moral reasoning capacity, confidence, hope, optimism, resiliency and future-orientation" (p.246). Similarly, from CDP, Rooke and Torbert (2005) relate that "the most remarkable – and encouraging – finding from our research is that leaders can transform from one action logic [the name Torbert gives to his developmental stages] to another" (p. 9). A study of the ways in which transformational and authentic leadership are related to developmental stage, in what ways they lead to positive change within organisations and how developmental movement can be facilitated might provide a useful addition to positive psychology research.

While still relatively sparse, there are a number of interesting studies that have used a developmental stage perspective to gain further understanding of leadership and organisational change. As mentioned in chapter two, Rooke and Torbert (2005) discuss research demonstrating that only those managers operating from the latest three stages (Individualist, Strategist and Alchemist) have shown a regular ability to transform their organisations. Moreover, their research showed that the ability of managers measuring at earlier action logics (Opportunist, Diplomats and Experts) to effect organisational strategies was significantly lower than that of managers measuring at the next later stage in their developmental sequence (Achiever).

McCauley et al (2006) review the research literature on leadership that has used CDP models, focusing on the three most frequently used models of Kegan, Loevinger/Torbert and Kohlberg. They divide the adult developmental stages of all three models into three broad stages/orders which they call Dependent, Independent and Inter-independent¹. Most of this research is focused on how stage development relates to leadership effectiveness and performance, and indicates that those leaders operating at the Independent order are more effective in modern organisations than those operating at the Dependent order – e.g they are more likely to delegate, deal more easily with conflict, use rewards and expertise rather than coercion to motivate and influence employees and are more effective at instigating change. Because there are few leaders at the Inter-independent stage little research that studies the effect of their leadership has been done. Most has been done with

Loevinger/Torbert stages, which shows that the higher action logics are more effective at implementing transformational change (see Rooke and Torbert, 2005, comment above). Leadership effectiveness is clearly of concern to positive psychology and can have great impact on organisational and employee health and well-being.

Another area within leadership of interest to positive psychology is the study of how development in individuals can be facilitated (e.g. Luthans and Avolio, 2003; see also the chapter on positive adult development). McCauley et al note how Kegan theorises that individuals at his Interindividual order are more likely to facilitate the development of others – though no significant studies have yet been done to test this. They also mention studies by Torbert that show how the use of ‘action inquiry’ – a practice devised by Torbert that encourages people to be simultaneously aware of subjective, intersubjective and objective data (see Torbert et al, 2004) - in an MBA programme led to impressive developmental change in most of the students.

In general, however, McCauley et al conclude that much of the research on CDP and leadership uses restricted samples, employs mainly cross-sectional rather than longitudinal research and, with the exception of Torbert’s research, is piecemeal rather than cumulative. There is clearly room for a collaboration between CDP and positive psychology to overcome these shortcomings and refine our understanding of leadership, positive organisational change and the facilitation of individual development.

One way to do this could be through the use of Dawson's new cross-domain metric (the LAS) and methodology (developmental maieutics) (see Appendix C). In essence, these tools are used to describe, and later assess, developmental sequences of conceptual reasoning and skill mastery in any knowledge domain. Recently, Dawson and Stein (2008) have used them to analyse the development of conceptual reasoning of good leadership. This was done by interviewing a sample of 189 children, adolescents and adults. The interviews were then evaluated for their developmental level and conceptual content using the LAS. The coding of conceptual content uncovered eight themes and 449 concept codes, which were then ordered by the developmental levels in which they first appeared, and this was used as the basis for further qualitative analysis to trace the developmental pathway. From LAS level 10 (abstract mappings)², the eight identified themes [ethics, social skills, emotion, personality, style, communication, skills (other) and cognition] largely coincided with the factors that researchers of implicit leadership theories had also identified. Although the sample was not representative and the study involves a first approximation, Dawson and Stein believe the results give a more nuanced account of leadership reasoning than existing ones. Further research via developmental maieutics will be able to refine the developmental pathway.

Furthermore, Stein and Heikinnen (2008) suggest how 'psychographs' can be constructed to show how skills in general are distributed in an individual at any given time ('synchronic' psychograph) and how they develop over time ('diachronic' psychographs) – in one specific domain or over several domains. In the domain of leadership, they give an example of a diachronic psychograph

(see figure 1) that includes four specific leadership skills: leadership reasoning, ethical reasoning, decision-making and enterprise focus.

Para ver esta película, debe
disponer de QuickTime™ y de
un descompresor TIFF (Uncompressed).

Figure 1: A diachronic psychograph of leadership skills

(The y axis shows some of the higher LAS levels divided into four phases).

Permission: Stein and Heikinnen (2008)

The construction of developmental pathways and personalised psychographs enable individuals to see where they are and where they might next develop to. This in turn offers the possibility of devising more precise interventions to facilitate development. A dialogue between positive psychology and CDP in this respect might lead to promising results. Because of the versatility of the LAS, due to its ability to separate developmental level and conceptual content, such a dialogue could be extended to cover other strengths apart from leadership. The next chapter examines this possibility and further considers LAS's advantages and limitations.

CHAPTER SEVEN

STRENGTHS

Strengths are one of the pillars of positive psychology, and Peterson and Seligman's classification of character strengths (2004) one of its major publications. They see character as composed of positive dispositions or traits or strengths, which possess both a level of stability and generality yet without being genetically fixed. They can, in other words, be cultivated and developed.

The authors define their work as an “aspirational *classification* of [24] strengths and virtues” (p. 7)¹ that involves a hierarchy of three conceptual levels: virtues, character strengths and situational themes. Virtues are deemed universal and are valued by religion and moral philosophy. Character strengths, which have been placed as key ingredients of specific virtues, all require the acquisition and employment of knowledge, and yet are distinct from each other. People can therefore be, and are, at different ‘levels’ in different strengths. Finally, situational themes are habits that arise out of specific settings like the workplace or the family, and they are value-neutral. They can be used to acquire strengths and virtues but also for less ethical objectives. According to Peterson and Seligman, the greater the level of abstraction – from themes to strengths to virtues – the less the variation and the greater the universality.

Of course, this initial classification does not claim to be exhaustive, but it does offer a very useful vocabulary with which to empirically study important positive characteristics and psychological processes or domains or skills. A

complementary classification is the Gallup list of 34 strengths (Rath, 2007), which are examples of talents and specific work 'themes'. For Gallup, strengths are the result of natural talents that are built up through continual practice, skill development and knowledge acquisition. These two classifications together provide us with a fair number of strengths/talents/situational themes that can potentially be cultivated.

Again, there would seem to be close ground between positive psychology strengths / talents and the domains studied by CDP, opening the way for potential collaboration. Some of the domains studied by CDP include faith (Fowler), moral judgement/reasoning (Kohlberg) and leadership (see previous chapter), all of which correspond to specific strengths. The strength of *spirituality*, which Peterson and Seligman's classification breaks down into faith, religiousness and purpose, is similar to James Fowler's 'stages of faith', which trace development of a person's tacit worldview or 'master story' across an invariant sequence of six stages, with each subsequent stage being more encompassing. Another character strength, *fairness*, is defined in Peterson and Seligman (2004) as "the product of moral judgement" and they "follow the lead of previous psychologists [regarding] reasoning to be critical to moral development and to enabling moral behaviour" (p.392). This is clearly related to the CDP stage models of Piaget, Kohlberg and Gilligan, and much of the chapter on fairness is devoted to their models. The strength of perspective, or wisdom, has also been related to stage models and postformal thinking².

Peterson and Seligman were influenced in their classification by two stage models that, while not within the tradition of CDP, are close relations: Maslow's hierarchy of needs and Erikson's psychosocial stages. They recast both models as catalogues of strengths and virtues, correlating specific strengths with Erikson and Maslow's stages and also with Maslow's characteristics of self-actualised individuals. They agree with the essential notion of Maslow's hierarchy but not in the actual details. They also were influenced by Kohlberg, especially for the strength of fairness, as mentioned, but pointed to three common critiques: that his stages emphasised abstract rules and justice as against compassion and care; that they showed cultural bias towards the West; and that moral reasoning does not necessarily correlate with moral behaviour (this last point is discussed further below). These are all valid concerns, but the critique of Maslow and the first two critiques of Kohlberg are addressed by more recent and sophisticated CDP models that might offer finer detail of hierarchical development and avoid cultural and gender bias: Fischer's dynamic skill theory, Commons' model of hierarchical complexity and Dawson's LAS and developmental maieutics³.

Positive psychology assumes that all strengths can be developed and cultivated and so with adequate tools they could feasibly be studied to see if they show specific stage or level sequences. We could hypothesise that strengths like, for example, love, social intelligence, perspective, integrity, kindness, citizenship, forgiveness, appreciation of beauty and gratitude, all pass through broad stages of development like Kohlberg's preconventional, conventional and postconventional classification. However, robust empirical assessment is

preferable to mere hypothesis and a practical and global way to do this, I propose, is with the recent models just mentioned.

As was seen in the last chapter, Dawson's LAS and methodology of developmental maieutics was used to study the developmental pathways of the strength of leadership. It is based on Fischer's pioneering dynamic skill theory (1980, 2006) - itself based on a century of constructivist developmental psychology - and Commons' model of hierarchical complexity. The process used with LAS was explained in the previous chapter and Appendix C gives further background. With strengths, it could be used as follows: a) semi-structured interviews, or written questionnaires, could be devised for any particular strength; b) these can then be given to a broad sample, the larger the better, to discover people's reasoning about the particular strength / talent / skill; c) the resulting text would then be analysed to find its level of hierarchical complexity ('hierarchical order of abstraction' and 'logical structure' – see Appendix C) and the conceptual content coded for themes and related concept codes; d) these concept codes would then be arranged in order according to the level of complexity they first appeared; e) from there, the developmental sequence for each strength could be mapped out.

This approach has both advantages and limitations. A major advantage is that, unlike other assessment systems of CDP, it does not require the expense and time consumption of longitudinal studies, which until now have been the most common method in CDP. Ideally, longitudinal studies would later be used to further validate the outlined developmental pathways, but they are not initially

required. Second, due to its content-free metric of hierarchical complexity and combination of qualitative and quantitative analysis, it overcomes several shortcomings of previous CDP assessments and sequences that were built through a purely qualitative “bootstrapping” procedure that fitted observations from longitudinal studies with developmental theory (Dawson, Fischer and Stein, 2006) (see footnote 3). Third, the LAS is a general measure that can measure conceptual reasoning about each of the strengths, but is also domain specific that assesses cognitive complexity in each domain (here strength/talent/skill). Cognitive development has been shown to develop at different rates in different skill areas and so the LAS applied to strengths would enable the construction of synchronic psychographs that show an individual’s overall strength levels based on a unidimensional measure (of hierarchical complexity)⁴. Due to LAS’s ability to trace developmental sequences, diachronic psychographs could also be mapped out to show a person’s development in particular strengths over time. Figures 2 and 3 below are examples of such psychographs.

Fourth, as was seen in the previous chapter on leadership, the conceptual content analysis may provide a variety of themes for each strength, thus possibly breaking it down into sub-strengths and correlates. (This would provide additional data of interest for each strength which could then be compared to what is already known). Specific ‘synchronic’ and ‘diachronic’ psychographs could be then constructed for an individual strength as well as for several strengths.

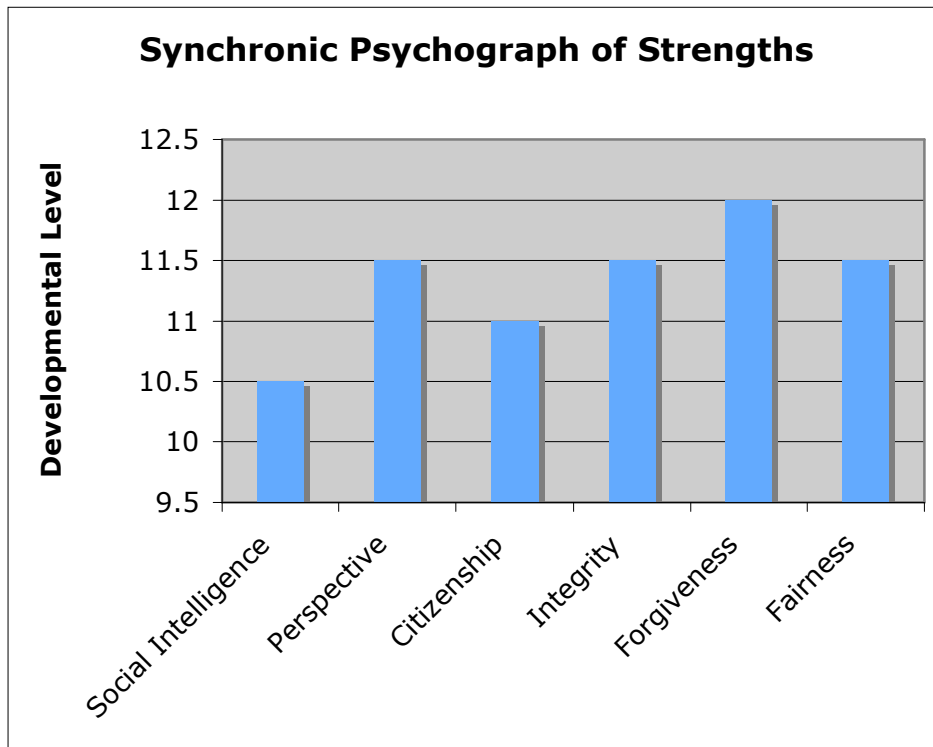


Figure 2: Example of a synchronic psychograph of strengths

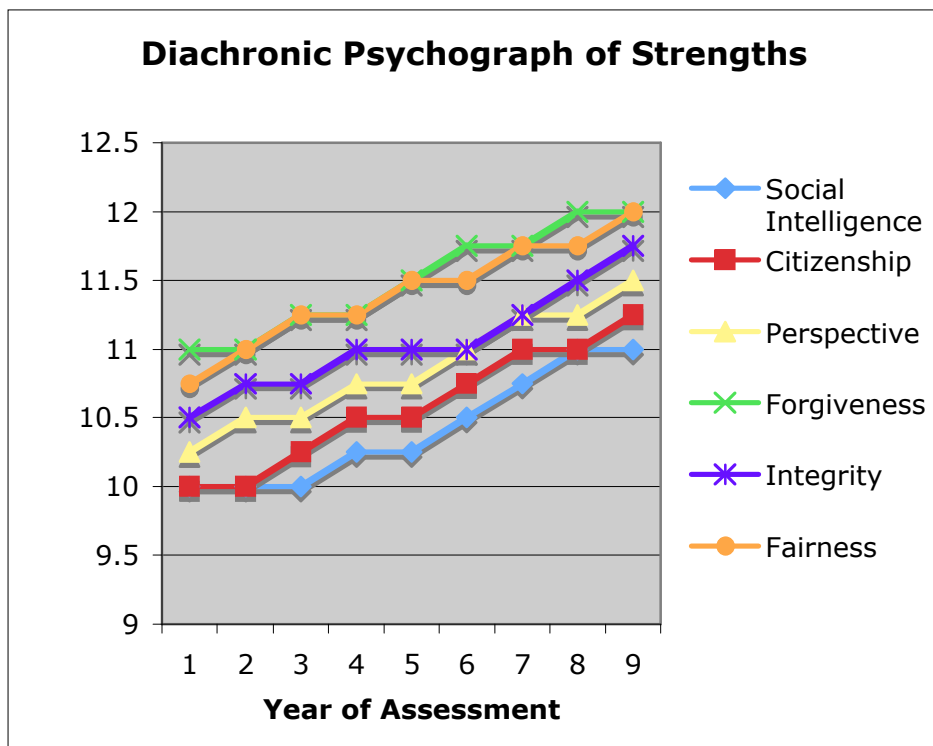


Figure 3: Example of a diachronic psychograph of strengths

Fifth, with the construction of developmental sequences for particular strengths, individuals can be shown the next required step to enhance a particular strength (or sub-strength), and interventions can be designed to help move people from one level or sub-level to the next. In this way development can more easily be facilitated. Finally, most strengths have so far been assessed through self-report questionnaires, which while widely used in psychology as a whole with promising results, have recognised shortcomings like, for example, the threat posed by social desirability to validity⁵.

The LAS has several limitations, however. Its main limitation is that it is an assessment of cognitive development, of conceptual reasoning, and therefore fails to assess actual behaviour. This was one of the problems of Kohlberg's stages of moral reasoning, which studied moral reasoning rather than moral behaviour and failed to take sufficiently into account the effect of emotional and motivational components of morality which influence whether reasoning leads to actual behaviour (Peterson and Seligman, 2004). However, cognitive awareness and conceptual reasoning about a domain would seem a necessary first step towards a corresponding behaviour. Peterson and Seligman, for example, "regard reasoning to be critical to moral development and to enabling moral behaviour" (p. 392). Nevertheless, despite tapping into a fundamental aspect of general development (hierarchical complexity), it fails to account for the many other elements that can influence actual behaviour and this is its major shortcoming.

Another limitation is that the outlining of developmental pathways is a complex process. However, once they are done they can be used as the basis for assessment – and also be continually refined.

Despite these limitations, the LAS offers the possibility of providing rich developmental data on strengths that could be used in positive psychology to hone existing interventions and create new ones. Other CDP models and assessment tools like Kegan's SOI and Loevinger/Cook-Greuter's SCT could be used to give additional data. Since they measure aspects of development beyond cognition (meaning-making, affective, interpersonal and intrapersonal aspects) they might provide data that the LAS is unable to – and thus begin to address its main shortcoming.

CHAPTER EIGHT

POSITIVE ADULT DEVELOPMENT

The final area to be discussed, positive adult development, naturally combines the core features of the two disciplines studied in this dissertation. Positive psychology is concerned primarily with what fosters positive, flourishing lives and CDP focuses on the stages or levels through which individuals develop. Furthermore, just as positive psychology has emerged recently to redress psychology's (especially clinical psychology's) overemphasis on psychological ill-health, so adult development, and within that positive adult development, has begun to form its own field after decades of focus by developmental psychology on pre-adult development¹.

The growth of adult and positive adult development as emerging fields is illustrated by two recent handbooks on adult development (Demick and Andreoletti, 2003; Hoare, 2006). A large proportion of the contributors to both handbooks focus on positive adult development, and many of them adhere to a stage conception of development. A further sign of positive adult development's emergence is the preparation of a special issue of the *Journal of Adult Development* for 2009 on measuring positive adult development². A dialogue with positive psychology seems natural and would no doubt benefit both.

Some positive psychology researchers already make use of developmental stage conceptions. One of the founders of positive psychology Mihaly Csikszentmihalyi (1994), for example, notes how Maslow, Loevinger, Fowler

and Kohlberg's stage theories trace a general pattern of development that involves a gradual liberation from biological genes, cultural memes and individual desires; or moves from instincts, egocentrism, social conformity and excessive individualism, in that order, until reaching the conjoining of one's own autonomous interests with those of serving the larger community. And he argues how the experience of flow, the concept for which he is most well-known, facilitates development. It does so through a process of differentiation (recognising a challenge), increasing complexity (acquiring a skill) and integration (mastering a skill). These are the three underlying developmental processes highlighted by CDP. Research into how the experience of flow may stimulate growth through, say, Fischer's skill levels, or accelerate development through other stage models, would be an intriguing research project and an example of how the two disciplines could contribute to each other.

Another prominent positive psychologist concerned with positive adult development is George Vaillant, who is director of the longest study of aging ever made: the Harvard Study of Adult Development. He discusses positive aging from the perspective of two non-CDP (but closely related), psychoanalytic, developmental sequences: Erikson's stages of psychosocial maturation and his own reformulation of Freudian defence mechanisms or coping styles into a developmental sequence from psychotic to immature to neurotic to mature (2002; 1995). His studies have revealed invaluable information about adult development and aging, including predictors of healthy aging (2002; 2004). Among seven predictors were adaptive coping styles (mature defence mechanisms) and years of education. These predictors might

lend themselves to further elaboration through the use of CDP stage conceptions and assessment tools. For example, by separately measuring individuals' coping styles and developmental stage, mature and immature defences could be correlated to Kegan's orders of consciousness, Loevinger's stages of ego development and/or the LAS levels of conceptual reasoning. Similarly, the correlation between stage development and the three components of education that most correlated with physical health in old age (self-care, future-orientation and perseverance), could also be researched. Studies could be devised to find which specific domains (Fowler's faith, Loevinger's ego development, Kegan's orders of consciousness, Armon's good life, Kohlberg's moral reasoning, Kitchener and King's reflective judgement stages), or underlying developmental dimensions (Dawson's LAS), most correlated with factors predictive of positive aging. In this way, the two disciplines could mutually enrich each other.

Many CDP stage models have indicated the benefits of later stages of development. For example, Kegan (1994) stresses how development to more complex 'orders of consciousness' is necessary if an individual is to thrive under the demands of life in the 21st century. Kitchener et al (2006) observe that a key aspect of successful adulthood is the ability to make reflective judgements about and create solutions to difficult problems typical of adult life. Sinnott and Berlanstein (2006) discuss the importance of postformal thought for successfully integrating 'felt connections' with different aspects of oneself (including one's shadow), with others and with something larger than oneself. And earlier chapters have discussed how stage development beneficially

affects aspects of leadership ability and the possibility that the development of other strengths is correlated to stage development.

Collaborative research between positive psychology and stage conceptions could reveal more detailed data on the correlation between stage development and life satisfaction and well-being; on what domains are most conducive to well-being and how development within those domains can be facilitated; and on distinguishing between horizontal development and vertical development, researching the relations between the two and interventions to facilitate both. Research to date suggests that two interventions, meditation and Torbert's 'action inquiry', facilitate stage development³. Research has also shown the multiple physical and psychological benefits of meditation (Shapiro, Schwartz & Santerre, 2005)⁴, and similar research could focus on the positive psychological benefits of action inquiry. Furthermore, studies could be devised to test whether other interventions, like, for example, those that encourage the experience of flow (see above) or developmental coaching (see below), facilitate stage development. In addition to the above research suggestions, and in line with the suggestion made in chapter five on expansion into a positive social science, collaboration between the two fields could focus on political, socio-economic and cultural factors that lead to positive adult development (see footnote 1, chapter five).

One final area that connects both CDP and positive psychology in relation to positive adult development is coaching. Positive psychology is naturally related to coaching since both aim at fostering positive growth and facilitating the

actualisation of potentials. It provides coaching with a scientific methodology, validated assessments and evidence-based interventions, while CDP provides a developmental perspective with validated developmental pathways. Combining the two would, again, likely be mutually beneficial. Biswas-Diener and Dean (2007) stress well-being and character strengths as the two foundations of 'positive psychology coaching', two foundations that could be supplemented by a developmental perspective and developmental assessment tools (chapter four and seven discussed some ways this might be done). And as discussed in chapter six, leadership skills, relevant especially to executive coaching, could benefit greatly from a stage developmental approach.

If we accept the evidence and the notion of stages/levels and stage development then a developmental perspective is clearly relevant to effective coaching since developmental coaching concerns itself with facilitating vertical developmental shifts and not just horizontal behavioural changes (see Laske, 2006). Otto Laske (2006) offers a useful 'constructivist developmental framework', based especially on Kegan's and Basseches' research on adult development, for coaching; and the discussion in chapter seven on how the LAS might be used to measure strengths development is another way a 'positive developmental coaching' might proceed.

CONCLUSION

This dissertation has provided a theoretical enquiry into how the stage conceptions and assessment tools of constructivist developmental psychology might provide new insights, research findings and conceptual clarity to specific areas of positive psychology. These areas, save minor exceptions, have not been studied through a stage developmental lens, yet recent theoretical and methodological advances within CDP, together with signs of a dialectical movement of worldviews, make such a vertical perspective timely. Certain affinities between positive psychology and CDP were pointed to, including their shared conception of human nature as the progressive unfolding of innate structures or potentials and common objective of facilitating positive, healthy growth.

A primary objective of positive psychology is to discover the causes and conditions of flourishing, meaningful lives and from there develop interventions and promote institutions that can facilitate such flourishing. Stage developmental models and tools can be employed, in ways suggested in this dissertation, not only to refine our understanding of how flourishing and well-being is conceptualised by different individuals, but also to help devise interventions in domains that lead to greater flourishing – both in individuals and in institutions. Beyond that, on a more societal and global level, a developmental perspective might provide an underlying framework with which to expand positive psychology into a positive social science, incorporating findings from sociology and political science. These findings point to developmental

conditions that lead to effective democracy and self-expression values, both factors that lead to greater well-being. There is room for an exciting dialogue between the notions of individual stage development and collective development and how they might lead to greater well-being, with both developmental structuralism and positive psychology well positioned to play a significant role.

Assessing developmental stage is a delicate issue and needs to be handled with sensitivity, ethics and responsibility. It needs to be done with a clear recognition that stage assessments measure not the 'overall stage' or essence of a person but rather his/her task performances in specific domains that can vary according to context, emotional state and level of support. There are many different domains or skills that undergo development and each individual is at different stages in different domains. Furthermore, research has shown that development continues well into adulthood through many of these domains and so development is not fixed. With the above in mind, research into what domains lead to greater flourishing and the creation of interventions and institutions – and societies – that facilitate positive development through these domains, should, I believe, be a major objective of positive psychology. The fostering of such development will help equip individuals with the complexity and inner development that is now required to thrive and flourish in today's complex world and to manage its sophisticated demands.

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APPENDIX A

Kegan's principles of mental organisation and subject-object relationship

Kegan sees psychological growth as the development of increasingly more complex principles/orders for organising experience. These principles have several features in common (Kegan, 1994):

- 1) They govern both how an individual thinks and how s/he constructs experience in general, including thinking, feeling and relating to others.
- 2) They govern *how* a person thinks, feels and relates to others, not the content - not *what* a person thinks, feels and relates.
- 3) They have a core or 'deep structure' which is the subject-object (or self-other) relationship. This is the essence of his theory. **Subject** refers to components of our knowing or mental organising that we are embedded in or identified with. They are elements that we *are*, that we experience subjectively. Because we are identified with them we cannot reflect on them, be in control of or be responsible for them. **Object** refers to those aspects of our knowing and mental organizing that we are not embedded in, that we are dis-identified with, that we can observe and therefore reflect on, be responsible for, or generally, to use a Piagetian term, 'operate' on. They are elements that we *have*, and that we experience objectively. As the individual develops, that which was previously subject becomes object, and a new subject-object relationship emerges, a new way of knowing (or 'epistemology'), a new system or window through which one sees the world. Kegan outlines five such 'epistemologies' or 'orders of consciousness/mind', each successive order reflecting a qualitative shift in which a whole mental structure/system that was previously experienced as subject is now seen as object.
- 4) They are all closely related to each other. Each new principle of mental organisation includes or subsumes the previous principle. Each new principle is thus of a higher order, more complex and encompassing. They are thus developmentally related.
- 5) This developmental process implies that what we experience as subject and object are not fixed or permanent. Kegan claims that what we experience through our subject-object principles is similar to what both the West and East call 'consciousness' – hence his 'Orders (dimensions) of Consciousness'.

APPENDIX B

Correlations between the various Stage Models*

Stage Model	Preconventional	Conventional	Postconventional	Transcendent
Piaget	Sensorimotor Preoperational Concrete-operational	Formal operational		
Kohlberg	Stage 1 Stage 2	Stage 3 Stage 4	Stage 5 Stage 6	
Fowler	Intuitive-projective Mythic-literal	Synthetic-conventional Individuative-reflective	Conjunctive Universalising	
Loevinger	Impulsive Self-Protective	Rule-oriented Conformist Self-aware Conscientious	Individualist Autonomous Integrated	
Kegan	1 st 2nd	3 rd 4th	4/5 5th	
Torbert	Impulsive Opportunist	Diplomat Expert Achiever	Individualist Strategist Magician/ Alchemist	Ironist
Graves/SD	Automatic/Beige Tribalistic/Purple Egocentric/red	Absolutist/blue Multiplistic/orange	Relativistic/Green Systemic / Yellow and turquoise	
(Maslow)	Physiological Safety	Love and Belongingness Self-esteem	Self-actualisation Self-transcendence	
Cook-Greuter	Impulsive Self-Protective	Rule-oriented Conformist Self-conscious Conscientious	Individualist Autonomous Construct-aware/ ego-aware	Unitive
Wade	Reactive Naïve Egocentric	Conformist Achievement	Affiliative Authentic Transcendent	Unity

* Where some of the stages belong is not crystal clear, and the exact point where postconventional ends and transcendent begins is a little blurry. But the table gives a general idea of the correlations between the various stage theories.

APPENDIX C

THE LAS

The LAS

Dawson's Lectical Assessment System (LAS) is a domain-general measure of development that assesses the complexity level (of conceptual reasoning) of a linguistic (oral or written) performance. It is based on a long tradition of constructivist developmental psychology that has focused on cognitive development. This tradition claims there are general developmental processes that are present across domains (without denying that each domain also has its own structures and processes). Its main influences are Piaget's notion of reflective abstraction, Fischer's skill theory and Commons' model of hierarchical complexity. All of these models subscribe to the notion of hierarchical integration which is manifested in different, more complex ways/levels of thinking. In conceptual reasoning, which the LAS and its Hierarchical Complexity Scoring System measures, this is observed in the way each new level uses (integrates) conceptual elements of the previous level in more 'hierarchically complex' constructions (Dawson et al, 2005).

Layers of Structure

Dawson (2001) breaks verbal performances down into three structural levels, which she uses to guide assessment. There is a) *conceptual content*, which includes the concepts and views expressed and the vocabulary used. Underneath that layer is b) the *surface structure* of the text, which includes the conceptual content that reflects more general concepts associated with specific domains. This is the layer that most CDP scoring systems target. And beneath that layer is c) the *core structure*, which is the level of abstraction or complexity indicated by the conceptual content. It is what Dawson calls the 'hierarchical order of abstraction'.

The LAS Levels

The LAS levels or 'orders' are based directly on Fischer's skill 'levels'. These levels show different ways of thinking, ways that are progressively more complex and hierarchically integrated. The 'orders' are divided into tiers and levels (see Stein and Heikinnen, 2008). The tiers represent significant transformations in ways of thinking (and acting) and are called *reflexes* (instinctive reactions of neonates), *sensorimotor*

actions (pre-verbal physical actions on the environment of infants), *representations* (concrete images, concepts and language of childhood and early adolescence), *abstractions* (increasingly general, abstract thought processes that transcend contexts), and *principles* (broad principles and conceptual frameworks that underlie complex, postconventional thinking). The LAS obviously measures only the last three tiers since the first two are pre-verbal.

Each tier, in turn, consists of three levels which coordinate the conceptual elements of the particular tier in increasingly more complex ways. These levels, which are repeated in each tier, go from *single concepts* to linear *mappings* or relations to complex *systems* – with a new tier emerging with further development after each systems level. The LAS so far has data up to level 13, single principles, although two further levels, principled mappings and principled systems are also being studied. Commons' scoring system, also based on Fischer's skill theory, has 15 levels. The first 13 correspond to the LAS levels, and the last two are largely hypothetical (Dawson and Wilson, 2004). The levels, in turn, are subdivided into four phases: transitional, unelaborated, elaborated and highly elaborated.

Assessment and construction of developmental pathways

The LAS focuses on two manifestations of hierarchical complexity in a text: Its conceptual structure or *hierarchical order of abstraction* (or generality) of the concepts employed in its reasoning, and the most complex logical structure, or conceptual organisation, of its reasoning (Dawson and Wilson, 2004). In this way the LAS acts as a content-free 'ruler' that permits a developmental assessment of texts from whatever specific domain. As well as the developmental level of hierarchical complexity, the conceptual content of the text is analysed and coded separately. These two aspects are then combined, arranging the concept codes according to the level of hierarchical complexity in which they first appeared. Additional qualitative analysis is then employed to outline the developmental pathways.

Reliability and Validity

The LAS possesses high statistical reliability and validity. **Internal consistency**, as measured by Rasch analysis, which provides estimates of reliability equivalent to Cronbach's alpha, is consistently over .95, while **inter-rater reliability** is high at 80 to

97% agreement within 1/2 of a complexity level (Dawson, Commons, Wilson and Fischer, 2005).

It has also shown **convergent validity**. Dawson (2006) describes five validation studies that showed that the Hierarchical Complexity Scoring System (the scoring system of LAS) assesses the same dimension of performance as several domain-based cognitive development assessments that have been longitudinally validated. There was high correspondence with scoring systems for Perry's epistemological positions (82% to 98% within one Perry level), for Kitchener and King's stages of reflective judgement (.84 correlation), for Armon's good life stages (.92 correlation) and for Kohlberg's moral stages (95% within one complexity level of each other; $r = .94$).

Furthermore, **construct validity** for the Hierarchical Complexity Scoring System was attained by two studies using Rasch scaling to analyse patterns of performance. They showed that development follows an underlying dimension of hierarchical complexity and proceeds in discontinuous spurts and plateaus, evidencing qualitative, rather than cumulative, change. Patterns of performance were also shown to be consistent from one level to the next, across the lifespan, showing a process of consolidation at a specific complexity level followed by a period of transition using structures of contiguous complexity levels and then another period of consolidation at the next level of complexity. (Dawson, 2006; Dawson, Commons, Wilson and Fischer, 2005). This is consistent with the postulates of cognitive development theory and CDP that development proceeds through nested hierarchies of increasing complexity.

End notes:

Chapter One:

¹ Witherington points to the internal consistency of Thelen and Smith's pure contextualist approach but laments that it "loses sight of the organism as an integrated whole" and that by "privileging... the task-specific particularities of action, the contextualist DSP [dynamic systems perspective] ultimately undermines its own systems theory origins. A fundamental principle of general systems theory is that any given form is both a whole in itself – a system in its own right – and a part of another whole – a component comprising another system" (2007, p.149).

Chapter Three:

¹ Kelly and Vygotsky, like Piaget, stressed the proactive role of the individual in knowledge acquisition and understanding, with Vygotsky also emphasising the critical role played by social context and cultural surround. Social constructionism, on the other hand, emphasised the huge role played by language and other cultural sign systems in determining and framing an individual's construction of reality (Ashworth, 2008).

² This is an idea that first emerged in linguistics with Saussure and was expanded to show that individuals are inextricably embedded in cultural networks and contexts that govern their interpretation of meaning in ways that are largely hidden.

³ This critique is related to the common critique that Piaget assumed the cognitive domain of development to govern all other domains. To some extent Kohlberg's stages of moral reasoning and to a much greater extent the 'soft' stages mapped out by neo-Piagetians like Kegan (1982; 1994) and Fowler (1981), as well as Loevinger's broader stages of ego development (Loevinger, 1987), have done much to overcome such criticism as they include aspects of development beyond formal reasoning like affect and meaning-making (see the section on empirical critiques for further discussion).

⁴ In his comparison of Gadamer, Dilthey and Heidegger, de Mul prefers the more active role Gadamer gives to the human subject in history (as opposed to Heidegger's underestimation), but laments Gadamer's (and Piaget's) admiration for Hegelian dialectics and his conception of history and development as an all-embracing integration whereby "the rising to a higher universality...overcomes not only our own particularity but also that of the other" (quoted in de Mul, p. 238). This would seem to imply a nondual overcoming of subject and object which actually has a venerable tradition in both Eastern and Western philosophy and includes not only Hegel but also Teilhard de Chardin (1959/2002) and Sri Aurobindo (McDermott, 2001), for example. It is also implicit in Robert Kegan's subject-object relationship (1982; 2002). And the Hegelian dialectics is also present in the spiralling nature of development of both Kegan's and Graves' (1981) developmental models.

This also brings in the delicate notion of teleology or developmental direction, which is marginal in evolutionary theory but supported by the tradition just mentioned and also Jürgen Habermas, whose acceptance of a universal telos de Mul finds 'remarkable'. Despite its marginality in evolutionary theory, there are grounds, however, for a compelling argument that development, and evolution, is going somewhere, for example towards greater differentiation, integration and complexity (e.g Wright, 2000) but that the actual content of that development is fairly open and co-created by the subject(s) in their relation with the world (e.g Wilber 2003). There is thus, it is argued, a general direction, which can be observed through *rational reconstruction* à la Habermas of the historical past and in the stage theories of developmental structuralism, but this does not necessarily imply that the actual content is fixed or that it can never regress. The spiralling models of some of the stage theories capture this model well and both our long-term collective and individual histories would seem to corroborate it.

⁵ While it would seem clear that regress can occur and has occurred, both in individual development and collective/societal development (Nazi Germany, Gulag Archipelago etc), it would also seem undeniable that, looking at human history over thousands of years, progress towards a more reasonable and moral society has been made (e.g. the modern Enlightenment led, among other things, to the institutionalisation of democracy, the legal abolition of slavery and the defence of universal human rights). Why this is so is an open question and goes back to the discussion of teleology and direction (see endnote 4). Progress is not inevitable, but it does seem the general theme in human history *in the long term*, at least until to date, and also in individual development if circumstances are favourable.

⁶ The differences between structural stages and Erikson and Levinson's more epigenetic 'stages' do not, of course, invalidate either. They are two different types of stages, one more narrow and precise and the other more broad. There is evidence for both. And in fact Fowler (1981), for example, takes aspects of both to make an interesting synthesis. In the construction of his stages of faith, Fowler began with Erikson's stage conception but later focused more on the structural stage conception while maintaining Erikson's framework as a background. He found that a movement from one faith structural stage to another often correlated with an Erikson stage – often, *but not always*. He points to research by Richard Shulik that indicates that an individual can stabilise, sometimes for a lifetime, at any one stage (from stage 2 onwards) and that this fact, the specific stage at which they stabilise, affects how they respond to Erikson's psychosocial crises.

Fowler's research suggests some interesting links between structural development and Levinson's periods and eras. For example, the optimal time to make the transition between the Synthetic-Conventional stage (stage 3) to the Individuative-Reflective stage (stage 4) appeared

to be Levinson's transition period to the early adult era (age 17-22). Not everyone makes this transition and Fowler's research shows that those who do not, may make the transition later in their twenties or thirties, but with greater difficulty. Yet others remain throughout at stage 3. And if the transition from stage 3 to 4 is not made before the mid-life transition (age 40-45) then likelihood of doing so greatly decreases. Fowler remarks that it is easier to enter a new era if we let go of the structure (here, of faith) that was used during the last phase of the previous era.

Levinson agrees there are hierarchical stages of growth in preadulthood, in cognitive complexity, adaptive capability and character formation for example, but that such rapid growth stabilises in early adulthood and then declines in middle and late adulthood – when other psychosocial qualities may develop and mature. With respect to life structure, he claims that it unfolds in an invariant sequence but that it is not hierarchical in the sense that one life structure is developmentally higher than any other. The life structure is not inside a person, like the structures studied by Piaget and developmental structuralism, but rather a result of 'self-in-relation-to-the-world'. Like Fowler, he believes that an integration of his own stages with the hierarchical stages of developmental structuralism is possible and desirable, especially with respect to his transitional periods which are opportunities for psychological change and growth. He notes the research of developmental structuralists Souvaine, Lahey and Kegan (1990) and Pascal-Leone (1990) whose research shows significant inner change in early adulthood (17 to 45) and hypothesises that such change and growth is more likely to occur in the two early adult transition periods (17-22 and 28-33) than in the structure-building periods. The same may apply, he suggests, to his mid and late adult transition periods.

⁷ Furthermore, there has been a proliferation of stage theories since Kohlberg first studied development beyond pure cognition in his stages of moral judgement, including stage conceptions of faith, interpersonal perspective taking, ego development, reflective judgement, values, conceptions of the good life to mention just a few. These, necessarily, have complicated the search for a common 'deep structure' underlying all development, although Fischer, Commons and Dawson's promising research in this respect will be discussed below.

⁸ They mention attempts to reconcile the two approaches through competence/performance models, with stages being associated with competence and individual differences with performance. However, these models are severely limited, they say, since they still separate the stages of organismic structure (competence) from observable variation in functioning (performance).

⁹ A few points relevant to the next section on controversies, and to some of the critiques discussed so far, should be mentioned. What Fischer's theory, Commons' model and Dawson's metric all have at their centre is the classical stage theory notion of hierarchical complexity and

hierarchical integration. Development in any domain is measured against a yardstick of hierarchical complexity and the LAS, following Fischer's hierarchy skills and building on Commons et al's hierarchy of task structure, measures linguistic performance in tasks according to the degree of abstraction of concepts used and the degree of complexity in logical structure. As a whole, LAS "outlines a developmental pattern of recursive hierarchical integrations" (Stein and Heikkinen, 2008, p. 123). This follows the classic constructivist developmental notion that development proceeds through increasing differentiation, hierarchical integration and complexity, but does so through an analytical, content-free measure, which avoids the problems involved in empirically demonstrating the existence of qualitatively different discontinuous stages rather than just continuous, sequential development.

LAS, as a domain general metric, has been compared with several domain-specific metrics that measure Kohlberg's moral reasoning, Armon's conception of the good, Perry's epistemological understanding and Kitchener and King's reflective judgement levels with equivalent scores. This suggest that both the domain specific and LAS metrics are measuring the same *latent dimension* – the former indirectly and the latter directly -, which Dawson suggests is hierarchical complexity (Dawson, 2001; Dawson, 2006; Stein and Heikkinen, 2008).

¹⁰ Piaget, and other developmental constructivists, have passionately defended against the deterministic implications of both empiricist/environmental and innatist epistemology, constantly highlighting the creative, proactive role of the individual in his/her own development.

¹¹ This includes Piaget's notion of *reflective abstraction* (hierarchical integration); Werner's *orthogenetic principle* (that "the one regulative principle of development ... that whenever development occurs it proceeds from a state of relative globality and lack of differentiation to a state of increasing differentiation, articulation and hierarchical integration" – quoted in Stein and Heikkinen, 2008, p. 113); Kohlberg's distinction between moral reasoning and other forms of reasoning yet at the same time acknowledgment of certain general properties that underlie them all; Fischer's unique task-specific and situation-sensitive skills which nevertheless develop through a comparable process of differentiation and integration; and Commons' codification of the construct of hierarchical complexity and his focus on task analysis which analyses the number of sub-skills that are hierarchically integrated in a task performance.

¹² The term *development* has even been distinguished from the term *growth* by its connotation of qualitative or structural change (Van Haaften, 1997a). Van Haaften defines development as " (a) a process of (b) more or less gradual (c) change, (d) resulting in (what can be reconstructed as) one or more qualitatively different stages for which (e) the prior stages are necessary conditions" (p. 18).

¹³ Piaget undervalued learning and elevated development and Skinner did the opposite, with the former comparing learning to “the mastery of circus tricks” and the latter dismissing development “as an illusion based on cumulative learning” (Fischer and Silvern, 1985, p. 623). However, contemporary constructivists like Fischer and Dawson stress the complex interdependence and importance of both. Dawson (2006) uses the term ‘development’ to refer to both learning and structuring, seeing learning as that aspect of development that involves knowledge gained from interaction with the external environment (which affects conceptual content) and structuring as the way the individual organises that knowledge (hierarchical complexity). “The complex interrelation of learning and structuring makes it impossible to draw a clear line between two aspects of the developmental process. The conceptual content of a new developmental level is, at least in part, the result of restructuring the conceptual content of the previous level. On the other hand, new knowledge is often obtained through interactions with the external environment in a process that involves both learning and structuring. From a Piagetian (1985) perspective, new knowledge is either *assimilated* to existing structures or *accommodated* through restructuring. In both processes some kind of structuring takes place. This means the conceptual content of any performance is the product of both acquisition (learning) and structuring” (Dawson, 2006, p. 435).

Chapter Four:

¹ Seligman (2003) places flow squarely in the eudaimonic camp (for example, flow generally requires initial effort), although it would seem to have qualities that could fit also in the hedonic camp (for example, some clearly non-eudaimonic activities, like playing cards, can lead to flow). One possible explanation is that flow is a state, not a stage, and is therefore, following Wilber’s (2006) distinction between states and stages, available at any stage.

² Armon’s good life stages already give some interesting developmental data indirectly connected to happiness and well-being. Her stages, which delineate an invariant sequence of value reasoning about the good life, closely follow Kohlberg’s stages of moral judgement. Stage 1 is called ‘egoistic hedonism’, where what is good is that which gives pleasure to the self. In stage 2, ‘instrumental hedonism’, the person thinks instrumentally about the good life and others are seen as a means to the self’s ends. In stage 3, ‘affective mutuality’, the Good is shared with others, relationships and value consensus is important and both happiness and the good life are defined by the absence of negative affectivity. In stage 4, meaning is important and satisfaction is based on the fulfilment and realisation of one’s individually-chosen values; relativism can be more or less prevalent, depending on one’s philosophically hedonistic or perfectionistic orientation, respectively. Finally, in stage 5, ‘autonomy’, universality or intrinsicality, rather than the individuality of stage 4, are used as the criteria for value; emphasis is not on the self-choosing of values but rather on a principled, ethical evaluation of the values’ worth for self, others and the world (Armon, 1984; Armon and Dawson, 2003).

Chapter Five:

¹ Michael Commons and his colleagues have already begun this conversation, using the notion of hierarchical complexity (Commons and Goodheart, 2008; Ross and Commons, 2008).

Chapter six:

¹ These broad Dependent, Independent and Inter-independent stages are roughly equivalent to Loevinger/Torbert's Diplomat and Expert, Achiever and Individualist, and Strategist and Alchemist stages, respectively. They also correspond roughly with Kegan's interpersonal/traditional, Institutional/modern and Interindividual/Post-modern stages, respectively.

² LAS's abstract mappings level roughly correlates with Kegan's interpersonal stage, or Kohlberg's stage 3 (Stein and Heikinnen, 2008).

Chapter Seven:

¹ As opposed to a *taxonomy* (i.e. it is not driven by any underlying theory that conceptually unifies the classification – that will hopefully emerge with time, possibly with the help of developmental structuralism).

² The VIA strength of *perspective* (or wisdom) is particularly complex. Two major researchers on wisdom are Paul Baltes and Robert Sternberg, and both relate wisdom to practical knowledge. Sternberg's triarchic theory of intelligence distinguishes between analytical, creative and practical intelligence, and Sternberg argues that wisdom derives primarily from practical intelligence (Sternberg, 2000). Baltes and his colleagues conceptualise wisdom as "an expert knowledge system about the fundamental pragmatics of life", by which they mean "knowledge and judgement about the most important (fundamental) aspects of the human condition and the ways and means of planning, managing and understanding a good life" (Baltes and Freund, 2003 p. 252). [Armon's good life stages could offer valuable data about conceptions of the good life as related to hierarchical stage development (Armon, 1983; Armon and Dawson, 2003)].

Others see wisdom as the result of ego maturity, postformal operational thinking and dialectical thinking. These include developmental structuralists like Cook-Greuter, Kramer, Labouvie-Vief, Pascal-Leone and Kitchener and Brenner – see Basset (2006) for a review. It would also seem reasonable to speculate that individuals scoring at the highest levels of the broader stage models of CDP - like Kegan's Interindividual order, or Torbert's Alchemist stage – would demonstrate a greater degree of perspective, or wisdom, than those at earlier stages. One relatively straightforward way to research this would be to doubly assess individuals by using, on the one hand, Loevinger/Cook-Greuter/Torbert's Sentence Completion Tests or Kegan's

subject-object interview and, on the other hand, Baltes' 'think-aloud protocols'. These are wisdom-related tasks or dilemmas that are given to respondents and then evaluated by applying the five wisdom criteria elaborated by Baltes and his colleagues.

³ Dawson et al (2006) discuss how sequences in earlier CDP models, including Kohlberg's, used a 'bootstrapping' process that led to sequences based on descriptions of reasoning, and stages that correlated to specific conceptions. Among other problems, this distorted scoring since the sample sizes were often small and restricted, e.g just men or Western or students. The scales used also meant that it was only possible to study cultural differences by developing new scales for each culture. The LAS, they argue, overcomes these problems.

⁴ This unidimensionality helps avoid the problem of conflation with other constructs like personality that affects some other measures (e.g. some measures of emotional intelligence like Goleman's (1996) and Bar-On's (2006)).

⁵ Peterson and Seligman's VIA strengths are assessed by a self-report questionnaire (the VIA Inventory of Strengths), a VIA Structured Interview and a strengths content analysis. This last technique is used on any written or spoken text, and is thus broadly similar to the conceptual content analysis of the LAS. The LAS, however, adds a developmental analysis and avoids the pitfalls of self reporting – as well as possessing high validity and reliability (See Appendix C).

Chapter Eight:

¹ See chapter two for a discussion on why adult development has only relatively recently begun to attract large number of researchers.

² From a daft sent on 14/12/2008 by Michael Commons to the adult development listserve on this issue: "This will be the first and **only** special issue of the Journal of Adult Development to focus on the measurement of positive changes during adulthood. Most of previous work on measuring change in adulthood examines deficiency and decline. There is now a substantial body of evidence, however, that positive forms of development can occur at all periods of the lifespan, including adulthood. Over the last twenty years, there has been a rapid increase in measurement instruments that examine development during adulthood. This presents many of these measures, describes their purpose, etiology, validity, and reliability, and explains the appropriate methodologies for their use. Included is ego, moral, social, etc."

³ Alexander et al (1994) discuss research findings that show that Transcendental Meditation facilitates development through Loevinger's stages and Piagetian processing tasks, as well as promoting growth of self-actualisation and advanced moral development. Chapter six discussed

how action inquiry promoted stage development in an MBA programme. See also Torbert (1994) on how action inquiry fosters postformal thought.

⁴ Kabat-Zinn and other researchers have studied the many positive effects of meditation, both physical and psychological. Physical benefits include decline in blood cortisol and lactates, reduced respiration rate, increased cerebral blood flow, greater alpha and theta brain waves, while among the psychological benefits are improvements in memory and academic performance, creativity, interpersonal relationships, self-worth and self-acceptance, greater coping skills, self-actualisation, ego strength, trust in others and subjective well-being (Shapiro, Schwartz & Santerre, 2005).