PETER McILVEEN

CAREER DEVELOPMENT, MANAGEMENT, AND PLANNING FROM THE VOCATIONAL PSYCHOLOGY PERSPECTIVE

INTRODUCTION

This chapter is a consideration of career development, planning, and management from the perspective of vocational psychology. Before describing career development, management, and planning, the chapter begins with a brief overview of the discipline of vocational psychology, highlighting recent trends toward its redefinition. This is followed by a description of the significant constructs and theories of vocational psychology, along with the paradigms under which they are subsumed. In concluding, there is reiteration of a call for paradigmatic diversity in theory, research, and practice.

DEFINING VOCATIONAL PSYCHOLOGY

Ever since its beginnings, vocational psychology had an applied, practical mission emanating from the same intellectual foundations as industrial and organisational psychology. The discipline's early development as a modern science and profession is often attributed to social and work-related conditions arising in the transition from agrarian to industrial economies, and to the pioneering scholarship and practice of individuals such as Hügo Munsterberg and Frank Parsons (Savickas & Baker, 2005). Munsterberg, a Prussian who was schooled in the tradition of Wundt and later introduced to the United States by William James, was a pioneer of *applied psychology* (Thorne & Henley, 2005)—the foundation discipline of vocational psychology and I/O psychology. Parsons' definitive opus, *Choosing A Vocation* (Parsons, 1909), has been often cited as the original text for professional vocational guidance, which has evolved into professional practices we know today in forms such as career counselling, vocational assessment, and occupational selection.

Vocational psychology has been an empirical psychology of the individual, with *vocational behaviour* as the unit of analysis. Centre-stage for the discipline has been the notion of *career*: variously considered as an assemblage of vocational behaviours conceptualised in psychological terms as patterns of enduring traits, occupational interests, skills, and abilities; or developmental stages unfolding over a lifespan, yet with an emphasis on adolescence and early adulthood; or crucial decisions at transitional moments in specific domains such as education and work.

Re-defining the discipline

In recent years there has been notable upheaval in the field of vocational psychology, with it coming under increasing criticism for its ostensible failure to relate to contemporary and rapidly evolving worlds-of-work or, indeed, the world-at-large. Collin and Young (1986) incisively identified problems in traditional research and practice:

Even in their own terms, many of these theories and their associated research are inadequate in both content and method. They do not, therefore, meet the demands made of them in today's turbulent environment (p. 843).

These are hardly reassuring comments after nearly a century of progress in the science. Those earlier radical claims by Collin and Young were extended in the arguments of other scholars (e.g., Savickas, 1992, 1993, 2000b), notably in vehement criticisms and calls for an overhaul of the very foundations of vocational psychology (e.g., Richardson, 1993, 2000; Richardson, Constantine, & Washburn, 2005). With the passing of over two decades, the environment—social, economic, natural, and built—is no less turbulent. It is apposite therefore to reflect on how theories can adequately satisfy the demands made of them.

With the chorus of discontent growing ever louder, vocational psychology has nevertheless appeared to take a turn toward a positive future. In summarising a special volume of papers in the discipline's flagship publication—the *Journal of Vocational Behavior*—which was dedicated to contemplating the strengths, weaknesses, threats, and opportunities for vocational psychology, Savickas (2001a) formulated a mission statement to ensure it as a distinct discipline in the 2000s:

Vocational psychology, a specialty within applied psychology, conducts research on vocational behavior among all groups of workers, at each life stage, in order to advance knowledge, improve career interventions, and inform social policy. It is characterized by innovative theorizing to comprehend the diversity of human experience and the changing world of work; the use of diverse epistemologies and research strategies; an emphasis on programmatic and longitudinal studies; and the translation of research findings into models, methods, and materials for career education and intervention (p. 286).

How well the discipline actuates this defining mission statement—and whether it is accepted in the field—is yet to be judged. Indeed, Patton and McMahon (2006) later opined:

There still remains little coherence in the career theory literature, which can still be viewed as competing theories searching for the truth in career development, or more generously as a number of theories continuing to focus on specific aspects of career development within a whole which is not yet clearly specified (p. 167).

Nevertheless, in her analysis of the empirical research in the decade preceding her publication in the *Annual Review of Psychology*, Fouad (2007) synthesised the empirical research pertaining to the following core questions of the discipline: What factors influence career choice? How do people make career decisions? How does context influence career decisions? How are clients effectively helped? In her review Fouad found a discipline thriving in its attempts at making a transition to deal with its weaknesses and threats. There has been vigorous work to revise vocational psychology and to generate new perspectives so as to build upon the discipline's strengths and to ensure its relevance in the contemporary era which is constituted by increasingly diverse worlds-of-work to which the discipline must relate (Savickas, 2000b).

CAREER DEVELOPMENT, MANAGEMENT, AND PLANNING

The term *career development* has been variously defined with a two-fold meaning, for example:

The lifelong process of managing learning, work, leisure and transitions in order to move towards a personally determined and evolving future" (Career Industry Council of Australia, 2006, p. 38).

As a two-fold concept, career development implies that an individual's career will contiguously progress and evolve as a series of stages, transitions between stages, decisions, and work-related activities which occur in relation to personally planned or unpredicted moments, experiences, or influences—all transpiring throughout the duration of an individual's working lifetime. In this way, an individual's career development is a unique lifelong experience. Secondly, an underpinning assumption of career development is that career is a manageable personalised entity: that something can be done to, for, and by the individual to improve his or her work-related lot in life.

Emanating from the psychology of the individual and formulation of career as personal property have been various approaches to *career management*. This process is perhaps better described as *career self-management* (King, 2004) which consists of strategic individual behaviours (e.g., applying for a career-enhancing position, learning a new skill) or joint actions with another person (e.g., establishing a mentorship relationship, engaging in career counselling); behaviours which ensure positive influences among others (e.g., self-promotion); and behaviours which balance the demands of roles and prevents transgression of boundaries (e.g., work and non-work balance). In this way, career management is an active process. It may involve, for example: improving self-awareness and knowledge of personal preferences; choosing appropriate occupational goals and concomitant educational pathways; making critical decisions; negotiating phases of transition; improving work-related performance; and achieving and sustaining balance in work and leisure—all with the aim of developing and sustaining a satisfying career in complex worlds-of-work.

Like the management of a share or property portfolio, the notion of career management implies an active, participatory process in the control of a personal good— career—which is managed and exploited to maximum benefit. This executive functioning is exemplified in the notion and activity of *career planning*, which requires the active, deliberate, and tailored facilitation of an individual's career development through a process in which the individual is intimately engaged. The term itself, career *planning*, suggests that a career can be planned—envisioned, operationalised, predicted, traversed, and controlled. As an active individualised process, career planning therefore entails the establishment of personal goals, action plans, and the determination, acquisition, and allocation of resources required for the achievement of a specific career development outcome.

Professional interventions for career development, management, and planning, have been delivered in the form of career-related information resources in numerous media (e.g., employment trends and job opportunities); one-on-one counselling and vocational assessment; group- and class-based education and training; and professional consulting. Although interventions may be delivered diffusely or indirectly (e.g., online information services) or in settings in which multiple persons are addressed (e.g., group training), they have been ultimately targeted at the individual, with aims to foster personal improvement or change in the individual. Conversely, interventions have not, in the main, been delivered at a systems level beyond the individual per se; although, in recent decades, vocational psychology has paid increasing attention the context of individuals and the higher-level or distal influences upon their careers (see Patton & McMahon, 2006).

With respect to career interventions, it is perhaps career counselling which best exemplifies the discipline's focus upon the individual. There are various models of career counselling emanating from differing psychological schools-of-thought, ranging from the traditional (e.g., psychodynamic, differential, existential, social learning, and cognitive-information processing) through to contemporary schools (e.g., narrative and critical psychology). The narrative approach, for example, entails the client, in active collaboration with the counsellor, developing an affective and meaningful biographical account of his or her career past, present, and future, using various qualitative procedures such as brief autobiographies; with the aim of co-constructing a narrative which generates new meanings and actions (McIlveen & Patton, 2007b). This model of career counselling stands apart from the well-established model, which entails objectified assessment procedures, such as semi-structured interviews and psychometric testing typical of mainstream psychological assessment of an individual. Indeed, as a scientific subdiscipline, vocational psychology's flagship has been the psychometric measurement of vocational behaviour: exemplified by an impressive array of well established instruments, ranging across diverse theoretical constructs, delivery modalities, and catering for the needs of special sub-populations which have been used for research and practice (see Kapes & Whitfield, 2002). Individualised qualitative assessment methods have also taken their place as valuable instruments for vocational assessment (McMahon, Patton, & Watson, 2003).

To study career development, management, and planning, and to underpin professional interventions, vocational psychologists use a range of constructs and theories. Indeed, there are myriad phenomena of research and professional interest that fall within their remit. In an overview and analysis of the field, Patton and McMahon (2006) catalogued no fewer than 17 theoretical frameworks with established profiles within the literature. They did not include their own *Systems Theory Framework* (Patton & McMahon, 2006) which has likewise amassed a significant body of literature. A selection of constructs and theories is presented in the next section. It includes well-established constructs (i.e., development, interests, values, self-efficacy, and choice and decision-making) and those which consolidate the discipline's relevance to the contemporary worlds-of-work (i.e., change and complexity, action, story, and relationships).

ESTABLISHED CONSTRUCTS AND THEORIES

Development

Inherent to vocational psychology is the notion that an individual's career is subject to the processes of *development* as he or she progresses through *stages* in life. There is a significant body of literature dealing with the career development of childhood and adolescent development (see Skorikov & Patton, 2007). With respect to a life-span stage approach to adult career development, Super's (1980, 1992) widely acknowledged *Life-span Life-space Theory* posits a series of stages correlated with age ranges (i.e., childhood, early teen years, late teens and early adulthood, and then mid- to late-adulthood) and roles which a person can take on in life (e.g., worker, parent, student).

Exemplar. Notwithstanding the value of age- and stage-related theories, in vocational psychology—as in mainstream developmental psychology—there has been a turn toward process-oriented theory which places less importance on biological phases or milestones. The Life-Span Developmental Approach to career development (Vondracek, Lerner, & Schulenberg, 1986) and its updates (Vondracek & Kawasaki, 1995; Vondracek & Porfeli, 2002) puts developmental contextualism at its core, using the notion of probabilistic epigenesis as an explanatory device. This approach assumes that a human will pass through roughly equivalent biological stages of life, but does not assume that individuals will experience each stage equally. Furthermore, it is taken that every person actively influences and is influenced by his or her context. In this way, biological, interpersonal, social, cultural and other influences, all interact to produce a unique experience, but one *probably* similar to that of another person in similar circumstances. This approach allows for an understanding of the uniqueness of an individual, whilst allowing for wider explanations pertaining to populations of individuals. Vondracek and Porfeli (2002) used the notions of *selection*, *optimisation*, and *compensation* to explain how an individual makes career choices (i.e., selects); develops resources to best exploit career-related opportunities (i.e., optimises); or copes with limitations (i.e., compensates) in order to best adapt his or her career at different times or circumstances in life.

Interests

Vocational interests have held the spotlight in vocational psychology and have been the most frequently assessed construct in career development practice (Hansen, 2005). Interests have been a mainstay for the trait-and-factor and person-environment fit approaches. As a topic of focus for theories, interests have been posited in some way in all of the schools of thought. For example, interests are influenced by values and abilities in the *Theory of Work Adjustment* (Dawis, 2002, 2005); they feature centrally in the *Social Cognitive Career Theory* and are affected by self-efficacy and outcome expectations (Lent, 2005; Lent, Brown, & Hackett, 1994); and in the *Theory of Career Construction* interests are variously manifested in vocational personality, adaptability, and life themes (Savickas, 2002, 2005).

Exemplar. Holland's (1997) Theory of Personality and Work Environments is an extensively articulated theory for understanding vocational interests. This theory posits six personality and corresponding environmental types which manifest interests in workrelated activities or occupations: Realistic (R), Investigative (I), Artistic (A), Social (S), Enterprising (E), and Conventional (C), which constitute the famous RIASEC hexagonal model. Stereotypical occupations represented by the hexagonal model may be: R for the occupation of automotive mechanic; I for laboratory scientist; A for painter; S for teacher; E for politician; and C for accountant. The theory holds that types which are adjacent to one another on the hexagon model (e.g., R and I) are more likely to be manifest in individuals as a combination of types than types opposing one another on the hexagon (e.g., R and S). Individuals show varying degrees of type. Some individuals may present with one or two adjacent types being predominant; and therefore demonstrate *consistency* in their overall personality and interest structure, along with lower levels of various types allowing for *differentiation*. The theory is not simply a descriptive trait-and-factor theory, however; for it highlights the interaction between a person and his/her environment as a cause of vocational behaviour. Holland argues that an individual will be most satisfied if working in an environment which is *congruent* with his or her personality type. The theory is operationalised in a host of specific psychometric measures and products derived directly from the theory (e.g., Self-Directed Search). Within the person-environment framework, the notions of congruence (or correspondence in the Theory of Work Adjustment) pertain to the fit between an individual and his or her environment, and concomitant levels of satisfaction or Although there is a significant body of research (e.g., Piasentin & performance. Chapman, 2006), "based on over 40 years of research on congruence we know that people choose, achieve, remain in, and are satisfied with the occupations for reasons other than congruence" (Phillips & Jome, 2005, p. 131). On the whole, however, Holland's theory has generated and withstood decades of theoretical and empirical investigation documented in hundreds of studies, including emerging evidence of crosscultural validity (Spokane & Cruza-Guet, 2005; Tien, 2007).

Values

Although they have not taken on the same status as interests in vocational psychology theory, "values are central to our understanding of both the meaning of work and the reasons that people work" (Rounds & Armstrong, 2005, p. 305). Brown's *Value*-

based Career Theory (Brown, 2002; Brown & Crace, 1996) has received attention because it maintains the centrality of individual values as traits, yet positions values amidst socio-cultural context (cf. Patton, 2000). Part of the reason for values being relatively unexplored in vocational psychology is due to their conceptual complexity and concomitant limitations upon measurement (Patton, 2000; Rounds & Armstrong, 2005); though psychometric measures have been developed: for example the *Values Scale* (Nevill & Super, 1989) which emanates from Super's (1980) developmental theory.

The Theory of Work Adjustment (Dawis, 2005; Dawis & Lofquist, Exemplar. 1984) and its variant Person-Environment Correspondence Theory (Dawis, 2002) take a person-in-environment approach and focuses upon the individual's satisfaction with and performance in the work environment. Values are predominant in the Theory of Work Adjustment and are operationalised in concert with needs, and manifest in notions of achievement (i.e., using one's abilities and feeling accomplished), comfort (i.e., feeling comfortable and devoid of stress), status (i.e., feeling recognised, acknowledged, and being in a dominant position), altruism (i.e., being in harmony with others, serving others), safety (i.e., maintaining stability, order, predictability), and autonomy (i.e., being independent and feeling in control). The theory predicts satisfaction: providing that an individual has the requisite abilities to perform in a work situation, then environmental reinforcement of an individual's values will lead to satisfaction; therefore, there is correspondence. More recently, the theory has been conceptually extended toward mainstream positive psychology with its potential in relation to well-being (Eggerth, 2008).

Self-efficacy

The mainstream psychological construct of *self-efficacy* (Bandura, 1986) has been the subject of extensive theoretical development and research within vocational psychology (Betz, 2007; Betz & Hackett, 2006), and is of considerable relevance to career development, management and planning. Self-efficacy has been defined as "people's judgments of their capabilities to organise and execute courses of action required to attain designated types of performances" (Bandura, 1986, p. 391). It is notable in vocational assessment (Betz, 2000; Gainor, 2006), such as the *Career Decision-Making Self-Efficacy Scale* (Betz, Klein, & Taylor, 1996; Taylor & Betz, 1983); the vocational psychology of women's career development (Betz, 2005); and as a core construct within the *Social Cognitive Career Theory* (Lent, 2005; Lent, Brown, & Hackett, 2002), and the *Learning Theory of Career Counselling* (Krumboltz, 2002). The construct's prominence in career theory was evident in special issues of the *Career Development Quarterly* (2004, 52(4)) and the *Journal of Career Assessment* (2006, 14(1)).

Exemplar. The *Social Cognitive Career Theory* (Lent, 2005; Lent, Brown, & Hackett, 2002) is derived from the Bandura's (1986) *Social Cognitive Theory*. According to the theory, self-efficacy plays a crucial role in the development of occupational interests, and career choices and actions; it is also posited in the prediction of performance of occupational roles and work settings. An individual who has enjoyed positive experiences and reinforcement associated with a particular occupational interest or activity is likely to develop self-efficacy for the interest or activity. Should this pattern continue, the theory asserts that self-efficacy would influence a person's career interests and goals. In making a career choice, the theory suggests that self-efficacy and expectations influence interests; which in turn influence a person's career-related goals; which affect goal-related actions; which produce experiences; which then affect paths and goals. Self-efficacy influences the process and is recursively influenced itself through

learning experiences. With respect to work-related performance, ability and past performance are taken as key predictors; they also influence self-efficacy which, in turn, predicts goals and attainment. The theory has attracted a significant body of research, including a case for cross-cultural applications (see Guindon & Richmond, 2005; Harrington & Harrigan, 2006; Lent, 2005; Tien, 2007). Unlike personality theories which call for the measurement of relatively stable traits, the theory concerns itself with domain-specific constructs, such as the self-efficacy for a specific ability or task (e.g., mathematics). In recognising the potentially unlimited number of phenomena that could be measured in relation to core social cognitive constructs, Lent and Brown (2006) established protocols for measurements required for testing or applying the theory. This system has promise to further any research into and development of the theory, which has already eclipsed its theoretical predecessor: the *Social Learning Theory of Career Decision-Making* (Mitchell & Krumboltz, 1990, 1996).

Choice and decision-making

The vocational choices an individual makes and how he or she performs the choice process is a cornerstone of the discipline (for a critical review see Krieshok, 1998), with oft-cited reference to Parson's (1909) early model as a foundation for the scientific study of interests, choice, and decision-making, and the professional activity of matching individuals for the workplace. They are also key dimensions in career development, management and planning. Phillips and Jome (2005) nominated the person-environment typological theories of Holland (1997) and Dawis and Lofquist (1984), and Gottfredson's (1981) development theory focusing on *circumscription* and *compromise*, as significantly contributing to an understanding of career choice. The process theories of decision making can be conceived of as descriptive or prescriptive (Peterson & Gonzalez, 2005). Descriptive theories relate to how individuals make choices and decisions; whereas prescriptive theories pertain to how individuals should or could make more rational or efficient choices and decisions. Other dimensions of career choice and decision-making include decision-making styles, problems in decision-making, and readiness for decisionmaking (Phillips & Jome, 2005). Readiness, as a construct, has been well articulated in theory and psychometric measurements such as the Career Decision Scale, Career Development Inventory, and Career Maturity Inventory Attitude Scale (Savickas, 2000a). In has been notably operationalised in Super's developmental theory in the construct of maturity (Super, 1980, 1992); which was later modified to adaptability (Savickas, 1997a) to rid it of notions of age- and developmental stage-dependence.

Exemplar. The Cognitive Information Processing Model of Career-Decision Making (Peterson, Sampson, Lenz, & Reardon, 2002; Sampson, Reardon, Peterson, & Lenz, 2004) articulates Parsons's (1909) three core requirements for career development: self-understanding, as *self-knowledge*; knowledge of occupations, as *occupational knowledge*; and true reasoning, as *career decision making*. Two core knowledge domains, *self-knowledge* and *occupational knowledge* are the information base for career decision-making. As a prescriptive approach, the theory specifies a 5-step decision-making process entailing:

- Communication (C), which involves the recognition of an information gap and the formulation of a problem to be solved;
- Analysis (A) of the information and problem to determine the causes of the problem and their connections with one another;
- Synthesis (S) of possible courses of action and refinement of the options;
- Valuing (V) the options with respect to prioritising which will be implemented;

- Execution (E) of the proposed solution; and
- Recursively returning to C to move on with the next problem to be solved, or to evaluate and appraise the initial attempt.

At the highest level of cognitive functioning, the theory assumes a meta-cognitive process by which an individual appraises his or her knowledge and decision-making skills as a career problem-solver. This theory has correlation with other prescriptive approaches to problem-solving in mainstream psychology. However, there is limited evidence of its application to individuals with particular needs with respect to their race, disability, or sexuality (Brown, 2007).

NEW CONSTRUCTS AND THEORIES

Change, complexity, and uncertainty

As the adage goes, there is certainly nothing more constant than change in the contemporary world-of-work. It is assumed in vocational psychology theories that individuals and their environments change and interact with one another—albeit with varying levels of scope and emphasis according to different theories—so the phenomena of change-in-person and change-in-environment receive considerable attention in the literature; and they are indeed key concerns in understanding career development, management and planning. Taking its lead from various new approaches to mathematics, physics, and science, which focus upon naturally occurring chaotic systems, vocational psychology (e.g., Bloch, 2005; Pryor & Bright, 2003a, 2003b, 2007) has opened new vistas in understanding and managing personal and environmental change and uncertainty at the higher conceptual level of an individual's career over a lifetime; and at lower conceptual levels pertaining to cognitive and behavioural operations such as decision-making.

Exemplar. The *Chaos Theory of Career* by Pryor and Bright (Pryor & Bright, 2003a, 2003b, 2007) assumes a systems approach to understanding career development (cf. Patton & McMahon, 2006). It aims to account for: the *complexity* in human behaviour with respect to the myriad objective and subjective influences impinging upon career development; the adaptive function and unpredictability of *change*; how individuals use their inherent *constructiveness* to understand their experience of the world; and the influence of *chance* (Pryor & Bright, 2003a). It is a relatively new approach, but is nevertheless a well articulated framework demonstrated by empirical research (e.g., Bright, Pryor, & Harpham, 2005; Bright, Pryor, Wilkenfeld, & Earl, 2005) and practical applications for career development (Bright & Pryor, 2005) which, like the *happenstance approach* (Mitchell, Levin, & Krumboltz, 1999), help clients to prepare for and capitalise on change and circumstances ordinarily or potentially deemed threatening by individuals.

Agentic Action

Contemporary approaches emphasise the individual's active agency in constructing career over a lifetime. The importance of the individual's actively engaging in his or her context is emphasised in approaches such as the *Systems Theory Framework* (Patton & McMahon, 2006); the *Protean Theory* of career (Hall, 1976); and the use of *selection*, *optimisation*, and *compensation* (Vondracek & Porfeli, 2002) with respect to the *Life-Span Developmental Approach* (Vondracek, Lerner, & Schulenberg, 1986). In this way, career is conceived of in terms of dynamic interactions between the individual and his or her context—akin to the person-environment approach, yet not necessarily positing

notions such as stable traits. An individual's *actions* and their relationship with his or her context are, therefore, of crucial importance to understanding career development, management and planning.

Exemplar. Action is clearly articulated in the Contextualist-Action Theory of Career (Young & Valach, 2004; Young, Valach, & Collin, 2002), which posits action with others as an inherent process of developing career. This theory presents a framework for understanding career in terms of action, as being a self-constructive process of meaning-making and goal-directed behaviour, and situates this process in the context of a person's social environment. It posits three dimensions of action: systems of action, *perspectives* on action, and *levels* of action organisation. There are four levels within systems of action scaffolding upward in complexity and entailing relations with others across time: individual action, joint action, project, and career. Actions may be understood from varying perspectives: manifest behaviour, internal processing, and social meaning. With respect to levels of action, it can be decomposed to the lowest level of behavioural and cognitive *elements*, and clustered upward to *functional steps*, and then fully formulated goals. Again, the theory contextualises the individual through its specification that actions, projects, and hence career, cannot be understood without reference to an individual's interpersonal, social existence. For example, research using the theory has investigated family/parental influence upon adolescent's career choice (Young et al., 2007; Young et al., 2001).

Story

Under the aegis of the constructivist, narrative approach to career development, the subjective content and process of story, or narrative, in theory and practice has emerged as a significant interest for the field in recent years (McIlveen & Patton, 2007b). Story is the content and process of *meaning-making* in relation to the role of work in people's lives and making sense of one's career, and so plays a part in career development, management and planning. As for theory, story is predominant within the Theory of Career Construction (Savickas, 2005), the Contextualist-Action Theory of Career (Young & Valach, 2004; Young, Valach, & Collin, 2002), and posited as a process influence in the Systems Theory Framework (Patton & McMahon, 2006); although it has long held a place within psychodynamic career development (e.g., Watkins, 1993; Watkins Jr & Savickas, 1990), albeit under different epistemology and technical rhetoric. In career development practice, story and storying is exemplified by Cochran's (1997) model for narrative career counselling, Peavy's (1997) SocioDynamic counselling, and McMahon's (2006) model for working with clients as storytellers. Nevertheless, the psychological process of storying career—the how—requires further theoretical and empirical attention. There are promising avenues: applying the principles of *narratology* to understanding how individuals story their careers (e.g., Cohen, 2006; Collin, 2007), which would complement similar approaches in mainstream counselling psychology research (e.g., Hoshmand, 2005).

Exemplar. In his *Theory of Career Construction* (Savickas, 2002, 2005), Savickas positions personal narratives as the crucial threads of continuity that make meaningful the elements of vocational personality and adaptability. Savickas pursued the notion of uniqueness by contrasting personality types and *life themes*. He suggested that a personality type indicates an individual's resemblance and similarity to a prototypical other, whereas a story was a truly unique description of one person. Types indicate *what* a person possesses (e.g., abilities, interests) whereas themes indicate *why* these are important or matter to that person. As distinct from objective personality traits, stories express the uniqueness of an individual—a story of one who is contextualised in time,

place and role. Career stories are an individual's explanation as to *why* he or she will make choices, or made choices, and explicates the meanings that guided those choices. Career stories "tell how the self of yesterday became the self of today and will become the self of tomorrow" (Savickas, 2005, p. 58). Savickas noted that stories do not determine the future. However, he asserted that stories play a role in the action of an individual's career adaptation (cf. Contextualist-Action Theory) by evaluating resources and limitations, and using traits and abilities to work through tasks, transitions, and trauma. The theory has been advanced by McIlveen and Patton (2007a) who argued that the life themes component of the theory lacked a psychological mechanism to explain *how* the individual constructs stories. They suggested integration of the *Dialogical Self* (Hermans & Kempen, 1993) as a vehicle for explaining how individuals construct career life themes with self and with others.

Relationships

Although not yet extensively articulated as a theoretical framework as such, the *relational approach* (Blustein, 2001, 2006; Blustein, Schultheiss, & Flum, 2004; Richardson, 2004; Schultheiss, 2007) has emerged as one of the platforms to establishing a contextualist scope for the discipline: demonstrated by conceptual and professional developments in research (e.g., Schultheiss, Kress, Manzi, & Glasscock, 2001), vocational assessment (e.g., Schultheiss, 2005) and counselling (e.g., Schultheiss, 2003). This approach emphasises the role of interpersonal relationships across a range of career development dimensions, including the co-construction of identity in the context of work relationships, connections to work per se, balancing work and non-work life. For example, family relationships have been addressed in the development of career identity and decision making (e.g., Whiston & Keller, 2004) and in conceptualising the family-friendly career (e.g., Collin, 2006; Schultheiss, 2006) and its relationship to satisfaction with family and work (e.g., Cinamon, 2006; Perrone, Webb, & Blalock, 2005).

PARADIGMS

By using Ponterotto's (2005) system which has been applied to approaches to research in counselling psychology, the paradigms for vocational psychology may be generically categorised as: *positivism* (and *postpositivism*); *constructivism* (or *interpretivism*); and *critical-ideological*. With respect to their philosophies of science, each paradigm's approach to research (and practice) can be differentiated across: *ontology, epistemology, axiology, rhetorical structure,* and *research methods*.

In terms of ontology, positivists assume a true and knowable universe, whereas post-positivists accept that this knowledge corresponding to this standard is unattainable, and intellectually settle on an attenuated version of truth replete with error-that difference notwithstanding, I do not differentiate them for the sake of this analysis. Constructivists posit that there are multiple constructed realities dependent upon recursive relationships between perception and context. Social constructionists and criticalideological theorists posit a negotiable reality that is mediated by power dynamics embedded in language, relationships, culture, and history. Their respective epistemologies range from objectivity to subjectivity. The knower and the known are separate according to the positivists, whereas the constructivists admit to a transactional relationship between the two, and the critical-ideological theorists emphasise the power of the researcher to influence the dialogue between the two. With respect to axiology, therefore, the values of the researcher inherently drive critical research with a desired social and political outcome: whereas the constructivists acknowledge and attempt to contain their values and their potential influence upon the research endeavour, the positivists eschew values concordant with their standard of objectivity. The discourses of their respective sciences differ; with the positivists speaking and writing without emotion and involvement and speaking for the subject; through to the engaged dialogue and first-person account of the critical theorist. At their polar ends, positivists and critical-ideological theorists markedly differ across ontology, epistemology, axiology, rhetorical structure, and method. However, constructivists and post-positivists can sit (albeit sometimes uncomfortably) somewhere in the middle of the two poles.

Metaphor has heuristic potential for the conceptualisation of theories and constructs, and it has played a role in the construction, transfer, and accretion of knowledge in psychology over the past century (see Gentner & Grudin, 1985). Metaphors can offer conceptual coherence by capturing the core ideas of a theory in a descriptive manner. Within vocational psychology, for example, Inkson's (2007) metaphorical formulations described the *legacy* metaphor with career as inheritance, particularly under parental influence; the *craft* metaphor for career as construction; seasons for career as cycle; matching for career as fit; path for career as journey; network for career as encounters and relationships; theatre for career as role; economic for career as resources; and narrative for career as story. A number of scholars (e.g., Collin & Young, 1986; Patton & McMahon, 2006; Richardson, Constantine, & Washburn, 2005) have used Pepper's (1942) epistemological metaphor framework to describe vocational psychology theories according to their predominant world hypotheses expressed as root metaphors which "are implicit metatheories that may be distinguished from the more explicit (and limited) hypotheses typically found in the sciences, in that they are 'unrestricted' in their subject matter or in the scope of the evidence they encompass" (Lyddon, 1989, p. 442). Those root metaphors are mechanism, formism, organicism, and contextualism. This section describes some of the conceptual frameworks for organising theories of career in terms of paradigms and their exemplifying metaphors.

Positivist/Post-Positivist Paradigm

Nothwithstanding the importance of appropriate and provocative criticism and questioning (e.g., Collin & Young, 1986; Richardson, 1993), it must be stated categorically: traditional approaches to vocational psychology (e.g., differential, personenvironment fit and developmental) were—and still are—the bedrock foundation of the discipline. This positivist tradition predominantly includes theories conceptualised in terms of the worldview metaphors of mechanism, formism, and organicism.

Taken from the metaphor of a machine, the worldview of mechanism assumes causality, linearity, and predictability in human behaviour across antecedents and responses; this is typified by psychoanalytic, behavioural and cognitive-behavioural formulations (Lyddon, 1989). The *Social Cognitive Theory of Career* (Lent, 2005; Lent, Brown, & Hackett, 2002) and *Cognitive Information-Processing Model of Career-Decision Making* (Peterson, Sampson, Lenz, & Reardon, 2002; Sampson, Reardon, Peterson, & Lenz, 2004), as examples, describe linked-up cognitive and behavioural processes in cause-and-effect relationships with one another. A significant criticism of mechanical theories in psychology is their incapacity to deal with the diversity of personal meanings ordinarily attributed to antecedent causes of behaviour (Hermans & Kempen, 1993).

The formist worldview is based on the metaphor of similarity and posits the notion that objects in the world can be organised according to their form (e.g., shape, colour, function) or definitive, immutable essence or type. This approach is exemplified

by the work of Parsons (1909), Holland's trait-and-factor *Theory of Personality and Work Environments* (Holland, 1997), the *Theory of Work Adjustment* (Dawis & Lofquist, 1984), and its recent formulation, the *Person-Environment Correspondence Theory* (Dawis, 2002). Whilst formism contributes at the level of nomothetic and nosological conceptualisation of behaviour (e.g., personality factors, psychiatric diagnosis), it is limited with respect to determining personal meaning for an individual's unique identity (Hermans & Kempen, 1993).

The organic worldview assumes that there are intrinsic processes that underpin structural development and transformation over time toward a final integrated whole; and is thus teleological (Lyddon, 1989). Lyddon also associated systems theories with organicism, due to their assumption that individuals can be conceived of as active, selfconstructing, open systems of activity that seek a state of self-organisation. It is this assumed dynamic toward self-organisation that indicates the potential of systems psychologies to be teleological and thus developmental. Organicism is exemplified by the Life-span Life-space Theory promulgated by Super (1980, 1992) with its overt developmental assumptions. A more subtle example of organicism is the formulation of career according to the chaos systems approach which assumes the person will move from stable state to stable state with intervening periods of instability, all the time aiming toward organisation (Bloch, 2005; Pryor & Bright, 2003b). Whilst there appears to be a regular trajectory of human career development as espoused by Super and other developmental theories, their formulation has increasingly been brought under scrutiny for its incapacity to explain development in the context of a post-industrial world and the nuances of persons who do not fit the theories range of explanation (e.g., white, male, middle-class) (Patton & McMahon, 2006; Vondracek, Lerner, & Schulenberg, 1986). However, the chaotic systems perspective provides a theoretical vehicle for the unpredictable exigencies of the current world-of-work and individuals' activities to sustain within it.

The traditional positivist and post-positive theories not only provide some of the distinguishing features of the discipline; they also provide scope for its integration with mainstream psychology. The typological *Theory of Vocational Personalities and Work Environments* (Holland, 1997), for example, has a considerable relationship with personality theory, such as the *Five Factor Theory* (Hogan & Blake, 1999; Spokane, Luchetta, & Richwine, 2002). Furthermore, Hartung (2005) argued that traditional psychometric assessment and qualitative assessment methods could quite effectively be integrated in counselling practice: such as the integration of quantitative psychometric measures of interest with qualitative methods of generating personal stories (Hartung & Borges, 2005).

Constructivist/Social Constructionist Paradigm

The rise of *constructivism* and *social constructionism* within vocational psychology is a most notable trend signalled by a special issue of the *Journal of Vocational Behavior* (Young & Collin, 2004). These similar, but different, approaches have gained considerable ground, with definitive publications extolling theoretical advantages and practical applications (Cochran, 1997; McMahon & Patton, 2006; Savickas, 1997b). Put simply, the constructivist approach emphasises the individual as the primary creator of his/her meaningfulness; whereas the social constructionist approach emphasises how psychosocial environmental systems (e.g., discourse) mediate how the individual engages in the process of creating meaningfulness. These two approaches are exemplified in notions of career entailing a sense of personal meaning (Chen, 2001) and personal

spirituality (Savickas, 1997c), with career inherent to a process of lifelong self-construction (Guichard, 2005).

The contextualist worldview, which subsumes the social constructionist approach, takes the position that whole individuals dynamically interact with their environment, which is likewise dynamic and in flux; that an event can only be understood in context of time and space; and that context is a social construction, as distinct from the logical-positive view of environmental reality (Collin, 1996, 1997). Contextualism conceives of the whole in terms of "a confluence of inseparable factors that depend upon one another for their very definition" (Lyddon, 1989, p. 443). Contextualism calls for unique individualised explanations of a person in time and in space amongst a multiplicity of events; yet it invites idiographic approaches to psychology in order to bring meaning and coherence to that flux.

With respect to predominant theories, the *Theory of Career Construction* (Savickas, 2002, 2005) has exemplified the constructivist approach (although Savickas has encouraged social constructionist views too). Savickas (2001b) proposed a comprehensive theory of career development which calls for the integration of traditionally conceived of vocational personality typologies (e.g., Holland's RIASEC types) with career narratives represented in constructivist theories. The ecologically-oriented approaches have been expressed in the *Systems Theory Framework* (Patton & McMahon, 2006), the *Contextualist Action Theory* (Young & Valach, 2000; Young, Valach, & Collin, 2002), and the relational approach (Blustein, Schultheiss, & Flum, 2004; Richardson, 2004; Schultheiss, 2003, 2005).

Critical-Ideological Paradigm

Two major trends underpin the emergence of the critical-ideological paradigm in vocational psychology: changes in the world-of-work and the evolving meaning of career. In the post-industrial era, in which systems of work and education saw upheavals, the revised and emerging theories of vocational psychology came to reflect the valuing of personal independence and individualism (Baruch, 2004; Collin & Watts, 1996; Russell, 2001), along with notions of adaptability (Savickas, 1997a), self-managed career development (King, 2004), lifelong employability (Fugate, Kinicki, & Ashforth, 2004), and career competencies (Kuijpers & Scheerens, 2006) as vehicles for personal success in the world-of-work. This evolution of career corresponded to the positioning of career development practices within the socio-economic and political sphere of public policy (e.g., Organisation for Economic Cooperation and Development, 2004; Watts, 2005). Within some Western nations, for example, career development practice has an historical relationship with equity and social justice (O'Brien, 2001; Savickas & Baker, 2005). This relationship has been brought into view and in some respects revived (Irving & Malik, 2005), along with criticism alluding to vocational psychology's role in sustaining oppressive socio-economic structures, and the inadvertent collusion with industry that risks subversion of the commitment to the individual-client (Blustein, 2006; Collin & Young, 2000; McIlveen, 2007a; McIlveen & Patton, 2006; Richardson, 2000).

Further to the positioning of career in its socio-economic context, the foundations and practices of vocational psychology have been questioned. As with mainstream psychology, the axiology of vocational psychology has been dominated by notions of objective, value-free science. Whilst resilient, this notion has been effectively challenged in mainstream psychology (Gergen, 2001; Prilleltensky & Nelson, 2002). In vocational psychology it has been particularly challenged by the emergence of avowedly value-laden perspectives (e.g., Blustein, 2006; Blustein, McWhirter, & Perry, 2005; Richardson, Constantine, & Washburn, 2005), and a body of literature addressing contextual dimensions of career (e.g., Patton & McMahon, 2006; Richardson, 2002), gender (e.g., Betz, 2005; Cook, Heppner, & O'Brien, 2002; Fitzgerald & Harmon, 2001), culture (e.g., Leong & Hartung, 2000), and race (e.g., Worthington, Flores, & Navarro, 2005). Several scholars (e.g., Blustein, 2006; Peterson & Gonzalez, 2005; Richardson, 1993) have argued that vocational psychology be redefined and refocused on the role of *work in people's lives*, as distinct from the study of *career*—that psychological construct apropos Western, middle-class, professionals' working lives which are developmentally contiguous and meaningfully connected up across lifelong transitions.

Blustein's (2006) *The Psychology of Working* is a superbly articulated map for the work-in-lives perspective. It contends that vocational psychology must be explicit in its value positioning. Blustein argued that *career counselling* should be reformulated to *vocational counselling*, to reflect a new broader and inclusive approach to practice, and one devoid of traditional notions of career. Furthermore, Richardson, Constantine, and Washburn (2005) redefined vocational psychology as:

a field comprised of theory, research, and intervention practices, that is committed to the importance of work and relationships in people's lives, to helping people live healthy and productive lives, and to social justice, especially with respect to providing access to opportunity for those marginalized or disadvantaged due to social locations such as gender, race, and class (p. 59).

This definition is not a mere echo of Parsons' pioneering welfare work: it goes to the epistemological foundations of the science, the *applied science*, of vocational psychology. Their definition shifts the axiology of the discipline from an ostensibly value-free and dispassionate science to an applied science with moral intentions.

The importance of the relationships amongst theory, practice, and public policy have been expressed in the publication of theoretical models that were overtly and avowedly reformist and political in orientation, such as the *Emancipatory Communitarian Approach* (Blustein, McWhirter, & Perry, 2005). This model stipulates recommendations for research and practice in vocational psychology:

- Recommendation 1: Strive to incorporate democratic participation among stakeholders and participants throughout research and delivery of interventions (p. 164);
- Recommendation 2: Strive to engage in the process of research and practice that starts from the bottom and is simultaneously worked down from the top (p. 165);
- Recommendation 3: Strive to instil a critical consciousness—not just among the powerless but the powerful and privileged (p. 167); and
- Recommendation 4: Incorporate social advocacy and activism into our notions of research and practice (p. 168).

Clearly, this example of the critical-ideological approach is anathema to the epistemology and axiology of the classical positivist paradigm. However, expanding the vision of the discipline from the study of individuals or work per se to the interrelationship of the two in a lived, meaningful sense, does justice to Collin's and Young's (1986) argument that the discipline needed to take on a contextual and hermeneutic approach to regain relevance in the contemporary worlds-of-work.

At this early stage in its development, critical-ideological research has been rather limited in vocational psychology. However, frameworks such as the *Emancipatory Communitarian Approach* (Blustein, McWhirter, & Perry, 2005) and research methods such as autoethnography (e.g., McIlveen, 2007b) are adding to the impetus for critical research and practice in which the observer and the observed are inter-subjective.

CONCLUSION

In contemplating the past, present, and future of vocational psychology, there should be some caution to avoid the trap of historical *presentist bias* (Thorne & Henley, 2005): the mistake of critically judging past theories with criteria pertinent to conditions of the present. After all, theories emerge in various industrial and intellectual epochs of human social-economic evolution which produce qualities inherent in the tenets of their psychologies. Accordingly, theories should be evaluated on the basis of their own internally-consistent terms and ultimately validated by their utility in their—plural—worlds-of-work, rather than a single paradigmatic standard.

It is therefore pertinent to acknowledge the intellectual precedents of vocational psychology which may serve as a reminder that any science is a product of social and cultural influences throughout time. For example, in the late 19th and early 20th century the applied science of *phrenology* held some sway as a means to determine occupational fit, and was positioned as a tool of vocational guidance during the Great Depression in the United States (Risse, 1976); and the contemporary discipline of applied psychology, and vocational psychology, owes some debt to its roots in brass-instrument empiricism (van Strien, 1998). Farther back in time, there is evidence of the study of work and vocation dating back to the social orders of ancient Greece, Egypt, and China (Doyle, 1974; Dumont & Carson, 1995; Peterson & Gonzalez, 2005), in the literature of mediaeval England (Hershenson, 1974) and Spain (Peterson & Gonzalez, 2005), and in the spiritual worldviews and scriptures of Taoism, Confucianism, and Islam (Peterson & Gonzalez, 2005). Accordingly, we have reason to be respectful of the fact that various human societies have in their own good time and place developed psychosocial systems for the understanding and management of work in their unique contexts.

With Western society's evolution toward the knowledge-economy of the postindustrial era, alternative theories and practices have emerged to serve contingencies of the new era, including the cognitive and social constructionist schools of thought respectively based in metaphors of the computer and the story. Over the past century different schools-of-thought in vocational psychology have well served their theoretical proponents and beneficiaries of practice: the individual and the institutions of education, industry, and the academic discipline itself. Although some groups have been marginalised by these theoretical traditions (e.g., women, people of colour, the working class), it is nonetheless important to state that the theories have had specific meaning and utility for some groups and societies. However ostensibly privileged those beneficiaries may have been, the fact that traditional theories have been useful is incontrovertible, especially given the preponderance of empirical evidence indicative of the effectiveness and usefulness of career development, management, and planning (e.g., Bimrose & Barnes, 2006; Brown & McPartland, 2005; Brown & Ryan Krane, 2000; Brown et al., 2003; Whiston, Brecheisen, & Stephens, 2003; Whiston & Oliver, 2005).

In conclusion, the theory, research, and practice of vocational psychology do not stand in isolation from one another, or in isolation from the past, present, and future worlds-of-work to which they relate. The psychological science of work, vocation, and career is an inherently moral project of humanity which must establish its truthfulness in its pragmatic value to individuals specifically and societies broadly (cf. Rorty, 1999). Such a moral project should be practically directed toward the end of an open-society in which its intellectual and professional bounty may be shared. From an epistemological perspective, psychology's own version of *pragmatism*, championed by William James (1948), stands as a foundation for the discipline to negotiate its place in increasingly complex and plural worlds-of-work. With this ultimate aim, all versions of psychology

may be brought to bear on the problem of renovating a psychological discipline inherently beneficial for all peoples within its scope. Following Borgen's (1995) argument for methodological pluralism and epistemological eclecticism in vocational psychology, and his adventurous optimism of taking both forks in the road, I reiterate the call for a pragmatic foundation for an applied psychological science for the contemporary worlds-of-work—one which is necessarily underpinned by notions of diversity, inclusivity, and local or specific utility.

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AFFILIATIONS

Dr Peter McIlveen Careers & Employment, University of Southern Queensland

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