

## **Dynamics in Career Development: Personal and Organizational Perspectives**

Andreas Hirschi & Jean-Pierre Dauwalder

Institute of Psychology, University of Lausanne

### **Introduction: The Dynamic Nature of Careers**

Due to advances in technology, increased workforce diversity, and changes in organizational structures the nature of careers has changed remarkably over the past three decades (Sullivan, 1999). One important consequence of today's career environment is the increased importance of each employee's performance and the increasing inability of organizations to plan long-term career development or to manage careers for employees (Stickland, 1996). As one consequence of this change, psychological contracts between employers and employees have also changed. Current psychological contracts are no longer based on the promise of job security and automatic advancement as provided by the employer in exchange for loyalty and good performance as provided by the employee. Instead, the support of the employee's personal career development and learning in exchange for temporally limited contributions to the organization's success increasingly form today's tacit agreement between parties in organizations (Rousseau, 2001). As a result of these changes in how careers developed in today's world of work, employees face an increased need for career self-management because companies are increasingly pursuing a human resource policy that shifts accountability for career management from the employer to the employee (Kossek, Roberts, Fisher, & Demarr, 1998). These changes have profound effects on how careers develop, resulting in more non-linear and less predictable career patterns. Accordingly, increased self-directedness, flexibility, and adaptability are required on the part of

employees if they are to successfully cope with the changes in the realm of work (Sullivan, Carden, & Martin, 1998).

As outlined by Guichard (Chapter 1, this volume) the dominant theories and practices of career counseling have always been a reflection of contemporary societal, political, and economic conditions. Faced with the above mentioned new career context, the field is hence in need for new theoretical and practical conceptualizations that are aligned with the current realities in organizations and the labor market. Although they still have merit, linear models of career development such as proposed by Super (1990) or models of stable individual differences that need to be matched with aligning work environments such as implied in Holland's (1985) model seem inapt to fully reflect this new reality.

As a consequence, the field of career studies, particularly, its management-oriented branch, has proposed a vast array of career concepts over the recent years that aim at addressing the new career reality. Prominent among them are the notions of employability (Forrier & Sels, 2003; Fugate, Kinicki, & Ashforth, 2004), career motivation (London, 1983; London & Noe, 1997), career self-management (King, 2004; Kossek et al., 1998; Stickland, 1996), career competencies (Akkermans, Brenninkmeijer, Huibers, & Blonk, 2012; Kuijpers & Scheerens, 2006), or a protean (Hall, 1996) and boundaryless (Arthur, Khapova, & Wilderom, 2005) career orientation. From the domain of vocational psychology, the happenstance learning theory (Krumboltz, 2009) and the chaos theory of career

(Bright & Pryor, 2005) have equally addressed the dynamic nature of careers.

Common to all the modern approaches to career development is the notion that career development cannot be restricted to career decision-making which focuses on finding a suitable profession which corresponds to personal skills, values, and interests. As a consequence, classical notions of career guidance which aim at assisting clients finding a good match between their personal characteristics and work environments or professions are deemed insufficient. Moreover, many of the current career concepts are limited by the fact that they solely propose different sets of attitudes, competencies, or behaviors that are deemed important for successful career development in the new context. However, they mostly fail to adequately address the *processes* by which career development can be conceived.

The life designing paradigm has the potential to address these issues and shortcomings. It is based on the epistemology of social constructivism (Young & Collin, 2004) and acknowledges that professional development is highly contextualized and individualized. Similar to the general developmental-contextual theory of human development (Lerner, 2006) the life designing paradigm proposes that career development must be understood as a dynamic interaction of person and environment. As a consequence, solely focusing on personal attitudes or competencies as a basis for successful career development is insufficient. A truly comprehensive notion of career development must address which personal characteristics in combination with what kind of environmental conditions produce what kind of career outcomes. While it is beyond the scope of the present chapter to

develop such a theory (see Vondracek, Lerner, & Schulenberg, 1986; Vondracek & Porfeli, 2008, for elaborations), we will outline some of the implications for career counseling based on a life designing approach.

According to developmental-conceptualism, people are active agents of their own development. Their development is the result of a dynamic interaction between personal characteristics and actions and environmental affordances and constraints. As a consequence of this process, human development shows great plasticity and contains the potential for systemic change and adaptation. The resulting individual trajectories of development may vary across time and place and are dependent on individual differences as well as constraints and opportunities in the environment (Lerner, 2006). In difference to the notions of chaos or happenstance, such trajectories are in principle predictable and lawful, albeit very complex and dynamic.

### **From Dynamical Reasoning...**

Understanding -and taking advantage of- complex dynamics therefore becomes more and more important for career counselors. Classical scientific reasoning is linear and deductive. It proved to be useful and efficient to apply a general law (e.g. human beings die) to the single case (e.g. X is a human being) and deduce a foreseeable consequence (e.g. X will die). By analogy and for decades now, traditional career counseling desperately looked for such linear relationships between single 'causes' (e.g. abilities, interests) and their foreseeable 'consequences' (e.g. professional choice, career development).

Unfortunately, neither the 'law' that interests or abilities are sufficient to obtain any 'job' or 'training' opportunities, nor

even the premise that these prerequisites remain stable or at least predictable, are valid any more. During actual processes of resolving professional problems, not only premises but also definitions of the problems themselves continuously change in an interactive manner. *Chains of causality* become multiple, complex and permanently changing, sometimes complicated by the influence of reciprocally dependent elements. Non-linear relationships are the rule, simple and linear causalities remain the exception.

This challenge, however, also opens unexpected opportunities to position life-designing as a science of understanding and management of such complex interactive problem solving processes at the interface of many other traditional disciplines (Haynes, 1992). Rather than continue to apply classical reasoning, which has not proven to be false but rather weak in our fields, we should develop more adequate forms of reasoning, taking advantage of better understanding of *interaction*, *complexity* and *dynamics*. In other terms, we have to replace the prevalent linear (or ‘medical’) sequence (e.g. 1. differential diagnosis, 2. indication, and 3. prescription of choice/treatment) by iterative or even circular interventions (e.g. identifying invariants and variable elements in client’s interaction with his environment, formulating dynamical hypotheses, exploring the space of potential changes, testing different solutions). A single contact thus will rarely be sufficient for life-designing, dynamical reasoning needs time. Furthermore, introducing and developing dynamic reasoning in the field of counseling –for the time being– mainly relies on ideas and concepts developed in other disciplines such as mathematics, physics, thermodynamics, biology or meteorology (Gleick, 1988).

One principle is to understand each person as just one element within an ongoing process of mutual shaping between herself and her environment. There is no singular or unidirectional causality, but at best a *co-evolution* which can be observed. For life-designing this means that there exists no ‘independent’ or ‘neutral’ point of reference. Looking at client’s perception of his environment includes looking at counselor’s role as just one element among others within this environment, sometimes helpful, sometimes not. This might explain why in psychotherapy research the ‘working alliance’ (Horvath & Greenberg, 1994) or ‘therapeutic relationship’ (Grawe, Donati, & Bernauer, 1994) proved to be so fundamental, just as it seems determinant for counseling outcome (Masdonati, Massoudi, & Rossier, 2009). But understanding and accepting each single person as acting within the constraints of her (perceived) specific environment or eco-system also means being particularly attentive to the dynamical patterns resulting from these interactions, including client’s plans to influence the counselor (Caspar, 2007).

A second principle is to understand complex systems as not being directed or controlled by any agent or subsystem –may be the client himself or even the counselor– inside or outside the system itself. The multitude of interactions generates, however, some form of global order, emerging spontaneously. Such *self-organization* is wholly decentralized over all components, typically robust and able to survive and self-repair substantial perturbations. Understanding and accepting the power of self-organization is crucial for any life-designing intervention (see also Schiersmann & Thiel, 2012). For example labor markets continually change at a local level (e.g. innovative products from smaller

companies or 'start-up's create new jobs) but are at the same time constraint by macroeconomic conditions (e.g. taxes or consumer behavior). There is no need for a 'invisible hand' to explain the emergence of a state of equilibrium among the locally changing 'attractors' (due to local 'control parameters') and the more stable 'potential landscape' (Haken, 2006), growing together into a comprehensive 'general picture' (due to emerging 'order parameters').

Another example, for clients looking for vocational guidance perceptions and expectations about possible professional pathways form many coexisting 'attractors' linked through quite random dynamics and large 'basins' of attraction. Any choice then selectively reinforces one 'attractor' among all others and thereby also reshapes the whole 'potential landscape'. Counseling outcome results usually in reduction of uncertainty and indecidedness, mainly by working out a comprehensive dynamic understanding (metaperspective) and reshaping of such complex configurations (Dauwalder, Rossier, Massoudi, & Masdonati, 2011).

A third principle requests to understand emergence of order and disorder as being both necessary and complementary for *sustainable evolution* in living systems. A completely 'ordered' system would be immune to change or evolution (e.g. entropy in a thermodynamic system). Local 'disorders' allows for emergence of new dynamic patterns, which enter into competition with existing patterns and generate new 'attractors', sometimes able to trigger a 'bifurcation'. This corresponds to a sudden 'qualitative' or topological change in the behavior of an entire dynamical system (Gleick, 1988). Described as 'équilibration majorante' in cognitive development during childhood by Piaget (1985) or 'dissipative structures' and their

role in dynamical systems far from equilibrium (Prigogine & Stengers, 1997), these fundamental re-organizations often mark irreversible *steps of evolution* within dynamical systems, usually accompanied by substantial increase in efficiency. This means that life-designing might be particularly helpful in critical situations (far from equilibrium), when 'bifurcations' towards a new 'order parameter' (Haken & Schiepek, 2010) become possible. In such 'bi-stable' configurations a (irreversible) decision often depends on small or insignificant details. This might explain why even university students retrospectively often declare having decided the choice of their studies 'at random' (Bäumler, Scheller, & von Maurice, 1994). On the other hand, the emergence of a macroscopic 'order parameter' such as somebody's 'professional identity' is usually maintained through a multitude of interactions and constraints in his daily environment and acts back according to the 'slaving principle' (Haken, 1991) on what is 'possible' or 'not possible' in one's life (e.g. a butcher will not practice as a surgeon and vice versa). Effective life-designing has to be aware of these dynamical constraints too.

A fourth principle opens, by understanding the dynamics of a complex system, the whole perspective of *anticipation*. The emergence of macroscopic 'order parameters' facilitates the understanding of possible or potential evolutions of a whole dynamical system for any observer. It drastically reduces the information (e.g. into a set of mathematical equations) necessary to describe its dynamics. Not only in the present but also for the future.

A discipline which has achieved mastery in *modeling* complex dynamical

systems, is meteorological science (Lynch, 2006). Today's weather forecasts are usually fairly reliable and adapted to local conditions for up to ten days. However, according to the particular configuration of the 'control parameters' sometimes practically no prediction is possible, sometimes very reliable predictions are possible for long periods. By analogy, for some clients or some 'professional identities', given the dynamics of their interactions and/or constraints within their local environments, no forecast is possible, whereas for others it seems easy. In life-designing first attempts to systematically anticipate possible 'professional identities' through specific interview techniques have recently been proposed by Jean Guichard (2008). He puts into perspective multiple 'subjective identity forms' of one person in their evolution from the past through the present towards the future.

Thus, the emergence of order and the control of local dynamics appear to be indivisible and mutually linked phenomena. The classical distinction between 'cause' and 'effect' or 'independent' and 'dependent' variables makes no more sense. The life design paradigm goes far beyond such traditional reasoning, as the understanding, analysis and shaping of naturally occurring processes of change leads to needs for new kinds of interventions.

### **...to Life-Designing Interventions**

Usually, *change* continuously happens within the limits of self-organization. Noise, disorder, or perturbations regularly appear within the dynamical equilibrium of a given system. They are generated through environmental influences or the non-foreseeable results of multiple non-linear interactions within the system itself. Persisting perturbations give rise to

fluctuations and instability within systems dynamics, leading potentially to states far from equilibrium. Finally, bifurcations toward new order parameters may re-stabilize dynamical patterns at a new integrative level ('*équilibration majorante*').

At this point, we should ask what this (different) understanding of change from a dynamical perspective implies for life-designing interventions and counselors behaviors. Efficient counselors usually do not apply theories strictly, but refer to their 'intuition'. In fact, their intuition reflects a holistic understanding of complex dynamics, which are different for each client within his eco-system. Intuitively most counselors 'know' when a client is 'really ready' to actively engage in a process of counseling, problem-solving or vocational guidance. In one case, a 15 year old boy may well understand and integrate the preoccupation of his parents about his need for professional choices without asking for vocational guidance (assimilation), without any substantial perturbation. In another case, such a message may be understood (assimilation), but also generate increasing questionings for client's personal and professional identity (fluctuations) and result in a need for intensive counseling (crisis) or life-designing interventions and -if successful- to a mature choice and increased assertiveness (accommodation). Beyond their 'intuition' and this fundamental distinction between 'assimilation' and 'accommodation' processes, however, counselors need theoretical constructs to help clients negotiate continuous change without losing a sense of self and social identity (Guichard, 2005).

From our life-designing perspective, *motivation to change* is elicited from the client and not imposed from outside forces. Readiness to change is not a trait of the

client, but a fluctuating result of dynamic interactions and environmental influences. At best, counselor and clients thus can achieve a co-construction, sufficiently efficient to modify client's readiness to change. Miller and Rollnick (2002) have developed specific *motivational interviewing techniques* based upon five effective principles: 1. Express empathy; 2. Develop discrepancy; 3. Avoid argumentation; 4. Roll with resistance and 5. Support self-efficacy. These client-centered but also directive techniques aim particularly at the examination and resolution of client's ambivalence, before engaging in more specific problem solving or career counseling.

From our life-designing perspective, the concepts of *constructivist and narrative career interventions* fit particularly well the actual needs for effective interventions, which are adapted to our global understanding of dynamic change (Savickas, 2012). Building on our common epistemological position about contextual boundedness, dynamical processes, nonlinear causalities, multiple subjective realities and needs for modelization (Savickas et al., 2009) and Savickas' (2005) former work on career construction by narrative techniques, he proposes substantial evolutions of heuristics for life-design interventions. His model involves construction, deconstruction, reconstruction and co-construction, which lead to action in the real world. First, the counselor asks a client to tell stories, illustrating how he has constructed his self, identity and career. Storytelling means active 'construction' of multiple subjective realities through words, but also building new local 'attractors' or 'control parameters' in dynamical reasoning. Second, the counselor assumes a critical role by confronting the client with self-limiting ideas or biases in his or her

stories. This 'deconstruction' is only efficient, when the client becomes aware of his own contradictions (assimilation) and then includes alternative ideas in his or her future own reasonings (accommodation). For dynamical reasoning, this contributes to enhance 'fluctuations' or 'instability' leading finally to 'states far from equilibrium' and is therefore essential for systemic changes. Third, from all the micro-stories told by the client, the counselor has to identify client's macro-story (or 'identity'), which explains his or her past, orients his or her present and guides him or her into the future. This 'reconstruction' gives a holistic 'sense' to the stories, but also defines at least one 'order parameter' in dynamical reasoning. In our view, offering different explanations or 'order parameters' to the client at this moment might increase probabilities for 'bifurcations' or re-stabilizations ('*équibration majorante*') at new integrative levels. Fourth, the counselor has to constantly revise the life-portrait developed so far, together with his or her client. This 'co-construction' opens perspectives of new language, fresh perspectives or extended vistas not only to clients but also to counselors. In life-designing interventions, one might perhaps stress somewhat more the 'anticipation' perspective, exploring the potentials and the limits of the 'modelization' designed together, for client's future options for life. Finally, the counselor should help the client turn his intentions into 'action'. Albert Bandura (2001) defines perceived self-efficacy as the necessary foundation of human agency: people are self-organizing, proactive, self-reflecting and self-regulating because of their interaction with their environment. For dynamical reasoning, this monitoring and coaching of client's action provides the necessary test of the

integration of change into the whole dynamic system: decentralized, robust and able to self-repair. In other words, the counselor is no longer necessary.

Some might criticize the life-designing interventions presented so far as being too 'normative'. Haken and Schiepeck (2010) tried to define some very general 'generic principles' as being less 'normative', because they should be present during the whole process of any systemic intervention: 1. Create stable conditions for change processes; 2. Identify the system and its patterns; 3. Develop visions and goals; 4. Energize and identify 'control parameters'; 5. Destabilize and reinforce 'fluctuations'; 6. Foster 'symmetry breaking'; 7. Secure 're-stabilization' and 8. Facilitate 'synchronization'. In their excellent book Schiersmann and Thiel (2012) analyzed however in detail the eight 'generic principles' and criticized their relative proximity to more classical problem solving techniques.

What we definitely need are new global assessment tools and research methodologies to better describe and monitor life-designing interventions and their efficacy (Dauwalder, 2007). The emerging concepts, however, seem sufficiently promising to position life-designing as a science of understanding and management of complex interactive problem solving at the interface of many other disciplines.

Beyond such interventions in personal situations, which already include an eco-systemic perspective, there exist a variety of organizational contexts. In order to further advance the life designing paradigm it is important to connect it with the literature on personal and organizational career management (Savickas et al., 2009). In the following paragraphs, we will specifically focus on how self-directed

career management can be seen as a part of life designing.

### **Career Management: Proactive Regulation of Person-Context Interactions**

Focusing on the dynamic nature of careers, lifelong career management within, between, and outside of organizations becomes pivotal. The notion of career management implies that career counselors should focus on the interaction between client and environment and how this interaction can be optimized to result in favorable career outcomes. In order to achieve this, career counseling and career development in organizations should focus on (a) the promotion of proactive career behaviors; and (b) the development and unitization of personal and environmental resources of the client.

First, career counseling practice based on the life design paradigm should focus on promoting proactive career behaviors. Modern concepts of career emphasize self-directed career management as vital for positive career development (Hall, 2002; King, 2004; London & Noe, 1997). For example, Savickas (2011) asserted that the modern career and work context requires career management –not career planning; action– not verbal expression of decidedness. As a consequence, different researchers have noted that the current career context increases the need to be engaged in proactive career behaviors (e.g., career planning, networking, exploration) in order to achieve objective and subjective career success (Fuller & Marler, 2009; Thomas, Whitman, & Viswesvaran, 2010). One of the major functions of different proactive behaviors is to achieve a good person-environment fit (Parker & Collins, 2010).

We propose three fundamental ways of how people can interact with their environments through different proactive career behaviors can be distinguished: Behaviors aimed at (1) the selection of environments; (2) the adaptation of one self to current environments; and (3) the active shaping of current environment to one self. According to this conception, person-environment fit is a temporal state that results from the alignment of personal needs and preferences to environmental demands and resources. This state of fit can be achieved through a process of person-environment interaction that consists of three previously named processes.

First, people can select environments that correspond to their personal needs, skills, and preferences and which allow an alignment between personal needs and environmental resources. This notion is related to various classical models of career development and career decision-making (Hirschi & Läge, 2007; Holland, 1997; Savickas, 2005; Savickas et al., 2009; Super, 1990) where a clear self-awareness is seen as the foundation for being able to make sound career choices and implementing one's self-concept into the work role. Empirical research has shown, for example, that a clearer career identity relates positively to career choices congruent with one's interests (Hirschi et al., 2011; Srsic & Walsh, 2001) or that unemployed adults reporting more career planning were more successful in finding employment with a good person-job fit (Saks & Ashforth, 2002). This component hence refers to the classical approach in career guidance which aims at helping clients make self-congruent career choices and implementing their choice (Sampson, Lenz, Reardon, & Peterson, 1999).

Second, people can adapt themselves to better correspond to existing

and future work environments. This aspect is related to the notion of personal flexibility, which is often mentioned as a requirement to succeed in the modern work context (Hall, 1996). For example, Pulakos et al. (2002) showed in an empirical study that more facility in adjusting to new work situations predicts better job performance. This flexibility is often referred to as career adaptability, which has been defined as the ability to adapt to changing career circumstances and proposed it as an indicator of openness to change and ability to handle the stresses of a new career context (Kossek et al., 1998) or as a component of employability which refers to wage and occupational flexibility or a propensity to learn combined with a sense of control and efficacy (Fugate et al., 2004; McQuaid & Lindsay, 2005). Likewise adaptability in the workplace is described as the individual characteristic that allows people to increase their level of fit with the work environment through adaptive performance measures, such as dealing with uncertain and unpredictable work situations (Pulakos, Arad, Donovan, & Plamondon, 2000).

Third, people can shape their environments according to their personal needs, skills, and preferences. This notion is similar to the concept of job-crafting proposed by Wrzesniewski and Dutton (2001), which envisions employees as active crafters of their jobs who change actual task boundaries, cognitive task boundaries, and social task boundaries. According to Wrzesniewski and Dutton, the degree to which such job-crafting occurs depends on the individual work and motivation orientations of the employee and on the job characteristics in terms of task interdependence and the level of freedom and autonomy at one's job. Emerging empirical work supports the assumption



that people in different professions and at different levels within organizations are active in job crafting and that work orientation and self-image are predictors of crafting behaviors (e.g., Berg, Wrzesniewski, & Dutton, 2010).

In sum, all three proposed ways of career management can enhance person-environment fit. In contrast to static models of person-environment fit, however, they depict fit as dynamic and on-going process of constant person-environment interactions. Such interactions stem from the application of different proactive career behaviors. As such, this dynamic notion of fit, based on career management, reflects the theoretical approach in the life designing paradigm that career development is a contextualized and individualized process of self-construction (Savickas et al., 2009).

### **Promoting Resources and Readiness among Clients**

In order to promote different types of proactive career behaviors among career counseling clients, career counseling based on a life-designing approach should focus on promoting the necessary resources, abilities, and readiness that allow clients to actively take charge of their working lives.

Several recent theoretical accounts have promoted such an approach. First, Savickas and Porfeli (2012) have proposed career adapt-abilities are essential for career development, extending Savickas' (1997) earlier conceptualizations of career adaptability. Career adaptability is described as a psychosocial construct that denotes an individual's resources for coping with current and anticipated tasks, transitions, traumas in their occupational roles that, to some degree large or small, alter their social integration (Savickas, 1997). According to Savickas and Porfelli,

career adapt-ability is seen as a set of resources that a person can draw on to master challenges in the domain of work. They emerge from the intersection of person-environment relations, represent a form of human capital, and are closely related to the recent notion of psychological capital (Luthans, Avolio, Avey, & Norman, 2007). Specifically, four manifestations of career adapt-abilities are proposed: concern, control, curiosity, and confidence.

Second, Lent (2013) has addressed the need to revise long standing notions of career decision-making and planning and suggested that, while still valid, they should be complemented by career counseling aiming at enhancing clients' "life preparedness". He describes it as a "healthy state of vigilance regarding threats to one's career well-being as well as alertness to resources and opportunities on which one can capitalize" (p.7). One important function of this preparedness is that clients can use proactive behaviors to manage barriers, build support, and master the challenges in their working lives. Within the context of the social-cognitive career theory (Lent, Brown, & Hackett, 1994), career and life preparedness can be enhanced by developing vocational interests, enhancing self-efficacy beliefs, correct unrealistic or negative outcome expectations, setting attainable career goals, and managing environmental barriers and supports.

A final example of a recently proposed model is Hirschi's (2012) career resources model. Based on a qualitative review and integration of different theoretical models and empirical studies regarding the competencies, behaviors, and attitudes that are important for successful career development, Hirschi proposed that four basic and interrelated career resources situated in in the person and the

environment can be intensified which are important for career counselors to assess and develop in order to promote positive career development among their clients: human capital resources, social resources, psychological resources, and identity resources. *Human capital resources* include factors such as education, experience and training, and cognitive ability within the broader category of work-relevant knowledge, skills, abilities, and other characteristics (KSAOs). *Social resources* (often referred to as social capital) refer to “the goodwill available to individuals or groups” (Adler & Kwon, 2002, p. 23) in terms of information, influence, and solidarity it makes available to the person. The availability and characteristics of a mentor is one form of social capital but it can be more broadly conceived as one’s developmental network, which can be characterized according to its structure and diversity (e.g., range and density) and quality or strength (Higgins & Kram, 2001). *Psychological resources* refer to the positive psychological traits and states, such as the cognitions, motivations, and affect of the person, which are generalized and expressed in different contexts and more specifically in relation to the work role. Finally, *career identity resources* indicate one’s conscious awareness of oneself as a worker, of one’s occupational interests, abilities, goals and values, of the importance of one’s work, and of the structure of meanings in which such self-perceptions are linked with career roles (Ibarra & Barbulescu, 2010; Meijers, 1998). At the core of career identity is the question “Who am I and how is my work meaningful to me?” Hence, career identity resources can be distinguished from more general psychological resources in the sense that they specifically refer to how one

consciously views oneself in relation to one's work.

In sum, all of the three briefly reviewed concepts share the view with the life designing paradigm that classic models of decision-making and planning which dominated career counseling in the last century should be expanded by a career counseling approach that helps clients build readiness and use their resources in order to enable them to actively manage their working lives. As such, they actively help clients in a process of self-construction, taking their individual life stories and contexts into full account.

### **Conclusions**

In this chapter we elaborated on some basic notions in the life design paradigm and specifically focused on the dynamic nature of modern career development and its implications for theoretical and practical perspectives on career counseling and career development interventions on the personal and organizational level. Based on the life designing approach, we have shown that models which see careers as predictable, linear, and based upon deductive reasoning should be complemented by perspectives that take the dynamic interaction between person and context into account. Career counseling and career development approaches based on the life designing paradigm should apply dynamic reasoning and interactive counseling approaches. Linking life designing with career management at the individual and organizational level, we showed that career counseling should stimulate positive person-environment interactions, promote proactive career behaviors, and focus on developing and applying different resources for positive career development. We believe that enhancing career theory and intervention

practice by these perspectives inspired by the life designing paradigm will adequately reflect the realities of modern career development and promises to significantly enhance the quality, effectiveness, and relevance of career counseling and intervention for our clients.

## References

- Adler, P., & Kwon, S. (2002). Social capital: Prospects for a new concepts. *Academy of Management Review*, 27(1), 17-40. doi:10.5465/AMR.2002.5922314
- Akkermans, J., Brenninkmeijer, V., Huibers, M., & Blonk, R. W. B. (2012). Competencies for the contemporary career: Development and preliminary validation of the career competencies questionnaire. *Journal of Career Development*, 40(3), 245-267. doi: 10.1177/0894845312467501
- Arthur, M. B., Khapova, S. N., & Wilderom, C. P. M. (2005). Career success in a boundaryless career world. *Journal of Organizational Behavior*, 26(2), 177-202. doi: 10.1002/Job.290
- Bandura, A. (2001). Social cognitive theory: an agentic perspective. *Annual Review of Psychology*, 52, 1-26. doi:10.1146/annurev.psych.52.1.1
- Bäumler, T. Scheller, R., & von Maurice, J. (1994). Der Einfluss von Zufallserfahrungen auf die Studienfachwahl. *Swiss Journal of Psychology*, 53(3), 166-177.
- Berg, J. M., Wrzesniewski, A., & Dutton, J. E. (2010). Perceiving and responding to challenges in job crafting at different ranks: When proactivity requires adaptivity. *Journal of Organizational Behavior*, 31(2/3), 158-186.
- Bright, J. E. H., & Pryor, R. G. L. (2005). The chaos theory of careers: A user's guide. *Career Development Quarterly*, 53(4), 291-305. doi:10.1002/j.2161-0045.2005.tb00660.x
- Caspar, F. (2007). Plan Analysis. In T. Eells (Ed.), *Handbook of psychotherapeutic case formulations* (pp. 251-289). New York, NY: Guilford.
- Dauwalder, J. P. (2007). Beratung: Herausforderungen für eine nachhaltige Entwicklung. *Report*, 30(1), 9-19.
- Dauwalder, J. P., Rossier, J., Massoudi, K., & Masdonati, J. (2011). Effectiveness of guidance and controlling: The complex impact of guidance. In S. Kraatz & B. J. Ertelt (Eds.), *Professionalisation of carrer guidance in Europe: Training, guidance research, service organization and mobility* (pp. 221-232). Tübingen, Germany: Dgvt-Verlag.
- Forrier, A., & Sels, L. (2003). The concept employability: A complex mosaic. *International Journal of Human Resources Development and Management*, 3(2), 102-124.
- Fugate, M., Kinicki, A. J., & Ashforth, B. E. (2004). Employability: A psychosocial construct, its dimensions, and applications. *Journal of Vocational Behavior*, 65(1), 14-38. doi: 10.1016/j.jvb.2003.10.005
- Fuller, B., Jr., & Marler, L. E. (2009). Change driven by nature: A meta-analytic review of the proactive personality literature. *Journal of*

- Vocational Behavior*, 75(3), 329-345. doi: 10.1016/j.jvb.2009.05.008
- Gleick, J. (1988). *Chaos. Die Ordnung des Universums*. München, Germany: Droemer Knauer.
- Grawe, K., Donati, R., & Bernauer, F. (1994). *Psychotherapie im Wandel. Von der Konfession zur Profession*. Göttingen, Germany: Hogrefe.
- Guichard, J. (2005). Life-long self-construction. *International Journal for Educational and Vocational Guidance*, 5, 111-124. doi: 10.1007/s10775-005-8789-y
- Guichard, J. (2008). Proposition d'un schema d'entretien constructiviste de conseil en orientation pour des adolescents ou jeunes adultes. *L'Orientation Scolaire et Professionnelle*, 37, 413-440.
- Hall, D. T. (1996). Protean careers of the 21st century. *The Academy of Management Executive*, 10(4), 8-16.
- Hall, D. T. (2002). *Careers in and out of organizations*. Thousand Oaks: Sage Publications.
- Haken, H. (1991). *Erfolgsgeheimnisse der Natur*. Frankfurt. Ullstein
- Haken, H. (2006). *Information and self-organization : a macroscopic approach to complex systems*. Springer series in synergetics. Berlin. Springer.
- Haken, H., & Schiepek, G. (2010). *Synergetik in der Psychologie. Selbstorganisation verstehen und gestalten*. Göttingen. Hogrefe.
- Haynes, S. (1992). *Models of causality in psychopathology*. New York: Wiley & Sons.
- Higgins, M. C., & Kram, K. E. (2001). Reconceptualizing mentoring at work: A developmental network perspective. *The Academy of Management Review*, 26(2), 264-288. doi: 10.2307/259122
- Hirschi, A. (2012). The career resources model: An integrative framework for career counsellors. *British Journal of Guidance & Counselling*, 40(4), 369-383. doi: 10.1080/03069885.2012.700506
- Hirschi, A., & Läge, D. (2007). The relation of secondary students' career-choice readiness to a six-phase model of career decision making. *Journal of Career Development*, 34(2), 164-191. doi: 10.1177/0894845307307473
- Hirschi, A., Niles, S. G., & Akos, P. (2011). Engagement in adolescent career preparation: Social support, personality and the development of choice decidedness and congruence. *Journal of Adolescence*, 34(1), 173-182 doi: 10.1016/j.adolescence.2009.12.009
- Holland, J. L. (1985). *Making vocational choices*. Englewood Cliffs, NJ: Prentice Hall.
- Holland, J. L. (1997). *Making vocational choices: A theory of vocational personalities and work environments* (Vol. 3rd). Englewood Cliffs, NJ: Prentice Hall.
- Horvath, A.O. Greenberg, L.S. (1994) *The working alliance. Theory, research and practice*. New York: Wiley & Sons.
- Ibarra, H., & Barbulescu, R. (2010). Identity as narrative: Prevalence, effectiveness, and consequences of narrative identity work in macro work role transitions. *Academy of Management Review*, 35(1), 135-154.
- King, Z. (2004). Career self-management: Its nature, causes and consequences. *Journal of Vocational Behavior*,

- 65(1), 112-133. doi: 10.1016/S0001-8791(03)00052-6
- Kossek, E. E., Roberts, K., Fisher, S., & Demarr, B. (1998). Career self-management: A quasi-experimental assessment of the effects of a training intervention. *Personnel Psychology, 51*(4), 935-960. doi: 10.1111/j.1744-6570.1998.tb00746.x
- Krumboltz, J. D. (2009). The happenstance learning theory. *Journal of Career Assessment, 17*(2), 135-154. doi: 10.1177/1069072708328861
- Kuijpers, M. A. C. T., & Scheerens, J. (2006). Career competencies for the modern career. *Journal of Career Development, 32*(4), 309-319. doi: 10.1177/0894845305283006
- Lent, R. W. (2013). Career-life preparedness: Revisiting career planning and adjustment in the new workplace. *The Career Development Quarterly, 61*(1), 2-14. doi: 10.1002/j.2161-0045.2013.00031.x
- Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior, 45*(1), 79-122. doi: 10.1006/Jvbe.1994.1027
- Lerner, R. M. (2006). Developmental science, developmental systems, and contemporary theories of human development. In R. M. Lerner & W. Damon (Eds.), *Handbook of child psychology* (6th ed., Vol. 1, Theoretical models of human development., pp. 1-17). Hoboken, NJ US: John Wiley & Sons Inc.
- London, M. (1983). Toward a theory of career motivation. *The Academy of Management Review, 8*(4), 620-630.
- London, M., & Noe, R. A. (1997). London's career motivation theory: An update on measurement and research. *Journal of Career Assessment, 5*(1), 61-80. doi: 10.1177/106907279700500105
- Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M. (2007). Positive psychological capital: Measurement and relationship with performance and satisfaction. *Personnel Psychology, 60*(3), 541-572. doi: 10.1111/J.1744-6570.2007.00083.X
- Lynch, P. (2006). *The emergence of numerical weather prediction*. Cambridge, UK: Cambridge University Press.
- Masdonati, J., Massoudi, K., & Rossier, J. (2009). Effectiveness of face-to-face career counseling and the working alliance. *Journal of Career Development, 36*(2), 183-203. doi: 10.1177/0894845309340798
- McQuaid, R. W., & Lindsay, C. (2005). The concept of employability. *Urban Studies, 42*(2), 197-219. doi: 10.1080/0042098042000316100
- Meijers, F. (1998). The development of a career identity. *International Journal for the Advancement of Counselling, 20*(3), 191-207. doi: 10.1023/A:1005399417256
- Miller, W.R. Rollnick, S.(2002) *Motivational interviewing: Preparing people to change*. New York Guilford Press
- Parker, S. K., & Collins, C. G. (2010). Taking stock: Integrating and differentiating multiple proactive behaviors. *Journal of Management,*

- 36(3), 633-662. doi: 10.1177/0149206308321554
- Piaget, J. (1985). *Equilibration of cognitive structures*. University of Chicago Press.
- Prigogine, I., Stengers, I. (1997). *The end of certainty: Time, chaos and the laws of nature*. Free Press.
- Pulakos, E. D., Arad, S., Donovan, M. A., & Plamondon, K. E. (2000). Adaptability in the workplace: Development of a taxonomy of adaptive performance. *Journal of Applied Psychology*, 85(4), 612-624. doi: 10.1037//0021-9010.85.4.612
- Rousseau, D. (2001). Schema, promise and mutuality: The building blocks of the psychological contract. *Journal of Occupational and Organizational Psychology*, 74(4), 511-541. doi: 10.1348/096317901167505
- Saks, A. M., & Ashforth, B. E. (2002). Is job search related to employment quality? It all depends on the fit. *Journal of Applied Psychology*, 87(4), 646-654. doi: 10.1037/0021-9010.87.4.646
- Sampson, J. P., Lenz, J. G., Reardon, R. C., & Peterson, G. W. (1999). A cognitive information processing approach to employment problem solving and decision making. *Career Development Quarterly*, 48(1), 3-18.
- Savickas, M. L. (1997). Career adaptability: An integrative construct for life-span, life-space theory. *Career Development Quarterly*, 45(3), 247-259.
- Savickas, M.L. (2005) The theory and practice of career construction. In: Brown S.D. & Lent, R.W. (Eds.) *Career development and counseling : Putting theory and research to work* (pp. 42-70). Hoboken NJ: Wiley.
- Savickas, M.L. Nota, L. Rossier, J. Dauwalder, J.P. Duarte, M.E. Guichard, J. Soresi, S. VanEsbroeck, R. VanVianen, A.E.M (2009). Life designing: A paradigm for career construction in the 21st century. *Journal of Vocational Behavior*, 75 (3), 239-250. doi: 10.1016/j.jvb.2009.04.004
- Savickas, M. L. (2011). New questions for vocational psychology: Premises, paradigms, and practices. *Journal of Career Assessment*, 19(3), 251-258. doi: 10.1177/1069072710395532
- Savickas, M. L., & Porfeli, E. J. (2012). Career adapt-abilities scale: Construction, reliability, and measurement equivalence across 13 countries. *Journal of Vocational Behavior*, 80(3), 661-673. doi: 10.1016/j.jvb.2012.01.011
- Schiersmann, C., & Thiel, H.U. (Hrsg). (2012). *Beratung als Förderung von Selbstorganisationsprozessen*. Göttingen: Vandenhoeck & Ruprecht.
- Srsic, C. S., & Walsh, W. B. (2001). Person-environment congruence and career self-efficacy. *Journal of Career Assessment*, 9(2), 203-213.
- Stickland, R. (1996). Career self-management - can we live without it? *European Journal of Work and Organizational Psychology*, 5(4), 583 - 596. doi: 10.1080/13594329608414881
- Sullivan, S. E. (1999). The changing nature of careers: A review and research agenda. *Journal of Management*, 25(3), 457-485. doi: 10.1016/S0149-2063(99)00009-4

- Sullivan, S. E., Carden, W. A., & Martin, D. F. (1998). Careers in the next millennium: Directions for future research. *Human Resource Management Review*, 8(2), 165-185.
- Super, D. E. (1990). A life-span, life-space approach to career development. In D. Brown & L. Brooks (Eds.), *Career choice and development: Applying contemporary theories to practice* (2nd ed., pp. 197-262). San Francisco, CA: Jossey-Bass.
- Thomas, J. P., Whitman, D. S., & Viswesvaran, C. (2010). Employee proactivity in organizations: A comparative meta-analysis of emergent proactive constructs. *Journal of Occupational and Organizational Psychology*, 83(2), 275-300. doi: 10.1348/096317910x502359
- Vondracek, F. W., Lerner, R. M., & Schulenberg, J. E. (1986). *Career development: A life-span developmental approach*. Hillsdale, NJ: Erlbaum.
- Vondracek, F. W., & Porfeli, E. J. (2008). Social contexts for career guidance throughout the world. Developmental-contextual perspectives on career across the lifespan. In J. A. Athanasou & R. v. Esbroeck (Eds.), *International handbook of career guidance* (pp. 209-225). Heidelberg: Springer.
- Wrzesniewski, A., & Dutton, J. E. (2001). Crafting a job: revisioning employees as active crafters of their work. *The Academy of Management Review*, 26(2), 179-201.