Career movements and their outcomes – a way of interacting with organisations: An empirical study of career transitions in Austria

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1 Introduction

Career transitions are an integral part of one's working life as well as career research and practice. Careers have been regarded as an evolving sequence of work experience over time (Arthur, Hall, & Lawrence, 1989a; Arthur, Hall, & Lawrence, 1989b). These experiences are linked with specific positions. Within the world of work, such positions are often jobs in the social space of an organisation (Dyer, 1976; Hall, 1976; Feldman, 1988), occupation (Slocum, 1974) or career field (Mayrhofer et al., 2000; Iellatchitch, Mayrhofer, & Meyer, 2003). Every move from one position to another includes transitions. They can be conceptualised as a phase of change bridging two more stable zones. Transitions emerge if events do or fail to occur, which in turn changes conceptions about one's self and the world and requires changes in the behavioural, motivational and cognitive area (Schlossberg, 1981).

Currently, traditional organisational career patterns break up and new forms seem to emerge. They are described as boundaryless (Arthur & Rousseau, 1996), protean (Hall, 1996), nomad (Cadin, Bender, de Saint Giniez, & Pringle, 2000), chaotic (Peterson & Anand, 2002; see also Gunz, Evans, & Jalland, 2002), spiral (Brousseau, Driver, Eneroth, & Larsson, 1996), postcorporate (Peiperl & Baruch, 1997) or chronically flexible (Iellatchitch et al., 2003). Especially in a "new career" context, the influence of changes seems more complex and can have significant consequences for individuals as well as for organisations (Minor, Slade, & Myers, 1991).

Among others, these changes also have effects on career transitions. Individuals move along different career tracks, are located in different organisations and career fields and career transitions lead to different objective as well as subjective career outcomes. Theoretically, the paper utilises the insight generated in transition research. This includes work based on role theory (Allen & Van de Vliert, 1984), status passage (Glaser & Strauss, 1971), or a transition cycle concept (Nicholson & West, 1988; Nicholson, 1990; Nicholson, 1996). Its main foundation is Schein's dimensions of a career cycle (1978) which conceptualises both the external career movement and the internal career experience of individuals. According to this model there are three possible dimensions of movements: (1) vertical, (2) radial, and (3) circumferential or technical. The first dimension includes promotion and demotion, often associated with climbing up the ladder within an organisation. Movements along the second dimension are connected with changes in the field of expertise when changing jobs, and the third one deals with movements toward the inner core of an organisation. Considering the discussions about new careers a fourth dimension is added according to Nicholson (Nicholson et al., 1988: 49) movements within and across organisational boundaries described as the (4) organisational dimension. Looking at two cohorts of business school graduates (1970 and 1990), the paper analyses

(1) What effects do movements along the vertical, radial, functional/technical, and organisational dimension resulting from a career transition have on income and career satisfaction after the transition?

career transitions within organisations and deals with two questions:

(2) Do these effects differ between the 1970 and 1990 cohorts i.e., is there an interaction between type of transition and cohort in terms of both career success indicators?

The latter question becomes especially salient in the light of the change of career landscape and their consequences for career transitions as outlined above.

2 Conceptual framework

2.1 New careers

As described above careers are always embedded in a broader societal, political and economical context (Mayrhofer, Meyer, & Steyrer, 2007; Collin & Young, 1986; Kanter, 1989) which has changed over the last years (Arthur, Inkson, & Pringle, 1999). The influence of the general context of careers in and out of organisations is reflected in the career research discourse over the last decades (Hall, 2002). The literature on new careers talks about increased flexibility (see e.g., Derr, 1987; Hall & Mirvis, 1996; Mayrhofer et al., 2005; Peiperl et al., 1997; Wright & Snell, 1998; Zuckerman, Kim, Ukanwa, & Rittmann, 2003), the perception of increased changeability (see e.g., Brousseau et al., 1996, Derr, 1986; King, 2003), referring to psychological contracts (see e.g., Coyle-Shapiro & Neuman, 2004) an increase in individual independence (e.g., Guest, 2004; Guest, Oakley, Clinton, & Budjanovcanin, 2006; Hall & Moss, 1998) but also increased uncertainty (see e.g., Brown & Humphreys, 2003; Callister, Kramer, & Turban, 1999; Connell & Nord, 1996; Doyle, 2001; Evans & Gunz, 1996; Kramer, 1993, 1996; Pelsma & Arnett, 2002) and insecurity e.g., (Millward & Kyriakidou, 2004; Swaen, Kant, van Amelsvoort, & Beurskens, 2002). The career literature discusses concepts of employability (e.g., Fugate & Ashforth, 2003; King, 2003: 5) with particularly the career counselling literature promoting lifelong learning as one answer to constant change (see e.g., Matejka & Dunsing, 1993; Sluis, 2002; Tamkin, 1997) and suggesting possible coping strategies for uncertainty and overcoming career obstacles (see e.g., Pelsma et al., 2002). Especially, career transitions are connected to the topic of new careers. Careers are characterised by more job changes with influence on the outcome of these transitions (Hall, 2002). Against the backdrop of this literature the context of 1970 cohort and 1990 cohort can be differentiated:

(1) 1970 context. Looking back more than 30 years, organisations are the almost exclusive point of reference (see, e.g., Glaser, 1968; Schein, 1978). Researchers mainly assumed organisations to be enclosed in a stable environment and career development is to a significant extent influenced by organisations which are primarily responsible for the entire career management. Consequently, careers are conceptualised as progression of linear career stages within few organisations (Levinson, 1979) and associated with a mechanistic ladder system where "age and seniority is highly correlated" (Nicholson, 1996: 45).

(2) 1990 context. During the mid-1980s the context of work changes as organisations start to react to environmental conditions like increasing competition (see e.g., Hamel & Prahalad, 1994), internationalisation (see, e.g. Perlitz, 2004) etc., which also has consequences for organisations and employees (Krüger, 1995). Research dealing with these issues focused on job loss (e.g., Latack & Dozier, 1986; Locker, 1997) downsizing (e.g., Evans, Gunz, & Jalland, 1997; McGovern, Hope-Hailey, & Stiles, 1998), employee relocation (e.g., Hall & Isabella, 1985), organisational restructuring (Goffee & Scase, 1992), inter alia (see e.g., Feldman, 1989). Throughout the 1990s transition trends seems to intensify, increasing competition through internationalisation (Arthur et al., 1999), globalisation (see, e.g. Michie, 2003), and deregulation (see, e.g., Aufderheide, 1990), which left their footprints at the macro-level of societies and economies (see e.g., Iellatchitch, Mayrhofer, & Strunk, 2004). Specifically, the context of work changed on a macro level in 1995 as Austria joined the

European Union, and the enlargement of the European Union during the last five years had consequences on the labour market, too (Biffl, 1997).

Career research seems to reflect these changes of career contexts and patterns (Baruch, 1999) and the issue of new careers arguably contributes to a sharply rising number of career-related publications in the 1990s (Kelly, Brannick, Hulpke, Levine, & To, 2003: 416). Many contributions to this debate have an implicit notion of liberation, freedom and independence (see, e.g., Moses, 2000; Arthur et al., 1999; Arthur & Rousseau, 1996b; Hall & Associates, 1996), thus emphasising the positive effects. More sceptical observers, talk about an overload of the individual in terms of responsibility for career success, increased feelings of insecurity (e.g., Littler & Innes, 2004; Littler, Wiesner, & Dunford, 2003; Nicholson, 1996) leading to negative stress reactions and lower job satisfaction (Latack, 1989; Reitman & Schneer, 2005) and a risk shift from organisations to individuals who increasingly carry the cost of increased flexibility (see e.g., Bridges, 1994). Some even stated: "The only constant in workplace appears to be change" (Locker, 1997:16).

2.2 Career transitions

There is extensive research that deals with a lot of varieties of career transitions which can have various implementations (Ng, Sorensen, Eby, & Feldman, 2007). Career transitions can be defined as the "sequence of positions occupied by a person during the course of a lifetime" (Super, 1980). In order to structure these transitions this study builds on four dimensions of individual careers in and across organisations (Schein, 1971; Nicholson et al., 1988). The first three dimensions are based on the three-dimensional model of an organisation (Schein, 1971) and the fourth one deals with transitions within or across organisations (Nicholson et al., 1988). The following concept characterises an organisation along three conceptually distinct dimensions: (1) vertical, (2) radial, and (3) circumferential or functional. The figure below shows the three dimensions within an organisation.



Figure 1: Schein's organisational cone (Schein, 1971: 404)

Movements along the vertical dimension correspond to the notion of an increase or decrease in rank or level. In this study this dimension can have three characteristics: an upward move, no change in rank, or a downward move resulting in an inferior rank.

Movements along the radial dimension embrace the notion of increasing or decreasing one's centrality according to the power, access to sensitive information, and decision making. Again

there can be three characteristics of transitions along this dimension: gaining centrality, loosing centrality or staying on the same level.

The circumferential or horizontal dimension refers to the notion of change in function, division or department (Schein, 1971: 403f.). The fourth dimension is related to transitions within or across organisations and industries (Nicholson et al., 1988: 49).

2.3 Career success

Career transitions lead to outcomes that are crucial for individuals. This study focuses on career success outcomes and draws on a framework that is widely accepted in career research. Hughes' framework (1937) differentiates between objective and subjective career success. The former is defined as directly observable, measurable, and verifiable by an impartial third party, while the latter is only experienced directly by the person engaged in her or his career. Thus, objective career success denotes verifiable attainments, such as pay, promotions, and occupational status. Subjective career success is defined by an individual's reactions to his or her unfolding career experiences (Hughes, 1937). It heavily depends on individuals' (re-) construction of career success according to subjective and individualised patterns. Objective and subjective views on careers constitute a 'two-sidedness' inherent in the career concept. The subjective-objective career duality expresses these two dimensions as unique, empirically distinct constructs (Arthur, Khapova, & Wilderom, 2005) showing different patterns of correlations with and different effect sizes for commonly used predictor variables (Ng, Eby, Sorensen, & Feldman, 2005). Especially, this study draws on two career success indicators: (1) income as objective and (2) career satisfaction as subjective one.

Concerning the relationship between these two dimensions various possibilities of influencing directions have been formulated between objective and subjective career success. Historically it has been and still is most often assumed that objective success has a positive influence on subjective success (e.g., Korman, Wittig-Berman, & Lang, 1981). It follows the traditional opinion that "subjective success follows objective success as a direct outcome of it – people who do well feel good" (Nicholson & De Waal-Andrews, 2005: 143).

3 Hypotheses

In the new career context transitions occur more often and are described as being more complex compared to those in the traditional career context. Basically it is assumed that career transitions in all dimensions will be more frequent within the first 15 years within the cohort of 1990 compared to the 1970 cohort, and that career transition outcomes like career success indicators (Arthur, 1994; Hall, 2002) will differ between these cohorts, too. The literature on new career contexts also proposes that climbing the hierarchy is no longer the only criterion for being successful. Subjective career success indicators become more important. This changed the meaning of career advancement.

Changes in organisational structure are also discussed by many scholars (see e.g., Adamson & Doherty, 1998) which are also influenced by factors on the macro level such as economical and societal factors. Career paths changed at the end of the last decade influenced by flattening of organisations and eliminating managerial layers. The following hypotheses link forms of career transitions to the consequences for objective and subjective career success.

Hierarchical level or rank in an organisation can be expressed by the number of subordinates (Meyer-Raven, 1996). Looking at the vertical dimension it is assumed that for both cohorts

more subordinates lead to a greater increase in income than a transition resulting in equal number or less subordinates. Concerning objective career success it is assumed that career transitions of the 1970-cohort lead to a higher growth in income compared to the 1990-cohort based on the assumption that flatter organisational structures in the new career context result in less change in objective career success indicators.

Vertical transitions effects on income(in) and career satisfaction(cs)

H1t(in): Career transitions resulting in more subordinates lead to a higher growth in income than transitions resulting in less or equal number of subordinates along the vertical dimension.

H1c(in): Career transitions resulting in more subordinates lead to a higher growth in income for graduates from the 1970 than for graduates from the 1990.

According to the literature objective career success is positively related to subjective career success (Judge, Cable, Boudreau, & Bretz, 1995; Korman et al., 1981). This leads to the following hypotheses.

H1t(cs): Career transitions resulting in more subordinates lead to a higher increase in career satisfaction than transitions resulting in less or equal number of subordinates along the vertical dimension.

H1c(cs): Career transitions resulting in more subordinates lead to a higher increase in career satisfaction for graduates from the 1970 than for graduates from the 1990

Gaining more organisational centrality can be considered as a form of objective and subjective career success because it is accompanied with organisational and financial rewards and privileges (O' Hara, Beehr, & Colarelli, 1994: 203). From an organisational viewpoint, in the new career context companies may define "core" and peripheral employees (Baruch, 2004: 112). More centrality need not automatically imply higher financial rewards anymore. Concerning the developments in the new career context it is assumed that centrality in the 1970s led to more growth in income and therefore also more career satisfaction. This leads to the following hypotheses.

Radial transitions effects on income(in) and career satisfaction(cs)

H 2t(in): Transitions connected with increased organisational centrality lead to a higher growth in income than neutral or "outbound" radial transitions.
H 2c(in): Transitions connected with increasing centrality lead to a higher growth of income for graduates from the 1970 cohort than for graduates from the 1990 cohort.
H 2t(cs): Transitions connected with increased organisational centrality lead to a higher increase in career satisfaction than neutral or "outbound" radial transitions.
H 2c(cs): Transitions connected with increasing centrality lead to a higher increase in career satisfaction than neutral or "outbound" radial transitions.
H 2c(cs): Transitions connected with increasing centrality lead to a higher increase in career satisfaction than neutral or "outbound" radial transitions.

It is assumed that a change in function or division leads to more income than no changes on this dimension. Concerning new career contexts it is assumed that flatter hierarchies lead to more changes on the functional dimension. The traditional structure divided the organisation into many departments according to specific functions such as marketing, logistics etc. Later, organisations have reduced these strong horizontal boundaries (Ashkenas, Ulrich, Jick, &

Kerr, 1998) to reach functional flexibility by utilising people's competencies in more than one functional role, making horizontal changes more common and not necessarily linked to financial benefits (Baruch, 2004: 111). This leads to the following hypotheses.

Functional transitions effects on income(in) and career satisfaction(cs)

H 3t(in): Transitions linked with a functional change or change of department lead to a higher growth in income as a transition without such changes. *H* 3c(in): Transitions linked with a functional change or change of department lead to a

higher growth in income for graduates from the 1970 cohort than for graduates from the 1990 cohort.

H 3t(cs): Transitions linked with a functional change or change of department lead to a higher increase career satisfaction than transitions without such changes. H 3c(cs): Transitions linked with a functional change or change of department lead to a higher increase in career satisfaction for graduates from the 1970 cohort than for graduates from the 1990 cohort.

Decisions for career transitions across organisations are based on information concerning objective criteria such as salary and prestige (Rosenbaum, 1979). Therefore a change of organisation should lead to more income and therefore to more career satisfaction. Furthermore, career literature posits that a traditional career context produces fewer interorganisational changes, resulting in higher financial rewards if there is a change to a new organisation. Therefore the 1970 cohort should have a larger growth in income than the 1990 cohort which changes more frequently. This leads to the following hypotheses.

Organisational transitions effects on income(in) and career satisfaction(cs)

H 4t(in): Inter-organisational transitions lead to a higher growth in income than intraorganisational ones.

H 4c(in):): Inter-organisational lead to a higher growth in income for graduates from the 1970 cohort than for graduates from the 1990 cohort.

H 4*t*(*cs*): Inter-organisational transitions lead to a higher increase in career satisfaction than intra-organisational ones.

H 4c(cs):): Inter-organisational lead to a higher increase in career satisfaction for graduates from the 1970 cohort than for graduates from the 1990 cohort.

4 Sample, measures, and methods

Empirically, the analyses are based on a sample of business school graduates from one of the largest universities in Austria, split into two cohorts. It contains 83 persons who graduated around 1970 who are currently in their late career stage and 208 graduates from around 1990 currently in their mid-career stage (proportion of women: 9.6% and 36.5%, which is representative of the respective graduation years). The mean age is 63 years (\pm 3 years) for the 1970 cohort and 43 years (\pm 3 years) for the 1990 cohort.

For both cohorts, data about career transitions during the first fifteen years of work are used. Only desired transitions were included in the analysis because they differ largely from undesired transitions as far as outcomes are concerned (see e.g.; Ashforth, 2001; Ng et al., 2007). For the 1970 cohort 2.5 % (5 in total) of all transitions were excluded in the 1970 cohort, the proportion for the 1990 cohort was 4.3 % (28 in total) in the first 15 occupational years. The data for the study were collected by questionnaire interviews, plotting the graduates' careers along several variables, based on a curriculum-vitae-list of their jobs.

The present analysis uses mixed linear models, examining the effect of the abovementioned transitions on change in income and career satisfaction. Unlike general linear models, mixed linear models can handle correlation in the longitudinal data (McCulloch & Searle, 2000; Verbeke & Molenberghs, 2000). The following models use transition characteristics, cohort, their interaction and year of career after graduation as predictors for objective (income) and subjective (career satisfaction) indicators of career success, with the career transition index as repeated measure.

The independent variables used for the models include characteristics of career transitions, year of the job as well as the cohort of 1970 and 1990. The following table shows the measurements of all dimensions and how they are operationalised.

Additionally to those predictors used in the model more predictors of career success were considered: gender, personal factors such as Emotional Stability and Conscientiousness (operationalised by Borkenau & Ostendorf, 1993), social behaviour such as Openness for Social Contacts and Flexibility (operationised by Hossiep & Paschen, 1998)¹, a predictor for social origin the occupational prestige of the father (Socio-Economic Index of Occupation (ISEI) Ganzeboom & Treiman, 1996), the hours of work, and position of the organisation within the industry.

dimensions ²	operationalisations				
vertical △ number of subordinates used as a basis: -more subordinates -equal number of subordinates -less subordinates					
radial	Did the job result in -more centrality -less centrality -none				
circumferential	"Did the new job include a change in function or department?" –yes –no				
organisational	"Did the new job include a change of organisation?" additional variable: industry of organisation -if not → intra-organisational transition -if yes → inter-organisational transition -if yes and change in industry → inter- organisational transition and change in industry				

Table 1: measurements for career transitions

Career success indicators are operationalised for each career success dimension. One of the most widely used and readily accessible indicators of objective career success is salary (Hall, 2002). "Subjective career success is most commonly operationalised as either job or career satisfaction" (Heslin, 2005: 116). Career satisfaction is seen as the most important aspect of

¹ For details see Appendix Table 6.

 $^{^{2}}$ All four dimensions reflect subjective perceptions of the interviewees except the vertical transitions where the basis for calculations is the number of subordinates. All dimensions are basically independent from each other.

subjective career success (Judge, Higgins, Thoresen, & Barrick, 1999). Thus objective career success for each transition was measured by the difference in income after the transition, expressed in % of the mean sample income (adjusted for inflation) for the respective work year (see description below). Subjective career success was measured by the change in career satisfaction (reported on an eleven-point scale ranging from "very dissatisfied" to "very satisfied") after the transition.

5 <u>Results</u>

Looking at the average number of all transitions it is apparent that the 1990 cohort had more transitions in the first 15 years than the 1970 cohort (1970: 2.3 (\pm 1.5); 1990 3 (\pm 1.7)), the difference being statistically significant.

The following table shows the average number of career transitions along the four dimensions (1) vertical, (2) radial, (3) horizontal, and (4) organisational during the first 15 years broken down into cohorts and gender.

		1970						1990					
		female	%	male	%	in total	%	female	%	male	%	in total	%
=	downward	0.38	15.0%	0.31	14.1%	0.31	14.2%	0.39	14.9%	0.49	17.2%	0.46	16.4%
<u>ic</u>	neutral	0.75	30.0%	0.67	30.7%	0.67	30.6%	1.00	37.6%	0.93	32.5%	0.96	34.3%
vertical	upward	1.38	55.0%	1.20	55.2%	1.22	55.2%	1.26	47.5%	1.45	50.4%	1.38	49.4%
	vertical in total	2.50	100.0%	2.17	100.0%	2.20	100.0%	2.66	100.0%	2.87	100.0%	2.79	100.0%
_	less centrality	0.00	0.0%	0.21	10.9%	0.19	9.9%	0.16	6.7%	0.23	9.3%	0.21	8.4%
radial	neutral	0.38	21.4%	0.24	12.2%	0.25	13.0%	0.28	11.7%	0.25	9.9%	0.26	10.6%
rac	more centrality	1.38	78.6%	1.51	76.9%	1.49	77.0%	1.92	81.6%	2.03	80.7%	1.99	81.0%
	radial in total	1.75	100.0%	1.96	100.0%	1.94	100.0%	2.36	100.0%	2.52	100.0%	2.46	100.0%
<u>.</u> 1	no functional change	1.75	87.5%	0.67	36.2%	0.77	41.6%	0.97	40.0%	0.97	36.7%	0.97	37.8%
hori- ontal	functional change	0.25	12.5%	1.17	63.8%	1.08	58.4%	1.46	60.0%	1.67	63.3%	1.60	62.2%
Υ Ň	horizontal in total	2.00	100.0%	1.84	100.0%	1.86	100.0%	2.43	100.0%	2.64	100.0%	2.57	100.0%
a t.	intra-organisational	0.75	33.3%	1.00	50.7%	0.98	48.8%	1.36	55.1%	1.44	51.5%	1.41	52.7%
an	inter-organisational	0.38	16.7%	0.36	18.2%	0.36	18.1%	0.42	17.1%	0.64	23.0%	0.56	21.0%
org	inter-org. and change of industry	1.13	50.0%	0.61	31.1%	0.66	33.1%	0.68	27.8%	0.71	25.5%	0.70	26.3%
S C	organisational in total	2.25	100.0%	1.97	100.0%	2.00	100.0%	2.46	100.0%	2.80	100.0%	2.67	100.0%

Table 2: number of average transitions per person

The increase in transitions for the 1990 cohort compared to the 1970 cohort is almost similar for all transition dimensions. The transitions per person rise by 0.59 for vertical moves, 0.52 radial moves, 0.71 for horizontal, and 0.67 organisational moves. The results on one hand supports and on the other hand contradicts the theoretical considerations. First, new career literature proposes that the frequency of career transitions increases which is supported by our results. Second, it is assumed that career transitions become more complex and occur in different shapes compared to those in traditional career contexts i.e. less vertical transitions (see e.g. Hall, 2002: 24; DeFillippi & Arthur, 1996: 124) and more horizontal (Peiperl et al., 1997: 8ff.). The results contradict these assumptions. There is no redistribution across all four dimensions e.g. looking at the vertical dimension upward movements for both cohorts are the most prevailing ones (1970 over 50% and 1990 marginal below under 50% of all vertical transitions).

The following section analyzes the influence of career transitions along the four dimensions on income and career satisfaction. For hypothesis testing concerning objective career success, the dependent variable was the change in income expressed in % of the average gross sample income (adjusted for inflation and for both cohorts combined) in the work year the transition took place. The presented Euro values just serve to illustrate the results. Subjective career success is measured on a eleven-pole scale ranging from "extremely satisfied" to "extremely unsatisfied". Reported figures refer to changes in career satisfaction after particular transitions.

Vertical transitions and income

According to the literature findings suggest that vertical career transitions are relevant for income (Francesconi, 2001). This is also shown by the results of the ViCaPP data. The following table displays the average income differences for all characteristics of vertical transitions for both cohorts.

In the following table shows the change in income in percent and Euros after transitions on the vertical dimension. The first column presents the results of the model looking at the differences in income of all three different characteristics and if the differences are significant within each cohort. The first row of the table presents if there is a significant interaction effect between cohort and transition characteristic according to the model.

	H 1c(in): cohort x transition: **					
H 1t(in): transition:		1	1970	1990		
n=235	∆ income € (corrected for inflation)	%	in €	%	In €	
1970: ** n=64	less number of subordinates	22.7	(5.044)	20.3	(3.930)	
1990: ** n=171	equal number of subordinates	25.3	(5.047)	15.8	(2.746)	
I	more number of subordinates	49.9	(10.442)	26.2	(5.073)	

Table 3: observed change in income for vertical transitions

⁺ p<0,1; * p < 0,05; ** p < 0,01; n.s.=not significant; Ht=hypothesis transition type, Hc= hypothesis cohort

Looking at the changes in income of the 1970 cohort the results show almost no difference between transition resulting in less subordinates and neutral transitions in terms of subordinates while promotions in terms of being responsible for more subordinates are rewarded with an increase in income by over 20 percent. For the graduates from 1990 promotions are also the most beneficial transition concerning objective career success indicator.

According to the model analysed, separated by cohorts, vertical transitions resulting in more subordinates do make a difference in both cohorts regarding the change in income (for 1970ies compared to less and equal number of subordinates and for the 1990ies compared to equal numbers of subordinates. The interaction effect between cohort and transition characteristics is significant at a 1%-level, corroborating that the effect of vertical transitions is not the same for both cohorts. Therefore H1t(in) "career transitions resulting in more subordinates lead to a higher increase in income than transitions resulting in less or equal number of subordinates" is only supported by the 1970-cohort. The second hypothesis H1c(in) "career transitions resulting in more subordinates lead to a higher increase in income for graduates from the 1970 than for graduates from the 1990" is supported by the model.

Vertical transitions and career satisfaction

Looking at the career success indicator career satisfaction the following table shows changes in career satisfaction after transitions along the vertical dimension for both cohorts.

	H 1c(cs): cohort x transition: n.s.		
H 1t(cs): transition:	Δ career satisfaction (11-pole scale)	1970	1990
n=280	less number of subordinates	-0.136	0.420
1970: ** n=80	equal number of subordinates	0.455	0.641
1990: * n=200	more number of subordinates	1.296	1.009

Table 4: observed change in career satisfaction for vertical transitions

⁺ p<0,1; * p < 0,05; ** p < 0,01; n.s.=not significant; Ht=hypothesis transition type, Hc= hypothesis cohort

For the 1970 cohort the changes in career satisfaction show an obvious difference between the three characteristics of vertical transitions. Transitions resulting in more employer responsibilities lead to the highest gain in career satisfaction followed by a smaller increase when there was no change in the number of subordinates. A transition resulting in less subordinates is even followed by a decrease of career satisfaction. The same picture appears for the 1990 cohort (although only significant on the 10%-level), a gain in employer responsibilities leads to the highest gain in career satisfaction while a move resulting in less smaller for the 1990 cohort.

The results show a significant difference between transitions resulting in more subordinates and both other criteria for the 1970 cohort and for the 1990 cohort. Therefore hypothesis H1t(cs) "Career transitions resulting in more subordinates lead to a higher increase in career satisfaction than movements with less or equal number of subordinates along the vertical dimension" is supported by both cohorts. Hypothesis H 1c(cs) "Career transitions resulting in more subordinates lead to a higher increase in career satisfaction for graduates from the 1990" is not supported as there is no interaction effect between cohort and transition characteristics.

Radial transitions and income

For both cohorts there is only a marginal difference between the characteristics less centrality, neutral in terms of the radial dimension, and more centrality. Hypothesis 2t(in) and 2c(in) is not supported. According to the literature moving along the radial dimension towards the centre of organisations is connected with more access to crucial information, resources (Schein, 1971), and consequently with objective and subjective indicators of career success. Both was not found in our data.

Radial transitions and career satisfaction

Although for both cohorts, increased centrality meant the largest increase in career satisfaction, while less centrality resulted in the smallest increase, but the effect is not statistically significant. Both hypotheses H 2t(cs) and H 2c(cs) are not supported.

Circumferential transitions and income

Transitions on the circumferential dimension describe a change in the functional area of work or transition to another department. The following table shows the growth in income in percent that is connected with these transitions for the 1970- and the 1990-cohort.

	H 3c(in): cohort x transition: *				
H 3t(in): transition:		1	970	1	990
n=230	∆ income € (corrected for inflation)	%	in €	%	in €
1970: * n=60	No change in function or				
	department	31.8	(6.394)	19.5	(3.730)
1990: n.s. n=170	change in function or department	44.4	(9.417)	22.0	(4.113)

Table 5: observed change in income for circumferential transitions

⁺ p<0,1; * p < 0,05; ** p < 0,01; n.s.=not significant; Ht=hypothesis transition type, Hc= hypothesis cohort

The 1970er cohort shows a considerable difference in the growth of income if there was a change in function or department (p<0.05). By contrast, for the 1990 cohort this change only shows a marginal difference of growth in income (p=0.19).

The characteristic of transition are only significant predictors for the 1970 cohort, although there is a significant interaction effect between cohort and the type of transition. Therefore hypothesis H 3t(in) "Transitions linked with a functional change or change of department lead to a higher growth in income as a transition without it" is supported only by the 1970-cohort while H3c(in) "Transitions linked with a functional change or change of department lead to a higher growth in income for graduates from the 1970 cohort than for graduates from the 1990 cohort" is supported by the model.

Circumferential transitions and career satisfaction

A change in function or department shows a higher increase in career satisfaction compared to a transition with no change on the circumferential dimension, but the effect is not significant for either cohort. Therefore hypothesis H3t(cs) "Transitions linked with a functional change or change of department lead to a higher increase in career satisfaction as a transition without it" is not supported. The model also shows no interaction effect therefore H3c(cs) "Transitions linked with a functional change or change of department lead to a higher increase in career satisfaction for graduates from the 1970 cohort than for graduates from the 1990 cohort" is not supported.

Organisational transitions and income

There is no support for both hypothesis H 4t(in) "an inter-organisational transitions lead to a higher growth in income than intra-organisational ones" and hypothesis H 4c(in) "Organisational transitions lead to a higher growth in income for graduates from the 1970 cohort than for graduates from the 1990 cohort.

Organisational transitions and career satisfaction

There are no significant differences concerning all predictors in terms of career satisfaction. Therefore both hypotheses H 4t(cs) and H 4c(cs) are not supported.

For an extended version of the model additional predictors are used. The following predictors were significant determinants for the change in income: gender, the occupational prestige of the father, hours of work, and change of organisational position within the industry. For career satisfaction the following predictors make a difference: the occupational prestige of the father, and the position of organisation within the industry. The personality dimensions seem to be

less relevant, never being a significant predictor for either dependent variable, while the father's job position (the higher the occupational prestige, the lower the change in income) and the change in organisational position (improvement resulting in most income increase, deterioration resulting in least income increase) play a role for objective and subjective career success. For income gender has an impact, as expected women experience less growth of income after transitions than men. Working hours are specified in the employment contract and therefore are a strong predictor for income.

6 **Discussion**

The results give more insight into how career transitions influence career success outcomes. Three main results are discussed:

First, the results about frequencies of career transitions on each dimension show that there are more career transitions for the 1990 cohort in their first fifteen years of career which is consistent with most career researchers describing new careers. More interesting seems to be that career transitions are more frequent on each dimension and there is no redistribution from e.g. vertical to horizontal career transitions presented as alternative career progression within organisations (see Peiperl et al., 1997). In other words more career transitions can be observed but no change in relative importance of the different dimensions of transitions.

Second, career transitions concerning objective career success on the vertical dimension lead to different outcomes for both cohorts. For the 1970 cohort increasing responsibilities in terms of subordinates make more of a difference in terms of income. In the new career context there is less raise in the average of income for the 1990 cohort. In the traditional career context of the 1970 cohort we can still speak of hierarchical progression as a sequence of work positions of increasing responsibilities and seniority (Arthur et al., 1989b). Responsibilities for subordinates is one dimension describing hierarchies in organisations (Meyer-Raven, 1996). For the new career context the results show that vertical advancement is still part of managerial career paths but it results in less financial gain compared to the 1970 cohort. Following the argumentation of new career concepts which emphasize subjective success criteria is interesting in the light that objective career success seems less easy to reach in comparison to the 1970 cohort or at least more transitions have to be made to reach the level of the 1970 cohort.

Third, career transitions on the horizontal dimension concerning income only make a difference for the 1970 cohort. It seems that horizontal changes pay off only for the 1970 cohort while it does not make any notable difference for the 1990 cohort. This goes along with the assumption that flatter organisations are organised differently so that there are maybe more possibilities to change functions and departments without relevance for income.

7 Conclusion

In a nutshell, it seems like the 1990 cohort linked to new career contexts may have to change jobs more often to keep employable, flexible, and to keep their market value, but without reaching more objective and subjective career success. This can be described as the "Red Queen Effect"³, where the Red Queen claims that "it takes all the running you can do, to keep

³ The term Red-Queen Effect is taken from the Red Queen's race in Lewis Carroll's "Through the Looking-Glass" a sequel to "Alice in Wonderland".

in the same place." The 1990 cohort have to keep changing jobs to reach the same outcomes as the 1970 cohort.

Further empirical research is necessary to combine the four career transition dimensions and to be able to analyse typical combinations of these dimensions and their outcomes for both cohorts. These could provide more insight into typical transition types of both cohorts and sharpen the picture of career transitions and their outcomes in the Austrian context of business graduates.

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9 Appendix

Table 6: personality traits-scales

Scale nar	Source		
		NEO-FFI (Borkenau et al., 1993)	
Conscientiousness	(α = 0.85; n=2112; number of items: 12)		
Openness for Social Contacts	(α = 0.90; n=5354; number of items: 16)	BIP (Hossiep et al., 1998)	
Flexibility	(α= 0.87; n=5354; number of items: 14)		