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**Making space for ambiguity:**  
Rethinking organizational identification from a career perspective

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**Abstract**

This paper argues that organizational identification is more ambiguous than currently depicted in the literature, especially as people try to make sense of their multiple organizational affiliations over the course of their careers. Based on the detailed analysis of ex-consultants’ career narratives, and especially the interplay of multiple, partly conflicting positioning practices through which they express proximity and/ or distance towards a past and present working context, this study provides a nuanced understanding of how ambiguous organizational identifications arise in the first place. Rather than problematizing these ambiguous identifications as undesirable for organizations and their members, the study aspires to make space for ambiguity by rethinking identification from a career perspective which is sensitive to aspects of temporality and change, thereby providing a more dynamic conceptualization of organizational identification in the contemporary workplace.

**Keywords:** Organizational identification, ambiguity, positioning practices, career narratives, career change
Introduction

Organizational identification is often referred to as people’s psychological attachment to a specific organization, assuming that “[m]embers become attached to their organizations when they incorporate the characteristics they attribute to their organization into their self-concepts” (Dutton, Dukerich & Harquail, 1994: 241-242). Organizations often encourage such attachments, not least because they are associated with better performance outcomes, employee commitment and positive evaluations of the organization. As Ashforth, Harrison and Corley (2008) rightly point out however, it may seem odd to speak of organizational identification in times of much-discussed societal upheavals and disruptions, where loyalties and long-term relationships – also between individuals and organizations – gradually erode (Braham, 1987; Mael & Ashforth, 1992; Marks, 1988). This trend is reflected as well in people’s professional career trajectories which are no longer characterized by continuous employment and upward mobility within a single firm (Hall, 2002), but rather by numerous career changes and thus a great variety of professional experiences across different organizations. To partly account for these conditions, the literature on organizational identification has moved into the direction of framing identification as a ‘verb’ and ‘process of becoming’ rather than as a ‘noun’ or ‘fixed state’. A process-model highlights how organizational identifications steadily evolve, momentarily fluctuate and potentially change as individuals link their own self-image to the image of an organization (Ashforth et al., 2008; Scott et al., 1998).

And yet, even when taking into account that people’s organizational affiliations change dynamically over time, there seems to be no literature which systematically investigates how people make sense of multiple, possibly competing affiliations over the course of their careers. Instead, studies which have looked at organizational identification in the context of career change have mostly framed it as a linear process of gradually shifting identifications from one working context to another, namely by revising and altering previous identity positions, and by constructing and internalizing new ones (e.g. Ibarra, 1999; Ibarra & Barbulescu, 2010). This understanding is based on the assumption that the salience of a past organization and the related sense of belonging fade with the passing of time (Mael & Ashforth, 1992), especially when a new organizational setting becomes more prominent for identification.

Counter to this depiction of fading attachments in the course of career change, the literature on alumni identifications has above all emphasized continued positive identification
with a past employer (Ashforth & Mael, 1989; Bardon et al., 2015; Iyer, 1998; Iyer et al., 1997; Lennox and Park, 2007), supported by empirical studies which indicate that the length of time elapsed after leaving a firm does not have to be negatively related to continued organizational identification (Iyer et al., 1997). These studies take a particular interest in the supposedly positive implications of continued alumni identification, where companies are expected to benefit when previous employees, as a valuable marketing resource, recommend the company to others or even become clients who generate new revenues (Bardon et al., 2015; Denney, 1983; Iyer, 1998; Iyer et al., 1997; Lennox and Park, 2007). Alumni in return are deemed to continuously benefit from the prestige of their former employer, continued intellectual stimulation as well as identity stability over time (Mael & Ashforth, 1992; Pickett, 1986).

Both these literatures, on changing identifications in the course of career change or continued identifications in the post-exit arena, do not take into consideration the possibility of multiple positionings (Kuhn, 2009) and multiple organizational identifications (Ellis & Ybema, 2010) as people reflect upon their overall career trajectories. So in order to account for a greater variety, in this paper I set out to shed more light on people’s multiple and potentially ambiguous identifications over the course of their careers. More concretely, I investigate the identification processes of former management consultants as they reflect upon past and future career moves, thereby addressing the question: *How do ex-consultants’ multiple and potentially conflicting positionings towards their consulting past as well as their current employer invite ambiguous identifications as they reflect upon their careers more broadly?*

To investigate this question empirically, I studied the career narratives (Christensen & Johnston, 2003) of 30 ex-consultants. The analysis indicates that interviewees engaged in multiple positioning practices, which in their interplay resulted in more or less ambiguous accounts concerning their organizational affiliations and overall career trajectories. By zooming in on seven particular interplays of positioning practices, the paper highlights that an unambiguous positive (or negative) identification with either the past or the present is rather the exception, while most interplays indicate some form of ambiguity. In addition to providing a first detailed overview on how different types of ambiguity come into being through different interplays of positioning practices – an analysis which is so far missing in the literature, the interpretation of results contributes to a more time-sensitive and dynamic conceptualization of organizational identification in the contemporary workplace. It underlines that identification in
the present is very often linked as well to previous and future identifications, thereby suggesting that identification in the present is a hybrid production (Van Laer & Janssens, 2014) which always draws on past and future resources (Ybema, 2004, 2010), especially as people reflect upon the overall course of their careers.

In the following I will review the literature on organizational identification and give first indications of how identifications may be more varied and conflicted than currently assumed, especially as people reflect upon their identifications in light of their career paths. In the conceptual framework I will elaborate upon the theorization of ambiguous organizational identifications through the interplay of various and partly conflicting positioning practices in people’s career narratives which takes note of multiplicity, contradiction and change, thereby providing a solid ground for better understanding ambiguous identifications in the context of changing careers.

**Ambiguous organizational identifications along the career path**

As we know from the literature on organizational identification more generally, there may be a range of different ways in which individuals connect to or distance their own self-image from that of an organization (Garcia & Hardy, 2007), often in multiple, ambivalent and conflicted ways (Larson & Pepper, 2003; Maguire & Hardy, 2005). Since individuals and organizations continuously create and re-create themselves in highly reflexive processes of interpretation and enactment (Goffman, 1959), identification tends to be dynamic and diverse (Humphreys & Brown, 2002). In order to capture this diversity, Elsbach (1999) suggested different processes of individual-organization relations, including positive identification, dis-identification and schizo-identification. While positive identification signifies the degree to which people define themselves in terms of their membership to an organization, dis-identification respectively indicates the degree to which a person defines herself as not sharing the same characteristics that she believes define the organization (see also Hogg & Terry, 2000; Turner 1985; Turner et al., 1987).

While plenty of studies have investigated examples of positive organizational identification (e.g. Bamber & Iyer, 2002; Dutton et al., 1994; Mael & Ashforth, 1992; Van Knippenberg & Sleebos, 2006) or dis-identification (e.g. Elsbach & Bharracharya, 2001;
Holmer-Nadesan, 1996; Kärreman & Spicer, 2009), in this paper I take a particular interest in the less widely explored phenomenon of ambiguous identification, also referred to as conflicted, ambivalent or schizo-identification (Elsbach, 1999; Humphreys & Brown, 2002; Kreiner & Ashforth, 2004; Pratt, 2000). Ambiguous identification describes a process in which people simultaneously identify and dis-identify with certain aspects of an organization and its identity narrative. While a person may be pulled towards identification on one dimension and towards dis-identification on another, she may also be pulled however into two opposing directions regarding the same aspect of the organization. The explanation for this is that organizational phenomena tend to be multifaceted, complex and loosely coupled so that one can easily have mixed feelings about a single aspect, leading to ambivalent or conflicted forms of identification (Elsbach, 1999; Humphreys & Brown, 2002; Kreiner & Ashforth, 2004).

Even though Elsbach’s (1999) expanded model of organizational identification provides a more nuanced picture of organizational attachments than most studies that exclusively focus on processes of attaining positive organizational identification or dis-identification, the model does not explain the variations of how multiple, ambiguous identifications may arise in the first place. Moreover, with a focus on identifications in the context of single organizations, the model does not account for people’s multiple identifications over the course of their careers. And yet, it can be assumed that particularly when people reflect upon their overall careers, organizational identifications become even more numerous and ambiguous, drawing attention to changing, competing or simultaneous organizational affiliations. Beyer and Hannah (2002) for example observed that career changers describe their identities as both being based in the past as well as in the present. As career changers start to feel emotionally disengaged and separated from their former employer, they may at the same time not have developed an attachment to the new organization (Rossiter, 2009). Instead, “people oscillate between ‘holding on’ and ‘letting go’, between a desire to rigidly clutch or grieve for the past and the impulse to rush exuberantly into the future” (Ibarra, 2005: 26).

This state of ‘in-betweenness’ may especially be observed among former management consultants as they come from ‘ambiguity-intensive’ organizations in the first place (Alvesson, 1993, 2001). On the one hand, management consultancies seem to be successful in terms of eliciting strong positive identifications among their employees through discourses of elitism (Alvesson & Robertson, 2006; Armbrüster, 2004; Gill, 2015) so that people who exit the
consultancy show signs of ‘post-exit loyalty’ (Alvesson, 2000) and express continued identification through their membership in alumni-networks (Bardon et al., 2015; Sturdy & Wright, 2008). On the other hand, these elite aspirations have been observed to clash with negative interpretations of the consulting job. Long working hours, high performance pressure and the meticulous monitoring of work outputs, for example, have led to an image of management consultants as ‘modern slaves’ (Kuhn, 2009). In light of these conditions, a person’s exit from the management consultancy may well be interpreted as a deliberate act of distancing him- or herself from the organization and its associated image (Mullaney, 2001).

When portrayals of such an undesirable and demeaning workplace (Kumra & Valsecchi, 2012; Mühlhaus & Bouwmeester, 2012) are juxtaposed with accounts of strong and continued identification (Brandon et al., 2015; Sturdy & Wright, 2008), one can assume that ex-consultants engage in an interplay of multiple and potentially conflicting positionings towards their past and also their present employer. A systematic investigation of such interplays, I argue, can shed more light on how ambiguous organizational identifications arise as people reflect upon their career paths.

The interplay of multiple positioning practices in career narratives

In the Western World, ‘what do you do?’ is a standard and all too familiar question to which everyone must have a convincing answer, as this in turn bestows meaning on the sense of self (Van Maanen, 2015). As people move in and out of occupations, they may follow certain ‘career scripts’ (Abelson, 1981; Gioia, 1992; Gioia & Poole, 1984; Schank & Abelson, 1977; Valette & Culié, 2015), where appropriate behaviors and interactions within a given context are prescribed, while also leaving some space for individuals to construct desirable career paths along their own preferences. Interestingly, as career paths are interrupted and positions shift, new meanings have to be negotiated for people’s work and their careers (Van Maanen, 2015).

Personal career narratives (Christensen & Johnston, 2003) can be a vital tool for this as they capture the temporal and changing nature of a person’s career experiences over time (Arthur, Hall & Lawrence, 1989; Bujold, 2004; Cochran, 1990; LaPointe, 2010). More generally it has been argued that narratives, by focusing on issues of temporality, complexity, contradiction and messiness (Mallett & Wapshott, 2012) are particularly suited for capturing the richness and
ambiguities of working lives (Riessman, 2008) which come to the surface particularly in times of career change. A narrative approach is grounded in the understanding that identity, and related to it identification, is a discursive and performative phenomenon (Benwell & Stokoe, 2006; Butler, 1990; Gergen, 1991) where organizational affiliations are manifested and given meaning through various discursive practices (Burke, 1968; Humphreys & Brown, 2002). From this perspective, organizational identification can be theorized and studied through the discursive practices that people engage in.

In this paper, I specifically use the concept of discursive ‘positioning practices’ (Garcia & Hardy, 2007; Kuhn, 2009; LaPointe, 2010) for better delineating how different organizational identifications are enacted in people’s career narratives. When spelling out their positioning theory, Davies and Harré (1990) introduced the concept of ‘positioning’ as the discursive production of selves, where people in conversational talk (McInnes & Corlett, 2012) – or in this case their career narratives – adopt and commit themselves to inhabit certain positions. In view of that, organizations often try to influence, e.g. through discourses of professionalism, team work and loyalty, how people position themselves towards their workplace (Coupland & Brown, 2012). And yet, people may also position themselves within a colorful and varied repertoire of different stories (Harré, 2001), all providing different accounts of (organizational) attachments. Davies and Harré (1990) considered this to be the strength of their theory, namely that it helps to explain both the constitutive force of discursive positioning, as much as it recognizes people’s capability of exercising choice in light of alternative positioning practices. Moving beyond existing organizational studies that apply a positioning framework (e.g. Garcia & Hardy, 2007; Kuhn, 2009; LaPointe, 2010), in this paper I draw particular attention to the ‘interplay’ of various positioning practices in people’s career narratives, arguing that organizational identifications emerge as a result of interactions and negotiations vis-à-vis multiple positionings in a given time and place. The interplay of partly compatible, partly conflicting positioning practices, I suggest, can mark a crucial element in legitimizing career choices, opening up (or closing) possibilities for change and inviting alternative organizational identifications that may clash or co-exist harmoniously. In terms of theorizing organizational identification, a focus on the interplay of positioning practices refrains from providing any definite answers. Instead, it gives a ‘shifting answer’ that depends on the multiplicity of positions made available within one’s own and within the discursive practices of others (Kuhn, 2009).
From this perspective, identification can be understood as a dynamic and ongoing project which is open to contestation and change over time (Ainsworth & Hardy, 2004; Antaki & Widdicombe, 1998), and therefore to experiences of ambiguity.

By investigating various interplays of multiple and potentially conflicting positioning practices in the career narratives of ex-consultants, I aspire to illuminate how ambiguous organizational identifications arise as people reflect upon their career paths more broadly. In the following I will lay out the methodological set-up of the study.

**Methods**

**Sample and data collection**

I conducted 30 interviews with ex-consultants who now work in different organizational settings. While all of the interviewed ex-consultants formed a rather homogeneous group, i.e. all expert consultants coming from a major global strategy or management consultancy, there was yet a good amount of diversity among the interviewees, especially as they were chosen from the following different organizational contexts: 1) corporate business, 2) NGOs, 3) academia, 4) in-house consulting in a bank and 5) own business start-ups. Other relevant parameters of variation were the time spent in consultancy (thereby also comprising different levels of seniority), which ranged from less than 1 to 10 years with an average of 3 years, and the time that people had been out of the consultancy when doing the interview, which ranged from less than 1 to 9 years, with an average of 2 years. 8 of the interviewees were female (27%), which somewhat reflects the ratio of men and women in most German or Swiss based management consultancies.

At the beginning of the interviews, I gave brief information on my current research interests, namely people’s identifications across changing organizational contexts. Similar to an approach used by Meriläinen et al. (2004), I explained that I was above all interested in people’s life and career stories rather than pure facts (see also Atkinson, 1998; McAdams, 2001) and I encouraged the interviewees to share their narratives by imagining, that they, in a couple of years, would have the idea of writing up their career or life story in a book. I asked them to delineate the important chapters and to think of interesting and remarkable aspects or episodes
that they would feel worth sharing in that book, starting from the time they entered university. Interviews ranged from 45 to 135 minutes.

Data analysis

After fully transcribing all interviews, the first step taken in what turned out to be an iterative data analysis process of moving back and forth between data, literature and analysis, was a repeated reading of the interview transcripts where I looked at the interviews for a long time ‘in their totality’ in order to identify first emerging themes, patterns and peculiarities in the data (see also Alvesson and Kärreman, 2004). One peculiarity which stroke me from the very beginning was that ex-consultants positioned themselves in remarkably different ways towards their past and/or their new working context. I immediately observed as well that these different positionings co-existed and interplayed within single interviews, thereby indicating certain levels of contradiction.

Therefore, as a second step in the analysis I color-coded (simple word application) all interview passages in which former management consultants positioned themselves positively (e.g. recalling pleasant experiences), negatively (e.g. recalling negative memories) or in an ambiguous way (e.g. mixing positive and negative accounts) when reporting upon a past or present work environment. Each positioning practice was coded in a different color and received a different label. I labeled positioning practices that related to the past as a) ‘reviving the past’, b) ‘closing the past’ and c) ‘remaining ambiguous about the past’. Positioning practices related to the present were accordingly labeled as d) ‘embracing the present’, e) ‘degrading the present’ and f) ‘being ambiguous towards the present’. (For an overview see Figure 1). Interestingly, even though interviewees showed different patterns in how they positioned themselves towards the past and the present, the color coded transcripts also revealed that all (!) 30 interviewees drew – to different extents – on all six different positioning practices in their career narratives, which led to colorful transcripts and various interplays of the different positioning practices along which I continued the analysis.

In a third and slightly more complex step, I investigated the interplays of the six different positioning practices of ex-consultants within single career narratives, assuming that the
interplay of conflicting positioning practices could become a source of ambiguity in how people
identified with a past or a present employer. Since the interplays of the six different positioning
practices across the narratives were so varied that it would exceed the scope of this paper to
address all of them, I decided to zoom in on seven frequently occurring interplays of positioning
practices (see Figure 1 for an overview), illustrated along seven different career narratives in the
results section. I have labeled the interplays as 1) holding on to the past unambiguously, 2) living
in the present unambiguously, 3) being torn between past and present, 4) lacking a positive
orientation, 5) being stuck in an ambiguous past, 6) being undecided about the present and 7)
remaining ambiguous all the way.

From these interplays of positioning practices I inferred different forms of identification
towards a past or present working context, including positive identification, dis-identification or
ambiguous identification. The analysis underlines that an unambiguous positive (or negative)
identification with either the past or the present – reflected in the first two interplays – is rather
the exception, while the remaining five interplays indicate some form of ambiguity.

In a fourth and last step I then analyzed how the different interplays of positioning
practices, and the related identifications, affected people’s overall career trajectories as they
reflected upon future career moves in light of their past and present positionings. Since the first
two interplays showed a compatibility of positioning practices, and therefore unambiguous
identifications with either the past or the present, this was also reflected in people’s rather
unambiguous career trajectories. Since the remaining five interplays depicted more varied and
conflicting combinations, thereby inviting more ambiguous identifications, this was also
reflected in people’s overall ambiguous career outlooks. These more ambiguous career
trajectories will later on be discussed along the notion of growing career ambiguity. In the
findings section, I will first describe each of the seven interplays of positioning practices. Table 1
shows a summary of the results.
**Figure 1**: Different interplays of positioning practices

1) Holding on to the past unambiguously
2) Living in the present unambiguously
3) Torn between past
4) Lacking a positive orientation
5) Stuck in an ambiguous past
6) Undecided about the present
7) Remaining ambiguous all the way

*While ambiguous positionings also interplayed with the other four positionings towards past and present, for simplicity reasons I only illustrate the interplay “remaining ambiguous all the way”*
Table 1 Interplays of positioning practices, organizational identifications and career trajectories

<table>
<thead>
<tr>
<th>Interplay of positioning practices</th>
<th>Positioning towards the past</th>
<th>Positioning towards the present</th>
<th>Organizational identification(s)</th>
<th>Overall career trajectory</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Holding on to the past unambiguously</td>
<td>a) Reviving the past</td>
<td>e) Degrading the present</td>
<td>Unambiguous: Positive identification with the past, dis-identification with the present</td>
<td>Unambiguous</td>
</tr>
<tr>
<td>2) Living in the present unambiguously</td>
<td>b) Closing the past</td>
<td>d) Embracing the present</td>
<td>Unambiguous: Dis-identification with the past, positive identification with the present</td>
<td>Unambiguous</td>
</tr>
<tr>
<td>3) Being torn between past and present</td>
<td>a) Reviving the past</td>
<td>d) Embracing the present</td>
<td>Ambiguous: Dis-identification with past and present</td>
<td>Ambiguous</td>
</tr>
<tr>
<td>4) Lacking a positive orientation</td>
<td>b) Closing the past</td>
<td>e) Degrading the present</td>
<td>Detached: Dis-identification with past and present</td>
<td>Ambiguous</td>
</tr>
<tr>
<td>5) Being stuck in an ambiguous past</td>
<td>-</td>
<td>d) Embracing the present, e) degrading the present</td>
<td>Ambiguous identification with the past</td>
<td>Ambiguous</td>
</tr>
<tr>
<td>6) Being undecided about the present</td>
<td>c) Ambiguous about the past</td>
<td>f) Ambiguous about the present</td>
<td>Ambiguous identification with past and present</td>
<td>Ambiguous</td>
</tr>
<tr>
<td>7) Remaining ambiguous all the way</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12
Illustrative cases

In order to zoom in on the seven different interplays of positioning practices observed in the analysis, and to provide a detailed description thereof, I will illustrate each interplay along a particular career narrative from the overall sample of 30 narratives. The seven chosen career narratives can be understood as illustrative cases which exemplify the variations in how ex-consultants positioned themselves in partly compatible, partly conflicting ways towards a past and/or a present working context. This methodological strategy of using illustrative cases or exemplars, which has been applied as well by various organizational scholars (e.g. Costas & Fleming, 2009; Johnsen & Sørensen, 2015; Muhr & Kirkegaard, 2013; Presskorn-Thygesen, 2015), seeks to provide rich and detailed descriptions of an observed phenomenon. Rather than aiming for the generalizability of results (for a discussion see Flyvbjerg, 2006) it tries to explore and illustrate the explanatory power of a particular theoretical frame (Presskorn-Thygesen, 2015). Within the context of this study, however, the seven chosen cases which make the dynamics of the interplays in the data most transparent and visible (see also Eisenhardt, 1989), may still be understood as representative for what has been observed in the overall data set. Table 2 provides an overview of the seven illustrative cases along which the findings will be presented.

Table 2 Overview of illustrative cases

<table>
<thead>
<tr>
<th>#</th>
<th>Name of ex-consultant (pseudonym)</th>
<th>Age</th>
<th>Years in cons.</th>
<th>Years out of cons.</th>
<th>New working context</th>
<th>Illustration of interplay</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Daniel</td>
<td>27</td>
<td>3</td>
<td>2</td>
<td>Industry</td>
<td>1) Holding on to the past unambiguously</td>
</tr>
<tr>
<td>2</td>
<td>Lea</td>
<td>30</td>
<td>2</td>
<td>1</td>
<td>NGO</td>
<td>2) Living in the present unambiguously</td>
</tr>
<tr>
<td>3</td>
<td>Karl</td>
<td>29</td>
<td>1</td>
<td>1</td>
<td>Entrepreneur</td>
<td>3) Being torn between the past and the present</td>
</tr>
<tr>
<td>4</td>
<td>John</td>
<td>33</td>
<td>5</td>
<td>2</td>
<td>In-house consulting</td>
<td>4) Lacking a positive orientation</td>
</tr>
<tr>
<td>5</td>
<td>Tom</td>
<td>29</td>
<td>1</td>
<td>1</td>
<td>Academia</td>
<td>5) Being stuck in an ambiguous past</td>
</tr>
<tr>
<td>6</td>
<td>Steffi</td>
<td>26</td>
<td>1.5</td>
<td>1</td>
<td>Industry</td>
<td>6) Being undecided about the present</td>
</tr>
<tr>
<td>7</td>
<td>Steve</td>
<td>39</td>
<td>3</td>
<td>9</td>
<td>NGO</td>
<td>7) Remaining ambiguous all the way</td>
</tr>
</tbody>
</table>
Findings

Holding on to the past unambiguously

When ex-consultants, within a single career narrative, engaged in the positioning practice of ‘reviving the past’, where they positioned themselves positively towards a previous employer, while also engaging in the positioning practice of ‘degrading the present’, where they rendered the new work environment as being inferior compared to the past, the overall career narrative gave the impression that interviewees were holding on to a glorified consulting past rather unambiguously. In this case one could infer a strong continued identification with the past, while people at the same time expressed distance towards their new working context. I will illustrate this interplay of positioning practices along the career narrative of Daniel, a former management consultant who at the time of the interview had been out of the consultancy for two years, and had been working as a manager in the commodity industry. When ‘reviving the past’, Daniel positioned himself positively towards the previous consulting context, expressing his appreciation and continued affiliation by depicting the consultancy as still being relevant, even for his positioning in the present working context:

In that which I do and how I work, especially because it was my first real job, I identify very much with the consultancy. When it is a matter of how I do something I would always say “we” when referring to the consultancy. “We” do it like this or that. I haven’t stopped that and I will not stop it either.

It could be argued that this strong testimony of his continued association with the consulting past, even two years after his exit, leaves little space for appreciating the new work setting. Instead, Daniel positions himself rather negatively towards the new context, thereby degrading the present. Especially when comparing his current colleagues with his previous colleagues from the consultancy, he bemoans the lack of professionalism:

When you go into industry and you do your work just like you did in the consultancy, then you already do things 200 times better than everyone else. […] When you get something back, it comes mostly too late. […] And when it comes back, either on time or not, only half of the work is done or something completely wrong was done. They don’t even ask for clarification.

When depicting the new colleagues as being inferior, Daniel frames their lack of professionalism as a source of frustration which clearly limits his inclination to identify with the new working
context. Thus it could be argued that the interplay of the two positioning practices of ‘reviving the past’ and ‘degrading the present’ leaves the overall impression of a coherent narrative where past organizational identifications are still prevalent, while the new working context provides few incentives for identification. This coherence is underlined as well in Daniel’s seemingly unambiguous expression of how he imagines his career to evolve in the future:

> When I want to work for a company [in the future] then I would of course like to work in a consulting-like environment again, because in consulting you don’t have any idiots running around. It is somehow tougher or whatever you wanna call it. But at least there are no idiots running around. In every other firm there are so many idiots running around. Then it’s better to have the one or the other nerd instead of having a workforce where 60% are idiots.

When holding on to the past so strongly, ex-consultants like Daniel did express their desire to return to their past employer at some point, or at least to work “in a consulting-like environment again”. This again comes across as a consistent thread in the overall narrative of continued identification with the past and it also leaves the impression of unambiguous aspirations concerning future career steps.

**Living in the present unambiguously**

A similarly smooth interplay of positioning practices could be observed when ex-consultants positioned themselves critically towards the past, in that way ‘closing the past’, while also showing appreciation for the new working context in the same narrative, thereby ‘embracing the present’. This interplay of positioning practices, which leads to an overall sense of ‘living in the present unambiguously’ is illustrated along interview extracts from Lea’s career narrative. Lea had worked as a management consultant for two years, and at the time of the interview she had been out of the consultancy for one year, working in a philanthropic NGO. When ‘closing the past’, Lea recalled and retrospectively constructed the time in consulting as an unpleasant experience:

> In the consultancy I often had the feeling that it is management by fear. That started with the partner who was scared of the client. The manager was scared of the partner: that he would scream at him. The project leader was scared of the manager and so it continued. And the junior consultant was shaking when he saw the project leader, but when the
manager came, oh God, that was Darth Vader [laughing]. But if you are scared to take a wrong step, you will never be able to grow.

Lea’s doubt about practices in the consultancy led her to the decision that she wanted to work in a different environment, with a different culture, different working climate as well as a more meaningful purpose. She argued that she could find all this in her new workplace, the NGO, which made it easy for her to embrace the present:

Here [at the NGO], we really care about our work, because we all want to create an impact. We are very diverse people with different backgrounds and we can often tell that different people tick differently. But the core of our work, the purpose that brings us together is the same for everyone. And I think that this is fundamental. This holds the team together.

Such a coherent narrative of having moved from a negative consulting past (‘closing the past’) to a much better organizational environment (‘embracing the present’) often enabled ex-consultants to frame their previous exit decision and career move as an irrevocable step, suggesting (continued) dis-identification with the past and positive identification with the present. When giving an outlook on their future career trajectories, interviewees with such positionings – as illustrated along Lea’s narrative – often made it clear that going back into consulting was not an option for them. Instead, they expressed their commitment of wanting to stay longer in their current work context:

I wouldn’t go back into consulting. I reached a point for myself where I saw I wanted to do something meaningful. And that is not going to change in the consultancy. That is the nature of the business that you are optimizing businesses in the private sector. This is just not anything I care about. In hindsight I have used the consultancy as a training which is now completed. There is no point of going back.

By depicting the consulting business as rather static – “that is the nature of the business” and “that is not going to change” – Lea underlines once more the closure of her consulting experience as something which belongs to the past, which is “now completed”. This allows her as well to draw a rather unambiguous picture of her future career, where she wants to continue engaging in meaningful work such as in the NGO, while returning to the consultancy is not an option.
Being torn between past and present

While the two interplays of positioning practices described so far suggest that positionings towards a past or present working context are well compatible in an overall coherent career narrative, other interplays suggest that positionings can be contradictory and conflicting, and that they do not indicate unambiguous identification with either the past or the present. When interviewees ‘revived the past’ by expressing their continued association with the consultancy, while also ‘embracing the present’, that is, claiming a strong re-orientation towards the new working context, I could observe some ambiguity in terms of how people described their identification, namely as ‘torn between the past and the present’. This tension in the interplay of positioning practices will be illustrated along the career narrative of Karl, a social entrepreneur who, when reviving the past, explains why it is appealing for him to continuously identify with the consulting past even in the new working context:

[The consulting background] gives me the prestige and the standing that I always wanted to have. I knew that this would help me later for moving into a different area. And I do feel flattered when I can say that I was in consulting and I get this recognition.

Even though prestige is clearly linked to the consultancy, for Karl it continues to be a source for recognition even in his new social enterprise where he can take pride in his affiliation with the past working context. At the same time the new entrepreneurial context is experienced as liberating and meaningful, thereby inviting a positive positioning. In that spirit, Karl describes his engagement with the new enterprise as having found his “calling”:

I can tell that this is the place where I belong. Where on the one hand I can learn something, where I move on, where I feel good, but on the other hand I am also needed here. And I have the feeling that I am the ideal person to make this happen in Switzerland.

Since people might well have more than one positive affiliation, the positioning practices of ‘reviving the past’ and ‘embracing the present’ might not seem conflicting at first sight. And yet, in the following meta-reflection Karl makes transparent how he feels rather puzzled about his continued association with the consulting past, as it does not fit his new self-image which is rather associated with his new position:
That’s the tragedy. People are really wasting their time in consulting because they chase after an ideal image, something which they don’t really want to be. And still they are captured by this status thinking of wanting to prove that they belong to the best. There’s also that part inside of me that cannot let go. I think that’s crazy because I finally arrived at a place where I feel good, where I enjoy the work, where I actually don’t need this. But I can tell that this part is still there.

Despite having arrived at a work environment that provides meaningful and enjoyable work, and thus a strong basis for identification, Karl clearly points out that he continues to have a (consultant) “part inside of him” that will not let him come to a rest. So with regards to his further career aspirations it can be inferred that there is no clear direction of where this could be going. Regardless of his strong identification with the present organization, the past still features so prominently into his positioning that every direction remains open.

Lacking a positive orientation

Almost the opposite of being torn between the present and the past could be observed when ex-consultants positioned themselves negatively, both towards the consulting past (‘closing the past’), as well as towards the new working context (‘degrading the present’). When positioning themselves negatively towards the past as well as the present, ex-consultants gave the impression that they dis-identified with both working contexts and thus lacked a positive orientation altogether. This interplay of ‘closing the past’ and ‘degrading the present’ can be illustrated along John’s career narrative. John had worked in a consultancy for five years, and at the time of the interview, he had been out of the consultancy for two years, now working as an in-house consultant in a large Swiss bank. In the following example of ‘closing the past’, John positions himself in such a way to the consultancy that it becomes obvious why he chose to exit and why there could be no return to the consultancy (at first sight):

When you have the right setting, then you don’t have to talk about whether it is 60 or 70 hours that you work, that doesn’t matter when the overall conditions are right. But not when they squeeze and press. And I had the impression that that was increasingly the case in the consultancy, that the leadership style did not match my understanding of what is ideal. So when I left and they asked me to stay, I said: “That which I need in order to stay is nothing that you can provide. I want a bit of my life back”.
When changing jobs and moving to an in-house consulting position, John does report better working hours and an overall more appreciative management. At the same time he is dismayed with the politics which he encounters in the corporate world, which lead to a mostly negative framing of the new work environment, especially when comparing aspects between the consultancy and the bank:

Here [in the bank] I had to learn a lesson in terms of reliability, you cannot take that for granted. Here you really have to nail people down with meeting protocols to document “what we have agreed upon”, else people will lie to your face, saying that this was never agreed, no matter how often we talked about it. It is also a blaming culture. Who can prove that someone else has failed to deliver on a promise. If you can prove that, you can get another person into trouble. And that really distinguishes the bank from the consultancy where you have a completely different code of ethics.

In retrospect, the consultancy which was no longer considered as a viable employer is associated with fairness, transparency and a particular code of ethics, while the political firm culture in the bank setting is associated with power games and a potentially negative impact on one’s career advancement, as John continues to explain in the interview. Therefore, he grows ambiguous concerning the next step in his career journey. While he could well imagine to return to consulting again – a job which he earlier claimed had eaten up too much of his life – he now envisions a consulting context that is different to the past, but which would yet allow him to escape his current corporate context:

I can imagine, based on my background, my personality, to actually do something, to move into the direction of consulting again. Not necessarily in the old setting, to go back again to one of the big consultancies. Instead I would rather do my own thing maybe, with a particular circle of friends, those coming from a similar environment, to build up something together.

While the current position is clearly depicted as not being a long-term option, John’s future career aspirations still remain vague, reviving elements from the past, yet only in combination with alternative parameters.
**Being stuck in an ambiguous past**

Conflicting or incompatible positionings could not only be observed when people compared the past and the present, but also, when they positioned themselves in opposing ways to one of those contexts. When ‘closing the past’ in some instances, for example by recalling negative memories, while then again praising the past and ‘reviving’ it through glorifications, the career narrative portrays an overall sense of ‘being stuck in an ambiguous past’, which then again invites ambiguous positionings towards the present and the future. This interplay of ‘closing the past’ and ‘reviving the past’ is illustrated along the career narrative of Tom, who after only a year in the consultancy decided to leave again for pursuing a PhD and possibly an academic career afterwards. When closing the past, Tom referred to the high performance pressure in consulting which he did not consider a sustainable work practice:

> We had a project leader who was completely overworked. Somehow he didn’t sleep anymore. That was ridiculous. He was a grown-up man who started biting his fingernails again. These were images that simply lacked a bit of dignity. Well sure, towards the client he was always professional, but if you saw him like that, that was just very, very disturbing. Because I don’t believe that you can work like this.

By uncovering the ‘Janus face’ character of consulting, where consultants come across as extremely professional to the outside world, while behind the scenes they deteriorate psychologically, Tom makes a strong case for this being an intolerable working condition. By stating his doubt “that [one] can work like this”, he clearly dis-identifies with the consultancy and its unsustainable working practices. Some tension arises, however, when Tom associates the high performance culture in consulting, which he just described as problematic, with a high work ethic and the notion of ‘living up to one’s promise’ which he “really, really appreciated”:

> The results are normally very good. I don’t think I have worked anywhere with so many people who are good on the one hand but also motivated accordingly. Because that doesn’t exist [that someone says] “oh I’m not up for it”. It will simply get done. People are also very reliable. I really, really appreciated that.

Interestingly, this positive framing of the high performance culture is exclusively linked to the consulting context, as Tom does not recall having worked anywhere else with so many “good”
and “motivated” people. Not surprisingly then, Tom feels stuck in an ambiguous past, also when re-considering and reflecting upon his exit from the consultancy, which in hindsight becomes inflicted with many doubts:

The question is whether career-wise I should have stayed a bit longer. Probably yes. And I could probably have had my dissertation financed [by the consultancy], but maybe I was not patient enough. But it was just not the right thing. And then, I was just too lazy or too consequent and have then decided [to quit]. Well, it will show whether this was wise or not. For the moment it’s okay.

While on the one hand drawing on the notions of “being too lazy” and “not patient enough” to endure the unpleasant consulting environment, and thereby challenging his exit decision as being based on low motives, Tom on the other hand asserts his decision again by drawing on the idea of being “consequent”, explaining that this was “not the right thing” for him. Rather than making a final assessment of his career move, he maintains that the future will show whether it was the right thing to do or not, thereby perpetuating the ambiguity that surrounds his past career move and current work situation into the future.

**Being undecided about the present**

Just as ex-consultants positioned themselves ambiguously towards the consulting context, they also positioned themselves in conflicting ways towards the present working context, namely by ‘embracing the present’ and ‘degrading the present’ within the same career narrative, thereby expressing that they were ambiguous in their identification with their current work context. This interplay of positioning practices is illustrated along the career story of Steffi, who had worked as management consultant for one-and-a-half years and at the time of the interview had been working in an HR function in an industry firm. When comparing the present work environment with her experience in the past, she can note many improvements, especially with regards to her self-confidence which had suffered in the consultancy, as well as the working hours which have become better:

Regarding my self-confidence, things are much better here. Now I’m the daughter again that my parents used to know. […] Also, with my four hours commute and another eight
hours in the office, I only have a 12 hours day. And people say: “With that long commute do you even have time for hobbies?” And I tell them that these things have to be put in perspective. Where I come from [the consultancy] this would be a luxury.

When reporting about her consulting past, Steffi described very explicitly how she had been bullied, how she had lost all her energy and self-respect and how she had gotten to the brink of depression. Moving out of this toxic environment is thus framed as recovering her ‘old self’ and enjoying a ‘luxury’ which her new colleagues wouldn’t understand. At the same time, Steffi is also dismayed about the chaotic working conditions that she experiences after leaving the highly organized, well-structured consulting world, and when stepping into her new job:

When I started my job over here, my boss was on vacation – that was great. And he hadn’t organized anything. In my first week there was a computer, but did it work? No. Did I have a telephone that worked? No. Did anyone know I was coming? Not really. It was totally chaotic, and that’s how he is.

Not only the first week in her current job – a time which often comes with a sense of disorientation – was described as chaotic. Experiencing her boss as “naturally chaotic”, a lot of frustrations – and with them some negative positionings – towards the present work context arose. This was again reflected in Steffi’s ambivalence with regards to the question of what a next career move could look like. “Going back to consulting”, even if this was a place where she had been bullied and humiliated, suddenly becomes an option again with reference to exciting work. At the same time, she is still reminded of the long working hours and would only go back under the (unrealistic) condition of significant changes in the entire consulting industry – a scenario which she knows is rather improbable.

Going back to consulting? Generally I would say yes, the work itself is very exciting. But these people have no limits, to say “stop” in the evening, “else we are no longer productive and cannot realize our potential”. If there was a cultural change, across the entire consulting industry, then it would be an option for me to return to the consultancy.

In the end, Steffi’s ambiguity is not even resolved in a future fantasy, as also her career trajectories are laden with incompatible desires for an exciting, challenging and at the same time sustainable work environment.
Remaining ambiguous all the way

One positioning practice that was frequently observed – in various interplays with other positioning practices – was that of being ambiguous towards a particular working context. Ex-consultants would position themselves ambiguously towards the consulting past, for example, but then embrace (or degrade the new working context) – or vice versa. Instead of showing all variations in which an ambiguous positioning with one working context was combined with other positionings, due to the limited scope of the paper I will here give an illustration (only) of how ‘remaining ambiguous about the past’ and ‘being ambiguous about the present’ often interplayed in people’s career narratives, creating a sense of remaining ambiguous all the way with no clear identifications with either the past or the present, but rather an ambiguous identification with both contexts. This interplay will be unfolded along Steve’s career narrative. Steve had worked three years in a management consultancy and at the time of the interview, he had been working for an NGO for nine years. In the interview, Steve reflects openly on his ambivalence concerning his past consulting experience:

There was always a kind of ambivalence regarding the identification with the [consultancy] firm. On the one hand, first of all very fascinating, also good interpersonally, on the other hand just, I realized, this is not my thing.

By stating that there was “always a kind of ambivalence”, Steve indicates that this ambivalence was never really resolved during his three years in the consultancy, even though towards the end her realized “this is not [his] thing”, which might in hindsight help to explain his career move. Interestingly, while Steve claims a very strong affiliation with his new employer when he states “for me it is very difficult to imagine not working for an NGO, that’s very difficult to imagine”, he still seems to carry an aura of management consultant in the new work environment, even years after his exit:

Me: Would people say that you do things like a consultant?
Steve: [laughing] Yesterday someone just said that to me after a conversation. He said: “One can still very much spot the consultant in you!”
Me: After nine years?
Steve: Nine years, yah, yah.
This ambivalence, also towards the present, indicates ambiguity in Steve’s overall career trajectory. While stating very firmly earlier that he could not imagine working anywhere else other than an NGO in the future, he also admits that he had thought about returning to the consultancy:

I have thought about [going back to the consultancy]. Because interestingly, indeed, the consultancy is starting to work very strongly in the NGO field. They have done a lot of good work in the sustainability area and they are working together with NGOs now. And that would have been unthinkable when I was still there. So, on both sides things have moved on. In that regard the worlds are not so different anymore. When they really gain momentum in the NGO sector now that would be a reason to consider a return. I don’t believe so. But it would, it would not be impossible.

The conflicting positionings (consultancy versus NGO) reveal Steve’s ambivalence with regards to his next career move. He is aware of this conflict and inconsistency when he states that he would consider returning to the consultancy only if they “gained momentum now in the NGO sector”. By making transparent that he actually “[doesn’t] believe so” his next career step remains unclear.

**Discussion and conclusion**

In the context of changing careers, organizational identification has either been theorized as a linear process of gradually shifting identifications from one working context to another (Ibarra, 1999; Ibarra & Barbulescu, 2010), or else as a matter of continued positive identification among alumni with their previous employer (Ashforth & Mael, 1989; Bardon et al., 2015; Iyer, 1998; Iyer et al., 1997; Lennox and Park, 2007), not taking note however of different possible associations with a past (or present) working context which may lead to conflicting and therefore ambiguous identifications in the workplace (Bardon et al., 2015). In order to contribute to a more nuanced and dynamic theorization of organizational identification in the context of career change, in this paper I have called particular attention to this multiplicity of ambiguous organizational identifications. As a conceptual contribution, I have explained this ambiguity through the interplay of different and partly conflicting positioning practices in people’s career narratives, while practically I aspire to contribute to a greater acceptance of ambiguity in
organizational identifications which may allow people to better cope with their working realities over the course of their careers. In the following I will elaborate on these contributions and discuss their wider implications.

The systematic analysis of interplays between multiple and partly conflicting positioning practices – summarized in Table 1 – indicates that there are (at least) four different sources for ambiguous organizational identifications, namely when people are ‘torn between the past and the present’, when they are ‘stuck in an ambiguous past’, when they are ‘undecided about the present’ or when they ‘remain ambiguous all the way’. By zooming in on these different interplays, the paper provides a first nuanced insight into how multiple ambiguous identifications arise in the first place and how they can be studied, thereby opening the way for a more adequate conceptualization of organizational identification in the context of career change. The study particularly shows that career changes – which to date have not been considered in all their complexity in the organizational identification literature – produce and make available a wider range of positioning practices than what people usually have at their disposal, especially as they start to make comparisons between the past and the present, thereby adding dimensions of temporality and change.

As I have tried to highlight in the analysis, it is through a variety of interplays among partly conflicting positionings towards the past and/or the present that a multiplicity of ambiguous identifications is invited. In line with this argument, Ybema (2004, 2010) observed that discourses which draw temporal comparisons between the past and the present provide rich reservoirs for promoting, negotiating and contesting the meaning of identifications. So when putting two time periods in strong contrast with one another, that is, when putting one period up against the other as desired versus despised (Ybema, 2010), the resulting interplay of positionings towards past and present may provoke reflections upon one’s organizational affiliations and career choices. This can lay the ground for ambiguous identifications as well as for ‘career ambiguity’ (Hollinger, 1991) more broadly.

Based on the observation that ex-consultant’s ambiguous identifications with the past, the present, or both working contexts are also associated with rather vague and ambiguous expectations concerning their future career moves, this paper invites a more general discussion as well on the link between people’s organizational identifications and their overall (ambiguous)
career trajectories. Career ambiguity – which I argue is closely intertwined with ambiguous organizational identifications – can be understood as a heightened sense of self-reflection, self-awareness and undecidedness concerning one’s career choices and the consequences of these choices. As Baumann (2004) claims in his ‘liquid modernity’ thesis, the mounting choices for identity reinvention in the contemporary work place leave people ever more questioning and anxious about themselves (see also Thomas & Davies, 2011), especially when going through many career changes and thus a number of diverse professional experiences. While a certain degree of career ambiguity may provide openness for individuals to exercise discretion over ‘who they want to be’, it can also increase their level of insecurity and vulnerability.

Even if reflection is to some extent inevitable and probably desirable when making decisions about one’s career path, relentless self-questioning may also have paralyzing effects, in the sense that people become so absorbed by their positioning attempts between the past and the present, that they get caught in an ‘ambiguity trap’ which also blurs their future career aspirations. Collison (2003) actually warns that people’s preoccupations with seeking a stable sense of self in such unsteady environments may in fact reinforce and intensify the ambiguity, multiplicity and insecurity which they aspire to overcome in the first place. This raises questions about how to deal differently with these growing ambiguities along one’s career path, thereby leading to the practical contribution of this paper.

First of all, it is worth noting that I do not intend to denounce the observed ambiguity in people’s identifications and overall career paths as generally problematic. In fact, social psychologists have found that individuals are well capable of simultaneously and consciously attending both positive and negative aspects of an organization (or organizations), and that they are able to maintain and endure this state of ambivalence for many years (Thompson & Holmes, 1996). And yet, since organizations almost exclusively encourage positive associations, while discouraging the negative component of ambiguous identifications, this mixed message may cause stress, isolation and a sense of hypocrisy for the ambiguous individual (Meyerson & Scully, 1995). This, I argue, can be more detrimental to organizations and their (past) members than making space for such ambiguity, which is inherent already in the myriad of people’s career choices today.
Hence, in order to create such spaces, I suggest rethinking organizational identification from a career perspective – and acting upon that. By taking into account the dimensions of time and change, as represented in the interplay of multiple positioning practices, a career perspective on identification can help address questions about how people conceive of themselves over the course of their changing work affiliations, and how they can find their way into different work identities. Instead of problematizing multiple and conflicting positionings which lead to ambiguous identifications, a career perspective can help embrace this multiplicity as “requisite variety” (Ashby, 1960) for dealing with variegated career challenges over time, thereby acknowledging instabilities but also possibilities and space for new action (Tracy and Trethewey, 2005). Thus, besides informing a more time-sensitive and dynamic conceptualization of organizational identification in the career context, this understanding can also help career changers (such as ex-consultants) and their current or future employers to be more accepting of ambiguous identifications rather than trying to ‘correct’ them towards more unambiguous, positive identifications.

To further strengthen my case for ambiguity and to discuss its implications, I would like to draw attention to studies which argue that diverse identifications are desirable and worthwhile pursuing, alluding to the fact that when a person identifies too strongly with a single organization, her own fate may become so intertwined with the organization that it renders her vulnerable to experiences of disappointment and frustration (Ashforth et al., 2008; Ashforth & Mael, 1989; van Knippenberg & Sleebos, 2006). Beyer and Hannah (2002) respectively observed that individuals with diverse work experiences and affiliations had more identity hooks to which they could connect to. So when not putting all of their valued self-concepts into one basket, people with multiple affiliations were better able to cope with negative experiences when one particular identity pillar came under threat (see also Linville, 1985; Ruderman, Ohlott, Panzer, & King, 2002).

In that sense, while frequent career changes may invite an interplay among multiple positioning practices in people’s career narratives that are normally not expected to ‘go together’ (Golden-Biddle & Rao, 1997: 594), embracing such multiple positionings, ambiguous identifications and polyphonic identities in a dynamic career perspective may actually be a way of reconciling the divergent expectations in people’s quickly changing working lives. So by
conceptualizing identifications in the present as hybrid constructs (Van Laer & Janssens, 2014) that emerge in some reference to an experienced past and an anticipated future (Ybema, 2004, 2010), this hybridity seems to allow for an outwardly impossible simultaneity between difference and sameness (Young, 1995) as it transcends traditional either/or constructions (see also Beech et al., 2012). From this perspective, I argue, people may still be able to maintain a sense of coherence between different positionings, while successfully navigating the contradictory contexts which they find themselves in (see also Hoyer & Steyaert, 2015).

So in conclusion, in this paper I have suggested to take note of people’s overall career trajectories when studying their organizational identifications. A better understanding of how people deal with frequent career changes, I argued, can shed more light on how ambiguous identifications arise in the first place. When framing these ambiguous identifications as a narrative accomplishment at the intersection of multiple, partly conflicting positionings towards a past or present working context, questions arise on how to deal with these ever growing ambiguities. By rethinking organizational identification from a career perspective, which naturally integrates aspects of fragmentation and multiplicity in relation to changing affiliations, I have suggested a more dynamic and time-sensitive understanding of organizational identification which is better apt for capturing and theorizing identification dynamics in the contemporary workplace.

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References


