Research Evaluation, 31(4), 2022, 438–451 https://doi.org/10.1093/reseval/rvab040 Advance Access Publication Date: 7 January 2022 Special Issue Paper



# Biographical representation, from narrative to list: The evolution of curricula vitae in the humanities, 1950 to 2010

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#### **Abstract**

Curricula vitae (CVs) are a crucial device for the evaluation of academic personae and biographies. They play a key role in the competitive assessments that underpin the reproduction of the academic workforce. Drawing on 80 CVs which have been part of candidates' applications for vacant professorships, our article provides a longitudinal study of the development of CVs used by German scholars in professorial appointment procedures in the disciplines of German studies and history between 1950 and the late 2010s. The analysis reveals the evolution of CVs by tracing their various morphological shifts. We distinguish four formats throughout the period of study: CVs initially had a (1) narrative format that develops into an (2) intermediary segmented form before CVs take on a (3) list form in which biographical information congeals into distinct categories. In the 2010s, the list form develops into a (4) hyper-differentiated list form in which coherent biographical representations are finally dissolved into almost eclectic accumulations of finely grained performance categories. Against the backdrop of this finding, the contribution concludes with three general observations: First, the evolution of CVs reflects changes in the institutional environment, not least the increased competitive pressures in academic careers. Second, the evolution of biographical representations also conveys a transformation of the academic persona throughout which boundaries between personal and professional biographies are established. Third, we propose a reactivity of current list form CVs through which academics are disciplined to live up to the categories that wait to be realized in their CVs.

Key words: Categorization; Curricula Vitae; CVs; Devices; Evaluation; German studies; History; Narrative

#### 1. Introduction

Curricula vitae (CVs) of researchers are an omnipresent and typically taken-for-granted element of the bureaucratic infrastructure of academic life. Routinely used for a broad range of information retrieval purposes, they also play a key role in the competitive assessment processes that underpin the reproduction of the academic workforce. For example, in peer review for funding programs as well as professorial appointment procedures, the information contained in CVs provides critical input for evaluating and comparing the achievements and future potential of candidates. Such evaluative use of CVs in particular has recently begun to attract analytical interest by researchers in both science and technology studies and

sociology. Important foci here have been the use of CVs as 'judgement devices' to facilitate comparison of otherwise unique biographies (Musselin 2010; Hammarfelt and Rushforth 2017), the interplay between individual normative criteria and broader evaluative conventions in the representation of biobibliographical information (Kaltenbrunner and De Rijcke 2019), and the fundamental processes of recognition and valorization involved in professorial appointment decisions (Hamann 2019).

In this article, we extend this literature by providing a longitudinal study of the development of CVs used by candidates in professorial appointment procedures in Germany in the disciplines of German studies and history between 1950 and the late 2010s. Contrary to most earlier research, the focus of the article is thus not on the interpretive use of academic CVs, but on the history of the genre itself. For academics today, it is intuitive to think of their résumés in terms of a list of achievements that are neatly ordered according to seemingly ahistorical categories, such as employment history, funding acquired, or monographs and journal articles published. By virtue of its longitudinal character, however, our study will allow us to reveal the evolution of CVs by tracing the various morphological shifts CVs underwent before taking on their current format. We will show that, at least in the fields studied here, CVs initially took a primarily narrative format that makes the now dominant concern with long publication lists and selective grants seem far from inevitable.

Moreover, the specific focus on two disciplines in the humanities will make for an interesting contrast to the predominant focus of much of the earlier literature on the natural sciences. With German studies and history, we focus on two well established humanities disciplines that are sufficiently similar for this article to make a contribution to the sociology of social sciences and humanities, but still different enough to facilitate comparative perspectives. Compared to the natural sciences, interpretive disciplines such as German studies and history are characterized by very different ways of organizing knowledge production in epistemic, practical, and social terms (Whitley 1984; Becher and Trowler 2001). For example, to this day scholarly publication cultures are less standardized than their counterparts in the natural sciences, and heavy reliance on grants as well as collaborative work in a project format are relatively recent phenomena in the humanities (cf. Serrano Velarde 2018). As we will demonstrate, such differences manifest also in the changing conventions of biobibliographical self-representation, thus raising interesting questions regarding epistemic diversity in increasingly homogeneous academic evaluation cultures.

Our article is structured as follows. First, we review pertinent literature and in the process develop a view of CVs as devices that selectively highlight and omit certain types of information in evaluative situations. In a second step, we describe the data our study draws on, as well as how we went about analyzing this data. The main empirical part of our article is subdivided into four parts, each of which is dedicated to a distinct phase in the evolutionary development of CV formats. The article concludes with general reflections that use the evolution of CVs as a lens for more general developments in academia.

## 2. Literature review: curricula vitae as a device in academic evaluation

Questions of academic evaluation, including inquiries into both the values underlying evaluation and the positions and classifications engendered by it, have yielded a broad body of literature (cf. Hamann and Beljean 2017). Research on peer review conducted for academic journals or funding agencies is primarily concerned with the reliability of such judgments (Sonnert 1995; Bornmann and Daniel 2005), their potentially dysfunctional effects (Sandström and Hällsten 2008; Pardo Guerra 2020), how reviewers try to reach a consensus about merit and 'quality' (Guetzkow, Lamont and Mallard 2004; Lamont 2009), and how indicators impact the evaluation of research (Hammarfelt and Rushforth 2017; Müller and De Rijcke 2017). While contributing a great deal to the scholarly

understanding of peer review and evaluation, this literature has focused primarily on academic judgments that target very specific aspects of academic life. The focal review practices are often geared toward the quality of a manuscript or a research proposal.

Evaluations of academic biographies as a whole are only recently beginning to receive attention. Studies on evaluation in academic obituaries (Hamann 2016), on the interpretation of CVs (Kaltenbrunner and De Rijcke 2019), and on the assessment of candidates for vacant professorships (Hamann 2019) have shown that the biography is an important reference point for the evaluation of academic personae (Daston and Sibum 2003). This insight is supported by research in the cultural history of science, which has utilized the literary genre of biographies as an empirical source that reflects academic norms (Shortland and Yeo 1996; Terrall 2006; Govoni and Franceschi 2014). Accounts in sociology have focused on biographical illusion—the presentation of life courses as coherent and intentional ensembles, conferring a logic to a merely sequential order (Bourdieu 2000; Wacquant 2000).

We contribute to the literature on academic personae and biographies by analyzing CVs as devices of evaluation (cf. Cañibano, Otamendi and Andújar 2008). Academic CVs in their current form can be seen as devices in the sense that they create and sustain equivalences between activities, thereby differentiating diverse forms of academic work as noteworthy achievements and homogenizing them internally (Espeland and Stevens 1998; cf. Kaltenbrunner and De Rijcke 2019). This (seemingly) allows for a comparison of like for like. For academics nowadays, few things are more intuitive than to summarize and compare academic biographies by juxtaposing output-most importantly, lists of publications as well as successful grant applications, typically with an indication of the total sum of funding acquired. Such a coincidence of biographies with very specific forms of achievement, however, is not naturally given, but itself the result of a historical construction process, during which certain types of biographical traces increasingly congealed and acquired the status of distinct categories. Csiszar (2016) has analyzed the process through which academic lives in the natural sciences became equated with publication lists in the course of the 19th century. A second important development occurred in the second half of the 20th century, when citations-originally an instrument to signal intellectual debt in academic writing—gradually became seen as a proxy for the impact and quality of academic work as such (Wouters 1999).

The process through which the activities of academics have become segmented into finely grained categories was significantly enabled not just by academic practices themselves, but by developments in the institutional, social, and infrastructural contexts of academic work. One key factor is the proliferation of information infrastructures. For example, bibliographic databases emerging in the 19th century not only facilitated access to scholarly and scientific writing, but also reified the idea that individual publications are the natural and most important product of scholarly work (Bazerman 1988; Csiszar 2016). This development has been massively compounded by the relatively recent digitalization of academic publishing and the new possibilities it provided for creating commercial value out of academic workflows. At the heart of these innovations-be it the rise of academic networking sites, Massive Open Online Courses or bibliometric databases—is a modernist idea of authorship, in which notions of commercial and intellectual ownership mutually reinforce and justify each other (Foucault 1977; Mirowski 2018; Posada and Chen 2018).

Moreover, the significance of academic CVs as an administrative technology is intimately connected to the emergence of labor markets in national higher education systems characterized by varying degrees of competition. In a now famous comparative analysis by Joseph Ben-David (1977), the intellectual successes of German academia in the 19th century are explained by the expansion of the national university system and the concomitant rise of the idea of scientific meritocracy. Contrary to the more class-bound structure of British universities and the rigidity of the centralized French system, Ben-David argues that the proliferation of newly created chairs in Germany spurred a growing academic work force while creating just the right amount of competition among new generations of scholars. The result was an increasing focus on individual achievements through which academics have tried to distinguish themselves from each other.

More recently, academic labor markets in Germany and France have been found to be more regulated by individual assessment and incentive devices in universities, and by the increasing role of higher education institutions in issues that have previously been in the domain of the academic profession (Musselin 2005). These current transformations of academic labor markets are reflected by changes in professorial hiring. In a study on professorial appointment procedures in Germany, France, and the United States, Christine Musselin (2010) has shown how thoroughly focused academic career development has become on person-centered, individual achievements, even in fields that are otherwise characterized by significant degrees of collaboration. Musselin argues that the academic CV is often used as a 'judgement device' to reduce complexity in the comparison of otherwise unique biographies (see also Karpik 2010). This includes the use of CVs to 'weed out' applicants who fail to meet a more or less arbitrary minimum threshold, but also the combination of certain criteria to compare particularly promising candidates—for example, number of publications and the relative prestige of certain journals or publishers (see also Sonnert 1995; Hammarfelt and Rushforth 2017; Hamann 2019). Interestingly, the current focus on quantifiable forms of achievement in peer review has also given rise to a body of literature that criticizes the excessive use of evaluative metrics, often in the form of manifestos or other genres of activist writing (Hicks et al. 2015; DORA 2018). The most recent development in this debate is the call to experiment with alternative forms of CVs. Large funding bodies in countries like the United States and Switzerland have begun to reduce the amount of quantifiable categories in CV formats in favor of narrative elements, for example 'biosketches' in which grant applicants can recount their careers and achievements in narrative form (NSF n.d.; SNSF 2020). The intention is to thereby broaden what is considered as legitimate forms of scholarly activities and to discourage referees in peer review settings from reducing evaluative complexity through recourse to numbers (Strinzel et al. 2021).

Our empirical analysis below will trace in detail the development of CV formats in two scholarly fields for the period from 1950 to the 2010s. We propose to think of this development in terms of an evolution from a primarily narrative format to a category-based list. As we will show, this entails an increasing focus on specific types of information that are provided in an ever more condensed form, combined with an expansion of the sheer diversity of activities that are considered a legitimate part of a scholarly CV. While on one hand consistent with historical studies of the rise of list-based administrative technologies in modern Western bureaucracies more generally (Bowker and Star 1999; Esposito 2017), our account will

also convey how this evolution manifests itself in locally specific ways—in particular, in terms of geographical location (Germany), disciplinary focus (two humanities disciplines), and historical context (immediate post-war period to the present). Our analysis will also suggest that no CV format is inherently more functional in conveying biographical accounts. Rather, the different steps in the evolution of CV formats have distinct affordances, in the sense of encouraging certain forms of reading and highlighting or omitting particular types of information. In particular, our findings suggest that the evolution from a narrative format to list form CVs leads to a shift in narrative agency: The narrative format of CVs requires candidates to integrate the events and achievements of their lifetime into a coherent biographical representation. More recent list form CVs require additional interpretative effort from the evaluators. To become useful as evaluative devices, lists have to be transformed back into narratives. Thus, throughout the evolution of CVs, the narrative agency shifts from the candidates to the evaluators.

#### 3. Data and methods

Our contribution draws on 80 CVs which have been part of candidates' applications for vacant professorships in Germany from the 1950s to the 2010s. The period of study starts when the appointment of professors became formalized procedures that relied heavily on application documents such as CVs (cf. Hamann 2019). Throughout our period of study, appointing professors in Germany follows a complicated choreography. The main steps of this choreography have not changed fundamentally since the beginning of our period of study: The hiring of professors begins with the nomination of an appointment committee that consists primarily of professors from the department. The committee drafts a job advertisement and assesses the incoming applications. Depending on the job market in the respective disciplinary field, the number of applications varies from the low double digits to over 100. Applications include, at a minimum, a cover letter, a CV, and a publication list. Together with job interviews, to which the committee invites approximately 5–10 candidates, and external reviews solicited by the committee, the application documents are the main source for the committee's decision on the shortlist of, typically, two or three candidates. The committee submits the shortlist to decision-making bodies at the university, which then make the hiring decision (cf. Musselin 2010; Hamann 2019 for further details on appointments of professors in Germany). The CVs this contribution draws on are therefore a crucial part of candidates' applications for vacant professorships. They belong to the main documents for the appointment committee to ground its evaluation on. In history, one of the disciplines covered in our sample, scholars usually become full professors in their early 40s. While about 30 full professorships were vacated in the early 2000s, the number was reduced to 23 per year in the early 2010s. Each year, 40-50 historians complete their Habilitation, the 'second book' that makes scholars eligible for a full professorship (cf. Lincke and Paletschek 2002; Eckert, Hilgert and Lindner 2012). The labor market in the earlier decades of our period of study may have been less competitive. The educational expansion of the 1960s and 1970s brought many new positions, in part because several universities were founded during that time. This expansion explains why the median age for first appointment to a full professorship in history was 37.7 in 1977 (Lincke and Paletschek 2002). Comparable data on the labor market in German studies is not at our disposal.

Table 1. Subsample of the current study

German studies	History	
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Most of the 80 CVs in our sample have been collected through archived appointment records of 145 professorial appointment procedures for professorships in the fields of history and German studies at 16 West German universities from 1950 to 1985 (see Hamann 2019 for further details on the initial sampling). Because German laws regarding data privacy prohibited access to archival records from the most recent 30 years, we approached professors in the two fields directly via email and enquired about original CVs they used for applications for professorships in the 2010s. We approached 152 randomly selected professors in different age groups and different subfields of the two disciplines in our sample. We employed stratified disproportional sampling (cf. Patton 2002) to facilitate a subsample with the same number of CVs in each decade. We chose to order the material by decades simply for practical reasons and do not suggest that the decades neatly coincide with epochal transitions in CV conventions (Table 1).

The analysis of the CVs was anchored in a grounded theory perspective (Strauss and Corbin 1990), which emphasizes the inductive generation of theoretical concepts through iterative data analysis. Following the coding strategy described by Charmaz (2006), both authors conducted two rounds of coding, which allowed us to identify main transformations of the CV as an evaluative device. In a first phase of open coding, we categorized all CVs according to content to identify prevalent themes. Several recurring codes referring to different formats, narrative motifs and content emerged in this initial step. In a second round of coding, going back between data and analysis, we related and interconnected codes to form more distinct and precise categories until prevalent patterns coalesced and no new subthemes could be found.

## 4. Analysis: the evolution of biographical representation in CVs

CVs are perhaps the single most important device for the evaluation of academic personae and biographies. Academic CVs create and sustain equivalences between institutional positions, achievements and activities, thereby differentiating diverse forms of academic work, marking them as noteworthy and integrating them into one documentary biographical account. In the following we analyze the historical development of academic CVs. Throughout this development, specific biographical information congeals to distinct categories that further differentiate over time and are presented in an ever more extensive form. The evolution of biographical representations from the 1950s to the 2010s proceeds through four distinct CV formats.

#### 4.1 The narrative format

For the 1950s and 1960s, the starting point of the evolution of biographical representation in our sample, all but one CV in our sample are presented in the shape of a biographical narrative

that is accompanied by a weakly structured publication record ('Schriftenverzeichnis').<sup>2</sup> In this format, CVs present academic biographies as a continuous running text that is predominantly told from a first person perspective and that selectively touches on a number of recurring narrative elements (see Figure 1).

All CVs following the narrative form begin with an account of the familial background, that is, the occupation of the scholar's parents (usually only the father's occupation), the maiden name of the mother and the scholar's religious creed. Today, most of this information would be seen as inappropriate. A typical start for a CV in the 1950s and 1960s is illustrated by the following example from a CV used in an appointment procedure for a professorship in German studies in 1958:

I, Heinz Beidel, was born on 11. April 1907 in Schermbeck, Kreis Rees, North Rhine-Westphalia, as son of the merchant Peter Beidel and his wife Caroline Beidel, née Schemick. I am of Catholic confession.<sup>3</sup>

After candidates reveal their familial background, all CVs offer a narrative account of the scholar's educational history. This educational career usually starts with school education, proceeds to courses and subjects read at university and concludes with the year of completion and grade of the dissertation. A particularly important piece of information in this educational history concerns what could be called scholar's intellectual heritage. To signify this heritage, candidates in both German studies and history usually state their PhD supervisor. Particularly in history, the genealogy of supervisors and teachers is an important narrative element of biographization. Candidates often express their gratitude for the advice and support they received from their supervisors, for example regarding the choice of the dissertation topic. One example from an appointment procedure in history in 1958 reads:

From summer 1932 to summer 1937 I studied history, German, Latin, Slavic languages and philosophy at the University of Cologne. My particular area of interest was Eastern European history, which I conducted from the first semester onwards with professor Lippert. It was under his guidance that I began a dissertation on [dissertation title].

Sometimes such genealogical information is provided already for the undergraduate period, for example, when scholars recount the professors whose courses they followed. The latter are at times referred to only by the family names, thus presupposing an audience of a clearly demarcated academic community that can be expected to be familiar with the names. Again, references to teachers in the undergraduate period are particularly common in history, where candidates offer long lists of the professors whose courses they followed. In a more extreme example, a candidate for a professorship in history states in 1958:

In Hamburg I heard the professors and lecturers Eitel, Redob, Kobitz, Kundermann, Friedrich Müller, Schmidtke, Stern, Backermann, Wutjen, Wallemann, Wust; in Stuttgart: Thomas Herdmann, Klee, A.O. Koch, Piedersen, Pinder, Schessler, Springer, W. Weiler. Throughout my undergraduate studies, I received the most lasting support from Friedrich Müller as well as Wust and Pinder, the two supervisors of my dissertation [dissertation title].

The narrative format allows for additional explanation of certain intellectual or biographical choices taken. For example, applicants

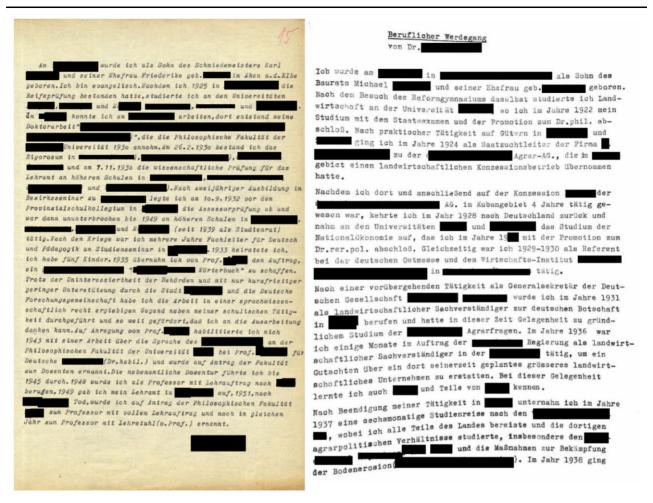


Figure 1. Examples for the narrative format

regularly highlight why they decided to focus on a particular subject in the course of their research (e.g., because they discovered their 'natural' inclination or because of a formative experience). One candidate in history notes in 1963:

While philosophy and history still had a certain priority in my subjects of study, I focused on history after my dissertation. My philosophical-anthropological interest led me deeper and deeper into history, at the same time I came to the conclusion that the subject of history would correspond better to my talent.

A further main element in the narrative CVs from the 1950s and 1960s is an in-depth outline of the substantive content of the candidates' research. This element gives candidates the opportunity to present their research interests and areas of expertise. Our data does not allow us to assess whether these descriptions of the candidates' research are used strategically to match the profile of vacant professorship and to meet the expectations and needs of the appointing department. In any way, in-depth accounts of their research allows candidates to emphasize core arguments and highlight the strengths and main contributions of their work for a specialized audience. For example, one candidate in an appointment procedure in German studies in 1961 writes:

With the main proposition of my dissertation, that the actual achievement of Proust's main work is overcoming the epic distance through a novel of the novel, I attempted to put Proust's new poetics of memory in a more comprehensive context of the 'literary revolution of the XIX. century'; evidence of a strict composition in Proust's novel of memory resulted from my effort to progressively extend stylistic analysis over the syntactic function to the compository wholeness.

The fluid transition between autobiographical narrative and substantive description of research agendas is instructive not least because it suggests a close link between CV conventions and the epistemic culture of German studies and history. Scholarly lives and the content of scholarly work can be narrated with the same hermeneutic ductus without causing a stylistic conflict.<sup>4</sup> In the same vein, narrative CVs commonly feature accounts of serendipity that cut across personal and professional life on one hand, and between the academic biography and its political-historical context on the other. Examples of the interweaving of personal and professional life include personal losses and tragic events, for example, death of a supporting parent, divorce, and sickness. One candidate in an appointment procedure in history in 1958 states quite bluntly:

Due to the conduct of my wife a continuation of the marital cohabitation became unacceptable for me in autumn 1957. Following the counsel of our lawyers, I came to an understanding with her to divorce the marriage by mutual agreement. Typically, such accounts of serendipity or crisis are integrated into the biographical narrative as a difficulty that has been successfully overcome (the motif of overcoming difficulties can also be found in academic obituaries of the time, cf. Hamann 2016).

Moreover, a great many CVs in our sample highlight military service during the Second World War, which is primarily presented as a temporary delay for studies or professional progress. In a few cases, scholars also point out their opposition to National Socialism during the war and the trouble this caused them within their academic institutions. For example, one candidate in German studies states in 1955 that his opposition of the Reich Lecturers Leader of the National Socialist German Lecturers League<sup>5</sup> thwarted his attempt to secure a habilitation scholarship of the German Research Foundation, 'and, indeed, any opportunity to habilitate in Freiburg.' Such evidence is interesting given the overall wave of rehabilitation and amnesties for professors who had been removed from their posts in the course of the denazification effort of the immediate postwar years (cf. Remy 2002), and who therefore constituted a significant part of the readership of a CV in appointment procedures.

Another example of interweaving the accounts of individual development and political-historical contexts pertains to the role that university politics play in CVs. In the beginning of the 1960s, a time in which German society as a whole undergoes a democratic transformation (cf. Dahrendorf 1967), we can observe that some scholars begin to highlight their involvement in the organized representation of students and/or nonprofessorial research staff. For example, one CV from an appointment procedure in history in 1961 contains the following passage:

Between 1951 and 1961 I was elected representative of the non-professorial staff in the faculty of philosophy; in 1960 I was elected representative of the non-professorial staff in the university association.

It is striking that information on participation in representative bodies is absent in the 1950s and starts to become less prominent again in CVs from the late 1980s. We consider this as evidence of a brief period in which the university was, at least by some, conceived not merely as the natural domain of the full professors ('Ordinarienuniversität'), but as a decidedly political and, indeed, democratic institution in which professors, nontenured academic staff, students as well as nonacademic staff should cooperate to make administrative decisions (cf. contemporary statements on this debate by Nolte 1968; Habermas 1969).

The narrative practice of interweaving private and professional life (e.g., divorces) as well as academic and political-historical spheres (e.g., military service or participation in democratic decision-making in universities) underlines that the boundaries between personal and professional life and between individual biography and political-historical context are still unstable. The comprehensive biographical narrative combined with a hermeneutic writing style makes candidates reveal more than just their professional personae. It enforces the portray of a comprehensive person and implicitly invites committees to assess not only professional achievements, but a candidate's moral character.

Most CVs from the 1950s and 1960s also contain publication records. In fact, some of the biographical narratives explicitly refer the reader to particular publications in the attached documents, for example, to dissertations and habilitations. However, contrary to current publication lists, publication records usually provide bibliographical information according to a nonstandardized and relatively

unspecific referencing style. Monographs are often just referenced by the year of publication, but not the publisher or location of the publisher (e.g., '[monograph title], Leipzig 1961'). Very commonly, scholars also list unpublished essays, articles, talks, and monographs, accompanied by the indication 'not in print' ('ungedruckt'). Moreover, there is a visible attempt to distinguish between major and minor publications. Monographs and essays are listed in full, whereas reviews of scholarly publications are sometimes listed in a summative form ('several reviews in'; 'versch. Rezensionen in ...'). Remarkably, publication lists are very short by current standards, rarely exceeding two pages. The relatively weakly structured referencing style should be seen in the context of a heavily monographbound publication culture that is far less stratified in terms of prestige than the humanities publishing landscape nowadays, where particular publishers signal reputability through their 'brand name' (cf. Zuccala et al. 2014). The nonstandardized publication records also underscore differences to the scientific communication system of the natural sciences, which began to organize itself around relatively standardized and increasingly coauthored articles published in a few reputed journals from the late 19th century onward (Bazerman 1988; Csiszar 2016).

As the dominant form of biographical representation in the 1950s and 1960s, the narrative format anticipates the standards of evaluation at the time. As evaluative devices, narrative CVs enforce representations of biographies as one coherent whole. To conform to these formative constraints, candidates cover an extensive course of events that begins way before the academic career with family origins and school education. Different activities, achievements, and positions are not sorted according to distinct categories, but integrated by a sometimes rather literary account. The function of CVs in this period of time is quite obviously not a sober and objective biographical representation, but a personal account of one's own life course.

#### 4.2 The segmented CV as a transitional form

The 1970s and 1980s are the period with the largest diversity in CV formats in our sample. We find the following to co-exist side by side: the traditional narrative format described above, a new segmented format, and a few early examples of a modern list-based format that draws on distinct categories of activity. The most important trend in the evolution of biographical representation is the gradual move away from a purely narrative CV to a segmented format. In the latter, CVs follow a structure that is either ordered according to years, recounting noteworthy events happening in the respective time period, or according to broadly conceived categories in which information is arranged by specific domains. In both temporal and categorical structures, the biography is segmented into short narrative snippets. Biographical accounts are typically given in 'chunks' or clusters that comprise either multiple years dedicated to a particular activity (e.g., 1971-1975: work on habilitation) or specific domains of academic activities (e.g., 'employment career', 'teaching') (see Figure 2). While the narrative format facilitates an elaborated and flowing presentation of academic biographies, the segmented format is more structured by temporal or categorical aspects.

The segmented format can be considered a transitional stage between the traditional narrative format and the list-based format that is exclusively dominant today and that we will discuss below. We have pointed out above that even though the CVs of the 1950s and

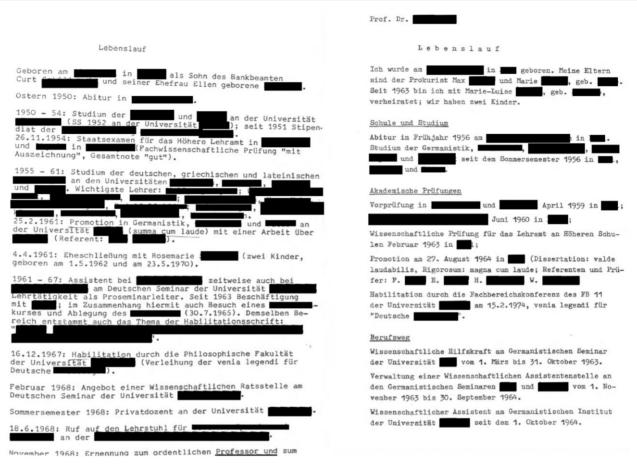


Figure 2. Examples for the segmented format, structured chronologically (left) or by broad categories (right).

1960s consistently present all information in a narrative format, they already cater to the same biographical categories, such as birth and family circumstances, educational history, becoming part of a certain intellectual and academic heritage, first independent scholarly work, and substantive description of research foci. In the segmented format emerging in the 1970s, these recurring foci are covered in the somewhat more condensed manner of self-contained micro-narratives. For example, in a CV in history in 1981 one candidate's micro-narrative concerns activities taking place from 1972 to 1973:

Archaeological excavation in Germanic and Slavic settlements as well as Slavic and German castles in Hanoverian Wendland as part of a research program '[name of the research program]'.

While the narrative format integrates the academic life course into one coherent narrative that is often presented in a rather literary way, the segmented CV breaks up the coherent, linear representation of the biography that we saw in CVs from the 1950s and 1960s. The segmented form that appears in the 1970s strings together separate micro-narratives that are not only less extensive, but also lack the personal account and the literary form of comprehensive narratives. The emergence of the segmented format and its gradual differentiation from narrative accounts goes along with the disappearance of some elements of information that are characteristic of the narrative format. Most importantly, we no longer find

explanations of biographical twists through tales of serendipity and challenges that have been overcome. Despite these differences to the narrative format, the micro-narratives in segmented CVs are still distinct from keywords and bullet points that are more standardized and could therefore be conceived at one glance, as is the case in current CVs.

#### 4.3 The establishment of the category-based list form

Although dominated by the still highly influential narrative format and the newer segmented format, the 1970s and 1980s also contain the first few examples of what is widely considered the norm in academic CVs in the 21st century, namely an academic biography presented in a list form that is based on differentiated categories of activities and achievements. List form CVs, emerging in the 1970s and 1980s and fully established in the 2010s, recount biographies according to accomplishments that are simultaneously differentiated and homogenized through the domains of research, teaching, and administration.

Research is the domain that is covered most extensively in all list form CVs. It is often split up in sub-categories like 'international experience', 'memberships in professional associations', and 'scholarships and prizes'. Teaching and administration are covered less extensively, both are usually attended to in a single paragraph. With regard to teaching, it is striking to note that the emergence of teaching as a distinct category of achievement takes place around the

1970s, the same period of time in which universities start to serve educational purposes for broader parts of society due to the educational expansion (Windolf 1997). It is thus no coincidence that biographical representations in CVs are extended by teaching duties in this period of time. Consequently, the publication records that supplement CVs since the 1950s are now often complemented by teaching records which list the seminars candidates have taught.

Until the 1980s all CVs start with the birth of the candidate, proceed with their school and university education, and end with current academic positions. Thus, in terms of their chronology, both narrative and segmented CVs present a proper linear biographical account: The biography is represented from its very start to the current date (see Figure 3). Crucially, the evolution from narrative over segmentation to list form culminates in a switch in the temporal order of CVs from 'past to present' to 'present to past'. This switch takes place in the 2010s. It is in this decade that the temporal order of 'past to present' becomes a mere residual form that can be seen in only a few examples. Most list form CVs in the 2010s begin with the present and then go back to the past (see Figure 4). Their end point is usually the years of study, while school education and familial background are now left out completely. In what seems like a rather sudden development, biographies are presented from the viewpoint of the present. What does this tell us about the dominant notion of academic biographies?

First, the switch could be a concession to the Anglo-American convention according to which academic CVs commonly follow the temporal order of 'present to past'. Second, the temporal reorientation could be an indicator for a new form of biographization that is rooted in a new understanding of academic biographies. Biographies that are presented in a chronology from 'past to present' appear as something that has grown somewhat organically. They present a biographical teleology in which older positions culminate to more recent positions and lend them a history (cf. Hammarfelt, Rushforth and De Rijcke 2020). CVs that present academic lives from 'present to past' are bereft of this teleological orientation. Their point of departure is the present. Because the path dependency of biographical trajectories is repealed and current positions on the CV do not seem to emerge from the past, the new temporal order could make it easier for candidates to reinvent who they are—and thus, to anticipate the evaluation by attempting a match between their profile and the job profile of the vacant professorship.

An important aspect of the switch in the temporal order is that CVs that represent biographies from present to past do not only put more emphasis on the present, they also provide a window into the future. Since the 1980s, more and more CVs showcase not only past achievements, but also include announcements of future projects and plans. Indeed, future projects seem to become achievements in themselves. Such outlooks can take different forms. For example, they include new categories in publication lists that announce publications not only 'in print' (which can be seen already in the 1960s and 1970s), but also 'in preparation' or as 'work in progress'.

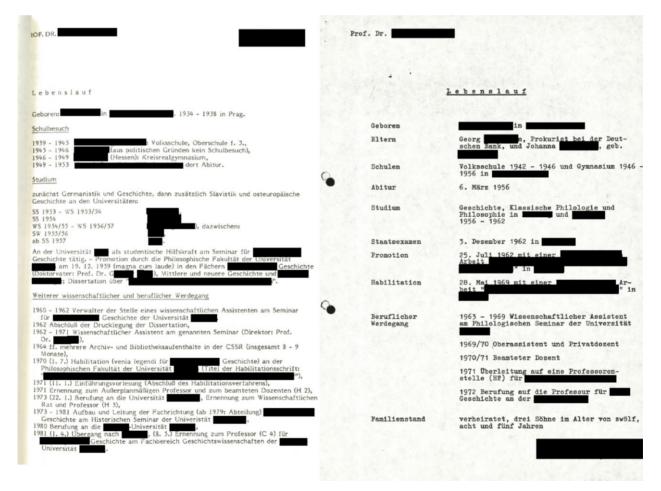


Figure 3. Examples for the list format based on rather broad categories.

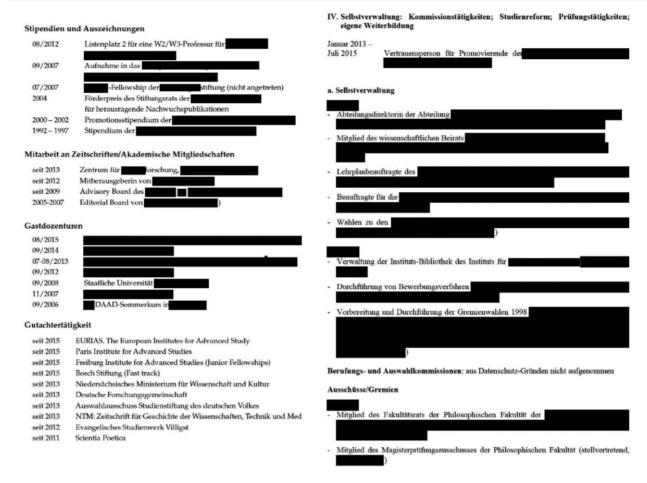


Figure 4. Examples for the hyper-differentiated list format.

Outlooks on future plans can also be expressed in statements like the following announcement from a CV in an appointment procedure in 1980 in German studies:

A volume on [topic] is nearing completion. Together with Ulrich Schneider I will edit a volume [volume title] at [publisher name].

The future orientation that many CVs reveal since the 1980s portrays the candidate as busy, organized, and forward-thinking. To evaluators, the future orientation promises that the industriousness that is already demonstrated by past positions and achievements will be prolonged into the future. The general orientation toward the future could hint toward a projectification of biographies (cf. Dodds 1954; Torka 2018). This projectification involves not only more explicit planning and, indeed, a management of one's own biography, but also an overall acceleration of biographies, according to which academic lives move so quickly that the future is always around the corner (cf. Müller 2014; Vostal 2016).

#### 4.4 The hyper-differentiation of the list form

Particularly CVs from the 2010s undergo yet another evolutionary step: In their most recent version, list form CVs explode into a multitude of different categories. To fully grasp this explosion, let us revisit the categories mobilized by the previous forms: CVs from the 1950s and 1960s usually integrate the different positions candidates have occupied throughout their career into a coherent narrative.

Beyond institutional positions, narrative CVs cover only a small range of academic activities. The transitional form of segmented CVs usually features the domains of research, teaching, and administration. Both narrative and segmented CVs focus on the candidates' research profile and a handful of publications that represent this profile. Teaching and administration appear as activities of secondary importance and are usually dealt with one or two paragraphs. Additional academic activities are rarely mentioned. This changes with the list form, although, as we have discussed above, early list form CVs in the 1980s still mobilize only a few additional categories to represent biographies. CVs in the 2010s reveal a hyperdifferentiation of academic biographical representation from a select number of core activities into many different categories and subcategories. The new, fine-grained categories reach from manifold sub-categories in publication lists over third party funding, scholarships, (rejected) professorial job offers, memberships in professional associations, lists of taught seminars, teaching evaluations and didactic concepts, supervision of Bachelor, Master and PhD theses, and language skills to organized conferences, moderation at conferences, talks, and invited talks (see Figure 4). The transition to the hyper-differentiated list form suggests that the German humanities have by now fully embraced a CV format that was previously typical of the natural sciences.

As a consequence of this hyper-differentiation, list form CVs become much more extensive compared to their narrative and

Table 2. Average length<sup>a</sup> of CVs and publication lists in the sample

	German studies		History	
	Avg. page number of CVs <sup>b</sup>	Avg. entries on pub. lists	Avg. page number of CVs <sup>b</sup>	Avg. entries on pub. lists
1950s	1.6	25.6	2	23.9
1960s	1.8	21.8°	2.5	14 <sup>d</sup>
1970s	2.1	13°	2.3	23.3
1980s	1.8	44	2.4	54.4
2010s	17	151.8	6.9	153.5 <sup>e</sup>

<sup>&</sup>lt;sup>a</sup>The average page numbers of CVs stated in this table have to be interpreted in light of the fact that narrative accounts take more room than bullet points and lists.

segmented predecessors (see Table 2). The extensiveness of CVs can partly be interpreted as a direct function of the list form: Lists do not force candidates to mobilize elaborate and coherent narrative accounts of their biographies. Rather, the list form precisely invites candidates to list every single activity of their academic biography according to concise and often standardized formats. This hyper-differentiation of the biographical representation means that the CV is no longer based on a singular linear presentation that requires the reader to take in the entire narrative. Instead, biographical representations now follow a structure of differentiated categories. Throughout this structure, the same periods of time are revisited time and again according to different sets of activities and accomplishments (e.g., educational history, research 1980–1995, teaching 1980–1995, administration 1980–1995; see Figure 4).

The hyper-differentiation leads not only to very detailed and extensive CVs, but also to lengthy publication lists.<sup>6</sup> From the 1980s onwards and in the 2010s in particular, publication lists constitute an increasingly significant part of CVs (see Table 2). Publications are now typically referenced by year, publisher and location of publisher, and many different types of publication—monographs, journal articles, contributions to edited volumes, lexicon entries, book reviews, and also what would previously have been listed in summative as 'minimalia'-are referenced in full. This is evidence of humanistic publication cultures that are still comparatively manifold and diverse. Remarkably, publication lists in the 2010s not only list book reviews authored by the candidate, but also reviews of the candidate's own books. We interpret this as an attempt of candidates to facilitate an evaluative reading of their résumés through the inclusion of second-order quality assessments. In the absence of reliable citation metrics for the humanities, this is achieved through in-depth book reviews by peers (cf. East 2011; Zuccala and van Leeuwen 2011; Hammarfelt and Rushforth 2017). The sheer number of reviews here can itself be interpreted as a signal for academic relevance—the more reviews a given monograph has attracted, the greater its perceived impact in a given academic community.

As components of hyper-differentiated list form CVs, two categories deserve particular attention: First, attracting funding becomes a central achievement from the 1980s onwards and even more so in the 2010s. We have identified only two instances in which grants are mentioned in CVs before the 1980s. In both instances, grants are mentioned in passing in rather factual statements. In these early cases, attracting funding is apparently not considered an achievement in itself, but something that allows candidates to pursue

research projects. For example, one candidate in an appointment procedure in German studies in 1961 states that he is editing a handbook with a colleague, and he explains in passing that the handbook 'is supported with a research assistant funded by the German Research Foundation.' It is only in the 2010s that almost every CV in our sample indicates funding in a distinct category and highlights it as an achievement in itself. Furthermore, it is in this decade that candidates also begin to specify funding sums.

A second category that illustrates the hyper-differentiation of the list form is teaching. With regard to the establishment of the category-based list form in the 1970s and 1980s, we have shown in the previous section that teaching emerges as a distinct category when universities start to serve educational purposes for broader society due to the educational expansion. It is from this period of time onward that candidates systematically showcase their teaching experience. Yet, in the 2010s the teaching category undergoes what we coin hyper-differentiation: Candidates now routinely include lists of taught seminars that are similar to publication lists (and that can be equally extensive). These lists give a detailed account of the types of seminars, lectures, and courses candidates have taught on Bachelor, Master, or doctorate level. Some candidates also complement their CVs with didactic profiles in which they lay out their pedagogical principles and orientations. Few candidates also include extensive teaching evaluations in their CVs, complete with replies collected in student surveys.

Remarkably, amidst the increased length of CVs and the hyperdifferentiation of biographical representations into fine-grained categories, some information that is covered by early narrative CVs in the sample disappears throughout the decades: A key domain that disappears completely from hyper-differentiated list form CVs are substantive descriptions of candidates' main research topics. One possible reason for this omission is that list form CVs prioritize achievements, and substantive descriptions of research foci are no achievements in the narrow sense. Another explanation could be that qualitative accounts of candidates' research profiles now have a different place in application documents: While narrative CVs are complemented by rather short cover letters of only a few lines, we can observe in our material that list form CVs are complemented by longer, narrative cover letters in which candidates provide qualitative statements of their research profile just as they did previously in narrative CVs.

Three additional elements of biographical representation disappear with the emergence of hyper-differentiated list form CVs:

<sup>&</sup>lt;sup>b</sup>Excluding publication lists and seminar lists.

<sup>&</sup>lt;sup>c</sup>Some interpolation due to two publication lists not included.

<sup>&</sup>lt;sup>d</sup>Some interpolation due to one publication list not included.

eSome interpolation due to four publication lists not included.

First, academic heritage becomes less prominent. As we have shown above, narrative CVs often trace back academic ancestry lines, for example by indicating candidates' teachers and mentors. This information largely disappears in the later decades covered by our sample. Second, while narrative CVs indicate the candidates' class background through the father's occupation, this social marker is also omitted in hyper-differentiated list form CVs. Although more recent CVs still indicate candidates' family status (i.e., marriage and children) at the top of the list, explicit markers of social class disappear. The omission of information on candidates' social class corresponds to a continuously growing popular belief in meritocracy (Mijs 2018). According to the meritocratic ideology, the success and performance that CVs are supposed to document result from individual efforts and are not a function of social class. Thus, omitting one's social class is a case of what has recently been coined deflecting privilege (Friedman, O'Brien and McDonald 2021). Third, the list form brings along an increasing focus on success: As we have shown above, CVs in the 1950s and 1960s present a somewhat comprehensive representation of academic lives, including more severe crises and challenges. These issues already disappear in the transitional form of the segmented CV. List form CVs that omit any narrative element do not only give candidates no opportunity to recount serendipities and rationalize or explain crises and challenges. What is more, the hyper-differentiated list form in the 2010s also represents a seemingly endless stringing together of successes and achievements in a multitude of categories and domains. The disappearance of the three biographical elements intellectual heritage, social class, and crises and challenges can be interpreted as a disciplining effect of hyper-differentiated CVs, a format that forces biographical representations into polished, artificial sequences of successes and achievements. Although this interpretation undoubtedly facilitates important insights, we suggest a more nuanced perspective: The polished sequences of successes required by current CVs also restrict the previous disciplining effects of narrative CVs, a format that does not delimit biographical representations to professional personae, but enforce an encroaching disclosure of who candidates 'really' are.

What could explain the hyper-differentiation of biographical representations? We would like to propose two developments that are not mutually exclusive: First, the domains and areas of activity of current professors might indeed be more extensive compared to professors in the 1950s, 1960s, and 1970s. Not only has administration become an important part of the professorial job profile. The growing grant dependence of academic research across disciplinary fields has moreover led to a gradual shift in the job profile of professors, which now includes more 'managerial' functions related to overseeing and administrating collaborative projects (Whitley et al. 2010). The literature on the societal impact of research also suggests that expectations for scholars to go beyond research and teaching have been institutionalized (cf. Budtz-Pedersen, Grønvad and Hvidtfeldt 2020). A second development that could explain the hyper-differentiation of biographical representations is an Audit Society (Power 1997) in which every possible aspect of academic performance is extensively controlled and assessed. Current CVs that, in extreme cases, stretch over more than 40 pages and include publication lists with over 150 entries, are a result of this development: Candidates are forced to engage in an academic arms race in which they have to signal bustle and demonstrate manifold activities and achievements. Although the introduction of a temporal order 'past to present' repeals biographical path dependency and thus opens up room for self-invention at least in principle, this freedom is restricted by candidates' need to serve a multitude of finely-grained categories. Thus, the hyper-differentiated CV is not a potential space to develop one's own biography. Rather, it resembles an evaluative iron cage for academics' identities.

## 5. Discussion: from coherent narratives to eclectic categories

The evolution of biographical representation in CVs reveals different CV formats from the 1950s to the 2010s. As evaluative devices, it is through their various formats that CVs exert different demands on academic biographies and constraints on how to represent a biography. The format dominant in the 1950s and 1960s requires elaborate biographical narratives. The respective accounts are comprehensive in that they call for candidates to include information on their social origin and school education and to reveal biographical serendipities and crises. The academic biography is condensed into few domains, most importantly research. The latter is not (yet) equated with publication lists, but is mostly conveyed in substantive descriptions of previous and future work. In the 1970s and 1980s, we find the narrative format to be complemented by CVs in the segmented format. Segmented CVs string together self-contained micro-narratives that are either arranged chronologically or categorically by specific domains. The 1970s and 1980s also see the emergence of list form CVs. This format gradually supersedes the singular linear representation of biographies and differentiates the biographical representation into a structure of distinct categories through which the same periods of time are revisited time and again according to different sets of accomplishments, activities, and qualifications. Crucially, list form CVs also imply a re-orientation in the temporal order of biographical representation. List form CVs undergo another evolutionary step in the 2010s. The temporal order of CVs switches from 'past to present' to 'present to past'. In addition, the list form explodes into a multitude of different categories. As a consequence of this hyper-differentiation, CVs become much more extensive. While some information is newly included (e.g., acquired funding) or covered in a more differentiated way (e.g., teaching), other aspects of biographical representation are omitted in hyperdifferentiated list form CVs (e.g., academic heritage or social class). A striking aspect of this development is also the growing length of publication lists in the sample, which increases from on average 25 entries in the 1950s to more than 150 in the 2010s (see Table 2). At the—provisional—end of the evolution, biographical representations have transformed from coherent narratives into almost eclectic conglomerations of hyper-differentiated categories.

The evolution of biographical representations that anticipate evaluative situations in professorial hiring reflects changes in the institutional environment of academic careers: Increased competitive pressures to publish and obtain grants are not just external forces but internalized as scholars apply pressure to themselves and anticipate competitive demands (cf. Fochler, Felt and Müller 2016; Waaijer et al. 2018). New evaluative cultures rely, for example, more heavily on indicators and metrics and pervade academic life more and more profoundly (Hammarfelt and Rushforth 2017). These broader developments are reflected in CVs as devices that are used in the assessment of candidates in professorial appointment procedures. In current CVs, external funding becomes a biographical achievement in itself, extensive publication lists turn into

important parts of biographical representation, and reviews of candidates' books are invoked to signal peer recognition in the absence of other metrics and indicators (Hammarfelt and Rushforth 2017). Their standardized form allows for list form CVs to be used in comparative evaluations of candidates.<sup>7</sup>

A related development that is reflected in the evolution of CVs is the transformation of the academic persona (cf. Daston and Sibum 2003). Our analysis reveals that both personal and professional accounts as well as academic and political-historical spheres overlap and interweave in biographical representations of the 1950s and 1960s. CVs in this period of time portray candidates as comprehensive personae beyond their professional roles. These comprehensive personae have, for example, individual characteristics (e.g., a class background or a recent divorce) and they feature political facets (e.g., avoiding outright support of National Socialism during the Second World War). As we have argued, its comprehensive approach should not be taken to imply that the narrative format allows for a more 'natural' selfrepresentation. Rather, the format enforces certain disciplining expectations onto biographical representations, including information that would nowadays be considered 'personal' and thus not only irrelevant, but inappropriate. However, such personal disclosures were not yet sufficiently distinct from academic personhood in the 1950s and 1960s. Especially because this comprehensive representation of personae facilitates biographical narratives that account for serendipities and even crises, it also allows for a rather unmediated evaluation of the candidates' habitus, which might be assessed as their 'moral character' or 'intellect' (cf. Tsay et al. 2003). It is only throughout the latter decades of our period of study that the boundaries between personal and professional accounts on one hand and academic and politicalhistorical spheres on the other are drawn more rigorously. Current CVs represent a professional academic persona. This enforces a biographical representation through a grid of standardized categories and criteria, but may also prevent an evaluative gaze onto nonprofessional aspects of a candidate's life.

The evolution of biographical representations in CVs concludes-at least for now-with the hyper-differentiated list form CV, in which personhood is contained to the professional academic sphere and largely equated with a sum of achievements. The emergence of the list form CV can be seen in a broader context of a general spread of lists in the last three decades (Esposito 2017). As a prototype of rankings, lists break up a coherent flow of biographical representations into almost eclectic conglomerations of finely grained categories. Our analysis has illustrated the performative leverage of lists: Lists arrange things in a certain way (e.g., in a specific temporal order), they make things visible (e.g., funding as an achievement) and exclude others (e.g., class background as part of an academic biography). Not least, we assume reactivity as a performative leverage of lists: Just like rankings recreate social worlds by what they measure (Espeland and Sauder 2007), we argue that list form CVs request academics to live up to the abstract and standardized categories that wait to be realized in their CVs.

Despite the problematic reactivity of list form CVs, their evolutionary success is obvious. One important reason for the success of the list form CV lies in the fact that lists abstract and decontextualize activities and achievements. This facilitates, for example, standardized or comparative evaluative processes. This also means that lists require additional contextual information or interpretative effort in order to become useful in evaluative contexts (cf.

Esposito 2017). To be precise, to be of use as an evaluative device, lists have to be transformed back into narratives. But this time around, the narrative agency rests with the evaluators.

#### **Notes**

- 1. These data can only convey a rough estimate of the labor market in history because they do not reflect a number of important factors: The data do not consider that the number of vacant positions varies between sub-disciplinary fields, nor the fact that some vacated professorships may not be re-staffed as a cost-cutting measure while new professorships may be established elsewhere, nor do the data consider the number of historians that have qualified for full professorships through career paths that have been introduced as an alternative to the Habilitation, for example, the junior professorship.
- The exception that does not follow the narrative format is from 1964 and adopts what we coin a category-based list form (see Section 4.3).
- We have changed all names and places to pseudonyms and blacked out any personal information to protect the identity of the CV holders.
- 4. The historical roots of this peculiar fit between scholarship and a scholarly conduct of life have been uncovered by Fritz Ringer's (1990) work on the relations between *Bildungsbürgertum* and humanities in Germany.
- 5. The National Socialist German Lecturers League [Nationalsozialistischer Deutscher Dozentenbund] was a party organization under the NSDAP (the Nazi Party).
- As can be seen in Table 2, there is a difference in the page length of CVs between historians and scholars of German studies for the 2010s. These numbers are skewed because three historians and one scholar of German studies have submitted only a core CV without a publication list. We speculate that this points to a further instance of differentiation of CVs, namely the gradual decoupling and separate storage of publication lists and CVs. This can be seen to create at least two types of efficiency gains in an academic environment where scholars are constantly asked to submit CVs for various administrative and bureaucratic purposes: First, academics can reuse a now highly standardized core CV that undergoes relatively little change over time, while the publication list is stored separately and can be continuously updated. Second, separating the core CV from the publication list has the practical advantage of keeping the document length manageable—those CVs that include publications lists in the 2010s can easily exceed 80 pages, a length that can become cumbersome for manual browsing.
- 7. Not least, current changes in the institutional environment of academic careers have resulted in the proliferation of biographical representations in other settings. The profiles academics set up of themselves on professional websites and in social academic networks mimic the CV as an evaluative device.

#### **Acknowledgements**

We would like to thank Maja Dahms for her support with the counting for table 2.

Conflict of interest statement. None declared.

#### References

- Bazerman, C. (1988) Shaping Written Knowledge. The Genre and Activity of the Experimental Article in Science. Madison: University of Wisconsin Press.
- Becher, T., and Trowler, P. (2001) Academic Tribes and Territories: Intellectual Enquiry and the Cultures of Disciplines. Philadelphia: Open University Press.
- Ben-David, J. (1977) Centers of Learning: Britain, France, Germany, United States. New York: McGraw-Hill Book Company.
- Bornmann, L., and Daniel, H.-D. (2005) 'Selection of Research Fellowship Recipients by Committee Peer Review: Analysis of Reliability, Fairness and Predictive Validity of Board of Trustees' Decisions', *Scientometrics*, 63: 297–320.
- Bourdieu, P. (2000) 'The Biographical Illusion', in du Gay P. et al. (ed.) *Identity. A Reader*, pp. 297–303. London: Sage.
- Bowker, G. C., and Star, S. L. (1999) Sorting Things Out. Classification and Its Consequences. Cambridge: MIT Press.
- Budtz-Pedersen, D. B., Grønvad, J. F., and Hvidtfeldt, R. (2020) 'Methods for Mapping the Impact of Social Sciences and humanities - A Literature Review', Research Evaluation, 29: 4–21.
- Cañibano, C., Otamendi, J., and Andújar, I. (2008) 'Measuring and Assessing Researcher Mobility from CV Analysis: The Case of the Ramón y Cajal Programme in Spain', Research Evaluation, 17: 17–31.
- Charmaz, K. (2006) Constructing Grounded Theory: A Practical Guide through Qualitative Analysis. Thousand Oaks, CA: SAGE.
- Csiszar, A. (2016) 'Peer Review: Troubled from the Start', *Nature*, 532: 306–8.
- Dahrendorf, R. (1967) Society and Democracy in Germany. New York, London: W.W. Norton & Company.
- Daston, L., and Sibum, H. O. (2003) 'Introduction: Scientific Personae and Their Histories', *Science in Context*, 16: 1–8.
- Declaration on Research Assessment (DORA). (2018) San Francisco Declaration on Research Assessment <a href="https://sfdora.org/read/">https://sfdora.org/read/</a> accessed 30 June 2021.
- Dodds, H. W. (1954) 'The Dangers of Project Research', Social Problems, 1: 90–3
- East, J. W. (2011) 'The Scholarly Book Review in the Humanities. An Academic Cinderella?', *Journal of Scholarly Publishing*, 43: 52–67.
- Eckert, A., Hilgert, N., and Lindner, U. (2012) Die Situation des Wissenschaftlichen Nachwuchses in der Geschichtswissenschaft 2012. Frankfurt/M.: VHD.
- Espeland, W. N., and Sauder, M. (2007) 'Rankings and Reactivity. How Public Measures Recreate Social Worlds', American Journal of Sociology, 113: 1–40.
- Espeland, W. N., and Stevens, M. L. (1998) 'Commensuration as a Social Process', *Annual Review of Sociology*, 24, 313–43.
- Esposito, E. (2017) 'Organizing without Understanding. Lists in Ancient and in Digital Cultures', Zeitschrift für Literaturwissenschaft und Linguistik, 47: 351–9
- Fochler, M., Felt, U., and Müller, R. (2016) 'Unsustainable Growth, Hyper-Competition, and Worth in Life Science Research: Narrowing Evaluative Repertoires in Doctoral and Postdoctoral Scientists' Work and Lives', Minerva, 54: 175–200.
- Foucault, M. (1977) 'What Is an Author?', in Foucault M. (ed.) Language, Counter-Memory, Practice: Selected Essays and Interviews, pp. 113–138. New York, NY: Cornell University Press.
- Friedman, S., O'Brien, D., and McDonald, I. (2021) 'Deflecting Privilege: Class Identity and the Intergenerational Self', *Sociology*, 55: 716–33.
- Govoni, P. and Franceschi, Z. A., eds (2014) Writing about Lives in Science. (Auto)Biography, Gender, and Genre. Göttingen: Vandenhoeck & Ruprecht.
- Guetzkow, J., Lamont, M., and Mallard, G. (2004) 'What Is Originality in the Humanities and the Social Sciences?', American Sociological Review, 69: 190–212.
- Habermas, J. (1969) 'Universität in der Demokratie Demokratisierung Der Universität', in Habermas J. (ed.) Studentenprotest und Hochschulreform, pp. 108–133. Frankfurt/M.: Suhrkamp.

- Hamann, J. (2016) 'Let us Salute One of Our Kind'. How Academic Obituaries Consecrate Research Biographies', *Poetics*, 56: 1–14.
- Hamann, J. (2019) 'The Making of Professors. Assessment and Recognition in Academic Recruitment', Social Studies of Science, 49: 919–41.
- Hamann, J., and Beljean, S. (2017) 'Academic Evaluation in Higher Education', in Teixeira P. and Shin J.C. (ed.) Encyclopedia of International Higher Education Systems and Institutions. Dordrecht: Springer.
- Hammarfelt, B., and Rushforth, A. D. (2017) 'Indicators as Judgment Devices: An Empirical Study of Citizen Bibliometrics in Research Evaluation', Research Evaluation, 26: 169–80.
- Hammarfelt, B., Rushforth, A. D., and De Rijcke, S. (2020) 'Temporality in Academic Evaluation', *Valuation Studies*, 7: 33–63.
- Hicks, D., Wouters, P., Waltman, L., De Rijcke, S., and Rafols, I. (2015) 'Bibliometrics. The Leiden Manifesto for Research Metrics', *Nature*, 520: 429–31
- Kaltenbrunner, W., and De Rijcke, S. (2019) 'Filling in the Gaps: The Interpretation of Curricula Vitae in Peer Review', Social Studies of Science, 49: 863–83.
- Karpik, L. (2010) Valuing the Unique: The Economics of Singularities. Princeton: Princeton University Press.
- Lamont, M. (2009) How Professors Think. Inside the Curious World of Academic Judgement. Cambridge, MA: Harvard University Press.
- Lincke, H.-J., and Paletschek, S. (2002) Situation des wissenschaftlichen Nachwuchses im Fach Geschichte: Berufungsaussichten und Karrierestadien von Historikern und Historikerinnen an deutschen Universitäten Ergebnisse einer Erhebung im Jahr 2002. Universität Freiburg, Manuscript.
- Mijs, J. J. B. (2018) 'Visualizing Belief in Meritocracy, 1930-2010', *Socius*, 4: 237802311881180-2.
- Mirowski, P. (2018) 'The Future(s) of Open Science', Social Studies of Science, 48: 171–203.
- Müller, R. (2014) 'Racing for What? Anticipation and Acceleration in the Work and Career Practices of Academic Life Science Postdocs', Forum Qualitative Sozialforschung, 15: Art. 15.
- Müller, R., and De Rijcke, S. (2017) 'Thinking with Indicators. Exploring the Epistemic Impacts of Academic Performance Indicators in the Life Sciences', Research Evaluation, 26: 157–68.
- Musselin, C. (2005) 'European Academic Labor Markets in Transition', Higher Education, 49: 135–54.
- Musselin, C. (2010) The Market for Academics. New York: Routledge.
- Nolte, E. (1968) Sinn und Widersinn der Demokratisierung in der Universität. Freiburg: Rombach.
- NSF. (n.d.) NSF-Approved Formats for the Biographical Sketch <a href="https://www.nsf.gov/bfa/dias/policy/biosketch.jsp">https://www.nsf.gov/bfa/dias/policy/biosketch.jsp</a> accessed 30 June 2021.
- Pardo Guerra, J. P. (2020) 'Research Metrics, Labor Markets, and Epistemic Change: Evidence from Britain 1970-2018', SocArxiv, DOI: 10.31235/osf.io/vzkfu.
- Posada, A., and Chen, G. (2018) 'Inequality in Knowledge Production: The Integration of Academic Infrastructure by Big Publishers', ELPUB, 2018, DOI:10.4000/proceedings.elpub.2018.30.
- Power, M. (1997) The Audit Society. Rituals of Verification. Oxford: Oxford University Press.
- Remy, S. P. (2002) The Heidelberg Myth: The Nazification and Denazification of a German University. Cambridge: Harvard University Press.
- Ringer, F. K. (1990) The Decline of the German Mandarins: The German Academic Community, 1890-1933. Lebanon, New England: University Press of New England.
- Sandström, U., and Hällsten, M. (2008) 'Persistent Nepotism in Peer-Review', Scientometrics, 74: 175–89.
- Shortland, M., and Yeo, R. eds (1996) Telling Lives in Science: Essays on Scientific Biography. Cambridge: Cambridge University Press.
- SNSF. (2020) SNSF tests new CV format in biology and medicine <a href="http://www.snf.ch/en/researchinFocus/newsroom/Pages/news-200131-scicv-snsf-tests-new-cv-format-in-biology-and-medicine.aspx">https://www.snf.ch/en/researchinFocus/newsroom/Pages/news-200131-scicv-snsf-tests-new-cv-format-in-biology-and-medicine.aspx</a> accessed 30 June 2021.
- Sonnert, G. (1995) 'What Makes a Good Scientist? Determinants of Peer Evaluation among Biologists', Social Studies of Science, 25: 35–55.

- Strauss, A. L., and Corbin, J. M. (1990) Basics of Qualitative Research.

  Grounded Theory Procedures and Techniques. Thousand Oaks, CA: SAGE.
- Strinzel, M. et al. (2021) 'Ten Ways to Improve Academic CVs for Fairer Research Assessment', *Humanities & Social Sciences Communications*, 8, DOI:10.1057/s41599-021-00929-0.
- Terrall, M. (2006) 'Biography as Cultural History of Science', *Isis*, 97: 306–13.
- Torka, M. (2018) 'Projectification of Doctoral Training? How Research Fields Respond to a New Funding Regime', *Minerva*, 56: 59–83.
- Tsay, A., Lamont, M., Abbott, A., and Guetzkow, J. (2003) 'From Character to Intellect: Changing Conceptions of Merit in the Social Sciences and Humanities, 1951-1971', *Poetics*, 31: 23–49.
- Serrano Velarde, K. (2018) 'The Way We Ask for Money... the Emergence and Institutionalization of Grant Writing Practices in Academia', *Minerva*, 56: 85–107.
- Vostal, F. (2016) Accelerating Academia. The Changing Structure of Academic Time. Houndmills, Basingstoke: Palgrave Macmillan.
- Waaijer, C. J. F., Teelken, C., Wouters, P. F., and van der Weijden, I. C. M. (2018) 'Competition in Science: Links between Publication Pressure, Grant Pressure and the Academic Job Market', Higher Education Policy, 31: 225–43.

- Wacquant, L. D. (2000) 'Academic Portraits: Autobiography and Scientific Censorship in American Sociology', in Kinloch G. C. and Mohan R. P. (eds.) *Ideology and the Social Sciences*, pp. 147–157. Westport, London: Greenwood Press.
- Whitley, R. D. (1984) The Intellectual and Social Organization of the Sciences. Oxford: Oxford University Press.
- Whitley, R. et al. eds (2010) Reconfiguring Knowledge Production. Changing Authority Relationships in the Sciences and Their Consequences for Intellectual Innovation. Oxford: Oxford University Press.
- Windolf, P. (1997) Expansion and Structural Change: Higher Education in Germany, United States and Japan 1870–1990. Boulder, CO: Westview.
- Wouters, P. (1999) *The Citation Culture*. Stanford, CA: Stanford University Press.
- Zuccala, A., Guns, R., Cornacchia, R., and Bod, R. (2014) 'Can We Rank Scholarly Book Publishers? A Bibliometric Experiment with the Field of History', Journal of the American Society for Information Science and Technology, 66: 1333–47.
- Zuccala, A., and Van Leeuwen, T. N. (2011) 'Book Reviews in Humanities Research Evaluations', *Journal of the American Society for Information Science and Technology*, 62: 1979–91.