



Open Research Online

The Open University's repository of research publications and other research outputs

Academic careers and the valuation of academics. A discursive perspective on status categories and academic salaries in France as compared to the U.S., Germany and Great Britain

Journal Item

How to cite:

Angermuller, Johannes (2017). Academic careers and the valuation of academics. A discursive perspective on status categories and academic salaries in France as compared to the U.S., Germany and Great Britain. *Higher Education*, 73(6) pp. 963–980.

For guidance on citations see [FAQs](#).

© 2017 The Author

Version: Version of Record

Link(s) to article on publisher's website:
<http://dx.doi.org/doi:10.1007/s10734-017-0117-1>

Copyright and Moral Rights for the articles on this site are retained by the individual authors and/or other copyright owners. For more information on Open Research Online's data [policy](#) on reuse of materials please consult the policies page.

oro.open.ac.uk

Academic careers and the valuation of academics. A discursive perspective on status categories and academic salaries in France as compared to the U.S., Germany and Great Britain

Johannes Angermuller^{1,2}

Published online: 18 February 2017

© The Author(s) 2017. This article is published with open access at Springerlink.com

Abstract Academic careers are social processes which involve many members of large populations over long periods of time. This paper outlines a discursive perspective which looks into how academics are categorized in academic systems. From a discursive view, academic careers are organized by categories which can define who academics are (subjectivation) and what they are worth (valuation). The question of this paper is what institutional categorizations such as status and salaries can tell us about academic subject positions and their valuation. By comparing formal status systems and salary scales in France with those in the U.S., Great Britain and Germany, this paper reveals the constraints of institutional categorization systems on academic careers. Special attention is given to the French system of status categories which is relatively homogeneous and restricts the competitive valuation of academics between institutions. The comparison shows that academic systems such as the U.S. which are characterized by a high level of heterogeneity typically present more negotiation opportunities for the valuation of academics. From a discursive perspective, institutional categories, therefore, can reflect the ways in which academics are valued in the inter-institutional job market, by national bureaucracies or in professional oligarchies.

Keywords Academic status · Social categories · Academic careers in Germany · France · UK and U.S

The research presented in this paper received funding from the European Research Council (DISCONEX project 313,172). I thank the members of the ERC DISCONEX team who have helped collect academic status categories in the four countries, notably Françoise Dufour for France, Johannes Beetz for Germany and the U.S., Eduardo Herrera for the U.S., Marta Wróblewska and Sixian Hah for the UK. I also thank Julian Hamann for his valuable comments and his help with the visualization of the results (Figures 4 and 2) as well as Anne Maclachlan for her comments on the U.S. case.

✉ Johannes Angermuller
J.Angermuller@warwick.ac.uk; <http://www.johannes-angermuller.net>

¹ Warwick, Coventry, UK / CEMS/IMM, Ecole des Hautes Etudes en Sciences Sociales, Paris, France

² Centre for Applied Linguistics, The University of Warwick, Coventry CV4 7AL, UK

Introduction

Researchers produce specialized knowledge. Yet it is normal for researchers to be involved in many activities which are not strictly related to pure knowledge. Not only do they deal with ideas and theories but they also want to be heard, get recognition and secure a good job in academia.

Against a background in sociological strands in Science and Technology Studies, this paper focuses on the valuation of academic researchers. While constructivist strands in the sociology of science typically focus on ‘the making of scientific facts’, less attention has been given to ‘the making of academic researchers’. Academic careers are indeed difficult to account for since the valuation of academics can neither be reduced to an intellectual phenomenon (like becoming a respected member or ‘star’ in a scientific community) nor to an institutional procedure (such as a professorial appointment). Academics participate in many valuation practices in different social arenas. In particular, there is a demand for research on how the informal value of researchers is constructed in scientific communities (‘reputation’) and translated into institutional recognized positions (‘status’) and the other way around. What is needed, therefore, is a perspective which can account for academic careers as ongoing processes of valuating academics in the many arenas in which are active.

To close this gap, I will outline a discursive approach to academic valuation which considers an academic career as a process of discursive subjectivation in the hierarchical world of research. From a discursive point of view, the question is how, by entering academic discourse, some individuals gain visibility, obtain a stable salary and feel recognized as a researcher, in brief: how researchers occupy academic subject positions which are valued in their communities. In this view, academic careers are embedded in ongoing discursive processes of subjectifying and valuating academics.

Academic careers are embedded in ongoing discursive positioning practices which turn around social categories. The medium for these positioning practices is ‘language’, broadly understood as the semiotic resources which allow individuals to position, classify and categorize each other as socially recognized somebodies. While ‘word-oriented’ discourse analysts are interested in the pragmatic markers, devices and expressions of positioning practices, sociological strands typically focus on formal and institutional categories. Therefore, rather than presenting a fully-fledged discourse analysis of the ways in which academics are subjectified through natural language, I will show effects of status categories and salary scales on the subjectivation and valuation of academics (for the uses of through text and talk, which constitute a primary source of value for academics, see Angermüller 2013).

A sociological perspective on discursive subjectivation can help produce comparative insights into academic careers across countries and reveal institutional constraints and conditions on academic subjectivation and valuation. France is often cited as an example for a system where the valuation of academic researchers is based more on national bureaucracies and oligarchic networks than on inter-institutional job markets. As opposed to the U.S., Germany and the UK, where senior academics can negotiate their salaries between institutions at certain biographical points, in France status categories are relatively homogeneous and pegged to non-negotiable national salary scales. The comparison between academic systems shows that market-based valuations of academics are more likely in academic systems characterized by high categorial heterogeneity. This paper asks, therefore, what academic status categories can tell us about how academic subjects are made, how they organize academic careers and place academics into the social world of research.

The first, theoretical part will present the discursive approach and situate it in the sociological debate on science, intellectuals and higher education. In the second, empirical part, I will compare the French status categorization system with those in the U.S., Germany and Great Britain with respect to career patterns and also discuss what they mean for academic salaries.

Academic careers as discursive positioning processes of researchers

Academic researchers spend considerable amounts of energy to advance their careers. Yet many things happen to them which are outside of their individual control. How can one explain that some academic careers succeed more than others? It would be difficult to see academic research in purely economic terms. Academic researchers are only partially driven by economic reward and they value many things which do not have monetary value.¹ Nor is academic research entirely determined by underlying structures of institutional power and social inequality. Seeking to create new knowledge, researchers generally pursue careers in which chance ('timing') can make a difference just as well as their resources ('time'). Entangled in a web of relationships with many other researchers, researchers participate in discourses in which they build up and consolidate academic subject positions in the social world of research (Angermuller 2013, 2014).

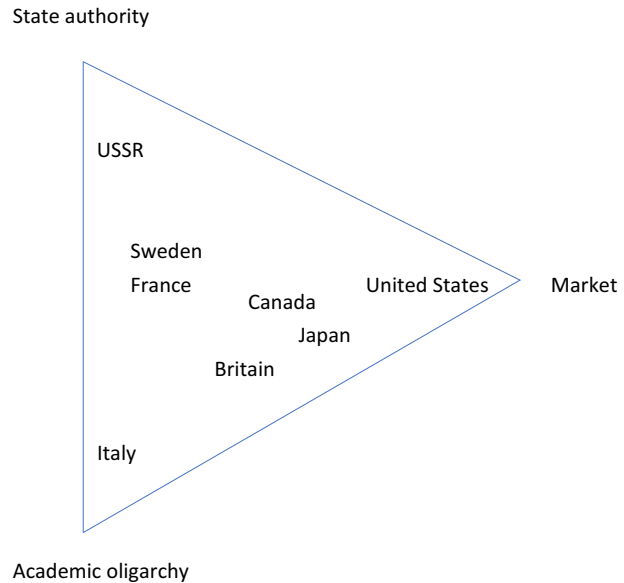
This discursive approach takes inspiration from a number of developments in the sociology of higher education. Such sociological approaches can be distinguished between macro-, meso- and micro-sociological strands. Macro-sociological approaches put emphasis on the constraining effects of structural inequalities (e.g. Bourdieu's *Sketch for a Self-Analysis* 2008). Meso-sociological approaches (Musselin 2009; Lamont 2009) focus on the dynamics of organized groups in the academic system. Micro-sociological approaches, finally, start from the subjective experiences that are shaped by social forces (West 1996; Trahar 2011).

With respect to the comparative study of researchers in different academic systems, Clark's triangle of coordination (see Figure 1) offers a typology of different academic systems. Clark claims that some academic systems (such as U.S. higher education) tend to rely on the market as a dominant mode of academic governance whereas other systems (such as the French one) are more likely to be organized by what he calls 'state' (bureaucratic valuation) and 'oligarchy' (the academic profession, Clark 1983). Qualitative studies such as Musselin's study of academic job markets build on Clark's model and reveal some of the differences between academic recruitment practices in the U.S., Germany and France (Musselin 2009).

Clark's model is from the early 1980s and does not account for the managerialist turn that has since taken place, especially in many European systems (Scholz and Angermuller 2013). As a consequence of tightening budgets, one can probably observe both a turn toward managerial models but also decreasing inter-institutional mobility of senior researchers in the U.S., at least in non-private institutions. Moreover, Great Britain has moved toward the market pole since Thatcher's university reforms and toward the state pole as the Research

¹ The higher education sector as a whole is subject to developments in the broader economy and increasingly dominated by managerialism (Clark 1997) and 'big business' (Slaughter and Leslie 1997). Yet, as a social practice, research cannot be reduced to the calculation of economic interests. Rather, it is a practice of valuation involving all members of the academic system. Thus, the question is how researchers struggle over who and what they value and the products of their research have value inside and sometimes even outside academia (Boltanski 2006; Lamont 2012).

Fig. 1 Clark's Triangle of Coordination (1983)



Evaluation Framework testifies to the important role of the national government. Yet the observation that the French academic system is characterized by the organizational logics of nation-state bureaucracies and professional oligarchies remains a valid one even after university reforms such as the 2007 reform (*Loi relative aux libertés et responsabilités des universités*, LRU) claimed to introduce entrepreneurial elements. While Clark gives little systematic evidence or criteria on how academic systems relate to the three poles, institutional status categories reflect the way in which academic careers are organized and researchers are valued. They constitute comparative data which can corroborate or contradict Clark's claims.

While many sociological approaches, especially in Higher Education Studies and also Clark himself, take their point of departure from the researchers as actors pursuing objectives and strategies in a field of power, the focus on social categories and discursively constructed subject positions makes it necessary to acknowledge some of the limits of actor-centered approaches.

Firstly, actor-centered approaches tend to take a researcher as a constituted entity, which can be identified and compared with other actors. But how can one delimit the group of actors that can be counted as the researchers of an academic system? Does one focus only on academic 'success stories' (such as professors) or does one try to include those who are not yet or no longer institutionally recognized as researchers (such as PhD students, adjunct teachers, independent researchers)? Where does one draw the boundary between those who are members of the system and those who are not?

Secondly, actor-centered approaches sometimes have difficulty accounting for the common denominator of the various social games and activities researchers typically are involved in. While organizational strands in Higher Education Studies e.g. often focus on the role of researchers as decision-making agents (for an overview see Gumpert 2007), sociologists of science (e.g. Latour and Woolgar 1979; Abbott 2001) and historians of ideas (Baert 2015; Gross 2008) are more interested in academics as specialized knowledge producers in scientific

communities. How does one do justice to the fact that academic researchers typically participate in many institutional and non-institutional positioning games at the same time?

This is the point where we can turn to constructivist social theory, notably poststructuralist strands which turn around the discursive construction of subjectivity (a problem which has been discussed in terms of ‘agency’, ‘actorhood’ or ‘identity’ in the social sciences and of ‘authorship’ in literary criticism). In classical structuralist discourse theories (Althusser 2003), subjects are seen as an effect of individuals occupying predefined places in the symbolic. In this view, subject positions are like names which are imposed on babies when they are born. As a result of being named and by using language, the individual enters discourse and turns into a ‘subject’ who occupies a social position in the social hierarchy and also develops an illusion of an ‘inner self’ (intentions, consciousness...).

Since Michel Foucault’s lectures on governmentality (2007), subjectivation has been seen in more historical ways. Foucault delineates the genealogy of the ‘free subject’ as the locus of post-disciplinary power, which has emerged since the eighteenth century in Western Europe. (Neo-)liberal subjectivity is produced and reproduced in discursive practices which can coordinate the behavior of large populations. Contemporary governmentality operates with a system of regulations and incentives which aim at monitoring and controlling many individuals from a distance rather than giving direct orders to individual subjects (Angermüller and Maeße 2015). The world of academic research can be cited as a classical example of a social space whose members are socially ordered through discursive subjectivation in the mode of ‘freedom’. Seeking to occupy a subject position and to be counted as someone, researchers pursue many social activities with little direct supervision while having to deal with constraints and limited resources. When researchers do research, they participate in discursive positioning practices in their communities through the social categories that language affords. They try to improve their positions in the hierarchical world of research by mobilizing formal and informal social categories. Rather than a given place in the social structure, academic subject positions are practical and creative achievements of those participating in discourse (see the perspective of positioning theory, e.g. Langenhove and Harré 1999; Baert 2012). Against this background, academics negotiate academic subject positions by applying categories to others.

Social categories have long been an object of sociological investigation. In the organizational field, sociologists have pointed out the role of categories for the valuation of products on markets (Zuckerman 1999) and the way ‘formal structures’ (images, profiles, categories) are related to organizational activity (Meyer and Rowan 1977). Sociologists of professions have looked into how formal categories – titles, diplomas and certificates – organize an area of specialized expertise (Desrosières and Thévenot 2002) whereas sociologists of education have concentrated on the effects of formal educational titles on social mobility (Bourdieu and Boltanski 1975; Bills 2004). Yet as interactionists have pointed out, individuals also negotiate their subject positions (or ‘identities’) through many informal categories in ongoing everyday practices (Strauss 1959). Thus, ethnomethodologists and conversation analysts have theorized these practices in terms of ‘membership categorization’ (Sacks 1986) whereas biographical researchers have looked into how biographical identities are constructed in narrative practices (Bamberg 2010).

The social world of academic researchers is no exception. Over time, researchers are defined by a large bundle of formal and informal categories which are allocated to them as they participate in the social games of the university and the discipline. An academic career is an institutionally *and* symbolically organized process of ‘subjectivation’, which crucially turns around social categories which are constructed often spontaneously and sometimes

strategically through language (in academic publications and talks) and established in systematic and formal procedures (e.g. in institutional decision-making). Through subjectivation, researchers occupy their subject positions which comprise social categorizations emerging from many social games: a researcher is perceived as a specialist in a disciplinary field, as a follower, colleague or friend of X, as a regular contributor to a newspaper, as a member of an association etc. The socially recognized labels, classifications and categories that constitute an academic subject position must not be misunderstood as a mere outside, as a marketing ploy that cynic actors create of themselves. These categories define the social existence of academics.

What are the categories that constitute the academic subject position of a researcher? The most important categories are the ones which define the roles of researchers in the arena of organized power (e.g. an ‘Assistant Professor’ in a university, their teaching and administrative roles in the system) and the categories which define the place of a researcher in the arena of specialized knowledge (e.g. their place and reputation in the disciplinary fields, e.g. ‘the anthropologist with a knack for psychoanalysis’). All researchers are also defined by intersectional categories such as gender, race and nationality, which are typically not required for a career but can have a significant impact on the perception of academic success. And some researchers may also exercise recognized professional roles outside academia, e.g. as councilors for the government, as media pundits or as entrepreneurs.

The following table (Figure 2) gives an idea of the types of categories that can define academic researchers and constitute their academic subject positions. Some are required for an academic career and need to be built up over time (such as status, disciplinary and reputational categories). Other categories are applied to all researchers but they are not an academic requirement (notably intersectional, private life and civil society categories). And categories are also attributed to those who pursue activities outside academia.

Therefore, to pursue their careers, researchers try to consolidate and improve their positions in higher education institutions (by moving up the academic status ladder, for a comparative study of institutional career systems see Altbach 1996) and in scientific communities (by enhancing their reputation as recognized experts in a disciplinary field, classically Hagstrom 1965). And they participate in many other, non-academic positioning games, which sometimes make a difference as well (e.g. recognition in the mass media). As a result of these positioning dynamics which involve many members in large communities, some come to be counted as established academic researchers (a process Bourdieu has called ‘consecration’, 1981) while others are less recognized, stay in precarious jobs or finally drop out (Aronowitz 1994; Bérubé 1998; Rothengatter and Hil 2013; Nikunen 2014).

	Academic categories (requirement for all researchers)		Non-academic categories (all researchers and no requirement)	Non-academic categories (some researchers and no requirement)
	Arena of organized power	Arena of specialized Knowledge	Everyday life	Activities in civil society and professional life
High formality	Status (institutional titles)	Discipline (diplomas)	Intersectional (race, gender, citizenship...)	Social movements, government, media, business...
Low formality	Reputation		‘Private life’	

Fig. 2 Types of social categories contributing to the making of academic subjects

A category typically consists of a semiotic descriptor (e.g. nouns or adjectives like ‘anthropologist’ or ‘anthropological’ or other resources that can represent actors) which describes a researcher as a member of a scientific community and refers to practices and implicit know-how in the community of anthropologists (such as ‘getting a PhD in anthropology’, ‘joining American Anthropological Association (AAA)’, ‘publishing in *Anthropology Today*’...). To claim a category (e.g. ‘anthropologist’) and to consolidate it over time usually requires that the researcher is active in his or her community over a long time. The subject position a researcher occupies in research as a result of these games is the sum of all the categories which have been attributed to her or him.

Yet different types of categories need to be registered. Some categories, especially the more formal ones, are ‘hard’, stable, objective, sometimes almost universal (like ‘professor’, which is a status category in use in most countries worldwide) and can be applied to a large number of researchers. Others are ‘soft’ ones, especially reputational, informal and subjective categories, which tend to be more ephemeral, singular and malleable and to be tied to a particular person and situation (like ‘my good friend Al, who gave a keynote at last year’s AAA’s’). As a researcher moves ahead in their careers, the categories that are attributed to her or him in the encounters with others are bundled together as a set, which constitutes his or her academic subject position. In this process, researchers can try to boost and soften, change or reinforce, tweak and develop their ‘soft’ categories in view of the ‘hard’ categories that they compete for with others on academic job markets. As a result, the ‘soft’ categories that emerging in a scientific community cluster around ‘hard’ categories, which are institutionally more established and rather difficult to change. The ‘hard’ categories, in other words, are the backbone of academic categorization processes in research communities. They define institutional career trajectories and convey socially shared knowledge about what researchers can expect to do and achieve. As will be seen below, an analysis of the system of academic status categories can reveal at what biographical points one can expect appointment or promotion decisions to be taken and the ‘soft’ categories of researchers to be (re-)assessed and turned into a ‘hard’ category in higher education institutions.

Recruitment for an institutional position can have a profound impact on the way a researcher is categorized – especially the first appointment for a full and permanent job, which is often experienced as a turning point in academic biographies (Paye 2013). There are a few other equally consequential decisions in academic careers, e.g. changing between institutions or getting a promotion in academic status (e.g. from a junior to a senior position). Yet these moments are rare and exceptional. In normal times, institutional positions of most members are stable; change is limited to minor adjustments (such as performance-based evaluations, reallocation of courses etc.) and gradual adjustments (salary hikes may apply qua seniority). But even during ‘slow’ times, members usually do not stop comparing the status they have inside the institution with the value of subject positions constructed in scientific communities. When the value gap of their positions inside and outside the institution is perceived to be too large, they may decide to apply elsewhere or decision-makers may feel obliged to grant a promotion. Therefore, if valuation is often a tacit, unconscious and imaginary activity, it can make a significant difference in institutional decision-making, when academic careers are given new directions. Members tend to perceive these ‘dramatic’ moments in their careers, when they are recategorized by the institution, as a result of chance and contingency. Yet moments of institutional decision-making are in fact no less socially structured than ‘stable’ periods in academic biographies: ‘dramatic moments’ and ‘slow time’ are structurally articulated with each other in the arrangement of categories which is specific to the academic system.

The following analysis compares institutional categorization systems between four countries. One will be able to see when periods of slow time are punctured by biographical turning points. These are the points when ‘soft’ reputational categories are typically assessed and translated into ‘hard’ status categories. Yet academic status categories are tied to and embedded in valuation practices more generally and the following discussion will shed some light on what these categories mean for researchers and their careers in these systems.

Comparing academic categorizations and career patterns across academic systems: between ‘markets’ and ‘oligarchies’ in France, UK, Germany, U.S.

Academic subjectivation typically turns around a set of institutional status categories, the most well-known ones being *Lecturer > Reader > Professor/Chair* in the UK, *maître de conférences/chargé de recherche > professeur/directeur de recherche* in France, *Wissenschaftlicher Mitarbeiter/Assistant/Akademischer Rat > Professor* in Germany, *Assistant Professor > Associate Professor > full Professor* in the U.S. There are considerable differences between the way these categories are organized in academic systems. These differences are not just terminological but they also indicate significant differences between the tacit knowledges members of academic systems have about the institutional rights and obligations, career perspectives and available resources that come along with academic categories (cf. Altbach 1996; Enders 2001; Kwiek and Antonowicz 2015). The following discussion will focus especially on expected career paths before and after the researchers’ first permanent appointment.

The first permanent position and the institutional recategorization of the researcher

A central event in any academic biography is when the researcher is appointed for a permanent position. Such an appointment usually means a transition of the researcher to a new academic status category, which is expressed by a title that is then given to the researcher.

France. Postdocs in France are commonly expected to obtain a permanent full-time position, which is called *maître de conférences* (universities) or *chargé de recherche* (CNRS, the French research institution), within up to four years after the completion of their doctorate (Bonnal and Giret 2010; Chevallier 2001a). French *maîtres de conférences* and *chargés de recherche*, which are always lifetime positions, can be recruited immediately after having obtained their PhDs, usually in the early 30s.

Germany. While junior researchers can be recruited for lifetime positions in France, Germany often requires researchers to be confirmed researchers with considerable experience in teaching and administration to get full permanent academic positions (namely as full *Professoren*). Junior researchers can become permanent *MitarbeiterInnen* or *Akademische Räte* but this has become rare (Enders 1996). At least a second book is expected (or equivalent, known as the habilitation in Germany and France, Berning 2004). German full professors are typically recruited for the first time between the late 30s and the age of 52, when the civil servants’ pension system closes its doors for new members (according to Schimank the average age of a first appointment as professor is 42, 2001). Today, as many as 95% of the members of research universities in Germany have precarious contracts.

U.S. The U.S. represents a mix between France and Germany in that members go through a long transition period to become permanent, usually a six-year tenure-track period as an

Assistant Professor, which in most cases leads to a permanent academic position, which is typically called *Associate Professor* (Metzger 1987). In recent years, the number of non-tenure-track adjuncts or lecturers has risen significantly. In many departments, they constitute more than half of teaching/research-active staff today.

UK. In the UK, standard academic career paths are a mix between the French and the American system even though there is a great deal of heterogeneity since, like in Germany, members can get permanent positions as *lecturers* before finishing their PhD (usually only for teaching purposes, Fulton and Holland 2001). Like in Germany, it can sometimes take a long time for postdocs to find permanent jobs since in all countries the number of fixed-term postdoc positions have strongly increased relative to permanent positions (Musselin 2009; Enders 2001).

Getting a permanent job not only means economic stability but it also means the recategorization of the researcher. He or she is no longer an *ATER* (in France), a *Wissenschaftlicher Mitarbeiter* or *Rat* (in Germany) but now becomes a *maître de conférences* (in France), a *Lecturer* in the UK, an *Associate Professor* in the U.S. and a *Professor* in Germany. Through these recategorizations, members come to be perceived as academic subjects enjoying a certain autonomy in the institution and in the community.

Valuation on the ‘market’ and in the ‘oligarchy’

Researchers do not only compete for institutional positions but they participate in many other categorization processes where their tacit social know-how about how things are done in research is mobilized. Academic subjectivation entails ongoing processes of categorizing and valuating members inside and outside institutions. At some points, researchers are formally evaluated, most importantly in appointment procedures, when informal valuations (such as reputation) are translated into academic status.

Institutional status categories are allocated in valuation practices and processes which can be qualified as ‘market-based’ if academic subject positions are valued between institutions (e.g. when academics can negotiate their salaries between institutions). Academic valuation is embedded in ‘oligarchic networks’ if the formal application for a job requires a preceding process of informal negotiations over the researcher’s memberships in groups, networks or communities. ‘Market-based’ and ‘oligarchic’ valuation practices do not have to be mutually exclusive. Yet market-based valuations tend to characterize systems which show a high degree of heterogeneity between status categories (indicated by significant salary gaps between status categories, prestige hierarchies between institutions, different employment regimes and contractual rules, high institutional autonomy...) whereas ‘oligarchic’ and ‘state bureaucratic’ valuation tends to predominate where status categories are more homogeneous and little negotiation can take place. As a rule, categorially heterogeneous systems (such as the U.S. and Germany), which are characterized by frequent gaps and hikes in career paths, present more space for salary negotiations for researchers, especially for some senior researchers, whereas more homogeneous systems (such as France) are characterized by rather continuous career patterns with promotions based on seniority and salaries set through institutional scales.

France: valuating researchers in a categorially homogeneous system

The French academic system shows highest homogeneity of institutional categories whereas the American more market-oriented system is among the most heterogeneous systems, which

show a great deal of variety of status categories within and across institutions (Metzger 1987). The categorial heterogeneity of the UK higher education system is higher than in France but lower than in Germany, where funding tends to come from different sources: the 16 different states (*Länder*), the federal government, jointly financed research organizations all following sometimes their own institutional rules (Schimank 2001). What makes the French system categorially speaking more homogeneous than the other three systems?

- 1) In terms of institutional categories, France is the most homogeneous system with respect to the institutional status categories that define members (see Figure 3). Members are usually recruited in one of the three types of institutions: universities (which are almost always funded and run by the nation-state), the national research organization (CNRS, a publicly funded institution) and a third group of more specialized institutions (such as EHESS, ENS, INRA etc.), most of which replicate the public salary and status system even when they are funded by the private sector (like some researchers in public-private partnerships, in Chambers of Commerce etc., Chevaillier 2001b). Compared to other countries, the institutional categories that define members' institutional roles in France are simple: members occupying regular permanent academic positions are called *maîtres de*

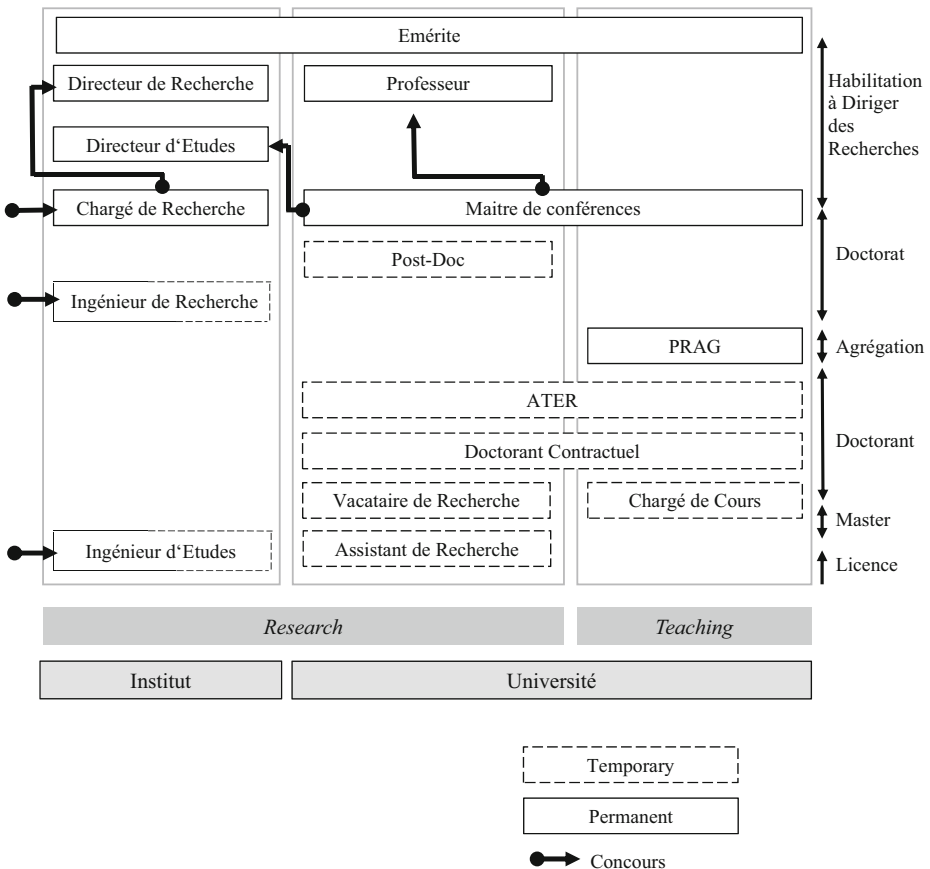


Fig. 3 Institutional status categories of the French academic system

- conférences* in universities and *chargés de recherche* in most research institutions. One can also find auxiliary positions such as *ingénieur de recherche* (a permanent researcher-technician) and PRAG (permanent teaching fellow). While the main institutional status categories can be summed up for France in Cartesian simplicity (see Figure 3), status categorizations in other countries are too heterogeneous to be represented in one table.
- 2) One can also point out the various employment regimes in these countries. In France, most academic staff are civil servants and almost all are paid by the central government following a single national salary system, which is set by the Ministry of Education (Chevaillier 2001b). In the UK, institutions have more flexibility but they broadly follow English, Scottish and Welsh salary scales (respecting minor specificities of the institutions). Like in Germany (*Tarifvertrag der Länder*), agreements are negotiated between employers and the unions on a national level (Fulton and Holland 2001). In the U.S., where unions act on local rather than on national levels, salaries between institutions can differ considerably. Employment heterogeneity is highest in the U.S. and in Germany, where different salary regimes coexist within institutions. German academics often turn from public employees into civil servants when appointed for a professorial position. In the U.S., important administrative differences can be observed between public and private institutions whereas in Germany two distinct salary regimes coexist *within* higher education institutions the large majority of which are public: a civil servant regime (W scales, formerly C) for all professors, the very large majority being permanent, and an employee regime for those who are not civil servants, most of whom being on fixed-term contracts.
 - 3) Thirdly, institutional academic categories usually indicate different levels of job security. In France, all senior academic staff are civil servants and enjoy almost total job security. The same is true for most junior academic categories such as *maîtres de conférences*, *chargé de recherche*, *ingénieur d'études/ingénieur de recherche* after a mostly perfunctory probationary period of one year. A member having the status of teacher-researcher (*enseignant-chercheur*) usually will not be fired or downgraded. While the vast majority of academic staff working in higher education institutions are practically untouchable, fixed-term contracts are given to a small but growing number of postdoctoral researchers for short-term research projects (funded by organizations such as *Agence Nationale de la Recherche*, the *European Commission* or other funders). In the U.S., it is common to gain tenure after six years as an Assistant Professor. In the UK, even though formal tenure was abolished in the 1980s, both professors and lecturers are usually on permanent contracts (a probationary period increasingly applies to the latter). In the UK, permanent and non-permanent employment contracts are usually defined according to the tasks in question. In both the UK and U.S., explicit redundancies among permanent academic staff are rare. However, members may decide to leave as a response to senior management trying to worsen work conditions.

Thus, few gaps, undefined zones and heterogeneities exist in the French system of academic categorizations. Careers usually progress rather slowly but steadily from one status category to the next. Compared to other systems, the French system presents no space for individual salary negotiations on the academic market. It is characterized by a high proportion of permanent and full-time academic jobs (as opposed to Germany especially). Researchers are more likely to stay in their institutions for a long time and it is not uncommon to see institutions recruiting their own PhDs (unlike Germany, where they usually have to move to another institution at a later point, however).

All these features indicate a relative absence of an inter-institutional job market as a coordinating mechanism for academic careers in France. Yet such an absence does not imply that researchers are not subject to valuation in their scientific communities. Nor does it mean that every academic in France gets the same salary. In France, one increases one's salary in two ways, 1) through promotion to a higher status and 2) through seniority. In option 1, members usually pass an appointment procedure to be recruited as *maître de conférences/chargé de recherche* or as *professeur des universités/directeur de recherche*. Recruitment and promotion decisions for professorial posts are in many cases competitive, i.e. with open job advertisements and committees choosing between different applicants. Yet when members apply for a professorial position, market valuations apply (but less so than in other academic systems). Why is the 'market' a valuation mechanism which is mostly unknown in France?

Firstly, the French system does not have strong Deans or Heads of Department who can strategically recruit on behalf of the institution. Decision-making responsibilities are dispersed among members of institutions. In the absence of strong, formally defined management roles, 'real' decision-making roles are more likely to be taken in informal power alliances.

Secondly, the number of candidates applying for professorial positions is regulated by formal filtering mechanisms within the institution and in the national bureaucracy. A case in point is the habilitation (which is the formal qualification equivalent of the 'second book' in the U.S. and a formal requirement to supervise doctoral students and to become a full professor). Members are awarded the habilitation (*habilitation à diriger les recherches*, HDR) through a combination of a defense/examination in the local institution and a formal qualification check by a national assessment panel (*Conseil National des Universités*, CNU)(Chevaillier 2001b).

Thirdly, recruitment decisions for senior staff do not necessarily make a huge financial and categorical difference for the candidates who pass from *maître de conférences* to *professeur des universités*. Unlike Germany, where members usually have to become appointed as full professor to continue, members in France can stay *maître de conférences* until retirement (like lecturers in the UK). Also, the promotion from permanent junior to permanent senior positions does not mean any change in the salary regime (unlike the German case) and pay rises are rather limited. In the absence of salary gaps between institutional categories, which may force decision-makers to take candidates from outside more seriously, decision-makers tend to stick with local and well-connected candidates. In many cases, therefore, recruiting a *professeur des universités* or a *directeur de recherche/études* can mean promoting a deserving colleague rather than hiring somebody new from outside. When French institutions do recruit professors on the national market (international recruitment remains an exception, especially on the senior level), it is often a result of the internal filtering mechanisms such as CNU which keep the number of applicants for senior positions low (universities outside Paris sometimes cannot expect more than a few applicants for full professorships).

What is more, while researchers' exposure to market mechanisms is limited in option 1, members are not obliged to seek a senior appointment to increase their salaries. Salaries are based on seniority and will continue to increase for members on permanent junior positions even though at a lower speed, which is why the French *maître de conférences* can always go for option 2, i.e. stay in their position and wait until they reach the highest spinal points close to retirement.

French academic careers, in other words, rarely attain zones not systematically covered by the categories of the salary/status complex. French members rarely reach the no-man's land of academic categorizations where applicants and decision-makers are obliged to move outside

the established grid of categories and rely on objectified reputational positions constructed outside the institution. French academic categorizations may be visualized as a closed institutional box in which the space for negotiating the value of subject positions individually is limited. Unlike the U.S. and UK, where recruitment is organized and controlled by the departments, departments are no autonomous organizational units in France, where informal positions of members are negotiated in research networks comprising members from different institutions and disciplines. Embedded in the power dynamics of formal and informal groups and networks, academic valuation tends to take place in an oligarchic web of what can be called little services and micro-debts among members.

The lack of market-based valuation practices in France has sometimes been denounced for its lack of ‘professionalism’ and ‘transparency’ (Frank 1977; Bessert-Nettelbeck 1981). Yet there is no reason why the ‘market’ is a better, more objective and more professional valuation device than those of the bureaucratic nation-state or professional oligarchy. Rather, the question is to account for different types of valuation practices and their effects on the knowledge that researchers produce. Therefore, in order to account for ‘non-market’ valuations, I prefer Clark’s non-evaluative terminology: ‘(professional) oligarchy’ and ‘nation-state’, which characterize valuation practices based on recognized membership (oligarchy) and bureaucratic scales (state).

Rather than a deficient valuation regime, which lacks market mechanisms, the French system can be characterized by a distinct arrangement of valuation practices which have proven to be efficient in their own ways. It has been strong at producing knowledge which is more holistic, less pragmatic and open to experiments as compared to the more specialized and streamlined knowledge typical of certain departments in the Anglo-American world. Moreover, there is a high degree of relative institutional equality between junior and senior staff, democratic inclusion in decision-making and job autonomy and security of both junior and senior members. As will be shown in the next section, the low level of categorical heterogeneity keeps negotiation opportunities, salary spreads as well as the number of precarious, non-standard contracts down. No wonder that French society is regularly rocked by social unrest whenever a government tries to change the existing system, which means both secure jobs for academic staff and low salary costs for the tax payer.

A comparative look at the nexus of institutional status categories and academic salaries across countries

We can now have a more systematic look at the economic dimension of academic valuation, namely the allocation of salaries. While academic salaries often correlate with institutional status (‘higher status means more money’), the link between status and salaries can be loose (especially in the U.S., where ‘market-based’ salary differences often occur between members of one and the same status category, especially in the more senior ranks – staggering for European standards), and it can be almost total (notably in France, where every academic – whatever his or her institution or discipline – is paid according to one and the same national salary grid).

This raises the question of ‘economic’ dimensions in scientific activity (Stephan 2012; Stephan 1996; Partha and David 1994) and the role of money in academic discourse more specifically. Money can represent social hierarchies and as such it is a resource of social categorization like the system of status titles, with which it normally correlates. Yet as money can represent almost any hierarchies of value – within academic systems but also between

academic systems as well as between academia and the outside world – it is the medium of valuation par excellence. In a world which is torn by conflicts and struggles over the value of research, money is a medium which allows the members to compare the value of researchers within and across academic systems. Thus, money can make heterogeneous members and their practices comparable and exchangeable. Thanks to money, researchers may be involved in many heterogeneous practices of valuation but they can be assessed according to one ‘universal’ standard of equivalence.

It is no surprise that status categories tend to correlate with salaries but huge differences persist between countries. In the U.S., where disparities between disciplines and institutions can be huge, monthly salaries are more indicative about the place of a researcher in the social academic hierarchy than status. Grants, soft money and external funding can make a huge symbolic and economic difference to researchers but they need to be traded in for a promotion to a higher career step to have a durable effect on the academic’s social standing. The effects of grants are more temporary, whereas the salary rate (just as status) at a university can usually not be reduced (unless a new contract is started).

The academic salaries of most researchers are determined through salary scales, spinal points and a host of bureaucratic rules, which define the corridors within which the institution can pay its employees and other members, including extra work, bonuses, reimbursements etc. What are the features of institutional status categories which are common to all four systems?

- 1) Academic beginners (PhD students) usually get the lowest salaries. Funded PhD student-ship rates (‘packages’) are usually close to minimum salary rates that apply in each country. Even though they can vary (especially between institutions in the U.S.), salary rates for both entry-level and senior staff are normally higher than PhD rates. In many cases (especially in Germany, in the UK and in the U.S.), PhD students are funded through scholarships rather than contracts.
- 2) Both PhD packages and entry-level academic salary rates tend to be calculated through institutional or national scales (juniors may negotiate small differences, equipment etc.), whereas some senior salaries are ‘negotiable’, especially in Germany (W system), the UK and in many institutions in the U.S. but not in France (Musselin 2009). ‘Negotiable’ usually does not mean that salaries are determined ad hoc. Rather, institutions develop and apply internal salary scales and sometimes make individual concessions according to circumstances (to counter job offers from other institutions in particular).
- 3) Different academic systems operate with different categories denoting member’s institutional status. However, for the senior level, the category of professor (which is sometimes specified as ‘full professor’ or ‘chair’ if it needs to be distinguished from junior levels) has become a worldcultural standard in all countries. Full professors normally have permanent contracts as well as all institutional rights (such as the right to recruit other professors, to chair a department or the university and to supervise PhD students). The situation is different for the institutional academic categories at the junior level. Junior or entry-level positions, especially non-permanent contracts, are often more flexible: they can be divided, reduced or cumulated more easily, but salary scales are less negotiable.

A closer look at the salary scales which are applied to regular and full academic staff can tell us more about the social hierarchies that the latter can express. Thus, in Figure 4 one can see net (i.e. after tax) academic salaries according to institutional status (from funded PhD student to full professor) in three European countries as well as at the University of Michigan,

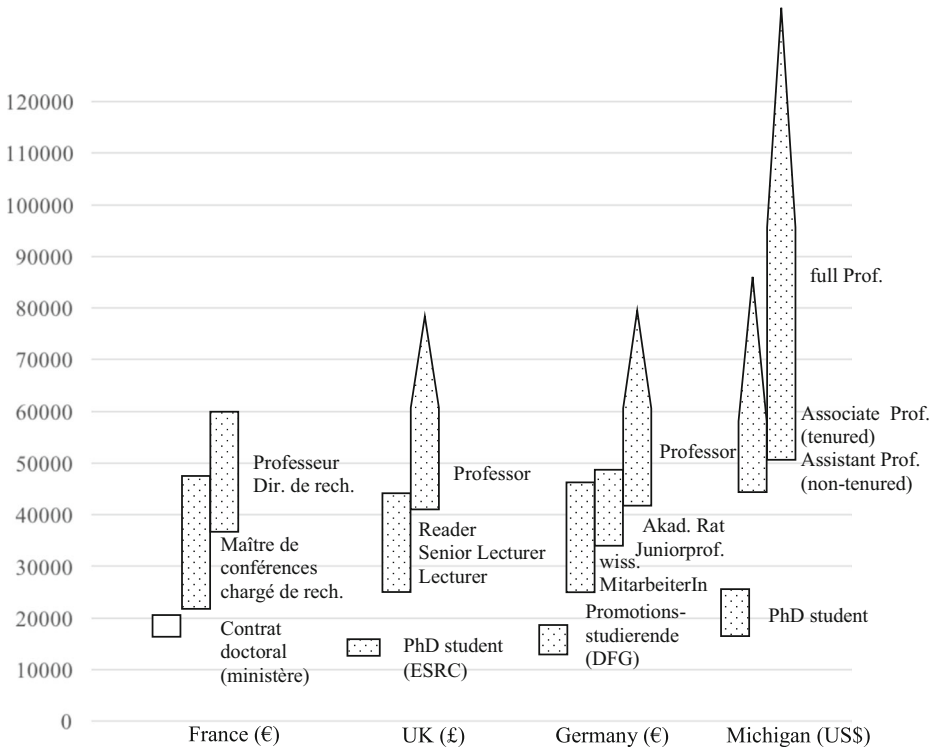


Fig. 4 Approximate salary ranges (after tax) for full academic positions according

which counts as a top-tier public research university in the U.S. After taxes and charges full professors should expect at least 40,000£ in the UK, 40,000€ in Germany and 50,000\$ at Michigan² but (theoretically!) they can receive just over 30,000€ in France. It is not uncommon to see some net salaries of senior academic staff rise to 60,000£, 800,000€ and 200,000\$ respectively. The situation is different in France, where scales based on seniority are applied at all career steps. End-of-career professors should therefore rarely exceed 60,000€ net (NB: ‘Net salaries’ in France usually means before taxes!). One can therefore estimate spreads between typical packages for PhD students and net salaries for full professors (lowest/highest level) around 2 and 3 times in France, 2.5 and 5 times in Germany, 3.5 and 5 times in the UK and sometimes even higher in U.S. universities (but note that these estimates do not include any extra payments academics may get on top of their base salaries).

The table presents estimates from 2015, based on public salary scales and online tax calculation devices. To make status groups comparable, I created three salary clusters: ‘research students’, ‘junior’ and ‘senior’ academic staff. ‘Juniors’ comprise a large number of positions from postdocs to *Associate Professors* in the U.S., from *Research/teaching Fellows* to *Readers* in the UK, no matter whether they are on fixed-term or permanent

² "Some salaries at Michigan are higher than in the sector as a whole. Aggregate gross salary data from U.S. institutions 2015 (Curtis & Kisielewski 2016) show that new assistant professors in large public universities in the USA can count on an annual average between 60800\$ (history) and 170000\$ (finance). Full professors earn on average between 110000\$ (anthropology) and 204000\$ (finance). The data show little salary differences between public and private institutions. After inflation, professorial salaries have remained mostly flat since 2002. "

contracts. I used the C salary scales for professors in Germany, which is still in use in many institutions, whereas the more recent W system applies only a minimal salary threshold. I calculated standard annual salaries of sociologists and linguists at Michigan by using public information on state employees in Michigan (see <http://www.umsalary.info>. NB: many U.S. academics are paid for nine months only).

Salary scales in the U.S., UK and Germany do not cover all stretches of an academic career in the same systematic way. They are sometimes punctured by certain gaps and undefined zones. In the UK, e.g., there is an important salary gap between students and lecturers (especially if one considers that tuition fee waivers have become uncommon for PhD students in the UK today). Also, in the UK the minimal salary for a professor is normally higher than the salary for any junior staff in the institution (a few exceptions can apply in special fields). In the U.S., there is an important salary gap between PhD students and assistant professor as well as between associate and full professor. While the salary gap between Assistant and Associate Professors is usually low, the gap is felt to be significant since the first are on non-permanent contracts for up to six years while the latter are permanent. In Germany, there is a large gap between precarious junior academics in the TV-L employment regime and full professors, who are paid civil servant salaries in the W or C regime. In the UK, Germany, and in some U.S. institutions, professorial salaries normally have minimal thresholds and no maximal caps.

It needs to be noted that these salary scales say little about real salaries of academics. Real salaries include extra payments, which are not included in my calculations (bonuses [*primes*] for extra work e.g. are an important source of income in France). In many cases, entry-level positions are split and in some cases academics can combine salaries calculated by different salary grids (in France, in particular, individuals sometimes have more than one appointment). In the U.S. and in the applied disciplinary fields, it is not uncommon to see salaries combined from different sources). Buying power and living costs vary considerably between countries and even within countries. In France, e.g., a number of taxes will reduce net salaries further but one also has good infrastructure and inexpensive public transport, health care as well as higher education which is mostly free. A more complete table would reveal even higher spreads between precarious or divided adjunct contracts and full senior professorships.

Conclusion: research as a discursive valuation practice

This paper pursued theoretical and empirical objectives. Theoretically, the focus on academic careers as discursive subjectivation of researchers performs three crucial displacements. Firstly, rather than explaining the value of academics by their strategies and intentions, the paper asked how they are subject to a discursive economy in which academics are valued through social categories. Secondly, institutional status categories and academic salaries do not only represent social and economic hierarchies among researchers but they also constitute such hierarchies by positioning and valuating researchers in the hierarchical social space of academia. Thirdly, valuation is a discursive activity in which status and money are only two types of resource for categorizing academics. While members of academic systems have ideas about the typical money value of researchers, academics participate in a great deal of discursive activities in which the value of academic subject positions *cannot* be reduced to status and money.

Empirically, I attempted to reveal what academic status categories mean in terms of academic career prospects and negotiation opportunities. Two regimes of academic valuation can be distinguished: one regime operating with a heterogeneous system of status categories in

which (some) researchers negotiate the value of their subject positions between institutions (i.e. on the ‘market’) and one categorially more homogeneous system in which their value tends to be assessed through the ‘nation-state bureaucracy’ or ‘professional oligarchies’. The French system, which represents the latter case, is the categorially most homogeneous one and presents the lowest level of negotiation opportunities. It is also the system where salary spreads are lowest, job security is highest, academic staff are institutionally most equal and academic knowledge is perhaps more holistic than elsewhere. While discursive approaches to academic valuation emphasize the limits of institutional representations of ‘academic excellence’ (such as status, salaries, evaluations...), future research will need to extend its scope and look into everyday valuations of academics through text and talk.

Open Access This article is distributed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made.

References

- Abbott, A. (2001). *Chaos of disciplines*. Chicago: University of Chicago Press.
- Altbach, P. G. (1996). *The international academic profession: Portraits of fourteen countries*. Princeton: Carnegie Foundation.
- Althusser, L. (2003). *The Humanist Controversy and Other Writings (1966–67)*. London, New York: Verso.
- Angermüller, J. (2013). How to become an academic philosopher. *Academic discourse as a multileveled positioning practice Sociologia histórica*, 3, 263–289.
- Angermüller, J. (2014). *Poststructuralist Discourse Analysis. Subjectivity in Enunciative Pragmatics*. Houndmills, Basingstoke: Palgrave Macmillan.
- Angermüller, J., & Maeße, J. (2015). Regieren durch Leistung. Zur Verschulung des Sozialen in der Numerokratie. In A. Schäfer & C. Thompson (Eds.), *Leistung* (pp. 61–108). Paderborn: Schöningh.
- Aronowitz, S. (1994). *The Jobless Future: Sci-Tech and the Dogma of Work*. Minneapolis: University of Minnesota Press.
- Baert, P. (2012). Positioning theory and intellectual interventions. *J Theory Soc Behav*, 42(3), 304–324.
- Baert, P. (2015). *The existentialist moment. The rise of Sartre as a public intellectual*. Cambridge: Polity.
- Bamberg, M. (2010). Who am I? Narration and its contribution to self and identity. *Theory & Psychology*, 21(1), 1–22.
- Berning, E. (2004). Petrified Structures and still little Autonomy and Flexibility. Country Report Germany. In J. Enders, & E. d. Weert (Eds.), *The International Attractiveness of the Academic Workplace in Europe* (pp. 160–187). Frankfurt: Gewerkschaft Erziehung und Wissenschaft 107.
- Bérubé, M. (1998). *The employment of English. Theory, Jobs, and the Future of Literary Studies*. New York, London: New York University Press.
- Bessert-Nettelbeck, J. (1981). *Zur Berufung von Hochschullehrern in der BRD und Frankreich*. Dissertation, Berlin.
- Bills, D. (2004). *The Sociology of Education and Work*. New York.
- Boltanski, L. (2006). *On Justification: Economies of Worth*. Princeton: Princeton University Press.
- Bonnal, L., & Giret, J.-F. (2010). Determinants of access to academic careers in France. *Econ Innov New Technol*, 19(5), 437–458.
- Bourdieu, P. (1981). Epreuve scolaire et consécration sociale. *Les classes préparatoires aux Grandes Écoles Actes de la recherche en sciences sociales*, 39, 3–70.
- Bourdieu, P. (2008). *Sketch for a Self-Analysis*. Chicago: University of Chicago Press.
- Bourdieu, P., & Boltanski, L. (1975). Le titre et le poste. *Rapports entre le système de production et le système de reproduction Actes de la recherche en sciences sociales*, 2, 95–107.
- Chevallier, T. (2001a). French academics: between the professions and the civil service. *High Educ*, 41(1).
- Chevallier, T. (2001b). Professional Diversity in a Centralized System: Academic Staff in France. In J. Enders (Ed.), *Academic Staff in Europe* (pp. 92–113).
- Clark, B. R. (1983). *The Higher Education System: Academic Organization in Cross-National Perspective*. Berkeley: University of California Press.

- Clark, B. R. (1997). *The Entrepreneurial University: Demand and Response*. Lawrenceville, NJ: Princeton University Press.
- Curtis, J. W., & Kisielewski, L. (2016). *Faculty Salaries in Sociology and Other Disciplines, 2016 Update*. No place.
- Desrosières, A., & Thévenot, L. (2002). *Les catégories socioprofessionnelles*. Paris: La Découverte.
- Enders, J. (1996). *Die wissenschaftlichen Mitarbeiter: Ausbildung, Beschäftigung und Karriere der Nachwuchswissenschaftler und Mittelbauangehörigen an den Universitäten*. Frankfurt am Main: Campus.
- Enders, J. (Ed.). (2001). *Academic Staff in Europe. Changing Contexts and Conditions*. Westport, CN: Greenwood.
- Foucault, M. (2007). *Security, Territory, Population. Lectures at the College de France*. Basingstoke: Palgrave, Macmillan.
- Frank, P. a. (1977). The sociology of science in France. In R. K. Merton & J. Gaston (Eds.), *The sociology of science in Europe* (pp. 258–282). Carbondale, Edwardsville: Southern Illinois University Press.
- Fulton, O., & Holland, C. (2001). Profession or Proletariat: Academic Staff in the United Kingdom after Two Decades of Change. In J. Enders (Ed.), *Academic Staff in Europe* (pp. 301–322).
- Gross, N. (2008). *Richard Rorty: The Making of an American Philosopher*. Chicago: The University of Chicago.
- Gumpert, P. J. (Ed.). (2007). *Sociology of Higher Education: Contributions and their Contexts*. Baltimore, MD: Johns Hopkins University Press.
- Hagstrom, W. (1965). *The Scientific Community*. Madison, WI: University of Wisconsin.
- Kwiek, M., & Antonowicz, D. (2015). The changing paths in academic careers in European universities: minor steps and major milestones. In T. Fumasoli, G. Goastellec, & B. M. Kehm (Eds.), *Academic work and careers in Europe: trends, challenges, perspectives* (pp. 41–68). Heidelberg: Springer.
- Lamont, M. (2009). *How Professors Think: Inside the Curious World of Academic Judgment*. Cambridge: Harvard University Press.
- Lamont, M. (2012). Toward a comparative sociology of valuation and evaluation. *Annu Rev Sociol*, 38(21), 201–221.
- Langenhove, L. v., & Harré, R. (1999). Introducing Positioning Theory. In R. Harré, & L. v. (Eds.), *Positioning Theory. Moral Contexts of Intentional Action* (pp. 14–31). Oxford: Blackwell.
- Latour, B., & Woolgar, S. (1979). *Laboratory Life*. Princeton: Princeton University Press.
- Metzger, W. P. (1987). The Academic Profession in the United States. In B. L. Clark (Ed.), *The Academic Profession. National, Disciplinary and Institutional Settings* (pp. 123–208). Berkeley et al.: University of California Press.
- Meyer, J. W., & Rowan, B. (1977). Institutional organizations: formal structure as myth and ceremony. *Am J Sociol*, 83(2), 340–363.
- Musselin, C. (2009). *The Market for Academics*. London: Routledge.
- Nikunen, M. (2014). Precarious work at the ‘entrepreneurial’ university: adaptation versus ‘abandon ship’. Individualization and identity work: coping with the ‘entrepreneurial’ university. In S. Ahola & D. M. Hoffman (Eds.), *Higher education research in Finland* (pp. 271–290). Jyväskylä, Finland: Finnish Institute for Educational Research.
- Partha, D., & David, P. A. (1994). Toward a new economics of science. *Res Policy*, 23(5), 487–521.
- Paye, S. (2013). *Différencier les pairs. Mise en gestion du travail universitaire et encastrement organisationnel des carrières académiques (Royaume-Uni 1970–2010)*. Paris.
- Rothengatter, M., & Hil, R. (2013). A precarious presence: some realities and challenges of academic casualisation in Australian universities. *The Australian Universities' Review*, 55(2), 51–59.
- Sacks, H. (1986). On the analyzability of stories by children. In J. Gumperz & D. Hymes (Eds.), *Directions in sociolinguistics. The ethnography of communication* (pp. 325–345). Oxford: Blackwell.
- Schimank, U. (2001). Unsolved problems and inadequate solutions: the situation of academic staff in German higher education. In J. Enders (Ed.), *Academic Staff in Europe*, 115–136.
- Scholz, R., & Angermüller, J. (2013). Au nom de Bologne ? Une analyse comparative des discours politiques sur les réformes universitaires en Allemagne et en France. *Mots*, 101, 22–36.
- Slaughter, S., & Leslie, L. L. (1997). *Academic Capitalism. Politics, Policies, and the Entrepreneurial University*. Baltimore, London: The Johns Hopkins University Press.
- Stephan, P. (1996). *The Economics of Science Journal of Economic Literature*, 34(3), 1199–1235.
- Stephan, P. (2012). *How Economics Shapes Science*. Cambridge, MA: Harvard University Press.
- Strauss, A. (1959). *Mirrors and Masks. The Search for Identity*. Glencoe: Free Press.
- Trahar, S. (2011). *Developing Cultural Capability in International Higher Education. A Narrative Inquiry*. London, New York: Routledge.
- West, L. (1996). *Beyond Fragments. Adults, Motivation and Higher Education*. New York: Routledge.
- Zuckerman, E. (1999). The categorical imperative: securities analysts and the illegitimacy discount. *Am J Sociol*, 104(5), 1398–1438.