# How mechanisms implicated in the collective process of academic hiring in France affect discrimination <br> Christine Musselin, Frédérique Pigeyre 

## To cite this version:

Christine Musselin, Frédérique Pigeyre. How mechanisms implicated in the collective process of academic hiring in France affect discrimination. Sociologie du Travail, 2009, 51 (supplément 2), pp.81-103. 10.1016/j.soctra.2009.06.021 . hal-02892077

HAL Id: hal-02892077<br>https://sciencespo.hal.science/hal-02892077

Submitted on 7 Jul 2020

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers. publics ou privés.

Distributed under a Creative Commons Attribution - NonCommercial - NoDerivatives 4.0
International License

# How mechanisms implicated in the collective process of academic hiring in France affect discrimination ${ }^{\text {故，证诠 }}$ 

Christine Musselin ${ }^{\text {a，＊}}$ ，Frédérique Pigeyre ${ }^{\text {b }}$<br>${ }^{\text {a }}$ Centre de sociologie des organisations（Sciences Po and CNRS），19，rue Amélie， 75007 Paris，France<br>${ }^{\mathrm{b}}$ EA 2354，institut de recherche en gestion，université Paris－12－Val－de－Marne，<br>place de la Porte－des－Champs，route de Choisy， 94010 Créteil cedex，France


#### Abstract

How may procedures in effect for hiring junior professors in France affect discrimination against women candidates？On the basis of detailed surveys and interviews with members of hiring committees in three disciplines，we explain how the specificities of the academic hiring process affect direct and indirect dis－ crimination．Judgment practices on hiring committees are shown to be permeable to types of indirect gender discrimination，while various tools（a grid for evaluating candidate applications，explicitly defined selec－ tion criteria，etc．）and arrangements（publicizing proceedings，diversifying committee make－up，collegial decision－making，etc．）allow for circumscribing or containing possible direct discrimination．


© 2009 Elsevier Masson SAS．All rights reserved．
Keywords：Direct discrimination；Indirect discrimination；Hiring；Collective decision－making；Gender；Judgment practices；Decision－making tools；Universities；Academics；France

Studies on discrimination against women in connection with their professional trajectories generally handle the issue in one of two ways．Some use quantitative methods to measure the proportion of women in a given profession（magistrates，managers，top business executives，engi－ neers，etc．）and their chances of career advancement in these areas long dominated by men．Others use qualitative methods，collecting opinions，life stories，experiences of women and some men．

[^0]These studies are likely to bring to light results or effects of discriminatory practices, which they then interpret as either the organizational effects of conscious or unconscious mechanisms which work to keep the number of women in dominant positions low (Kanter, 1977) and/or valorize traditionally masculine attributes or behavior (Adler and Izraeli, 1994), or as the result of women's own choices, the idea being that women have different ideas from men of what it is to have a career and less desire for power (Liff and Ward, 2001).

But these studies seldom examine the workings of the mechanisms that either contain discrimination or allow it to operate. In the context of a collective study of academic careers (Carrère et al., 2006) in three disciplines-biology, management studies, history-and on the basis of statistical data made available online by the French Ministry of Education, we have observed that in reality nearly $50 \%$ of academics hired in these disciplines are women. ${ }^{1}$ The figure may go higher in biology and management studies; it is lower in history (Appendix 1, Table 1).

This weak discrimination at entry level is corroborated by interviews with members of hiring committees in charge of recruiting maîtres de conférences (junior academics applying for their first permanent position) and this in turn led us to study committee judgment practices. We sought to understand how these committees function, focusing on mechanisms that help contain discriminatory practices. In other words, we have tried to grasp the mechanisms that produce or limit gender inequality as hiring decisions take shape.

This approach led us to study the candidate application examination conditions that collegial decision-making is likely to introduce. We then compared these conditions to those in effect in company hiring, which is characterized by a succession of decisions made by different actors rather than by collective deliberations that bring together all the actors involved. Specifically, we inquired into the extent to which collective decision-making may affect discriminatory practices.

Like many studies of unequal access to employment, we use the established legal distinction between direct and indirect discrimination. According to Olivier de Schutter, the first type amounts to "unfavorable treatment of a person on the basis of his or her race or ethnic origin, religion or convictions, age, sexual orientation, or any handicap he or she may have" (de Schutter, 2001: 63) while the second involves "the existence of a disposition, criterion or practice which, while 'apparently neutral' is in fact 'likely to incur a particular disadvantage for persons' of a given race or ethnic origin, religion or conviction, age, sexual orientation or handicap, in relation to other persons". In this study of men and women academics, we speak of direct discrimination when a woman candidate is excluded because she is a woman and indirect discrimination when aspects of the judgment practice can end up being unfavorable to women. This distinction is particularly useful here because examination of recruitment committee judgment practices reveals that they continue to be permeable to certain forms of indirect gender discrimination,

[^1]whereas the possibilities of direct discrimination are limited and contained by specific tools and arrangements.

This article is constructed around that opposition. In the first part, we analyze judgment process components that potentially involve gender bias and allow for indirect discrimination. The second part looks at mechanisms that function as safeguards against the risk of direct discrimination. We identify just how far the second type can go-no arrangement, however well-controlled, can guarantee perfect equality-and recall that actors can always circumvent or divert them.

Our thinking here is based on the statistics mentioned above, as well as official documents and approximately 50 semi-directive interviews (Appendix 3) with members of hiring committees (commissions de spécialistes), two per discipline, one in a Paris university, the other in one of France's régions. ${ }^{2}$ Here, each commission is indicated by the name of the discipline and its geographic location ("Paris" or "Region"). What we have observed above all (though a few qualifications will be made here and there) is convergence of the three disciplines: all are either moving toward or have already attained parity in hiring for first junior professor positions. We are of course well aware that these disciplines have different long-term histories; that they have evolved differently in recent times, are not present in universities in the same way and have differing kinds of relations with other sectors (for example management studies has special relations with France's prestigious, selective grandes écoles, biology with outside national research institutions); that proportions of men and women among maître de conférences-level faculty vary by discipline (Appendix 2), as do requirements for obtaining first academic position and requirements for obtaining professeur (senior professor) status, etc. But this information does not significantly impact on the main focus of this article; i.e., the arrangements and procedures deriving from the collective nature of academic hiring.

Our study of hiring committees leads to a twofold or two-level conclusion. The first concerns implications of the study for understanding differentials between men's and women's academic careers and suggests directions for pursuing research on that issue. The second involves extending our thinking to discriminatory practices other than gender inequalities, and to hiring situations other than higher education and research. We take up the question of the possible implications of our results for combating direct and indirect discrimination generally. The point here is to examine the relationship between type of skills sought in hiring processes, type of discrimination that these skills are likely to favor, and potential means of containing such discrimination.

## 1. The nature and origins of gender bias in academic hiring

Academic hiring committees recruit on the basis of position profiles identified earlier in the process. These profiles generally involve one of two main guidelines: emphasis is either on research or teaching. This in turn depends on how much pressure there is from student enrollment numbers ${ }^{3}$ and what the particular research dynamic is in the academic component doing the hiring.

On the basis of position profiles, we can identify three mechanisms likely to produce gender bias. While here they operate in the particular situation of recruiting junior professors for their first university job, all can be transposed to other hiring situations, namely company hiring. All three

[^2]mechanisms are sources of indirect discrimination of the sort that leads recruiters to eliminate women's (and some men's) applications without explicitly or consciously seeking to do so.

### 1.1. Criteria that are not as neutral as they seem

Hiring committee criteria are not strictly identical everywhere; above all, they are not all granted equal importance since they are chosen as a function of the general orientation of the profile that has been specified for each position being filled. Still, in practice we do find a number of constants. Committee members are highly concerned to base their decisions on objective material; as they see it, this will reduce the weight of subjectivity and personal impressions. When a position profile emphasizes research, it is customary to use virtually universal criteria, such as number of candidate's publications. And indeed, this allows for measuring not only candidate productivity-ability to regularly produce research results-but also the quality of that research, in that recruiters take into account the renown of the journals published in; i.e., the journals' "impact factor". ${ }^{4}$ If the emphasis is on teaching, other criteria are mobilized, such as teaching experience, which may be evaluated in terms of its degree of diversity or specialization, university level (graduate, undergraduate), etc.

We look at how many years' experience they've had. Have they been ATER (attaché temporaire d'enseignement et de recherche; temporary university teaching jobs available to new PhD or doctoral students close to finishing their thesis) or not, and for how long? I look at the range of subjects taught. If they've only taught accounting, that's not the same as having taught accounting, financial management, and management oversight. I prefer a broad range, because a manager is a generalist. I also like to see that they've taught at different levels. Two years teaching DEUG (first cycle; i.e., undergraduate-level) accounting sections cannot compare to 5 years teaching in first, second and third cycle.
(maître de conférences, woman, Management studies-Paris).
Teaching experience is taken into account, even middle school teaching-and actually especially middle school teaching, because a person who's taught middle school in the poor city outskirts will be able to handle Paris (university) students. We know something of the candidates. It is highly unlikely that we wouldn't know ancient or medieval history candidates, directly or indirectly. We know the candidate on the human, scientific, teaching and relational levels. ... There are all of these criteria, but when it comes to deciding between candidates, the academic ones are still the most important, especially publications. (maître de conférences, man, History-Paris).

As we will see further on, formalizing and quantifying criteria make subjective judgment-and therefore gender bias-less likely. However, criteria chosen have an impact in themselves. Are those criteria gender-neutral and therefore likely to hold discrimination at bay? Is number of publications as impartial an indicator as it may seem? Recent studies have shown that this kind of criterion is based on a conception of science that is sharply more favorable to men, and on the idea that science is a way of life "that cannot be made to coexist with other commitments" (Beaufaÿs and Krais, 2005: 58). Academics are thus understood to have no material considerations to deal with and to be entirely devoted to research. The fact is that in most cases, this implicit model

[^3]does not fit women's situations well; they are caught up in maternity and family responsibilities at ages that are of crucial importance for professional careers.

Some hiring committees, such as "Biology-Region", are conscious of this and are trying to take it into account. They have tried to objectify and measure the eventuality of women academics having children. In this committee, candidates are expected to have published at least once a year in a well-known journal, but it also applies the following rule: "either one publication or one child per year".

Other criteria, referring to readily observed, codifiable realities, can also give rise to objective (non-intentional) discrimination. The criterion of geographic mobility (commuting), for example, often works against women. As Jacqueline Laufer and Frédérique Pigeyre have shown, women are often thought to be less mobile than men because of their family responsibilities, the assumption being that they will not want to commute or move (Laufer and Pigeyre, 2000). This is also true for traveling outside France, which is sometimes required by research activities (conferences, international research team work, etc.). Hiring committees that consider willingness to move around as an essential, "objective" criterion may therefore be indirectly putting women at a disadvantage.

If ever there was a profession that is wide open to women, it's academics. But it's true that afterwards, when it comes to doing research studies and going to conferences halfway round the world. . .
(maître de conférences, man, Management studies-Region).
The ability to lead and supervise a team is a criterion often used in making hiring decisions, ${ }^{5}$ especially for research-focused position profiles. This criterion is also likely to put women at a disadvantage given that they have a harder time than men attaining supervisorial responsibilities (Carrère et al., 2006). ${ }^{6}$

The differences among the committees we studied are therefore explained by the relative importance attributed to each of the three major activity areas-research, teaching, administrative tasks-of the future maître de conférences and the selection criteria that correspond to them. The criteria used therefore seem constructions developed before the hiring process itself, and the committee is led to note the results of candidates' past actions: have they published? Have they had teaching responsibilities? Have they taught in thus-and-such environment? These apparently objective criteria in fact measure the effects of situations that preceded the hiring process. Imbalances between men and women that were created in the past thus become manifest during candidate selection. In history, for example, women are much less liked than men to have taken the agrégation du secondaire (national competitive examination qualifying candidates to become secondary school teachers). History-Paris only hire candidates who have passed this examination. This means that fewer women than men can apply for jobs at History-Paris. The model just described is operative far "upstream" of the hiring process, in the French school system itself, which selects the "best" students as early as twelfth grade. They are the ones who take the "science-heavy" ("S") study program, the most prestigious because it "opens all doors"; this program has more boys than girls in it, though girls usually do better than boys on the general education baccalauréat (general [as opposed to vocational] secondary school leaving) examination.

[^4]As early as secondary school, then, socialization carries with it the risk of gender discrimination, a risk due to France's meritocratic school system.

These observations make it necessary to inquire into "upstream" production of gender inequalities and just how neutral selection criteria are, because some groups (here women) are less in a position than others to meet the selection criteria chosen and are thus indirectly discriminated against. It is precisely this type of thinking that has given rise in some countries to positive discrimination techniques. The aim is to create "real" equality because equal rights are not enough to do this. The point is to prevent or compensate for disadvantages that follow from the fact of belonging to a given category (Calvès, 2004). This type of arrangement, often harshly criticized and discredited (including by women, who could benefit from it) is in any case not operative in France. For now, we have settled for creating "parity taskforces" at the Ministry of Higher Education and Research and in the major research organizations. These groups publish data and disseminate information, thereby raising awareness and sensitizing recruiters, but no special arrangements of the affirmative action sort have been put in place.

### 1.2. The weight of profession-related gender representations

Another potential factor of indirect discrimination in academic hiring concerns representations of the figure of the teacher-researcher and possible discrepancies between those representations and candidates applying for positions. As is the case in other professions long dominated by men and even inaccessible to women during some periods, ${ }^{7}$ higher education teaching is spontaneously linked by interviewees to behavioral norms that candidates are expected to comply with (way of introducing oneself, ways of being, etc.) and to dominant representations (personal physical or psychological characteristics that members of the profession are supposed to have). These representations attribute value to qualities that are more likely to be associated with men than women.

In processes such as hiring that involve interaction with candidates, these representations are particularly likely to come into play. Recruiters construct their opinions of candidates' skills in the course of face-to-face contact, exchanges and, most commonly, interviews. On such occasions, the recruiter often unconsciously compares the person in front of him or her with his or her own image or representation of what people who belong to the profession in question are or do. As François Eymard-Duvernay and Emmanuelle Marchal point out, judgments made in the course of interaction allow for noting individual skills that have not been pre-established and that usually involve representations which, if not unconscious, are seldom made explicit or expressed (Eymard-Duvernay and Marchal, 1997). Recruiters incorporate these representations without necessarily being aware of their potentially discriminatory content. In a study of "testing", ${ }^{8}$ it was observed that for equivalent CV , men's chances of being hired in a high-priced restaurant were better than women's regardless of hirer's or owner's gender; they unconsciously reproduced what they anticipated to be the customers' preference (Neumark et al., 1996). In French academic hiring processes, auditions (brief interviews with pre-selected candidates) are an occasion for

[^5]interaction-based judgments, i.e., judgments founded at least in part on candidate's similarity or correspondence to certain representations. ${ }^{9}$

Hiring committee members' answers to questions such as "What points count for you during the audition?" bring to light the criteria they give precedence to. And those criteria involve representations of the academic profession and specific expectations of candidates seeking to make an academic career. The predominant behavioral norm for the audition, for example, is to be neither "too" nor "not enough": candidates should be neither overly "pretentious" nor insufficiently ambitious; neither overly extroverted nor insufficiently communicative.

> There are two unbearable [candidate] profiles: the Normalien [student in one of France's extremely selective écoles normales supérieures, which train the country's intellectual and educational elite] who's seen it all, heard it all. That guy gets dropped: we'll have no trouble finding someone just as good and more pleasant. . . . [And] the ones who explain that they'll be able to innovate in everything, that no one before them has ever done anything. They're brilliant-but full of themselves.
> (maître de conférences, femme, History-Paris).

Though interviewees claim that no characteristics are more closely associated in their minds with one sex than the other, the concrete examples they cite to illustrate their statements are clearly gender-specific. Examples of candidates who are "not enough" are almost automatically female whereas examples of candidates who are "too much" are almost automatically male.

Recruiters also express expectations of candidates; namely, they want them to have done what they consider the necessary pre-audition work. The following interview excerpt clearly presents the range of behavior a candidate has to cover if he or she wishes to be thought of as adhering to the right norms.

What really differentiates them is how they perform orally [during the audition]. The person has to be able to show clearly how they plan to become integrated into the laboratory. We had a person this year, for example, who real stood out. As far as I'm concerned, this was surely one of the best auditions I've ever heard.

Question: What made it so?
She managed to present things extremely clearly. They don't have much time, but in the 2 months [between being notified that one has been selected for the interview process and the interview date], she managed to assimilate the entire laboratory bibliography and present us a clear plan of how she was going to become integrated into the laboratory. ... She managed to explain to us clearly where she wanted to go, when in fact not everyone understood what she was doing in her field. You have to have great pedagogical qualities to be able to do that.
(professor, man, Biology-Region).

[^6]Here women seem to meet expectations better than men. Some hirers mentioned that women candidates prepared their auditions better than men. But these perceptions, like the judgments mentioned above, can involve either a reality-women candidates are better prepared for the audition-or ideas that the interviewee has internalized about the behavior expected of men and women; for example, girls are "by nature" more conscientious than boys.

Perhaps boys are more relaxed, and they are definitely more sure of themselves. Girls look to me more stressed. But once again, it depends. I don't think you can make any general distinction. Some boys will have prepared their audition well, others won't. . . There are perhaps more boys than girls who haven't prepared it at all, but that's just an impression, I don't know if it's right.
(maître de conférences, woman, Biology-Region).
Moreover, when it comes to representations, male images of the teacher-researcher function seem to predominate. Having a high voice, being small, lacking self-assurance are a priori interpreted as handicaps for teaching. Once again, though both men and women interviewees claim that these characteristics can be found equally in both sexes, all the examples they cite concern women candidates.

During the last hiring contest, there was a small woman, she had a very good application but she spoke poorly, stammered, was tense. ... We felt bad for her! We said, "The poor thing, how is she going to manage in an auditorium?" It couldn't work. It would have been the same thing if it had been a man.
(maître de conférences, woman, Management studies-Paris).
Lastly, there are gender-based representations or assumptions that concern other representations than those linked to practicing the profession itself. Some recruiters are more likely to doubt women's real intention to make a geographical move; they consider it "normal" for women to follow their husbands.

Being able to live close to one's family, yes, really... Of course we ask women these questions, since we ask them what their partner does. If the partner is in Paris, we know that. . . Yes, you're right, we are more likely to ask that question. It makes sense to me to do so.

Question: Do you also ask men?
Yes, we ask men, but it's true that we're too attached to the idea that if the man chooses the position, it would have a more determining effect. It's the woman who's going to follow... A young woman who says, "My husband's in Paris, he has to stay there". . . she's not going to say it like that, but we're going to wonder. . .
(maître de conférences, woman, Management studies-Region).
We see, then, that gender-specific representations come into play in auditions, and that judgments in that situation get constructed on the basis of dominant ideas about the teacher-researcher profession, ideas that often valorise qualities traditionally associated with men. While recruiters often express doubts about the auditions (which, it should be recalled, are very short in France) ${ }^{10}$

[^7]and while they are conscious of the fact that auditions leave room for necessarily subjective impressions, presuppositions, prejudice, they nonetheless constitute an important moment in the hiring process, offering as they do an opportunity for confirming favorable evaluation of the written application or, on the contrary, significantly modifying that first favorable evaluation. While a successful audition is not enough to ensure one will be hired, a poor audition (i.e., when the candidate does not meet the expectations or correspond to the representations mentioned above) is enough to get oneself eliminated.

University auditions are therefore not impermeable to the biases that have already been widely identified in company hiring interviews. These biases can be ranked in three categories (Aubret et al., 1991):

- the primacy bias, which consists in judging candidates on the basis of the first impression they make (shy, for example) regardless of supplementary information gathered during the interview;
- the "halo effect", which designates situations where one feature tends to neutralize or conceal all others. ${ }^{11}$ The cognitive qualities of an extremely polite and courteous candidate will be judged positively, for example;
- the "fundamental error", ${ }^{12}$ referring to the widespread tendency to attribute behavior to personality traits rather than features of context. If a candidate seems anxious, for example, this is understood to reveal his or her inability to handle a group, whereas he or she may simply be nervous about not making the train to his or her next audition.

Judgments formulated in hiring processes can therefore be biased without there being any willful or conscious discriminatory intent.

How judgments get formulated in interaction situations is thus a matter of significant importance; above all, it is not insensitive to candidate gender. As statistical series studies of hiring in large American symphonic orchestras have shown, the practice of blind auditions brings about significant increases in the number of women musicians hired (Goldin and Rouse, 2000). This kind of arrangement does not seem readily transposable to academic hiring processes, and it might even have a negative effect on hiring effectiveness, ${ }^{13}$ but it does reveal the impact of the interaction-based factors handled in this section.

### 1.3. Discrepancies between the spirit and the letter

The third potentially discriminatory mechanism that operates in academic hiring pertains to the fact that the rules governing those processes are incomplete, despite the fact that hiring committees in France are framed by official texts governing how they function, texts that define representation of the different teacher-researcher categories, procedures for electing and appointing members, the consecutive stages of the procedure (announcement of positions, review of candidate applications, audition, ranking top candidates-by voting if necessary)—clearly the main points of procedure

[^8]have all been codified. And in this, academic hiring differs significantly from company hiring: firms seldom have such clearly formalized procedures at their disposal.

Yet even in the academic context, the degree of formalization is insufficient. Our study confirms, if ever there were a need to, that the same rules are still applied in different ways (Crozier and Friedberg, 1977; Reynaud, 1988). Actors still have enough maneuvering room to "ensure" that the rules do not suffice to guarantee discrimination-free processes.

For example, the requirement that the committee produce a written application review which the candidate can then consult may seem an important move in the direction of objectifying the reasons for the choice made (and thus of preventing gender bias: gender-based discrimination is prohibited by law, so it cannot figure in any written report). However, candidate application reviews do not play their guarantor role very effectively. There are no rules governing the form of the review, no specifications as to its length or content-and no requirements on criteria to be taken into account; this state of affairs reduces the ability of these reviews to guarantee candidate equality. Indeed, the fact that the candidates can read their application reviews causes reviewers to "euphemize" their opinion of the candidate or use standard formulas. In other words, precisely because the reviews can be read by the candidates themselves, the terms used in them are very likely to be watered down and thus to conceal the real reasons the given application was not selected.

When things won't do, we don't say so, because the review is public. We write "doesn't fit the position". In fact, all these people were previously declared qualified by the Conseil national des universités (CNU): national-level board organized into disciplinary "sections", each in charge of "qualifying" candidates as "fit to apply" for an academic position. We can't tell them they're not good. . . . So we put "doesn't fit the position".
(maître de conférences, woman, Management studies-Paris).
Choice of application reviewers is another example. Though there must be two reviewers for each application, committees are free to establish local conventions (or not); for example, to pair a professor and a maître de conférences as reviewers, or not to ask someone too close or too strongly opposed to the candidate in question to review the application, etc. But customs vary and that leaves room for varied practices. Who gets assigned to review an application is no innocent matter, and it often involves potential discrimination.

Distributing applications to reviewers constitutes an enormous power. You know the people, you know that if you give an application to so-and-so, he'll knock it down, whereas the next guy will think it's better.
(maître de conférences, man, Management studies-Region).
The official texts covering academic hiring are thus incomplete, and the way they are applied-similarly to legal rules-involves "a continual process of secondary normative creation" (Lascoumes, 1990: 62). Specifically, it is based on application norms for making appointed practices-such as candidate application review-and negotiation norms for defining what is acceptable-regarding choice of reviewers, for example-operative (Lascoumes, 1990).

In addition to the latitude that actors have in applying rules, there are other phenomena, this time uncontrolled, that may also weaken the ability of rules to frame decision-making. It may happen, for example, that the committee cannot assemble all its members, for any of several reasons. Outside committee members do not always attend meetings; reviewers of certain applications may be absent (for example, when they are substitutes). In such cases, the committee balance stipulated by the official texts may change. The presence or absence of one member rather than
another, a member open to one type of candidate rather than another, can work in favor or against hiring this or that candidate.

Moreover, absences can facilitate collusion between the relatively small number of actors left, thereby limiting occasions for disagreement or controversy and increasing the danger of discrimination. In other words, the "variable geometry" of the committee is likely to modify power relations on it and may favor discrimination or at least prevent (or amplify) the use of criteria more (or less) favorable to a given population of candidates-whereas the situation appears neutral and to be operating in compliance with the rules.

Adapting shared, official rules to each local situation is likely to induce discrimination: a position profile, a statement of the qualities the committee is looking for may be elaborated in such a way as to favor a candidate who has already been targeted or in a way that works to eliminate a woman.

The position profile is defined in accordance with the vacancy; we seldom create new openings. We hire when someone leaves. The profile is defined according to the university's needs. The professor who holds the XX chair (and colleagues) decides on the field; the decision is made in connection with course needs. When someone leaves, we hire about the same; there are seldom any changes.
(professor, woman, History-Paris).
Though academic hiring procedures are relatively well-defined and may therefore work to contain conspicuously discriminatory practices, they still cannot perfectly guarantee equal treatment, namely of men and women, though such treatment is often considered an obvious characteristic of civil-service hiring.

## 2. How collegial decision-making works to reduce discrimination

Until this point, we have been concerned with the gender bias that can be operative in academic hiring, and have indicated points it has in common with company hiring procedures. We have also noted that such bias is primarily a matter of indirect discrimination.

We now adopt a different perspective to show that certain specificities of academic hiring procedures, namely committee decision-making modes, allow for better control of some bias, under conditions that will be specified as we go along. The point here, what differentiates academic and company hiring processes, is not so much number of persons implicated in decision-making as the fact that in universities decisions are made by a group of persons who are all simultaneously present and have to reach a shared agreement. In companies, hiring processes may also involve a high number of actors, but the final decision results from a series of selections that occur over a set of stages that do not necessarily involve the same actors. The collegial decision-making characteristic of universities carries with it a number of safeguards against certain discriminatory practices; we now identify their inner workings. We will see that these practices are all of a certain type-namely direct discrimination.

### 2.1. Actor diversity, judgment diversity

One factor that reduces gender bias on hiring committees is that there are women on them. Interviewees repeatedly point up the influence of women's presence and participation. This is felt in several ways. First of all, on the committee itself: women's presence has the effect of keeping remarks highly civilized. Interviewees say either that men are careful about the arguments they
present because women are there, or else that women and in some cases men on the committee intervene when sexist remarks or gender-related arguments are used.

At the beginning, there were comments in committee about girls' figures, the way they dressed. I put an end to that, and they never did it again. There is always the risk of being tougher on girls, in any contest.
(maître de conférences, woman, History-Paris).
Clearly, number of women present on the committee, their personality and their degree of sensitivity to gender-targeted remarks, together with how long they have been participating in committees, have an effect. And though this point requires us to move away momentarily from maître de conférences hiring, it is interesting to mention the case of internal and external agrégation juries we have studied in the discipline of management studies, where passing this exam is the main way of attaining professorship; they offer a good illustration of these phenomena. Women only began serving on these juries very recently, and there are always very few of them (one woman out of the seven jury members in the cases we studied). Only in connection with these juries did interviewees mention recent cases of sexist remarks. ${ }^{14}$

Technically, you can. . . tell [a female candidate] there are ways of modulating her voice, but in my opinion this point should not be raised in an agrégation jury. If there had been another woman on the jury, I think the jury member in question would have been more hesitant to make such a remark. He got caught three times: the voice, the make-up, the skirt. He wouldn't have done that. He would have been called sharply to order. In this case, I was the one to intervene.
(member of the internal agrégation jury, man, management studies).
The presence of women can also have an influence on female candidates. Once again, this was mentioned explicitly for agrégation juries; as explained, the great majority of their members tend to be men. One of the few women jury members told us she was surprised when female candidates told her that her presence had been a help to them.

And in connection with what we were saying at the beginning, the fact that there's a woman-I was really struck by this-a great majority of women came to see me, saying "I just wanted to thank you, your mere presence, for me, was really important, it really helped me". I was very surprised to hear that. The idea that the mere presence of a woman could help women is something that had never crossed my mind. I think it was important for the women, who were often quite terrified, but also for the men.
(member of the agrégation jury, female, management studies).
The influence of women's presence on committees has been demonstrated for other circumstances. Gerald Gryski et al. (1986) showed that the presence of at least one woman on the bench of an American state high court significantly limited the risk that judicial decisions in that court would be affected by gender discrimination. Similarly, Alexandra Kalev et al. (2006) have shown that companies that have set up "diversity committees" that include members of minority groups are more likely to hire members of those minorities.

These observations on the impact of hiring committee composition are congruent with those of Christine Musselin (2005: ch. 4; forthcoming in English) on academic hiring processes in

[^9]Germany, France and the United States. She found that committee members were very likely to hire colleagues "in their own image". The fact that these committees are often monodisciplinary, made up of persons who know each other well and generally belong to the same "chapel" increases the homogeneity of their decisions. Results are quite different when a more diverse group of peers are doing the evaluation. Studying committees in charge of selecting grant projects to be funded by American research agencies, Michèle Lamont and her colleagues (Guetzkow et al., 2002; Guetzkow et al., 2004; Lamont et al., 2006) have shown that these committees-pluridisciplinary and therefore diverse; also made up of members who do not know each very well if at all-construct and use transdisciplinary "bridges" between members' distinct epistemological codes and produce more highly diversified results.

The idea that committee composition influences committee choices and results, and therefore that greater composition diversity will bring about greater diversity in the decisions made, is at the basis of thinking in companies around the diversity theme. Diversity is increasingly thought of as a desirable attribute for a company (this is the notion of "business case" brought to light in the literature; see, for example, Cox, 1994), and it justifies changing the composition of firms so that they will more closely resemble that of the society they are part of. One of the first actions advocated in this connection concerns not only "minority" hiring (ethnic or racial minorities) but also hiring of women and persons with different initial training or job experience (Cassell, 1996).

Though they concern quite another area, work on hybrid public policy action involves the same kind of reasoning. The idea is not to leave decision-making exclusively up to authorized members (official experts, administration representatives, etc.) but to construct deliberation spaces open to representatives of associations and advocacy groups as well as to all actors concerned by the given policy. This is presented by authors such as Michel Callon et al. (2001) as a means not only of counterbalancing the power of actors likely to confiscate power by closing off access to their decision-making bodies, but also to include concerns, criteria and types of expert assessment in the discussion that until now have not been expressed or represented, so that can now be incorporated into the choices made.

We see how more diversified committee composition can favor the expression of new priorities and perspectives, get them taken into account, and help change dominant representations. ${ }^{15}$ But this is no panacea. Several research studies have shown the limitations of open arrangements of this sort, and the frequent re-emergence of power relations which favor the dominant groups or those best equipped to control how the deliberations develop or pan out (see, among others, Simard, 2003), even in bodies explicitly conceived to prevent such power-taking. ${ }^{16}$ In just the same way, we can reasonably assume that there are still too few women on hiring committees, or else they are not sufficiently recognized (they are likely than to hold non-professor positions) to be able to thwart possible collusion moves or reverse existing power relations.

Nonetheless, discriminatory practices are more likely to be denounced, sexist or gendertargeted remarks are more likely to be banished, and different types of criteria are more likely to

[^10]be taken into account if the committee is not a kind of monolith. This is precisely what we have observed for academic hiring committees.

### 2.2. Publicity of debates and decision-making

One reason member diversity increases result diversity is that committee decision-making leads members to oversee their own remarks, behavior and preferences in such a way as to take into account those of the other members. The presence of actors whom one knows or believes have the opposite opinion from one's own leads to modifying what one says in front of them.

In contrast to individual decision-making, which is private in nature (or decision-making by a small, homogeneous group, which is nearly so), collective decisions are made in front of others, and this publicity affects how actors behave. ${ }^{17}$

As Jon Elster has written (1998) on democratic deliberating assemblies (and those two adjectives apply to hiring committee functioning), expounding an argument "constrain(s participants) to be formally impartial"; they cannot justify their positions by saying "we should do X because that is what I want" or "P is true because that is what I believe" (Elster, 1998: 101). It is often difficult, even counter-productive, to openly defend one's own interests to a group. For James Coleman (1990, quoted by Elster), this has to do with the social norm holding that one can only justify a position by referring to the benefits it offers to all. But Elster argues that it is in the individual's interest not to expose his own interest. The presence of others and of divergent preferences or priorities leads each participant, either strategically or unconsciously, to refrain from directly revealing what he or she would prefer and instead to present things in such a way that they are not in contradiction with the objectives shared by the group as a whole. To take an imaginary example, a recruiter opposed to hiring women would not put his position in those terms but would instead recall in his remarks to the group that the position requires staying late at the office and being entirely available at all times, implying that this or that woman candidate with young children could not meet those requirements and therefore does not fit the job.

Hiring committees offer an excellent opportunity to exercise this kind of control over what one says, and to behave in a way that integrates the others and is careful not to shock or elicit hostile reactions. Moreover, this is often the main function that "outside" members say they serve on hiring committees. ${ }^{18}$ In an earlier study, Marc Blangy and Christine Musselin observed that these members never thought of their role as working to balance the decision-making in favor of one or another subgroup or as intervening directly in making choices, but rather as ensuring that committee practices remained ethical (Blangy and Musselin, 1996). In sum, the outside presence and external view work to contain deviant behavior.

I think this committee functions fairly well because reviewers know there are often other people there who are already familiar with the application. So there are people from the outside watching, and if the reviewer tries to sell us a story, there's someone who says "Wait a second, you'd have to explain. .." or else there's someone who says, "Hold on, can you explain that? I'm not in your discipline. . . I'd like some precise explanations", so there's a discussion. (professor, woman, Biology-Paris).

[^11]Furthermore, we observe that committees are usually careful to ensure the various stages leading up to ranking candidates do not raise any suspicions. Hiring committee chairs often try to establish arrangements that make everything that is done-and how it is done-visible. In one of the management studies committees studied, applications were not assigned to reviewers by the committee bureau until applications that were not to be granted any further examination had been clearly identified. ${ }^{19}$ At the following committee meeting, the chair handed out the lists of assigned reviewers and of candidates who had been culled. As an outside professor pointed out, this makes clearly visible what has been done: if members think there is something inappropriate about eliminating such-and-such application or in the way reviewers have been assigned to the other applications, they can speak up. Conversely, the fact that members have this opportunity to contest decisions affects committee bureau practices: since the committee bureau knows its decisions will be on view, it is careful not to proceed in a way that might raise suspicion, thereby steering clear of controversy and preserving its own legitimacy.

> I didn't see any anomalies, distortions, or any people eliminated from the start for no good reason. What's more, this preliminary work is presented at the committee meeting and submitted for the committee's review. One is always free to say, "You've eliminated X, but it seems to me that. . ." It's perfectly public.
> (professor, man, outside member, Management studies-Paris).

Lastly, in addition to publicity internal to the committee, which helps limit more or less open discriminatory practices, committee work results are also made public. The final candidate ranking is published and therefore becomes known to all department colleagues; they will not hesitate to judge the committee's work. Second, given the relatively small size of academic discipline communities in France (slightly over 3000 faculty in biology, around 1500 in management studies, and slightly under 2000 in history), "odd" or "suspect" decisions will quickly damage the reputation of the department in question, especially if it makes several such decisions. ${ }^{20}$

Making decision-making practices visible in this way, a practice inherent in collective committee decision-making, therefore potentially limits gender bias by making it more difficult to practice openly. In an article on the situation of British women academics after different measures had been put in place to improve the hiring and promotion of women, Nick Forster points out the importance of "publicity" and cites the conclusions of the Association of University Teachers (AUT): "The combination of secrecy, subjectivity and amateurism, which surrounds too many promotion procedures, is antithetical to the objective of equal opportunity" (AUT, 1992: 13; Forster, 2001).

As we saw with committee composition diversity, there are limits to the positive effects of keeping committee debate and results public. First, doing so cannot counter all deviant or discriminatory practices because pre-established arrangements and discreet alliances may escape members' oversight. Second, a committee may be more or less sensitive-and more or less open-to the deviant practice of discrimination than to other deviant practices. Moreover, as in

[^12]committee composition, unfavorable power balances or majority collusions may make decisionmakers indifferent to any contesting of their decisions and even to the effects of acquiring a bad reputation. Lastly, practice visibility may not always be verified or overseen ${ }^{21}$ and it may not always be imposed. Often it depends on the committee chair's attitude toward visibility and/or the degree to which members care about these issues. But though the publicity of debates and results does not offer any perfect guarantee, it does allow for controlling gender bias to some degree.

### 2.3. Formalizing selection criteria to facilitate and improve collective decision-making

The third feature of academic hiring committees that is likely to limit the risk of discrimination concerns formalization of the criteria used in decision-making. One of the difficulties inherent in collective decision-making is the varying amounts of information actors have in a situation where the work is divided up among a small number of persons. The first component of the decision to be made-namely, choosing which candidates to call in for an audition-is determined essentially on the basis of application reviews. Only the reviewers-two persons for each application-have complete relevant information because they are often the only ones to have examined the given application.

To facilitate information acquisition and sharing, several committees, particularly in biology and management studies, have set up application examination and evaluation grids that make it possible to lay out all information available on each candidate and to share this information with the entire group. The two biology hiring committees studied work this way, with "standardized" information sheets, identical for all candidates and positions. The sheets include what are considered essential points in this discipline, all of them highly normed: applicant's pre-thesis itinerary, thesis subject and what institution thesis was written and defended at, articles applicant has published on the basis of the thesis (with the rank of the author compared to the number of authors), whether the applicant has (had) a post-doc position (geographic mobility or researchfocus flexibility), articles published on the basis of post-doc studies, and teaching experience. In management studies, too, the information in candidates' application files is formalized for communication to the group.

We have a grid. It's the same for all management studies university departments. There's a section for personal information: name, age, address. . . . The address is important because you can be seriously disappointed by the investment hirees make in the workplace. ... Then there's a "training" section: degrees obtained, study programs... This reproduces CNU forms... Then we classify the thesis: title, year, supervisor, jury and distinctions. Then come publications, and there we identify those published in journals with a reading committee. We look at conference papers and whether or not they have been published. Then

[^13]there's a "pedagogy" section: what courses? Then we indicate if the persons got involved in administrative tasks.
(maître de conférences, woman, management studies-Paris).
These practices also have an impact on how equitably candidates are treated, specifically in terms of discrimination. ${ }^{22}$ They make it possible to avoid making a comprehensive judgment of the candidate, of the "good candidate/bad candidate" sort. Blanket judgments like this have been noted and denounced by certain authors for their probable arbitrariness (Enriquez, 1976, for example). Wherever application examination grids have been put in place, application reviewers justify their proposal to select a given candidate for an audition (or not), literally "laying out" the features they have based their decision on and opening the door to challenges if their arguments do not dovetail with the information laid out. A grid also favors sharing information among all committee members: reviewers are no longer the only ones to "know" this or that candidate. It thus becomes more difficult to dissimulate or overinterpret certain pieces of information. For example, a statement such as "This candidate has not published enough" can be checked by counting the exact number of publications and checking what kind of journals they were published in. Lastly, measuring the criteria taken into account ${ }^{23}$ facilitates comparison of candidates and allows for flushing out false impressions. Each application is passed through the same filter, thereby limiting the danger of hasty or arbitrary decisions.

The degree to which such practices are used varies by discipline; they are more readily encountered in biology and management studies than history. This helps further explain the fact that though women are more likely than men to apply for qualification by the CNU in history, they are less likely to be qualified or hired (Appendix 1, Table 2). Wherever indicators have not been objectified, direct and indirect discrimination are more likely to occur.

While practices for laying out candidate application information and possible use of indicators have the effect of making hiring committee functioning more equitable, they can only be put into place and they can only work effectively under certain conditions. Using figures to represent the criteria chosen does not in itself resolve the problem of criteria neutrality mentioned at the opening of this article. If we settle for counting articles published in English, for example, the risk of indirect discrimination reappears. In order for formalization to be effective, we have to be careful to choose criteria that are in themselves non-discriminatory. Moreover, the choice of indicators used to quantify certain criteria-number of publications, for example-is not always bias-free: scientometric measurement may lead committees to give priority to quantity to the detriment of quality.

While formalization does improve the process in the sense that it improves equity, it can also represent a danger if it becomes excessive. In that case, "better is worse than good". If we try to formalize everything, we run the risk of producing evaluation systems that are so unwieldy

[^14]that actors will want to circumvent them. Such risks frequently arise in evaluation. Skill lists or referentials, for example, tools frequently used in companies today, create the same kind of difficulty. To limit the effects linked to "index" language, there is a great temptation to be extremely precise about the meaning of this or that notion. But this leads to describing the skills required for each job with so much precision that the referentials become too long and detailed to be used easily in evaluation situations (Oiry and Sulzer, 2002).

Furthermore, formalization presupposes that recruiters have reached a minimum of agreement on the criteria to be included in application evaluation grids. Should articles alone be counted or also books? How should textbooks or introductory works be handled? What administrative activities should be recognized? These are all points on which academics' opinions may diverge. Above all, they are points that can be renegotiated from one hiring process to the next according to the needs of the moment.

Lastly, the fact that a relatively high number of criteria exist does not always guarantee that they are really used. A study by Zedeck and Cascio (1984) sought to count the criteria that interviewers use to evaluate a candidate during a job interview. The results show that evaluators ( 10 of them in this study) only use a small number of the criteria available to them ( $70 \%$ of hirers used only three to five criteria of the 19 available). Moreover, which (few) criteria are chosen is determined not by the profile of the position to be filled or even by the characteristics of each candidate but rather by interviewer's personal preference. Evaluators have a propensity to focus on certain criteria they deem relevant, regardless of the specific characteristics of each situation.

These qualifications show that criteria formalization may help contain eventual discriminatory practices, and that when it does it works to support or prop up collective decision-making.

## 3. Conclusion

Contrary to studies of discrimination that identify the moments in which it arises but seldom consider the mechanisms that produce it, we have sought to analyze the discriminatory potential of the different hiring process phases, basing our analysis on the example of academic recruitment. French hiring committees lend themselves particularly well to this type of study: we have seen that national statistics on hiring of junior professors in France show virtual parity for men and women hired. Hiring decision-making in universities thus does not in itself produce gender discrimination.

This observation is important for understanding and studying the mechanisms that differentiate men's and women's careers in French universities. We reached the same conclusion on the functioning of committees hiring senior professors (Carrère et al., 2006). This is not surprising in itself, because we were studying approximately the same procedures, enacted by the same actors or a segment thereof (professors). ${ }^{24}$ In other words, the gender discrimination observed in higher education statistics is only marginally imputable to hiring committees. This result calls for reorienting research study of men's and women's academic careers: the low percentage of women professors can only be clarified by examining mechanisms other than gender bias in hiring. The period between first academic position and average age for attaining professor status

[^15]in a given discipline seems much more determinant for degree of career advancement opportunity. The place in which an academic goes through that period, the activity choices of the young maître de conférences (and whether or not they were made under constraint), her or his personal preferences, family obligations and how he or she meets them, etc. have a strong influence on chances of obtaining a professor position. These considerations also affect desire to obtain that status and whether the person will be able to meet the necessary conditions. The fact is that in France women are not in as good a position as men to apply for professorship status, and they are less likely to wish to do so. It is therefore by studying how men's and women's individual trajectories are constructed during this first career phase that we will be able to better understand the discrepancies observed between the two sexes when it comes to advancing from maitre de conférences to professor status.

But our results extend beyond academic careers. Our study of academic hiring committees has allowed for distinguishing the features most likely to produce gender bias and isolating the factors that allow for reducing such bias under certain conditions. In the first section, we showed that the selection criteria chosen, the dominant representations that rise to the surface when judgments are formed in a situation of interaction with the candidate, and possible games around rules are permeable to the risk of indirect discrimination. What characterizes this risk is that it operates without recruiters' awareness: the selection criteria chosen seem equitable; any representations of what an academic is have been fully internalized; and rule-related effects are not immediately visible. In other words, the assumptions operative in the selection act (Marchal and Rieucau, 2004), reflecting as they do shared norms of the teacher-researcher community, are not as neutral as they may appear.

In our second section, we identified the mechanisms that make it possible to control gender bias to some degree-namely, committee composition diversity, publicity of debates, and formalizing application information. These mechanisms are not of the same order as those handled in the preceding section; they refer to discrimination that can be designated open or direct. We have therefore shown that while in academic hiring, the risk of indirect discrimination persists and is not very well controlled, direct discrimination can be controlled-partially and under certain conditions.

The possibility of controlling discrimination therefore varies by type of discrimination. Most importantly, direct and indirect discrimination do not operate through the same channels. Indirect discrimination requires reflecting on practices and making an effort to expose the implicitly discriminatory nature of apparently objective criteria or to grasp the dominant representations at work in more or less conscious expectations about the respective roles and behavior of men and women. It presupposes calling into question and modifying the equity precepts that have prevailed until now. This in turn presupposes bringing about changes in behavior and attitudes-an undertaking that not only is very difficult in general but that also depends on using methods (training, feedback and others) that Kalev et al. (2006) have found to be relatively ineffective in promoting diversity. Direct discrimination, on the other hand, can be reduced by equipping the hiring committee with decision-making tools (an application evaluation grid, explicit selection criteria, etc.) or arrangements (for publicizing procedure, diversifying committee composition), etc. According to Kalev et al. (2006), such actions have a stronger impact on structures.

Nonetheless, how well direct discrimination is controlled or prevented is related to the type of hiring being done; specifically, to the nature of the skills sought or valued. Using a typology proposed by Eymard-Duvernay and Marchal (1997), we can differentiate between two major modes of defining abilities or skills sought by hirers: pre-established (the skills required for the
job in question have been specified in advance) ; "negotiated" and specified as the process itself unfolds.

We can hypothesize that it is easier to protect "market" and "institution" types of hiring processes (which, in the authors' schema, correspond to the first mode) from the risk of direct discrimination, whereas "network" and "interaction" types, related to the second mode, are much more exposed to such risk. The more fully pre-established the skills being sought are, the easier it is to use the tools that combat direct discrimination. On the contrary, when the skills required are specified during the different negotiation phases, it is not so easy to control discrimination risk. However, every hiring process, whether academic or not, simultaneously uses these two types of skill assessment in varying proportions. Combating direct discrimination would thus seem to involve attributing greater relative weight to pre-established skills and abilities than to negotiated ones.

Lastly, it is important to relativize both excessive criticism and excessive praise of collective or collegial operation. As seen, making decisions collectively as a committee is not enough to preclude all discrimination: indirect discrimination persists, and arrangements that are supposed to reduce direct discrimination only function effectively under certain conditions. Nonetheless, collective decision-making does have certain objective particularities that enable it to circumvent, or at least to reduce, discriminatory bias more effectively than sequential decision-making by individual actors. By strengthening these particularities-namely by ensuring committee composition diversity, accentuating moments in which the committee's work is made visible, and encouraging greater formalization of the information to be examined and assessed-some of the bias (gender and other varieties) that is likely to affect hiring decisions could be more actively stamped out. These proposals are fully consistent with Joan Acker's conclusions (Acker, 2006). She insists on the resistance of "inequality regimes" in all organizations, despite the many attempts to weaken them (laws, committees, many other sorts of arrangements). But she also makes the point that now that inequalities have become more visible and less legitimate, things are beginning to change.

## Appendix A.

Quantitative data on hiring and CNU "qualification" in three disciplines (data based on information available at http://www.education.gouv.fr/personnel/enseignant_chercheur/statistiques.htm (Tables 1-3).

Table 1
Distribution by gender of university teacher-researchers in three disciplines, 2003-2006.

| Maîtres de conférences | Biology (64-69) ${ }^{\text {a }}$ |  |  | Management studies (06) ${ }^{\text {a }}$ |  |  | History ( 21,22$)^{\text {a }}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Men | Women | Women/ total (\%) | Men | Women | Women/ total (\%) | Men | Women | Women/ total (\%) |
| 2003 | 81 | 89 | 52 | 41 | 35 | 46 | 33 | 27 | 45 |
| 2004 | 92 | 106 | 54 | 39 | 39 | 50 | 37 | 33 | 47 |
| 2005 | 98 | 80 | 45 | 31 | 37 | 54.4 | 51 | 30 | 37 |
| 2006 (1 ${ }^{\text {st }}$ session) | 72 | 95 | 57 | 44 | 50 | 53 | 46 | 34 | 42.5 |

[^16]Table 2
Distribution by gender of candidates for CNU qualification, "qualified" candidates, and hirees in three disciplines in 2006, and change in men/women ratios.

| Maître de conférences qualifications 2006 | Biology (64-69) ${ }^{\text {a }}$ |  |  | Management studies (06) ${ }^{\text {a }}$ |  |  | History (21, 22) ${ }^{\text {a }}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Men | Women | Ratio <br> M/W | Men | Women | Ratio <br> M/W | Men | Women | Ratio <br> M/W |
| Candidates examined by the CNU | 1260 | 1953 | 1.55 | 134 | 139 | 1.04 | 292 | 304 | 1.04 |
| Candidates qualified | 708 | 1064 | 1.50 | 55 | 63 | 1.15 | 187 | 167 | 0.89 |
| Hired | 72 | 95 | 1.32 | 44 | 50 | 1.14 | 46 | 34 | 0.74 |

Figures in bold point at situations when the percentage of women among recruited candidates is higher that the percentage of women among applying candidates.
${ }^{\text {a }}$ Numbers correspond to Conseil national des universités (CNU) discipline sections studied.

Table 3
CNU qualification and hiring success rates by gender in three disciplines, 2006.

| Maître de conférences qualifications, 2006 | Biology (64-69) ${ }^{\text {a }}$ |  | Management studies (06) ${ }^{\text {a }}$ |  | History ( 21,22$)^{\text {a }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Men (\%) | Women (\%) | Men (\%) | Women (\%) | Men (\%) | Women (\%) |
| Qualified/examined | 56 | 54 | 41 | 45 | 64 | 55 |
| Hired/examined | 6 | 5 | 33 | 36 | 16 | 11 |
| Hired/qualified | 10 | 9 | 80 | 79 | 25 | 20 |

${ }^{\text {a }}$ Numbers correspond to Conseil national des universités (CNU) discipline sections studied.

## Appendix B.

(Table 4).

Table 4
Presence of women by academic status in three disciplines, 2002.

|  | Biology $(64-69)^{\mathrm{a}}$ | Management studies $(06)^{\mathrm{a}}$ | History $(21,22)^{\mathrm{a}}$ |
| :--- | :--- | :--- | :--- |
| \% of women maîtres de conférences | 50 | 42 | 45 |
| \% of women professeurs | 17 | 15 | 26 |
| \% of women in the discipline | 41 | 36 | 38 |

${ }^{\text {a }}$ Numbers correspond to Conseil national des universités (CNU) discipline sections studied.

## Appendix C.

Interview procedure (components).
The main themes to be brought up during the interview:

- the different hiring process phases, brought up systematically in the order specified by the texts: their official characteristics (the point being to check what committee members know of them, how they may interpret them) and how they actually function (description of phases on the basis of most recent hiring processes interviewees have participated in);
- existing interactions between different types of committee members (elected or outside members, maîtres de conférences or professors, men or women);
- gender-linked specificities: attitudes toward candidates (questions asked, criteria used).


## References

Acker, J., 2006. Inequality regimes. Gender, class, and race in organizations. Gender and Society 20 (4), 441-464.
Adler, N., Izraeli, D. (Eds.), 1994. Competitive Frontiers,Women Managers in a Global Economy. Blackwell, Cambridge, Mass.
Arcimoles, M. d', Borraz, O., Salomon, D., 2000. Un risque socialement inacceptable ? La crispation autour de l'utilisation en agriculture des boues de stations d'épuration urbaines. Rapport final pour le programme Risques Collectifs et Situations de crise du CNRS, Paris.
Association of University Teachers (AUT), 1992. Sex discrimination in universities. Association of University Teachers, London.
Aubret, J., Gilbert, P., Pigeyre, F., 1991. Savoir et pouvoir. Les compétences en questions. PUF, Paris.
Beaufaÿs, S., Krais, B., 2005. Femmes dans les carrières scientifiques en Allemagne. Travail, Genre et Sociétés 14, 49-68.
Benamouzig, D., 2005. La santé au miroir de l'économie. In: Une histoire de l'économie de la santé en France. PUF, Paris.
Blangy, M., Musselin, C., 1996. Étude de cinq commissions de spécialistes en histoire. Rapport d'enquête. CSO, Paris.
Callon, M., Lascoumes, P., Barthe, Y., 2001. Agir dans un monde incertain : essai sur la démocratie technique. Seuil, Paris.
Calvès, G., 2004. La discrimination positive. PUF, Paris.
Carrère, M., Louvel, S., Mangematin, V., Musselin, C., Pigeyre, F., Sabatier, et al., 2006. Les carrières des chercheurs de l'INRA. Analyses et interprétations. Rapport de recherche, Paris et Grenoble.
Cassell, C., 1996. A fatal attraction? Strategic HRM and the business case for women's progression at work. Personnel Review 5 (25), 51-66.
Coleman, J.S., 1990. Foundations of Social Theory. Belknap Press of Harvard University Press, Cambridge, Mass.
Cox, T., 1994. Cultural Diversity in Organizations. In: Theory, Research and Practice. Berret-Koehler, San Francisco.
Crance, M., 2003. La place des femmes au CNRS aujourd'hui : quelques chiffres. Rapport UNIPS/DEP du CNRS.
Crozier, M., Friedberg, E., 1977. L'acteur et le système. Seuil, Paris.
Dobbin, F., Sutton, J.R., Meyer, J.W., Scott, R., 1993. Equal opportunity law and the construction of internal labor markets. American Journal of Sociology 99 (2), 396-427.
Elster, J., 1998. Deliberation and constitution making. In: Elster, J. (Ed.), Deliberative Democracy. Cambridge University Press, Cambridge.
Enriquez, E., 1976. Évaluation des hommes et structures d'organisation des entreprises. Connexions 79, 79-101.
Eymard-Duvernay, F., Marchal, E., 1997. Façons de recruter. Le jugement des compétences sur le marché du travail. CEE-Éditions Metailié.
Forster, N., 2001. A case study of women academics' views on equal opportunities. Career prospects and work-family conflicts in a UK university. Career Development International 6 (1), 28-38.
Gerbod, P., 1965. La condition universitaire en France au XIX ${ }^{\text {e }}$ siècle. PUF, Paris.
Goldin, C., Rouse, C., 2000. Orchestrating impartiality: the effect of "blind" auditions on female musicians. American Economic Review 90 (4), 715-741.
Greenwald, A.G., Banaji, M.R., 1995. Implicit social cognition, attitudes, self-esteem, and stereotypes. Psychological Review 102 (1), 4-27.
Gryski, G., Main, E.C., Dixon, W.J., 1986. Models of state high court decision making in sex discrimination cases. Journal of Politics 48 (1), 143-155.
Guetzkow, J., Lamont, M., Fournier, M., Mallard, G., Bernier, R., 2002. Evaluating Creative Minds: The Assessment of Originality in Peer Review. Association internationale de sociologie, Brisbane [Contribution présentée au symposium «Creativity». Association internationale de sociologie, Brisbane].
Guetzkow, J., Lamont, M., Mallard, G., 2004. What is originality in the social sciences and the humanities. American Sociological Review 69 (2), 190-212.
Kalev, A., Dobbin, F., Kelly, E., 2006. Best practices or best guesses? Assessing the efficacy of corporate affirmative action and diversity policies. American Sociological review 71, 589-617.
Kanter, R.M., 1977. Men and Women in the Corporation. Basic Books. Harper Collins, New York.

Lamont, M., Mallard, G., Guetzkow, J., 2006. Beyond blind faith: overcoming the obstacles to interdisciplinary evaluation. Research Evaluation 15 (1), 43-57.
Lascoumes, P., 1990. Normes juridiques et mise en œuvre des politiques publiques. L'année Sociologique 40, 43-71.
Laufer, J., Pigeyre, F., 2000. La mobilité comme enjeu sexué dans les entreprises. MAGE, document de travail, et pourtant elles bougent. IRESCO-CNRS.
Liff, S., Ward, K., 2001. Distorted views through the glass ceiling: the construction of women's understandings of promotion and senior management positions. Gender, Work and Organization 8 (1), 19-36.
Marchal, E., Rieucau, G., 2004. Les a priori de la sélection professionnelle : une approche comparative. Document de travail du CEE, $\mathrm{n}^{\circ}$ 25, Noisy-le-Grand.
Marry, C., (Éd.), 2005. Enquête sur les promotions CR-DR dans une section des sciences de la vie du CNRS. Rapport de recherche pour la direction générale du CNRS et la mission pour la place des femmes au CNRS.
Mignot-Gérard, S., 2006. Échanger et argumenter. Les dimensions politiques du gouvernement des universités françaises. Thèse de sociologie de l'institut d'études politiques de Paris.
Musselin, C., 2005. Le marché des universitaires. France, Allemagne, États-Unis. Presses de Sciences Po, Paris.
Neumark, D., Bank, R.J., Van Nort, K.D., 1996. Sex discrimination in restaurant hiring: an audit study. The Quarterly Journal of Economics 111 (3), 915-941.
Oiry, E., Sulzer, E., 2002. Les référentiels de competences, enjeux et formes. In: Brochier, D. (Ed.), La gestion des compétences. Acteurs et pratiques. Economica, Paris, pp. 29-47.
Reskin, B.F., McBrier, D.B., 2000. Why not ascription? Organizations' employment of male and female managers. American Sociological Review 65 (2), 210-233.
Reynaud, J.-D., 1988. Les régulations dans les organisations : régulation de contrôle et régulation autonome. Revue Française de Sociologie 29 (1), 5-18.
Ross, L., 1977. The intuitive psychologist and his shortcomings: distortions in the attribution process. In: Berkowitz, L. (Ed.), Advances in Experimental Social Psychology, 10. Academic Press, New York.
Schutter, O. de, 2001. Discriminations et marché du travail. Liberté et égalité dans les rapports d'emploi. PIE-Peter Lang, Bruxelles.
Simard, L., 2003. Conflits d'environnement et concertation: le cas du Québec et de la France autour des lignes THT. Thèse de sociologie de l'institut d'études politiques de Paris.
Zedeck, S., Cascio, W., 1984. Psychological issues in personnel decisions. Annual Review of Psychology 35, 461-518.


[^0]:    Our thanks to Catherine Marry（centre Maurice－Halbwachs，école normale supérieure）and Frank Dobbin（Harvard University）for their remarks and wise advice in response to an earlier version of this text；also to the Sociologie du Travail editorial board readers for their comments and requests for changes．
    H Th Translation by Amy Jacobs．
    ＊Corresponding author．
    E－mail addresses：c．musselin＠cso．cnrs．fr（C．Musselin），pigeyre＠univ－paris12．fr（F．Pigeyre）．

[^1]:    ${ }^{1}$ There can be no doubt that to pursue analysis of the statistics, we would need to know numbers of men and women candidates. Unfortunately, those data are available only for 2006 (Appendix 1, Tables 2 and 3). They show that for that year, the only discipline in which the number of women candidates increased was management studies whereas in history, the number fell sharply. These conclusions would have to be qualified if we took into account the research labor market as a whole. In biology, for example, more men than women were hired as junior researchers (chargés de recherche) at the CNRS (Crance, 2003; Marry, 2005); this would seem to mean that the best male candidates had already been hired elsewhere, leaving open positions for women hirees in universities. Still, while this reasoning makes sense for biology, it does not hold for management studies, a discipline not much represented in major French research organizations. There is, of course, the prestigious grande école market (France's grandes écoles train the elite and practice highly selective admission, contrasting on these two points with France's universities), but grandes écoles hire few university-trained junior academics, except for the largest among them, which are in fact more likely to turn to the international labor market than the French one.

[^2]:    ${ }^{2}$ At the time this study was done, commission de spécialiste members were elected for a 4 -year term by faculty of the relevant department.
    ${ }^{3}$ Determined with reference to the San Remo student-teacher ratios in effect in the French national education system. This set of calculation norms was used to determine French university operating budgets. It takes into account number of students enrolled, surface area occupied, discipline make-up, etc.

[^3]:    ${ }^{4}$ This practice applies much more to hard science disciplines than social sciences, but it has a strong impact on collective representations of what a researcher is.

[^4]:    ${ }^{5}$ However, this is more likely to be a selection criterion for candidates applying for professor positions than those applying for maître de conférences positions.
    ${ }^{6}$ At the Institut national de la recherche agronomique (INRA), candidates for promotion from chargé de recherche to directeur de recherche status are explicitly required to show team leadership experience.

[^5]:    ${ }^{7}$ In this connection, Paul Gerbod (1965) recalled that in the xix ${ }^{\text {th }}$ century, only men-and sometimes single men at that-could belong to the academic profession, a term that referred in France to lycée professors as well as professors teaching in higher education facultés.
    ${ }^{8}$ Reference is to procedures for testing hiring rates for candidates with the same CV but different gender or race characteristics.

[^6]:    ${ }^{9}$ Auditions are not the only occasion for assessing candidate characteristics and how well they correspond to the figure of the teacher-researcher. When recruiters have had occasion to meet up with the candidate in other circumstances (at a conference, for example) or in the case of "local" candidates (i.e. who have done their dissertations at or are already working in temporary positions at recruiters' university; at French universities, there is not the same ban on hiring own graduates that is operative in the United States), whose behavior they have had an opportunity to observe for several months or years, they also "construct their judgment in the course of interaction," and they often make use of these past experiences in recruitment processes.

[^7]:    ${ }^{10}$ Auditions last an average of 20 minutes-very short compared to the 2-day "campus visit" that selected American candidates make to universities they have applied to. Campus visits involve several interaction situations in which the candidate is tested: an interview with the dean and the head of the hiring department; informal exchanges with possible future colleagues; a 2-hour "job talk" on their research, a dinner with hiring committee members, etc.

[^8]:    ${ }^{11}$ As Greenwald and Banaji point out (1995), these effects derive from "implicit cognition"; that is, unconscious traces of past experiences.
    ${ }^{12}$ To quote Ross (1977).
    ${ }^{13}$ Though in France we still speak of national "examinations", the choice of future colleagues is increasingly being made through hiring processes; that is, processes where each committee uses its own complex set of criteria, criteria reflecting the characteristics of the particular hiring department and hiring university. Depersonalizing application examination and evaluation could therefore result in choices that would not be as well adapted to local needs as they are now.

[^9]:    ${ }^{14}$ The cases of overtly sexist remarks cited by hiring committee interviewees had all occurred some time ago.

[^10]:    ${ }^{15}$ The more women maitres de conférences and professors there are, the more confidently we can expect a change in the archetypal figure of the teacher-researcher and a weakening of the predominance of characteristics of that figure that are traditionally associated with men.
    ${ }^{16}$ This has been shown by Marie d'Arcimoles et al. (2000) in their study of the Comité national des boues (national wastewater sludge management committee). The committee was created in 1998 to set up a space of balanced deliberation that would bring together all parties involved in managing wastewater sludge. Not only did this move not work to develop a stable compromise among participants, but some of those participants proved more active and committed than others and therefore took over the deliberation reins.

[^11]:    ${ }^{17}$ Stéphanie Mignot-Gérard (2006) reaches a similar conclusion in her chapter on how French university deliberative councils (conseil d'administration, conseil scientifique, etc.) function.
    ${ }^{18}$ French hiring committees include representatives of the departments concerned by the hire but also "outside members" who come from either another university or a national research organization.

[^12]:    ${ }^{19}$ Such applications are eliminated either because the candidate profile does not fit the position profile or because the application is weak with regard to publications or teaching.
    ${ }^{20}$ I.e., odd or suspect in the eyes of the academics. Many academics would in fact not be critical of or find anything illegitimate in preferring to hire a "local" candidate, though this practice is often criticized outside universities.

[^13]:    ${ }^{21}$ In some American university departments, hiring committees present their successive decisions (list of candidates interviewed at the discipline's annual convention; list of those selected to come for a campus visit; recommendations on candidates after the campus visit, etc.) to the department council. In some cases, they do not even rank campus-visit candidates, but merely transmit their opinions on them; it is then up to the department council to determine the shortlist ranking. These committees' work is thus regularly put before outside yet implicated "viewers", but it is important to add that these committees, which are formed $a d h o c$ for each hiring process, are much smaller than French committees: they are made up of no more than five to seven members.

[^14]:    ${ }^{22}$ Various studies have already pointed out how formalizing evaluation, promotion and hiring procedures can help combat discrimination; Frank Dobbin et al. (1993), particularly pp. 405 and 406. Reskin and McBrier (2000) reached the same conclusions: hiring methods have an influence on gendered division of labor, and having written rules and procedures to be used in both hiring and firing processes, together with written job descriptions and evaluations, reduces the risk of subjectivity and bias.
    ${ }^{23}$ These practices attest to the fact that "indicator logic" has been imported into non-market activities, often through the diffusion of economists' analyses of and theses about these sectors, as shown by Daniel Benamouzig (2005) for the health sector. We do see a trend at the CNRS and the CNU toward clearly stating the criteria used in evaluating research and formalizing those criteria; we also see increasing use of quantitative data, the goal being to measure scientific productivity "objectively".

[^15]:    $\overline{24}$ Results of the survey of members of an internal and an external management studies agrégation jury are consistent with those presented here.

[^16]:    Figures in bold indicate disciplines and years by which recruited women were more numerous than men.
    ${ }^{\text {a }}$ Numbers correspond to Conseil national des universités (CNU) discipline sections studied.

