Academic inbreeding: exploring its characteristics and rationale in Japanese universities using a qualitative perspective

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Received: 14 December 2009/Revised: 30 June 2010/Accepted: 5 September 2010/Published online: 23 September 2010 © Education Research Institute, Seoul National University, Seoul, Korea 2010

Abstract This study analyses why and how academic inbreeding as a recruitment practice continues to prevail in Japan, a country with a mature higher education system, where high rates of academic inbreeding endure in most of the research-oriented universities in spite of several higher education reforms. Based on a qualitative analysis, we disclose three characteristics that lead academics to become inbred at Japanese universities. One characteristic-the adoption of "open recruitment processes" in detriment of "closed recruitment processes"-changed over time, limiting academic inbreeding practices, but two other characteristics remained unchanged over time: the "one university learning experience" and the "concentration of doctoral supervisors at the same university". These latter characteristics represent difficult challenges to be tackled as they are also traditional characteristics of the Japanese higher education system. The research also shows that

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Graduate School of International Development, Nagoya University, Furo-cho, Chikusaku, Nagoya 464-8601, Japan e-mail: akiyoshiyonezawa@gmail.com academic inbreeding practices are a means to assure organizational stability and institutional identity, features perceived as important by Japanese universities. A central challenge for the Japanese universities is then to guarantee these features without needing to rely on academic inbreeding practices to obtain them. However, devising policies to meet this challenge calls for institutional will to change, proactive strategies and time.

Keywords Institutional inbreeding/Academic

inbreeding \cdot Japanese Higher Education \cdot Characteristics of academic inbreeding \cdot Academic profession \cdot Academic recruitment

Introduction

The recent strains to the academic profession reflect the changes that higher education systems and universities have been going through worldwide (Shin and Harman 2009). In a supercomplex society, universities are required to respond to increasingly varied and complex needs (Barnett 2000). The faculty is expected to be creative and dynamic, to participate in collaborative networks, and to be able to combine traditional and emergent modes of knowledge production and diffusion (Nowotny et al. 2003; Laudel 2001). In order to respond to the changing needs of the society, competitive mechanisms for resources were fostered, universities have become progressively bureaucratic, and the professoriate sense of community has diminished (Altbach 2000). Under such circumstances, working conditions, types and length of appointments, remuneration, and social status have been deteriorated, and academic profession is considered to be endangered or in crisis (Enders 2001).

In spite of these transformations, several characteristics of the academic profession remained relatively unaffected. Some of these characteristics—such as academic autonomy—are fiercely defended and recognized as critical for the development of the modern university (Henkel 2005). Others such as academic inbreeding are perceived as detrimental to modern universities but still endure (European Commission 1995). Understanding why and how detrimental practices to academic work continue to prevail and developing policies to diminish them or their impact is paramount to foster the role of universities in modern societies. In this context, this study focuses on academic inbreeding in Japanese universities as a case study.

Academic inbreeding (also known as institutional inbreeding) is understood as a recruitment practice in which universities hire their own graduates as faculty directly after doctoral graduation. Although it is perceived to deteriorate the development of academic work, academic inbreeding exists throughout the world in countries with developing and mature higher education systems. The study of academic inbreeding in Japan is particularly relevant because profound systemic changes that critically affected the academic profession have taken place but high rates of academic inbreeding still prevail (Yamanoi 2007). The purpose of this article is to understand the mechanisms that allow this recruitment practice to survive regardless of systemic and organizational changes in Japan. Findings of the article are generated from a qualitative analysis of several in-depth interviews with Japanese faculty. There are three sections in this article. First, a brief literature review on academic inbreeding is presented as well as its rationale within the development of the Japanese higher education system. In the second section, the research methods and findings are presented. The third section concludes the article.

Academic inbreeding and the Japanese higher education system

On academic inbreeding

Academic inbreeding is characterized as a practice that takes place in the development of higher education in any country. Therefore, it can be perceived as a natural growing pain for any higher education system. For example, academic inbreeding existed in the United States at the beginning of the 20th century and it continued throughout the first half of the century (e.g. McNeely 1932), in spite of being considered potentially damaging to the development of academic activities. This is pointed out as early as in the 1930s in the United States, by the work of Reeves et al., which stressed that "except in the case of persons with extraordinary ability, the new doctor who stays with his *Alma Mater* will be slower to gain recognition, either professionally or economically, than if he starts his career elsewhere" (Reeves et al. 1933: 36).

Several studies on the United States higher education system reported that the promotion of inbred faculty was slower because they produced less research outcomes (e.g. Reeves et al. 1933). Since then, substantial research have been carried out on the effects of academic inbreeding on research productivity (e.g. Horta et al. 2010; Wyer and Conrad 1984; Hargens and Farr 1973). These and other studies stress that academic inbreeding makes the research communities to be narrow minded as the parochialism of ideas within geographical, linguistic, and cultural boundaries starts to become dominant (March 2004). This occurs because the renewal of academics is done within the same university leading these academics to share the same experiences and views, thus being more deemed to reinforce existing knowledge rather than pursuing new avenues of research (Pelz and Andrews 1966). This has negative consequences on research productivity as empirically confirmed by Horta et al. (2010).

As a consequence of spending the entire academic career at one institution since his/her postgraduate program, inbred faculty is considered to be less creative and less independent than other faculty (Pelz and Andrews 1966). Instead, one's knowledge about the organization, values, norms, and work routines are constantly reinforced. In other words, inbred faculty becomes accommodated to the university's organizational knowledge because they "frequently become steeped in the traditions and practices of their own institution" (McNeely 1932: 1). Therefore, there is a mutually reinforcing relationship between inbreeding and the consolidation of organizational traditions, which explains the perpetuation of inbreeding recruitment practices in universities.

Academic inbreeding tends to be a characteristic of elite universities throughout the world because both tend to emerge during the early stages of the development of higher education systems (Yamanoi 2007; Berelson 1960). In order for a university to achieve the status of a national elite university, it needs to quickly build up better research and teaching capabilities than other universities. To do so, they tend to hire their own doctorates. Once some universities achieve the status of elite universities, they maintain an almost monopolistic position as main producers of doctorates (Berelson 1960). Naturally, inbreeding rates at other universities are never as prevalent compared to elite universities because they are created in later stages of the development of higher education systems and tend to hire doctorates from elite universities.

As the first and foremost suppliers of doctorates, elite universities perform an important role in the socialization of academics, not only at institutional level but also at systemic level as they influence institutional behaviors of other universities. In other words, there is a linkage between academic inbreeding and the prestige/hierarchy of universities (Berelson 1960), and this linkage can have determinant influence in hiring practices (see Eisenberg and Wells 2000; Bedeian and Field 1980).¹ The main influence of these hiring practices is for the elite universities themselves. They become relatively isolated from the outside as Massengale and Sage noted when they pointed out that "the higher the prestige of a department, the greater the inbreeding of faculty and the more tightly closed is the door of opportunity to non alumni" (1982: 310). This contributes greatly for these universities to become 'Ivory Towers', overly embedded in their own knowledge and prestige but distant from societal needs.

Further influence is extended to other universities. In this context, it is critical to understand the hiring practices of elite universities from the perspective of positional goods (see Hirsch 1976). Elite universities tend to be a role model for the other universities. It is reasonable to argue that the latter may promote inbreeding practices as a way to foment their own institutional tradition and culture. In this regard, academic inbreeding involves a particularism that is simultaneously a cause and the effect of institutional parochialism (Wilson 1942), and most importantly, it presupposes that particularistic criteria preclude merit in academic recruitment (Bedeian and Field 1980). This highlights the rationale for the role of 'old boys' networks in the recruitment process as a means to reduce uncertainty of the hired faculty concerning their loyalty to the institution, controllability, and research productivity (Simon and Warner 1992). The 'old boys' networks also highlight the role of power, institutional belonging, cliques, and maintenance of status quo. In other words, academic inbreeding reinforces organizational/institutional academic cultures, consolidates research agendas, and guarantees organizational stability. However, this practice clashes with the need for institutional flexibility and swiftness in responding to societal demands (European Commission 1995).

In sum, at the early stages of development of higher education systems (and universities), the practice of academic inbreeding is unavoidable and perhaps necessary or desirable since it permits to quickly build up research and teaching capacity. It also fosters stability, the enhancement of shared beliefs, and the consolidation of collaborative agendas. However, when higher education systems mature and face the demands of a supercomplex society, the effects of academic inbreeding become more detrimental than beneficial, as it fosters inertia, institutional parochialism, and intellectual isolation. As a result, universities in some European countries (e.g. Germany) and in the United States have written or non-written policies to forbid or severely hamper the recruitment of their own graduates as faculty members. In this context, academic inbreeding (its origins and relevance) requires to be understood contextually within the development of higher education systems. The existence and the appropriateness of academic inbreeding is particularly important to be understood for countries, like Japan, that are well beyond the starting point of the development of their higher education system, facing the demands of a supercomplex society, but still maintaining high inbreeding rates.

Academic inbreeding in the evolution of the Japanese higher education system

In Japan, the *gakubatsu* and chair systems created a firm social structure to sustain academic inbreeding and limit academic mobility regardless of recent changes in society and higher education policies. In this section, the historical background to the emergence of Japanese higher education and its development is described with special attention to the meanings and influence of the system of *gakubatsu* and the chair system to academic inbreeding.

The beginning of the Meiji restoration, in the middle of the 19th century, marked the establishment of the modern institutions of higher education in Japan (Cummings and Amano 1977). Tokyo University was established as the first national public university, and in its wake, several others were established (Yonezawa 2007). The mission of these universities was directed toward the development of national unity, the implementation of a modern state, and the assimilation of Western cultural, social, and economic models (Shimbori 1981). They were constituted under a knowledge-seeking paradigm where knowledge assimilation from Western civilizations was more important than knowledge creation (Cummings 1994). The task of the Japanese elite universities at that time was to train top cadres to serve in the state apparel, and as such, these universities, faculty, graduates, and students achieved immediate stature in Japanese society (Cummings 1994). Since graduates from elite universities would constantly obtain key positions in the state administration and large corporations, a system of unconditional patronage for the graduates of each of these universities, called gakubatsu, emerged (Shimbori 1981).

The existence of *gakubatsu* led to the creation of a hierarchy of universities. At first, Tokyo University was the only institution to offer postgraduate training, therefore providing faculty for all other higher education institutions (Shimbori 1981). Later other universities began to offer postgraduate training and produced faculty, but the

¹ For a in-depth analysis of the effect of prestige on hiring practices between university departments see Roebken (2007)

graduates from Tokyo University dominated the academic market until the beginning of the massification of Japanese higher education in 1970s. For example, in 1962, 24.8% of all academics in Japan were the graduates of Tokyo University; it was still 11.4% by 2001 (Yamanoi 2007). A particularity of gakubatsu is that one could only find an academic position in universities of similar or lower rank/ prestige than the one where the degree was obtained, thus stressing the institutional hierarchy of the higher education system (Shimbori 1981).² As a consequence, graduates from a limited number of elite universities always had an advantage in finding an academic position over graduates from other universities, and even within elite universities such as the former imperial universities, there was a hierarchy with Tokyo University at the top. This is still valid today (Yonezawa 2007). The higher a university was in the hierarchy, the higher would be the inbreeding rate because the fewer were the eligible candidates to occupy a vacancy, and schools with near a 100% inbreeding rate at former imperial universities were not unusual.

Another characteristic of Japanese university that led to academic inbreeding is the chair system. In 1893, the chair system was introduced as the basic educational, political, and administrative unit in the former imperial universities (Cummings and Amano 1977). Its implementation contributed to the rapid development of the university in Japan. This system had a full-professor at its center, which would specialize in the one field of study and teach and supervise students' research in the same field (Seki 1995). Within the chair system, the relationship between a professor and students is tied strongly at different levels. Professors of top universities in Japan tended to be perceived as the men of wisdom beyond academic matters, as students ask them for advice on professional, social, and even personal matters (Cummings and Amano 1977). In the past, especially when only prestigious universities were able to carry out postgraduate education, a student tended to pursue his/her learning path at a single university with the same supervisor, creating a strong attachment and loyalty by a student both to the supervisor and to the institution (Shimbori 1981). The supervisor (i.e. professor) was (and still is) a "major actor in the intricate web of obligations, group memberships, and dependencies that define Japanese social life and culture" (Birnbaum 2005: 83) exerting influence over the placement of students and the formation of 'family-like' academic cliques. In terms of academic career paths, the chair system supported a clearly defined line of upward career progression (Cummings 1975). When a professor retires, the associate professor in

 2 A further particularity of *gakubatsu* is that once hired, the academic cannot be fired and the universities need to retain the faculty member in spite of lack of productiveness or competence (Shimbori 1981).

the same chair system would take over the chair of professorship and the assistant professor would be upgraded to become an associate professor. Thus, the chair system fostered academic inbreeding (Shimbori 1981).

This system remained strong until the early 1990s when amendments to the 'Standards for the Establishment of Universities' (SEU)³ relaxed regulations and encouraged other academic structures to be brought in (Ishii 2009: Hawkins and Furuto 2008). Alongside the SEU, most of the former imperial universities developed efforts to improve graduate education by changing the centenary chair system (Ogawa 2002). Moreover, several laws granted more autonomy to universities, and various assessment and evaluation structures were introduced to ensure the quality of research and education. It was expected that academic mobility would improve with the introduction of non-tenure track in 1997 and the assessment structure. However, the practice of academic inbreeding remained strong because the academic mobility rate increases when the market for academic positions grows and not because non-tenure track or assessment structures are implemented (see Yamanoi 2007).

Academic mobility increased with the rapid expansion of the higher education system in the postwar period.⁴ However, the gakubatsu system led to the creation of a system of "colonies" under the various former imperial universities. The growth of the higher education system enabled professors from the most prestigious universities to place their graduate students not only in their university but also in other less prestigious universities. This entailed that the internal clique relationship in which the student would acknowledge the debt to be taught (and placed in an academic position) by the supervisor (i.e. professor), by repaying him in obligations (such as acceding to pursue the latter research interests), was transposed to other institutions (Cummings 1975). In other words, the chair system was extended beyond a single institution to various institutions controlled by the professors from the most prestigious institutions (i.e. the ones placing the students). In this context, the strong development of academic societies was critical as they not only served the pertinent purpose of knowledge dissemination but represented essentially a good means of social integration that facilitated student placement at other universities (Cummings and Amano 1977).

At the turn of the century, further institutional reforms of Japanese universities were pursued to face the challenges of globalization and the knowledge society (Oba 2007). The incorporation of national universities—including the former

³ The SEU set the conditions to be met in order for a university to be created as well as the regulations after its establishment.

⁴ The growth of the higher education system in the 1960s and 1970s was impressive. According to Oba (2007), the number of universities rose from 245 in 1960 to 420 in 1975, when in 1943 only 19 existed.

imperial universities—in 2004 was one of the reforms. In incorporated national universities, stress was placed on changing the academic recruitment process toward a model that favored the public advertisement of vacancies as well as more objectivity and transparency in the selection processes (Oba 2007). In spite of these changes, however, the recruitment by the former imperial universities and the oldest private universities in Japan (i.e. Keio University and Waseda University) continues to be very much turned inward (Yamanoi 2007). Then, why and how does the practice of academic inbreeding continue? In the next section, the mechanisms that lead academics to become inbred are analyzed as well as how academic inbreeding in Japan has been affected by structural changes.

Analysis: what matters and what changed concerning one becoming inbred or not

The analysis results from 36 in-depth interviews with Japanese academics (15 inbreds; 21 non-inbreds) from engineering (various disciplinary sub-fields) and social and human sciences (including economics, management, philosophy, and education). The interviews focused on their academic career path. In the interviews, questions about the motivations, expectations, strategies, and the use of contacts/referrals to obtain the first academic position were asked. The interviewees are from seven universities, including former imperial universities, and other research-oriented public and private universities in Japan. The interviews were performed between August 2008 and July 2009 and conducted until information saturation was achieved (Seidman 1998).

The interview analysis disclosed three events/mechanisms that lead academics to become inbred. These are defined in this article as characteristics of inbreeding. These include completing both undergraduate and postgraduate education at one university, having all doctoral supervisors from the same university, and having the hiring process regulated by non-transparent recruitment arrangements. These three characteristics are affected differently through the development of higher education in Japan. It became clear that regardless of various changes taking place in Japanese universities, the former two characteristics of academic inbreeding remain relatively unchanged, which explains why the practice of academic inbreeding continues until today.

Changing with time: the relation between recruitment processes and academic inbreeding

The results of the interviews disclosed, as expected, that the vast majority of the inbred faculty interviewed stayed at the same university because they were offered the position by their doctoral supervisor. Also as expected, non-inbred faculty obtained their positions either with the help of doctoral supervisors to work at other universities or by applying to available positions. The interview analysis strongly suggests that although becoming inbred or not would depend to some extent from contingency issues,⁵ it would depend to a large extent from the recruitment processes in place. The recruitment process was perceived as playing a central role in explaining academic inbreeding rates at Japanese universities. The relation between academic recruitment and academic inbreeding is better understood through the changes of the former over time, and how these changes affected the predominance of the latter at Japanese universities.

Before the 1990s, it was relatively easier for the doctoral students to remain in the same university because the number of doctorates was still small and the number of academic posts available was increasing. However, two major changes have reduced the ability or will of universities to hire their own doctoral students. The first and foremost important change is the alteration in hiring practices and the second change is the changing mentality in Japanese universities, where academic inbreeding started to be considered as inadequate to scholarly needs. By the turn of the millennium, the hiring process at Japanese universities changed from a closed process to an open process. As explained by several interviewees, in the closed recruitment process, a vacancy for an academic post was not publicly advertized. At first, a recruitment committee was formed, consisting of a few professors, which would discuss and agree on the requirements for an available post. A search for suitable candidates for the position would ensue, and potential candidates were invited to submit relevant documents for screening by the committee. The candidates were then notified of the decision. Often it was not clear how the decision was made and the candidates were not aware of the requirements. The decision was made in the sphere of the committees that consisted of senior faculty members. Often the in-house candidates were well positioned to be offered the position and in some cases, guaranteed by their supervisors that the position would be theirs.

A position would open. Would there be an announcement of the vacancy? How did it work?

No, no. Positions in the university were not open; not only at University A but in many other universities in

⁵ This position to be offered by the supervisor was often dependent on the opening of a vacancy in the "right" timing.

Japan (...) those positions were dominated by the professor.

Social/human sciences, inbred faculty, Public national university, entered academia 1970–1980s

Actually, I do not know. I submitted some document (...) this is my guess, but the department contacted a few number of candidates, probably the department picked up some candidates based on their own survey, then they contacted them to submit the CV, list of publications or something, then I submitted the CV and the list of publications because I was requested or recommended or something, then after some selection was done in the department...but I do not know exactly the process they did, but anyway, I was the final candidate.

So you do not know with how many candidates you competed or the evaluation criteria?

I do not know. The criteria...well, probably they looked for a person in some specific field but I did not know the criteria.

Engineering, inbred faculty, Public national university, entered academia 1990–2000s

This practice of recruitment (besides its non-transparent nature) had given senior faculty members enormous power and influence (see Shimbori 1981; Cummings 1975). However, the recruitment process began to change with the enforcement of a more transparent recruitment process and the need for the Japanese universities to publicly advertise vacancies nationally and internationally. The introduction of an open recruitment process reduced the possibility of universities to choose their own students to occupy the vacancies for two reasons. The first is that the power of the professors was limited since the formation of a committee to search for candidates was no longer necessary (as the interested candidates themselves applied). The advertisement of the vacancies also critically broke the ability to control the competition for a position (previously, if there was no public information about a vacant position, there was anyone applying for it). Information retention on vacant positions was a pillar of the closed recruitment process and the mechanism supporting the ability of senior faculty to allocate their own students to faculty positions. The second is related to competition for the available posts by larger numbers of academically strong candidates from various academic backgrounds, thus making very difficult to choose one's own students if there were other candidates with better academic profiles. The growing proportion of Japanese academics with degree from foreign universities shows that the open recruitment is attracting a greater range of candidates (Yamanoi 2007) and contributing to diversify the academic labor force in Japan.

I browsed the internet and I saw that the university Y was looking for an associate professor (...) I sent my CV to this school. I was lucky and I got in.

Social/human sciences, non-inbred faculty, public national university, entered academia 2000–2010s

The opening up of the recruitment system, the restructuring of the universities, and the integration of Japanese universities in a more internationally competitive spectrum also started to transform academic mentalities. Therefore, institutional pressures to stem academic inbreeding practices emerged. It is suggested from the interviews that the participation of Japanese faculty in international conferences and seminars raise the faculty awareness that some changes in the Japanese universities were necessary in order to adapt them to the challenges of science, globalization, and the knowledge society.

In the 1990s, when your supervisor told you that there were a lot of vacancies, none of them were at university J?

Actually I was told by some faculty that I would have the opportunity to be appointed as a faculty member at university J, but according to what one faculty member told me later, most faculty were against hiring directly a graduate student from the same school...15 years ago this was a very popular hiring pattern. In the late 1990s, it changed and most people became cautious of hiring directly their graduate students.

Social/human sciences, non-inbred, public national universities, entered academia 1990–2000s

In spite of the changing recruitment process and hiring mentality at Japanese universities, having strong connections, in particular with academics from the alma mater, still remains important for two main reasons. One is that at Japanese research universities, the maintenance of institutional identity and allegiance is still perceived as crucial for the good functioning of the universities. As a result, even with open recruitment processes in place, some priority is still given to hiring in-house students. In this sense, the analysis found that closed recruitment practices still persists, meaning that not all available vacancies are publicly advertised as the quote below shows.

In this department not many recruitments are done through public advertisements, more than half, I think more than half, maybe much more than that are done by non-open recruitment but on the other hand in university G, especially in the department I was in, in that department most of the recruitment is done by public advertisement. The recruitment through public advertisement is growing but there are still some universities and departments where recruitments are not so open.

Social/human sciences, non-inbred, national public university, entered academia 2000–2010s

The other reason is that the number of students enrolling in higher education is declining, while the number of doctorate students continues to grow. As a result, it is becoming harder to find academic positions for doctoral students. Therefore, joining specific scholarly networks becomes essential for a doctoral student to increase the chances of being hired at a Japanese university.

I had told my supervisor before joining University L that I would like to do my PhD research abroad. He agreed on the condition that I would (...) build some academic networks with social scientists in Japan, so that when returning to Japan, I would not suffer from job search (...) Unless having some academic contacts...job hunt in the academic sector in Japan would be very difficult.

Social/human sciences non-inbred, national public university, entered academia 2000–2010s

Yet, in spite of transformations mentioned above, two characteristics that potentiate one to become inbred, such as spending the entire education at one university and having all supervisors from the same university, typical characteristics of the Japanese higher education system, remain.

The 'one university learning experience' and the 'concentration of doctoral supervisors at the same university': Japanese traditions fostering academic inbreeding at Japanese universities

Having undergraduate and postgraduate education at one university had been a typical feature of the Japanese higher education until the beginning of rapid increase of postgraduate students from 1990s (Ishii 2009). This is also a feature that promotes academic inbreeding. Almost all inbred faculty interviewed studied at only one university while only half of the non-inbred did the same. By spending the entire learning path at one university, the inbred faculty becomes embedded into the university's milieu. Inbred faculty understands the importance of complying with non-academic duties for the university some ritualistic in nature—which are not always understood by other faculty. This creates the portrayal of the inbred as someone loyal to the university, and as such, someone to be valued if the culture of the university is one that stresses strong institutional identity.

One advantage might be that (...) faculty members are required not only to be good at research and teaching but also are required to be good at administrative works and other non-research, non-teaching works and so if you recruit a researcher through public advertisement, the possibility is that he might be super-good at research or teaching but he might not be interested or willing to do other things. That might be one of the reasons for the rather closed recruitment.

Are you saying that the reason behind the rather closed recruitment is that one is able to hire people that comply?

Exactly

Social/human sciences, non-inbred, national public university, entered academia 2000–2010s

However, spending the entire learning path at one university as a characteristic of academic inbreeding cannot be understood in isolation. Instead, it is the mutually reinforcing linkage between the learning path spent at the same university and the supervision experience that enhances the chances of one becoming inbred. Another characteristic that inbreds share thus is having the doctoral supervisors from only one university, while most non-inbred faculty had supervisors from different universities. This is an important finding, because the doctoral supervisors often become 'role models' for doctoral students (Heath 2002). In the position of role models, supervisors strongly influence the doctoral student's understanding not only of scholarly practices but also of social and human aspects of the university and society. For inbred faculty, the socialization at doctoral level by role models from the same university reinforces the validity of what was learned at undergraduate and master levels in the same university (inbred faculty highlighted this in the interviews). It also restricts the doctoral research to organizationally framed scholarly knowledge, making the student to abide to a narrower perspective of knowledge. This is particularly relevant in the Japanese higher education, where the relationship between the supervisors and the learning experience is often unattached from one another (see interview excerpt below). This process makes the students to be overly dependent on a restricted number of supervisors from the same university. As for the supervisors, they enhance their paternalistic figure by guaranteeing that the learning path of the student from the start is not dispersed, but rather guided under their supervision.⁶

Professor X was my advisor at bachelor course, then master course, then after I joined the PhD course, I had a new advisor, prof Y, but prof Y was associate professor in professor's X laboratory, so actually in the same laboratory.

Engineering, inbred faculty, Public national university, entered academia 1990–2000s

For the non-inbred faculty (and in particular for those being supervised also by supervisors from different universities), the socialization at doctoral level entails experiencing several different institutional realities and having plural role models. Their intellectual and academic awareness is broader. In this regard, several non-inbred interviewees mentioned the importance of being exposed to a wide academic environment and how that marked their future academic activities. Such statements suggest that having supervisors from different universities prevents one to have a strong identity attachment to only one university. Most importantly, it indicates that a broader socialization during doctoral education enables the future academic to have the necessary "freedom" to be able to question established knowledge. This would entail that the loyalty of the trained doctoral student is more directed toward the scientific community than to one university. However, organizational loyalty is critical for Japanese universities, and it is often found in international comparisons that in Japan, the discrepancy between loyalty to the university and to the academic discipline is lower than the one observed in countries such as the United States, United Kingdom, or Germany (Arimoto 2009). At Japanese universities, organizational stability, identity, knowledge, and power structures are enforced by the sense of belonging to the university's educational/research tradition and ethos formed through a learning path, which the academic inbred possesses. This seems to be a major reason for the universities to hire their own students as recognized by some interviewees.

The problem is that organizational stability and identity are the highlighted qualities at all times. Extreme reliance on these qualities promotes the formation of close-knitted groups or cliques consisting of people with the same learning path, which makes it difficult to promote organizational change and integrate faculty trained outside the university. This occurs because these cliques often implicitly demand—although explicitly may not—group membership characteristics such as doing the learning path within the same university or having a long-standing relationship with senior faculty members. This is problematic when the demands of the modern university point toward quick adaptation, creativeness, dynamism, and collaboration (Laudel 2001). From the standpoint of the inbred faculty, the incoming faculty from outside might not be willing or motivated to perform certain tasks and work in ongoing projects, which may disrupt existing power structures, cultural frameworks, and established routines. From the point of view of non-inbred, they may not be motivated to perform some tasks, sometimes "ritualistic" tasks in part because they are not fully integrated. In this context, some non-inbred interviewees referred that they were still considered university Z people even if they were working at university W for years.

It is complicated (...) many faculty members at this school are university Y graduates so sometimes I feel like I am a stranger because I am not from university Y and most of my colleagues are from here, they are quite familiar with the environment and...the senior faculty (...) they are university Y graduates so their former academic advisors are still working here

Social/human Sciences, non-inbred, national public university, entered academia 2000–2010s

Conclusion

This study described how the practice of academic inbreeding continues to take place in the Japanese higher education. Some factors that promote and hamper the practice of academic inbreeding were identified, as well as how these were affected by systemic and institutional changes. The study shows that some traditional tertiary education learning paths in Japan contribute to the continued existence of academic inbreeding in the Japanese higher education system. For example, the pursuit of the whole tertiary education experience within the same university is simultaneously a characteristic of academic inbreeding and of the traditional tertiary education learning path. In this context, if academic inbreeding as a practice is to be diminished or tackled, policies promoting student mobility between institutions needs to be envisioned, either at national or at university levels, or both. Such policies have a strong potential to be effectual since analysis shows that student mobility hampers the inbreeding practice (noninbred faculty represented the most mobile students in the interviews).

This mobility could also help prevent another characteristic of academic inbreeding. The analysis shows that most non-inbreds had supervisors from more than one

⁶ Several inbred interviewees mentioned that their learning path tends to be very narrowly focused on the research interests of the research group to which the supervisors at bachelor, master and doctoral level education belonged to.

university, while inbreds had one or more supervisors from the same university. If the student is mobile, the chances of getting more than one doctoral supervisor from more than one university increases, and so increases the chance to get exposed to more than one academic environment. In this context, policies that reward doctoral theses to be supervised by more than one supervisor from different universities could be useful not only to prevent academic inbreeding practices but also to foster academic collaboration. If none of these policies could be implemented (e.g. students are free to choose where to study and Japanese universities in times of financial strain need them to stay rather than see them leave), the main policy to hamper inbreeding practices can continue to be focused on consolidating open academic recruitment practices.

The academic recruitment practices in Japan have gone through dramatic changes, shifting from relatively closed to relatively open, publicly advertized processes. This change has been a major contribution to diminish academic inbreeding rates because the usual means to hire inbreds, i.e. being offered the job at the same university became much harder. The current open recruitment process does not depend from a committee that closely decides the entry requirements, who the candidates are, and on what basis they are chosen. Instead, the public advertisement of vacancies brought a wider range of candidates making difficult to choose a specific candidate from the same university when there are others with better academic profiles available to be hired. However, the fact that some recruitment is still performed using the previous recruitment methods indicates that institutional identity and stability continue to be regarded as important characteristics at Japanese universities, and whatever polices are implemented, they should take this into account. This entails that the reduction of academic inbreeding needs time, that it is related to institutional choices and strategies (including the perception of academic inbreeding effects upon academia), and also that some recruitment even if open, should meet occasionally the need to preserve institutional identity that some Japanese universities crave for.

Nonetheless, Japanese universities should also take a more proactive attitude and implement policies promoting institutional collaboration and cohesiveness among academics regardless of the faculty's alma mater. These policies should aim at non-inbred faculty assimilation into the university institutional culture. Non-inbred faculty can have a strong institutional identity and loyalty as other faculty, but the mechanisms to sustain and foster that loyalty are dissimilar from those of inbred faculty. Unlike inbred faculty who identify themselves with the university through an educational socialization process, non-inbred faculty develops identity and loyalty feelings toward the university through professional experience and socialization. In this context, institutional policies fostering the integration of non-inbred faculty have to be proactive, encompass and actively involve the university faculty, and support the newly hired faculty since the moment they arrive to the university. Such policies are bound to ease the integration of non-inbred faculty and to make them feel more embedded into the university institutional culture, thus maintaining it without the need to continue to rely on academic inbreeding practices.

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