CHAPTER 4

Stratification through a Binary Degree Structure in Finnish Higher Education

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The aim of this chapter is to analyze stratification in Finnish higher education by examining the establishment of a binary degree structure at Master's level. Degree structure reforms that imply the standardization of study programs and the integration into a unitary higher education system, such as the Bologna process, which introduced a two-tiered study system, may also have stratificatory effects on the relationship between different institutions across higher education sectors (Bleiklie 2003; Kyvik 2008). Stratification emerges when the vertical differentiation between institutions and different kinds of credentials become institutionalized as differences in status (Teichler 2002). This study first focuses on the consolidation of the binary model in Finnish higher education via the establishment of a professional Master's degree in 2005, parallel to the implementation of the Bologna reforms in Finland. Second, it analyzes reactions to the new degree by actors affiliated with research universities.

The stratificatory effects of degree structures have not been extensively studied in the Finnish context to date. The policy objective of the Finnish

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binary system of higher education is that traditional academic degrees from research universities and the newly established professional degrees from universities of applied sciences should have their own unique profiles but equally high educational standards. Despite the policy intention of retaining two distinct tracks of academic and professional higher education, the different types of institutions compete for status, funding, students, and 'customers' (Rinne 2004). The credentials of graduates from both types of universities are weighed against each other in the labor market. Formally, the 'different but equal' policy principle implies that graduates with degrees from different kinds of higher education institutions should be treated equally in recruitment (Teichler 2007). They should obtain relevant jobs in their occupational fields on the grounds of their professional competence and not according to the reputation and prestige of the university or higher education sector where they received their degree (Kivinen and Nurmi 2010).

In order to gain a more comprehensive understanding of the stratificatory effects of national degree structure reforms, the idea of educational credentialism is adopted in this study from David Brown (2001, 1995) and David Bills (2003, 2004; see also, Bills and Brown 2011). Among social stratification researchers, educational credentialism has various meanings, which are not necessarily consistent with each other[1] (Bills and Brown 2011). The approach pursued in this chapter defines credentialism as a process through which "societies allocate individuals to slots in the occupational hierarchy on the basis of the educational qualifications that the candidates present at the point of hire" (Bills and Brown 2011, p. 1). Accordingly, employers 'use' educational degrees in order to control access to good jobs and high incomes (Bills 2004). Much research that originates from the United States attributes credentialism to the differentiated positions of individual universities within a system of unified mass higher education. However, as Finland and many other European countries have established binary systems, the credentialist argument needs to be adapted to address positional differences between higher education sectors. The question that arises is how degrees from different sectors are connected to advantages or disadvantages in the labor market.

In the following, first, the types of institutions within the Finnish binary system of higher education will be described. Second, attention will be directed to the implementation of a professional Master's degree and the stratificatory effects of the binary degree structure. Third, an analysis will be made of how graduates with an academic Master's degree and employers have reacted to the new professional

Master's degree. Finally, the paradox that stratification occurs as an effect of policies of inclusion will be elaborated.

Context for the Stratification of Finnish Higher Education

The Finnish higher education system is composed of 15 research universities and 26 professionally oriented universities of applied sciences (formerly polytechnics; *Ammattikorkeakoulu* in Finnish). In 2015, research universities awarded 15,200 bachelor's degrees and 15,500 Master's degrees, while universities of applied sciences awarded 23,800 professional bachelor's degrees and 2400 professional Master's degrees (Statistics of Finland 2016a, 2016b).

Finnish higher education is largely funded and controlled by the state and free of tuition fees. Higher education is regarded as a public good, and its importance is emphasized in carrying out the central policy goals of the social-democratic welfare state (see, for example, Välimaa 2001; Ahola 2014). The egalitarian ideals of equal opportunity and widening access were central principles in the development of the mass system from the late 1960s to the late 1980s (Ahola 2014). The expansion of the Finnish higher education sector at that time was closely linked to a welfare state agenda supported by all the major political parties. Regional equality was especially emphasized, partly to prevent an exodus of young people from rural areas. All major provinces were allowed to establish a university (Välimaa 2001). It was not intended to bring extensive diversity or competitiveness, as this first wave of expansion of the higher education sector was limited to the established type of research university. Although founded at different points in time, research universities were expected to remain similar in substance and quality. All universities and university degrees carried high social prestige in Finland. This rank equality was similar to that in other Nordic countries and Germany (Teichler 2002, cf. Stock in this volume).

The system of Finnish higher education underwent dramatic reform in the 1990s. The biggest change was the establishment of a professional, polytechnic sector. As was the trend in many countries, massification and credentialing pressures caused non-tertiary institutions to drift toward the norms of higher education. In Finland, the most advanced part of upper secondary vocational education was integrated into the higher education system by establishing polytechnics. The formal aim was to improve the

quality of higher vocational education and increase the choice of degrees available (Välimaa 2001). With the establishment of the new polytechnic institutions, the number of students almost doubled overnight. The Finnish higher education system was divided into academic and professional tracks,[2] which was generally understood as a dual or binary system (cf. Kyvik 2004).

Official policy and regulations emphasized that the new polytechnic institutions needed to be essentially different in their character and social functions from research universities (Rinne 2004). The latter concentrated on scientific research and had a discipline-oriented curriculum, whereas polytechnics had a work-oriented curriculum and conducted applied research to promote local and regional economic development. However, all Western countries have shown signs of academic drift. To advance their status, non-university institutions increasingly refer to similar narratives and implement similar reforms as traditional research universities (Kyvik 2004). Around ten years after they were established, Finnish polytechnics started to use academic symbols and titles, especially in their international communication. They are now called universities of applied sciences in English, although the Finnish name has not changed. Moreover, universities of applied sciences have strengthened their educational programs, upgraded the qualifications required of their teachers, increasingly conducted (applied) research, and built international alliances.

The Binary System of Master's Degrees

Degree structure reforms have the power to redefine the social order between institutions. The level of the degrees conferred by an institution plays an important role in defining the position it presumably occupies in a rank order (Bleiklie 2003). In the absence of a college tradition like in the United States, the bottom group is composed of institutions that award only bachelor's degrees, while institutions in the top group award all types of academic degrees, including doctorates. Therefore, if institutions in a non-university sector have aspirations toward improving their relative position in a hierarchical order, the ultimate goal is to strive for higher level degrees. In Finland, universities of applied sciences could initially only award professional bachelor's degrees. Nowadays, the academic as well as the professional track can award degrees at the bachelor's and the Master's level; however, the form and content of the degrees are genuinely

different. Furthermore, research universities are the only institutions to deliver doctoral degrees.

The Finnish professional Master's degree was created in the early 2000s and achieved permanent status in 2005. The decision to implement a new kind of Master's degree, rather than simply allowing the universities of applied sciences to award the established academic Master's, was based on a broad consensus. Relevant stakeholders involved in the process[3] agreed that a new degree was needed but stressed its work-oriented nature in order to distinguish it from the traditional academic Master's degree (Pratt et al. 2004).

The new Master's degree was an attempt to level universities of applied sciences (former polytechnics) upward and to offer graduates with a professional bachelor's degree the opportunity to upgrade their credentials within the professional track (Ahola and Galli 2012). One part of institutional leveling, in a credentialist environment, is to open up dead-end educational pathways. It was important for the new institutions to attract prospective students and make them perceive the university of applied sciences as offering them good future opportunities. Furthermore, the decision took away unwanted pressure from the research universities to provide Master's level education for university of applied sciences graduates.

The new right to grant Master's degrees upgraded the universities of applied sciences and made them more equal in status to research universities. However, the type of new degree differed from the traditional Master's degree in many ways (see Table 4.1).

The professional Master's degree had a more pragmatic and work-oriented profile than the academic Master's degree, which was research-based and discipline-oriented. Some traditional professions, like law and medicine, require an academic degree. The two types of degree differed in form and content. Degree programs at research universities were usually designed for full-time study, whereas programs at universities of applied sciences were designed for part-time study and could be completed alongside full-time employment. The final thesis in a professional Master's degree program was defined as a work development project, in contrast to the traditional, research-based Master's thesis. Moreover, the professional Master's degree was legally defined as an adult education degree, and a requirement for admission was three years of work experience after the bachelor's degree.

Table 4.1 Comparison of academic and professional Master's degrees[4]

	Academic Master's degree (cf. MA; MSc)	*Professional Master's degree*
Eligibility of students	Bachelor's degree in the same or related field	Three years of work experience after Bachelor's degree
Length of full-time study	2 years (120 credit points)	1.5 years (90 credit points)
Study fields	21 academic disciplines	8 professional fields
Thesis	Academic Master's thesis	Work development project
Graduates per year (2015)	15,500	2400

Source: Statistics of Finland 2016a, 2016b

In 2005, the same year in which universities of applied sciences established the professional Master's degree, the Bologna process was implemented, and degree structures were reformed accordingly at traditional, research universities. By the time the universities of applied science were established in the 1990s, research universities were reintroducing the academic bachelor's degree, which had been discontinued in the 1980s as a consequence of an earlier degree reform that had embedded bachelor's level courses in a five-year Master's degree. As part of the Bologna process implementation, it became obligatory to have two degree cycles in all disciplines (except medicine and dentistry), and the number of graduates with an academic bachelor's degree increased.

However, in research universities, the Master's degree was (and still is) considered the 'basic degree' and very few students graduated with an academic bachelor's degree without immediately continuing onto graduate studies in the same discipline. The academic community argued that employers would not be interested in hiring graduates with an academic bachelor's degree. Moreover, research universities developed specific Master's programs, including international Master's programs, in which students would be selected via program-specific application and admission procedures. These degree programs were defined for narrower (multi)disciplinary profiles than generic Master's programs. Some programs were designed to be research-intensive in the hope that graduates would continue onto a doctoral program, and some prepared their graduates for leading positions in society. The research universities thus readily adapted to the requirements of the Bologna process while

preserving their higher status, which was further cemented by the distinction between the academic and professional Master's degree.

Yet differentiation between educational credentials is not the product of structural changes alone; cultural processes also play a role in its advancement, creating common beliefs about the superiority of certain degrees and reproducing those beliefs through mutual self-praise among the interest groups involved in the credentialing processes, such as students, academic staff, employers, professional associations, and trade unions (Brown 2001). Attributing status to a particular academic degree is dependent on the relevant parties sharing and acting on the belief in it. Emerging stratification is evident when students and employers perceive growing differences in the reputation and prestige of formally equal educational credentials (cf. Teichler 2002). This is more likely to occur in the view of the established, research universities than that of the new universities of applied sciences, as the latter are trying to elevate their status. The following analysis will therefore consider how the new professional Master's degree is perceived by graduates at research universities.

Reactions among Academic Actors to Emerging Stratification

The analysis is based on 15 interviews conducted in 2009 with at that time recent graduates from research universities. The data was collected within the research project 'Competence and the dual model of the Finnish system of higher education' (2009–2010), in which the relative value of an academic Master's degree and a professional Master's degree was compared and contrasted (Isopahkala-Bouret 2015; Isopahkala-Bouret et al. 2011; Rantanen et al. 2009). The collection of interview data is based on the rhetorical approach of Michael Billig (1987), and recurrent themes are analyzed based on content analysis. Here the analysis focuses on whether the professional Master's degree and the academic Master's degree have equal status in recruitment (cf. Isopahkala-Bouret2015).[5]

The interviews will be illustrated with findings from an employer survey (n = 134), which was also conducted within the research project (Rantanen et al. 2009; Isopahkala-Bouret et al. 2011). Three survey items (employees with different types of Master's degrees have, in practice, different tasks; employees with different types of Master's degrees can use the same job titles; employees with different types of Master's degrees are paid the same salary) and the employers' evaluation of selected

competence claims (Do employers believe that graduates with a certain degree have the required Master's level competence?) will be considered here.[6]

Employers and graduates from the fields of business, health care, and social services participated in the project. These subjects are taught both in research universities and in universities of applied sciences. The participants worked in the public and the private sector, in large and small organizations. Most respondents had a substantial amount of working experience, and the age range was between 27 and 65 years. The employer survey was targeted to those employer representatives who had been involved with recent recruitment in their organization and had some experience of graduates with professional Master's degrees. Most employers (68 percent) held an academic Master's degree. The data collection and analysis processes are presented in detail elsewhere (Rantanen et al. 2009; Isopahkala-Bouret et al. 2011).

Based on the empirical findings, academic actors reacted in four different ways to the new professional Master's degree awarded by the universities of applied sciences: by refusing to recognize the new degree; by fearing to compete with the new degree; by stressing the superiority of academic degrees; and by emphasizing the exclusivity of academic degree programs.

Non-recognition of the New Degree

The number of graduates with a professional Master's degree is marginal in comparison to graduates with an academic Master's degree. At the time the data was collected in 2009, only 1500 individuals in total had graduated with a professional Master's degree since its introduction in 2005, compared with over 10,000 graduates with an academic Master's degree per year (Isopahkala-Bouret et al. 2011). There are now 2400 graduates gaining a professional Master's degree per year (Statistics Finland 2016b). Clearly, the introduction of the professional Master's degree did not trigger a widespread reaction in the research university community. This is simply because most people had not even heard of the new degree at that time, as the following excerpt illustrates:

> I can't say much about it, because I don't really know what the new professional Master's degree consists of. I can't say, because I don't know

> what it is like... Somehow I first started to think of a professional bachelor's degree. (Graduate with an academic Master's degree in business and economics)

The interviewed graduates from research universities knew hardly anything about the new degree (what it is, its scope, who can be admitted to the programs). Only some reported that they had worked directly with someone who had a professional Master's degree. The lack of recognition of the new degree is exacerbated by its confusing title. In Finnish, the professional Master's degree is called *ylempi ammattikorkeakoulututkinto*, which is entirely different from the academic Master's degree (*maisterin tutkinto*). Rather, because it sounds similar to it, the professional Master's degree tends to be confused with the professional bachelor's degree (*ammattikorkeakoulututkinto*), as the interview quote shows. The name of a degree impacts on the competitive position of graduates in the labor market and therefore also on the differences in status between the academic and the professional sector.

It is not uncommon for graduates with a professional Master's degree to return to the same job they had prior to their studies (Ahola and Galli 2012). Some advance in their career, but only a few graduates with a professional Master's degree hold leading positions in Finnish organizations. As the professional Master's degree is still a novel degree in Finland, employers who themselves have an academic Master's degree have little experience of it and therefore do not recognize its strengths (Isopahkala-Bouret et al. 2011). One interviewee observed the conservative attitudes in his work organization as follows:

> No, we haven't hired anybody here [with a professional Master's degree], we have two employees who are currently studying in that program..., but they are older... and work in [semi-professional] jobs. (Graduate with an academic Master's degree in health sciences)

Professional Master's degree holders may face additional employment barriers on the labor market, and they may be channeled into lower-qualified (and presumably lower-paid) positions. According to Ojala and Isopahkala-Bouret (2014), the relative competitiveness of graduates with a professional Master's degree is weakened by the fact that it is not fully

recognized by employers and is occasionally confused with the professional bachelor's degree.

The Fear of Increasing Market Competition

By contrast, the interviewed graduates with an academic Master's degree feared that the new degree was downgrading their privileged status as graduates of research universities. They referred to the professional degree as "wrong" and "misleading," "useless" and "worrying," and felt that it "makes no sense" to have professional Master's degrees (see also Isopahkala-Bouret 2015). Accordingly, universities of applied sciences should only offer bachelor's degrees, and Master's degree programs should be reserved exclusively to research universities.

To legitimize their own specific position, some of those with an academic Master's degree referred to the formal philosophy of the dual system of Finnish higher education. They argued that the two degrees should remain very distinct from one another and serve different functions in the labor market. However, this call for a strong separation of the two degrees mirrored a fear of competition and loss as stated by one interviewee:

> Graduates with a professional Master's degree are competing [with us] for the same jobs. I know, I've heard from some employers that they may prefer to hire graduates from universities of applied sciences, because they can make them do the same job with lower pay. Graduates with an academic degree know their own [salary] level and they'll check with the [professional union] what the minimum salary worth accepting is and what benefits you can expect. Maybe graduates with an academic degree won't be hired then, because they demand too much? (Graduate with an academic Master's degree in business and economics)

The introduction of professional Master's degrees intensifies the competition for already scarce graduate jobs. Graduates with a professional degree are formally able to apply for the same jobs as those who have an academic degree. Although employers may hire them for lower-qualified positions, as indicated above, they may also see them as a cheaper alternative to academic degree holders. The interviewee expects such graduates to demand a higher salary based on the established prestige of the academic degree, while holders of a professional degree, lacking this prestige, may

be willing to accept a lower salary. The global competition for graduate jobs has a tendency to push down the cost of a highly educated workforce; therefore, rewards from a university degree are no longer guaranteed for everybody (Brown et al. 2011; in Finland, see Aro 2014).

The employer survey confirms that sectoral differences in higher education impact on the graduates' position on the labor market. Almost half of the employers (46 percent) thought that employees with different Master's degrees could use the same job titles, which is in line with professional regulations and collective agreements. The majority (59 percent), however, believed that the different degree types corresponded in practice to different occupational tasks, and only 17 percent agreed that they should be paid the same salary (Rantanen et al. 2009).

Employers justified these differences on the labor market by appealing to different levels of knowledge, skills and competence, with the academic Master's degree warranting a higher level of education than its professional counterpart (Rantanen et al. 2009). Employers who had experience of graduates with a professional Master's degree saw critical and independent thinking as academic strengths and widely agreed that graduates with an academic Master's degree had adequate cognitive competence. The employers also saw academic graduates as having highly specialized knowledge in their field and relatively good knowledge at the interface between different fields. As for graduates with professional Master's degrees, the employers agreed that one of their greatest knowledge-related strengths was their ability to utilize cutting-edge knowledge and develop professional practice. Yet they thought that professional Master's degree holders lacked skills related to research and innovation, as well as management and leadership capabilities (Isopahkala-Bouret et al. 2011). These survey results do not suggest that competition on high prestige positions in research, management, and leadership has increased; rather, they confirm remaining differences that secure the academic degree holders' superior labor market position.

Academic Superiority

Within highly hierarchical higher education systems, most university students are aware of the value of their own degree in the labor market relative to those awarded by other institutions (Brooks 2006; Reay et al. 2001). Students usually develop a strong positive alliance to their own institution – seeing it as a suitable place for them. By contrast, different

kinds of institutions are seen as not being for 'people like us' (Brooks 2006). In the Finnish context, the status of graduates with a degree from a research university is reinforced in a discourse on 'smartness.' As the following quotes suggest, students are made to believe that it was special to be admitted to a research university and that, therefore, they were special, too.

> Graduates from [this high prestige university] are very self-confident, because the academic staff emphasize from the beginning to every student that it is special to be admitted here; and it's so amazing now that you've got in. (Graduate with an academic Master's degree in business and economics)

This kind of attitude is similar to that at American elite universities. Organizations reinforce the image that 'the best' and 'the brightest' are sorted and recognized through a credentialing process (Ho 2009). In a unitary and highly stratified higher education system, students compare their credentials with those who are lower or higher in the hierarchical rank order. In a binary system, students compare the value of their degrees with credentials awarded by institutions from the opposite sector. The interviews show that Finnish graduates with academic Master's degrees began to regard their own degree as superior as a reaction to the introduction of the professional Master's degree. As the professional Master's degree was introduced to increase higher education participation, the incumbent graduates, that is, those with an academic degree, downgraded the new degree by attributing a lower credentialing value to it in the labor market.

> Every true economist will answer: 'No!' . . . those two degrees do not have equal status as credentials. And this is a question of professional pride. (Graduate with an academic Master's degree in business and economics)

In the interviews, it was stated that especially in the most sought after jobs in the finance and banking sector, employers consider academic Master's degrees to be superior. The prestigious title of '*ekonomi*' (economist) is reserved to the holders of academic Master's degree only. Furthermore, in engineering, the value of an academic Master's degree is reinforced by employers: those with an academic degree prefer candidates from research universities, especially if they have exactly the same Master's degree as their

own. One interviewee noted how protective the academic degree holders were of their own status:

> If you are in a recruitment situation, and you have graduated with an academic Master's degree yourself, it is obvious that the recruiter will value the research university graduate more highly. (Graduate with an academic Master's degree in business and economics)

The Finnish labor market can be described as partly segregated according to the sectoral divide in those occupational fields that are common to both research universities and universities of applied sciences, like business, administration, and engineering. Graduates with an academic Master's degree on average hold the highest occupational positions in these fields, whereas the occupational status of graduates with a professional bachelor's degree is lower (Kivinen and Nurmi 2010). This positional difference is not only relevant on entering the labor market, it still remains when measured five years after graduation (ibid.). In a credentialist regime, many employers favor the recruitment of trustworthy, highly educated workers who have been immersed in the appropriate organizational and occupational cultures represented by prestigious graduate degrees (Brown 1995). The safe choice is to recruit graduates who have the same degree as their own.

The graduates with an academic Master's degree argued that professional Master's degrees should have a lower credentialing status because of the competitiveness, length, quality, and reputation of their own degree studies (Isopahkala-Bouret 2015). As the following quote demonstrates, graduates reinforce their own worth by comparing the two sectors:

> When I've looked more closely at professional Master's degree programs, the content of those studies, and especially when I've read the final thesis of those graduates… The academic quality of the thesis work is sh*t… similar to what we are already able to produce after our first year of study at research universities.… I'm really pleased that employers still value the graduates with an academic Master's degree more. (Graduate with an academic Master's degree in health sciences)

In the interviews, graduates said that academic Master's "studies are more demanding," the academic programs are "more extensive" and "last longer," there is "more face-to-face teaching," student "assessment is more demanding," and finally, the academic "Master's thesis has a higher

academic standard." Overall, they attribute a higher quality and therefore a higher level of knowledge to the academic degree. This attitude is mirrored by some of the employers perceiving the study requirements of academic degree programs to be more demanding than those of professional ones (Ojala and Isopahkala-Bouret 2014).

The higher level of education is also deduced from the selectivity of academic degree programs. In Finland, students who want to enroll in a research university must first pass a competitive entrance examination in a chosen discipline. What makes the admission process especially difficult is the limited number of places on each disciplinary degree program. Only a small portion of qualified applicants can gain admission. In many disciplines, fewer than 10 percent of applicants are accepted. Employers may assume that higher education sectors compete for students and that the best degree programs admit the most talented students. However, the number of places is equally limited on degree programs at universities of applied sciences, which means that the admission process can be very selective there, too – yet this selectivity is not acknowledged by employers.

Increasing Exclusivity

Overall, after the binary degree system was introduced, the research universities have over time become more exclusive (Ahola 2014). Growth in Finnish higher education has been directed mainly toward the professional sector. In particular, the academic degrees in traditional high prestige disciplines have become more distinguished in terms of selectivity. Access to disciplines in which the research universities have a monopoly on teaching has become more exclusive, and the relative number of students with a non-academic background has decreased since the 2000s (Kivinen Hedman and Kaipainen 2012). It seems that a discipline not being taught at universities of applied sciences translates into relative income advantages on the labor market: graduates from academic disciplines which are not in direct competition with the professional sector, such as medicine, veterinary medicine, dentistry, and law, have the highest income level (Kivinen et al. 2012).

The research universities moreover have restricted mobility from the professional sector to the academic sector. In principle, graduates with a professional bachelor's degree are eligible to apply for academic Master's programs. However, the academic bodies that are responsible for the selection process decide on the concrete admission requirements. Cross-

sectional mobility is thus severely restricted by the admission committees of research universities. This policy of exclusivity extends to the labor market.

In addition to their restrictive admission policies, research universities encourage processes of professional closure, that is, restricting access to a profession to academic degree holders. Parallel to the introduction of the professional Master's degree in 2005, the official qualification criteria for social sector occupations were changed. In the face of the competing degree, the status of the academic Master's degree was secured by defining it as the sole credential for social workers. In other fields too, the use of academic Master's degrees as a credential for access to upper-level jobs multiplied.

Discussion

This chapter has investigated the stratificatory effects of the binary degree structure in Finnish higher education. Widening access and equal regional provision have been core policy principles in the development and expansion of the Finnish system. From an egalitarian perspective, the establishment of a professional higher education sector in the 1990s has increased study opportunities and access to higher education. A large number of new students has been able to access higher education via the professional track. Further, the introduction of a professional Master's degree has enhanced the status of universities of applied sciences and made them more equal players in the field of higher education.

At the same time, and although a common degree structure was implemented, the inclusion of new types of credentials has also produced stratification. This stratification is most clearly signaled by the prestige attached to the different Master's degrees delivered by the new and traditional higher education institutions. Finnish graduates and employers with an academic Master's degree generally consider their degree to have a high exchange value in the labor market. This belief is based on a long-established high-level reputation. By contrast, the professional Master's degree is recent and to some extent unrecognized. Thus, the introduction of a new degree specific to universities of applied sciences allowed the research universities to set themselves apart and, by claiming a higher quality of academic degree programs, to cast themselves and their degrees as superior. This is acknowledged by students who choose an academic over a professional degree and

employers who prefer to hire academic degree holders (although they may also decide to cut costs and hire professional degree holders on a lower salary – it remains to be seen which development will actually prevail on the labor market, and there are likely to be differences between disciplines).

The specific focus in this chapter has been on the vantage point of research universities. The stratification of the Finnish degree structure, as argued here, is a direct effect of introducing a binary system on the Master's level. It was only after the professional degree had emerged that research universities and their graduates claimed the academic Master's degree to be superior to its professional equivalent. Furthermore, the research universities made some system-level changes that strengthened the status of their own degrees. They established two degree cycles (as part of the Bologna process implementation) and developed new, selective Master's programs. Even though professional degrees provide formal eligibility, the research universities have restricted access to their Master's program for holders of professional Bachelor's degrees – a practice that is familiar from other European higher education systems with a binary structure, albeit prior to the implementation of the Bologna reforms, which are generally regarded as contributing to "blurring boundaries" (Witte et al. 2008) between the two sectors. The Finnish case shows that the establishment of an inclusive sector goes hand in hand with enhancing the exclusivity of the university sector (cf. Bleiklie 2003).

Thus, somehow paradoxically, stratification is an effect of processes of inclusion. At the same time, as the number of students in the Finnish professional higher education sector has expanded, research universities have become more exclusive. Especially disciplines which are taught only at research universities, such as medicine and law, show signs of credential as well as social closure. They distinguish themselves not only within the binary system but also with respect to less selective disciplines within research universities. This vertical differentiation of disciplines has taken place parallel to increasing equal educational opportunities for students with a non-academic social background (Kivinen et al. 2012).

The analysis has concentrated on sectoral stratification inherent to the binary degree structure. Recent developments point to further differentiation processes between universities of the same type. In 2009, the legal status of academic universities was changed to that of independent foundations, although the state remains the main funder (Ahola 2014), a move which is currently also being discussed for universities of applied sciences. This strengthening of institutional autonomy will enable institutions with a formally homogeneous status to create distinct research and teaching

profiles. Different higher education institutions will presumably attract different student populations and, as a result, heterogeneity may increase in terms of reputation and prestige. Well-established universities with more resources and higher selectivity are at an advantage in the increasing competition for status. Further research needs to explore the effects of the ongoing stratification of Finnish higher education.

Notes

1. Educational credentialism can be understood alternatively as a persistent trend toward the need for ever increasing educational credentials for jobs (credential inflation) or as a non-linear return for schooling, meaning that the highly educated are rewarded more than their contribution to production is worth (Bills and Brown 2011). Both approaches convey a negative image of educational credentialing as superficial and as a mechanism that creates an unjust competitive advantage for people with a degree compared to those without.
2. 'Academic' and 'professional' refer here to differences in institutional profiles.
3. These included experts from the Association of Finnish Local and Regional Authorities, the Federation of Finnish Enterprises, the Union of Health and Social Care Professionals, and trade unions from private sector services and industry. Officials from the Ministry of Education and the Ministry of Social Affairs and Health also participated.
4. All professional Master's degree programs included in this study contain 90 credit points. However, some programs exist whose length is only equivalent to 60 credit points.
5. Fifteen graduates with a professional Master's degree were also interviewed in the project. These interviews are not part of this analysis.
6. Results are presented as the proportion of respondents who agreed (fully or partially) with the survey items on a five-point Likert scale.

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