universität wien

MASTERARBEIT / MASTER'S THESIS

Titel der Masterarbeit / Title of the Master's Thesis

Living with *hensachi*:

Students' perspectives of rankings and the meaning of universities in Japan

verfasst von / submitted by

Markus Hoffmann, BA

angestrebter akademischer Grad / in partial fulfilment of the requirements for the degree of

Master of Arts (MA)

Wien, 2019 / Vienna, 2019

Studienkennzahl lt. Studienblatt / degree programme code as it appears on the student record sheet:	UA 066 906
Studienrichtung lt. Studienblatt / degree programme as it appears on the student record sheet:	Masterstudium Science-Technology-Society
Betreut von / Supervisor:	Ass.-Prof. Dr. Maximilian Fochler

Some thanks are in order. After having been involved with this project for more than a year, there are quite a few people who helped me on different occasions to get to this point. First, a thank you to all the people (and especially to my five interview partners) who study or studied at Japanese universities and shared their experiences and opinions with me. What I learned was fascinating and I hope that I managed to create an interesting account based on that.

Another round goes to my peers from the programme and to my friends to whom I talked about this topic. The comments gathered in the seminars, over many beers and through written feedback have been very helpful. Also, special thanks go to Bernhard and some of my teachers in Japan for being responsible for the whole 'STS-thing'.

Only during the process of writing the thesis have I realized how important the continuous correspondence with somebody is for the quality of the outcome. In that sense, a big thank you to Max for showing interest in my topic, being open to my ideas and having seemingly endless time to meet up.

Lastly, personal support has also been carrying me through the game, and for that I thank my parents (for the love and food), brothers (for the good time, some punches, and especially Mani for reading the "thing"), friends (particularly Philip for doto and bed) and of course 深祈 (for everything).

Table of contents

1. Introduction

June 2015: The Ministry of Education, Culture, Sports, Science and Technology (MEXT) sent a directive to each national university in Japan, 'urging'[1] them to restructure or abolish their humanities and social science programmes[2]. The reason behind this directive are planned budget cuts (together with "an anti-democratic conservative ideological agenda" of the government), and that social science and humanities programmes have been targeted is not arbitrary. From the early 2000s on, the ministry put forward its goals to foster a limited number of universities to world-class level, measured by global university rankings (Yonezawa, 2007, p. 490).

In these rankings, the Japanese universities that managed to enter the top 100 did so mostly by their work done in natural science departments. A conclusion that has probably been drawn from that, is that social sciences and humanities departments are contributing less to these ranking successes, and thus deserve less resources. What does not appear to have been considered is that this difference in contribution to the rankings is not because of less 'relevance' of liberal arts programmes, but because of the dominance of natural science indicators in global rankings and databases. As most of the published work from non-natural sciences gets published in Japanese, and not in journals, they 'count less' – at least when the goal is to push for global excellence (Ishikawa, 2009, p. 169-170).

August 2018: The Medical University of Tōkyō has been accused of 'doctoring' the entrance examination scores of female applicants for over twelve years[3]. Women's scores were lowered on purpose, so that a maximum of 30% of accepted students would be female. According to the ministry of education gender quotas for university admission are allowed, if they are publicly communicated. But in this case the conditions for all applicants appeared to be the same, and the hidden nature of this quota was the real problem. The rationale behind this decision appears to have been the argument that because women can become pregnant, they will not be as useful in the workforce. Since the university wanted to have enough doctors at the university hospital, and because of a shortage of doctors in Japan generally, those initiatives were deemed justified.

Similar manipulations of entrance examinations have also happened at other universities and during high school admission procedures. What they had in common is that while the schools and universities in question publicly upheld meritocratic principles in their selection, they informally struck

[1] Whenever I use 'single quotation marks', I want to either point out that the 'word' in question should be understood as having more than just the literal meaning written (the 'urging' of the ministry cannot really be declined) or that I have not yet explained how this word should be understood yet. When I use "double quotation marks", I am directly quoting, mostly either from secondary works or from my interviewees.

[2] https://www.japantimes.co.jp/opinion/2015/10/03/commentary/universities-fending-off-attacks-liberal-arts/ (2019-10-15)

[3] https://qz.com/1346588/tokyo-medical-university-lowered-womens-test-scores-because-it-was-a-necessary-evil/ (2019-10-15)

agreements or tempered with the results in their own interests (for example to improve their market standing or to ensure that they get enough applicants) (Goodman & Oka, 2018, p. 590). A reason why they would do this, is that the ideal of meritocracy in education is still a very powerful narrative in Japan, even when many studies paint different pictures (Kariya, 2016).

March 2019: A large group of celebrities in the US got prosecuted because they bought their children's admissions into "elite" universities[4]. These accusations were based on an investigation led by the FBI, looking into cases of bribery of college sports coaches and a network of examiners who took the admission tests in place of the applicants. In this case, the universities and children in question were considered innocent, as they mostly knew nothing of the fraudulent behaviour.
What all the accused parents had in common was that they spent large amounts of money for their bribes and payments, and that the involved institutions were all considered to be top destinations in the university hierarchy. There appears to be the need to get one's children into one of few selected universities, and in addition to preparation during high school for these admission procedures, there is also the possibility to spend a lot of money to raise the chances of getting into those institutions (Stipek, 2011).

What do these three vignettes have in common? Obviously, they are all about universities. Two of them are about universities in Japan and two of them are about manipulations of university admission procedures. But what also connects them (at least two of them explicitly) is the "elite" status that some of the universities (want to) have, the context of (global) competition that these institutions function in, and the delicate relationship between money, meritocracy and egalitarianism.
Another thing that entangles these three stories on a very basic level are university rankings. In the article about funding-cuts of liberal arts departments, this gets connected with making Japanese universities competitive on a level of global excellence – measured by rankings. The second article was less about global rankings, but about university entrance examinations and their difficulty. This relationship of a university's rank and its entrance examination's difficulty will come up later in this thesis as a central part. The US-article also talked about the often-illegal steps that parents are ready to take to ensure that their children get into the 'best' universities – measured by university rankings.

University rankings have been existing for a long time now, going back to the end of the 19th century (Hammarfelt, de Rijcke & Wouters, 2017). But global university rankings are a relatively new development, which go together with the globalization of commerce, an increasingly mobile student and faculty body, and technologies that make competition and cooperation in real-time possible

[4] https://www.theguardian.com/us-news/2019/mar/12/us-college-admissions-fraud-scheme-charges-georgetown-southern-california-universities (2019-10-15)

across the planet (Hazelkorn, 2015). Next to these global rankings, which are very prominent in media coverage and are sometimes used as measures of achievements of countries; domestic rankings, which are embedded in the respective national contexts are also existing.

In this thesis I will look at the case of Japan, and more precisely at students from Japanese universities. With over 700 universities operating, more than 50% of graduates from high schools choosing to advance to that level, and a high degree of privatization in education; university rankings can be expected to be of interest for a large part of the population. I will show that this is indeed the case, but that the relationship between global university rankings and the most important domestic ranking – called *hensachi*[5] – is not a straightforward one. Especially for Japanese students, when choosing institutions for their undergraduate level, global rankings matter next to nothing.

But it is also not coincidence that one of the three starting vignettes was about a case in the United States. One way that Japanese students present their understanding of the Japanese higher education system, is in opposition with 'other' university systems – and universities in the US were frequently mentioned. I will show that those two systems seem to have more in common (also owing to historical developments) than the dominant narratives from my interviews suggest.

The aim of this thesis is to find out: *How do university rankings play a role for students in how they make sense of and evaluate universities and students in the Japanese higher education system*?

The choice of a "how do" and not a "what role" question is a conscious one. I do not only want to see how ideas about universities and their students are shaped by university rankings, but also by which situations and practices this understanding is produced. For the purpose of answering this main-research question, I structured the thesis in the following way:

Chapter two will give a general introduction to literature about university rankings. This includes a discussion of measurements, accountability, and how university rankings relate to Japan. The second part of the chapter will be an introduction to *actor-network-theory*, my chosen box of tools to guide my interpretation of the analysis. It will finish with a short section on the partiality of knowledge claims – including the ones made in this thesis.

The beginning of chapter three will state my research question more thoroughly and will formulate several sub-questions that delineate my project more closely. After that, I will introduce the context of my case study – the Japanese education system. The last two parts will be the methodological description of my thesis. This includes the way I produced my data – interviews, and how I interpreted them – inspired by grounded theory methodology.

Chapter four will be the core component of this thesis – the empirical part. I will begin with a

[5] 偏差値 – for a closer discussion of it refer to chapter 4.

characterisation of the Japanese higher education system, based on what I was told by my interviewees. After that I will take a closer look at *hensachi* and describe two situations where it impinges on students' lives. The last sub-chapter will address the effects that *hensachi* has on how students talk about and make sense of universities and students.

Lastly, chapter five will connect the issues that I opened before and make sense of them together. It will also serve as a vantage point to relate global rankings back with the description of *hensachi* that I will have given in the chapter before. I will also extend the results of my case study to further discussions in Science and Technology Studies (STS), and end with some new questions, and possible avenues of research that came up in the process of my thesis.

First reflexion

What you will read now will be the first of five reflexions. After each chapter one of them will appear to talk about this master project from a different perspective than in the 'normal' text. Their aim is to contextualize what was said in the preceding chapter and to open again the black box *that is the final product of the master thesis. You will find the theoretical background of the reflexions and the reasons why I chose to include them at the end of the next chapter (p. 30). As you might have noticed by now, the reflexions are also written in a different way than the rest of the thesis, making them more personal by content and style.*

While I gave a general introduction to my topic in the preceding chapter, it was not a very personal one. It might have seemed like I came upon my topic by reading several articles about universities and their rankings. And while I thought they might make a nice entrance into the topic; this was certainly not the way how I became interested in it. I want to give a somewhat 'alternative introduction' to my thesis here, which is much closer to how my interest developed, but less suited for academic papers:

A few years ago, I was in Tōkyō as an exchange student for a year. Since I was studying Japanese studies, I knew a bit about universities in Japan and that studying there was 'different' from studying in Austria. But attending both courses for exchange students as well as for regular students, partaking in many extra-curricular activities, and spending time with other students there, showed me these differences in action. Of course, these differences should be understood by keeping in mind that I also come from a distinct university culture in Austria, which must appear just as 'different' for people from Africa, the US, South Amerika or Japan. The students in Japan had very different ways of talking about their universities and other students. And a lot of this talk had to do with "difficulty" and "being very smart" (what those terms might mean will be talked about in chapter 4 – the empirical part).

So, what struck me most after coming back to Austria was that Universities in Japan, having such different relationships with their students and where students are attending under different conditions and often different motivations, are being compared year by year on a global scale. But not only that, the relations to these global university rankings that my colleagues and I have in Austria and those of the students in Japan are quite similar (we ignore them mostly) – but for very different reasons! At the same time, every year I read in newspapers and in social media how well (or badly) the University of Vienna did in those rankings. For me, it never occurred to check university rankings when I decided where to study but it seems that on different levels these rankings are considered very differently.

What I set out to do in this master project is to find out why students in Japan seem to embrace a very specific version of university rankings but reject others. And, probably more importantly, how this matters for how they relate to universities and the students who study there (including themselves).

2. State of the Art and Sensitizing Concepts

In this chapter I will give you an introduction to literature about rankings and indicators, their context in Japan, and to my sensitising concepts. This combination will open up a gap that I will propose to fill with my research questions – and their answers in the empirical chapter.

2.1. Accountability

A ranking is, in the most general sense, a technology that makes certain characteristics of entities commensurable – and creates a list that puts these entities in relation to each other. In the case of university rankings these entities are universities and the characteristics (depending on the concrete ranking) are often things like publication numbers, student-to-teacher ratio or financial capital. These are assigned certain weightings, then combined and the end-result is usually a single value that eventually represents the rank of the university[6]. Since university rankings did not appear out of nowhere, nor have they been existing forever, it makes sense to look a bit into some possible reasons for and the emergence of these rankings.

Representing institutions like universities through a single number and creating competition between universities needs some context to make sense. One way to contextualize rankings and other indicators is "the rise of audit culture in higher education" (Shore & Wright, 2000). Coming from financial accounting and being introduced into other spheres of organization, auditing refers to a way of increasing transparency through visibility and publicity – with the goal of improving (the output of) the audited organization (Strathern, 2000, p. 313). What often happens when organizations get assessed by external evaluators – and more importantly: by external measures – is that instead of 'improving' whatever activity was supposed to be measured, those activities get changed in a way that resemble the measurement more closely (Shore & Wright, 2000, p. 72).

This can even go a step further, for example, when indicators from university rankings are 'improved' directly, without taking the annoying route of increasing the measured entity itself. Instead of improving the thing that is measured by an indicator (because it represents some part of 'quality' for rankers, but hopefully also for others) – and thus increasing the indicator that is measuring it, the goal becomes to increase the indicator itself. Paul Wouters (2014) used the concept of "goal displacement"

[6] For examples of ranking methodology: Times Higher Education World University Rankings (THE)- https://www.timeshighereducation.com/world-university-rankings/world-university-rankings-2020-methodology (2019-09-29), U.S. News Law School Ranking - https://www.usnews.com/education/best-graduate-schools/articles/law-schools-methodology (2019-09-29), Academic Ranking of World Universities (ARWU or Shanghai ranking) - http://www.shanghairanking.com/ARWU-Methodology-2019.html (2019-09-29) – but see also: (Leiden Ranking - https://www.leidenranking.com/information/indicators for a purely bibliometric ranking (2019-09-29) and U-Multirank - https://www.umultirank.org/about/methodology/our-approach/ for a ranking tool without pre- formulated lists (2019-09-29), for different approaches.

for academic assessments and it is one instance of how increased accountability has the opposite effect than improving the practices that auditing was supposed to measure. One example that he gives in his chapter is when in 1992 publication counts were requested for the first time in the United Kingdom, scientific production and its output in publications increased sharply. This seemed to have negative consequences for the quality of the publications and resulted in a shift of criteria in 1996 from "quantity" to "quality". This again had as consequence that scholars increased their publications in journals with a high *Journal Impact Factor* (JIF[7]), an indicator which supposedly guarantees high quality publications (Wouters, 2014, p. 53).

What happened was that instead of 'just measuring' the 'productivity' of academics, these measurements made their subjects react to them. Scholars adapted their behaviour towards these measurements, but not just in the frequency of their publication but also in the style of their writing, and visualization, often aimed at specific journals that are valued highly (Burri & Dumit, 2008, p. 305).

One issue that comes up when bodies are assessed externally through making them more 'transparent', is that those assessments are usually achieved by collecting more and more information. And the easiest way to collect and process large quantities of information is when this information is represented through numbers.

Porter (1995) argues that the association that is often made between objectivity (or rather "mechanical objectivity") and quantification in scientific disciplines like psychology is often related to pressure from the 'outside'. This means that the need to 'prove' something through numbers is only given when the party to be convinced is not a member of the community (and thus not familiar with conventions and assumptions of how to do things). Quite the opposite, if we take disciplines like particle physics (the example Porter gives in his book), informal communication and trust are much more important than reliance on quantitative objectivity for everyday practices. On the other hand, when this trust is not existent or diminished, mechanical objectivity in the form of large amounts of quantitative information gets endorsed (and vice-versa, the more information is collected the less trust is displayed, Strathern, 2000, p. 313).

While the paragraphs above argue that audits and external assessment have to rely on indicators that usually translate what they measure into something else, the act of assessing others and their works is nothing that was suddenly imposed on academics from the outside, as "auditors are, Euro-American scholars and academics would be the first to admit (Brenneis, 1997; Davis, 1999), ourselves." (Strathern, 2000, p. 315). Evaluation is practiced by most people living in Western countries on a daily basis (Dahler-Larsen, 2012). Especially for the administration of (academic) institutions, evaluating things has become indispensable, and so faculty of universities are asked to submit in systems all their

[7] More about the JIF and issues with it in the conclusion.

(countable) research activities. In most cases, these evaluation exercises happen from the highest (ministry of education) to the lowest (single employee) level and can be expected to influence research practices. Sometimes, with the explicit goal to position oneself better in the global competition (Tan & Goh, 2014).

This relationship between metrics and indicators on the one side, research practices on the other side, and (especially STS) scholars on both sides has been the focus of an issue of *Engaging Science, Technology, and Society* (for instance Fochler & de Rijcke, 2017; Irwin, 2017). While the constant evaluations of work and output are putting a strain on researchers and are frequently lamented about, it often seems to be necessary to play the "indicator game" yourself (Fochler & de Rijcke, 2017, p. 22) to be able to keep up.

In the indicator game, publications are one of the most frequently used indicators to measure academics, together with citation counts (for a critical assessment of the "h-index", which combines both of these counts see Burrows, 2012; for citations, basic assumptions about quality reflected in numbers and in how far they can (not) represent anything more than visibility see Woolgar, 1991). Because so much focus is put on these two indicators, publication behaviour is often geared towards practices that maximise this measure (for instance "salami publishing" or "citation cartels", Fochler & de Rijcke, 2017, p. 27), and even choices of what kind of research people are pursuing, and the content of it is influenced by how much this research can further the career of the researcher (Fochler, Felt & Müller, 2016).

2.2. University rankings

These indicators usually measure the 'performance' of individual researchers but put together with other indicators like reputation surveys or student numbers, they are used as proxies to measure whole departments and universities (which then gets reflected on individuals, usually through university administrators that try to raise the rank of the university). For private universities, those rankings are an important way to make themselves desirable on the 'student market' and are even an important part of creating this (increasingly global) market. But not only private universities, for publicly funded universities, university rankings are promoted as a type of accountability mechanism, and thus in the interest of 'the public'.

Hammarfelt, de Rijcke and Wouters conceptualised university rankings as social technologies that "make universities 'calculable'", meaning that they produce 'versions' of universities that are similar enough to be commensurable and that by "measuring eminence [they] defined what would henceforth count as eminence" (2017, p. 393). "Eminence" was the way that the first university ranking at the end of the 19th century was ordered by, initially meaning reputation and the number of doctorates awarded by each university (p. 399-400).

This is the classic constructivist argument that by 'measuring' something, the party that does the measurement enacts the very thing it is arguing to 'just measure'. What then also happens is that a ranking that does this becomes "reactive" – meaning that it produces effects through its 'measurement' of something that was supposedly existing beforehand. I want to shortly introduce one example where the *U.S. News and World Report* ranking of law schools in the United States does more than just rank university departments, based on the account of Wendy Espeland and Michael Sauder (2007).

2.2.1. Effects of a ranking

The main argument that they make in their article is that rankings are "reactive" – meaning that "because people are reflexive beings who continually monitor and interpret the world and adjust their actions accordingly" (p. 2), those people change their behaviour when they get assessed. The two authors interviewed staff, faculty and administrators of different law schools to find out how these people dealt with the rankings assessing them. In interpreting their results, they arrived at two mechanisms that helped to explain how rankings, institutions and people interact with each other: "self-fulfilling prophecies" and "commensuration" (p. 11).

One way that self-fulfilling prophecies work with university rankings is for example the concrete distinction that is being created between two institutions. During the process of calculating the scores that are behind a university's rank, these scores are often "tightly bunched, [but] listing schools by rank magnifies these statistically insignificant differences in ways that produce real consequences for schools" (p. 12). That means that while different universities might overlap in many ways, and have been up until that point regarded equally, in the ranking eventually one is higher than the other. These small differences "which were often largely a product of measurement noise" (p. 12; they do not give examples for this "measurement noise") become enhanced through the discrete number-ranks that the universities are assigned. This then has the result that differences in the ranking affect things like application and student numbers – which eventually turns full circle and reinforces the small difference from before, making the difference 'real'. The self-fulfilling prophecy would then in this case be the statement which says "university A is better than university B" – based on miniscule differences which *only* become reified through the effects that the ranking has on student applications – making university A 'really' better than university B.

Commensuration, on the other hand, works with translating "qualities into quantities that share a metric, a process that is fundamental to measurement" (p. 16). Rankings transform a host of information and simplify them, losing in the process many nuances and at the same time make the result appear more definite and authoritative. After a ranking is produced, it gets harder to argue in

terms that are not reflected in the ranking. Because rankings are so simplified, they can travel easily. But the more they are spread the less other qualities and characteristics of universities are paid attention to. This can go as far as that people who should know better, rely on rankings instead:

> *Describing reaction to a disappointing ranking, a dean recalled:*
>
> *The effects were immediate hysteria. I had alumni writing me left and right. I had my board of directors asking me what had suddenly happened that [we] had suddenly [dropped in the rankings]. . . . It was an irrational response because the people writing mostly actually knew about the school. I had my student body protesting, and they're here and they know in the course of one year that nothing had happened. But they all essentially were saying, "What did you do?" (Espeland & Sauder, 2007, p. 23)*

Reactions like this and the sheer public attention that the US News ranking got made law schools react in different ways to better (or keep) their ranks: maximation of resources, redefinition of practices and manipulation in gaming strategies. All the effects of this ranking make it more durable and more criticized at the same time. Because it is so widespread, administrators cannot ignore it although most of them are very critical about it. While they argue that the indicators are not measuring correctly, they have to provide the ranking with their data because otherwise things will be 'assumed' about the university (usually at a less beneficial level).

The point that I want to make is that the US News ranking managed to entrench itself into the minds of administrators and students alike, but initially not even on purpose (Espeland & Sauder, 2007, p. 5). But because of the echo from application numbers and media coverage, law schools felt the need to address the ranking more seriously – in the end further legitimizing the ranking by putting themselves in line with the indicators used. It is this combination of students (taking it seriously) and media (popularizing and reporting on it) and institutions (reacting to it) that makes it such a big player and, as I will argue later, not every university ranking achieves that importance.

2.2.2.Global rankings

Logically, the bigger the scope of a ranking, the more general it tends to be. The only other option would be to provide more and more information, which would be counteractive to university rankings' biggest selling point: their simplicity in understanding which university is 'better'. In that sense, when university rankings extend their domain from law schools in the US to all kind of universities on a global scale, those rankings tend to be more and more disconnected from the particularities of the institutions that they rank.

Concerning global rankings, Ellen Hazelkorn (2015) gives a comprehensive introduction and an outline of the developments of the last ten years. Based on cases from the US, Japan and Australia, she

discerned two model trends of how higher education systems are developing: world-class university (WCU) and world-class system (WCS) (p. 217-221).

The first trend represents a strong focus (through funding and attention) on very few elite institutions, with the sometimes explicit goal to raise their position in global university rankings (this is also the context where one of my starting vignettes is to be placed). A world-class system, on the other hand, organizes its universities not through competition for the same resources, but by more integration in their local surroundings, and having different missions. The two models are also called the „neo-liberal model" and the "social-democratic model" (p. 201) respectively – reflecting their relation to political and market ideology.

She argues that (global) university rankings are clearly pushing for the world-class university model, since "rankings are an inevitable outcome and metaphor for the intensification of global competition" (p. 9). But competition gets not just created for the sake of itself, but for "the favor of an imagined public/audience" (Brankovic, Ringel & Werron, 2018, p. 272). It is thus important to always consider the current economic and political order when rankings are to be interpreted, and this becomes even more relevant when we investigate how global rankings interact with national higher education systems. Because rankings are made by people and companies from certain countries, we can expect that biases are inherent in them. If we consider for instance the databases that the big global universities rely on (*Web of Science* and *Scopus*), automatically English-speaking publications and journals are advantaged (Jöns & Hoyler, 2013). And since the rankings are of a global nature, indicators that express 'internationality' (like the number of international students and faculty) are emphasised over things like support for financially weak students (Jöns & Hoyler, 2013, p. 55).

Following the previous two statements, when we look at countries that publish neither mainly in English, nor have most of their efforts aimed towards an international audience, they are expected to be disadvantaged in global rankings. One of those countries is Japan, which I will turn to next.

2.2.3. Global rankings and universities in Japan

The fact that many countries are disadvantaged by global rankings does not stop them from being included in those (also because the claim of global rankings is to be "global"). Indeed, when the Times Higher Education Supplement ranking (then in cooperation with Quacquarelli Symonds Limited (which now publishes the *QS Ranking*[8] independently)) contacted Ōsaka university in 2006, it first looked like a spam e-mail to them. Problems of definition of who counted as an international student or about confidential information arose when the university tried to provide the asked information.

Since Ōsaka university did not have statistics on how many non-Japanese students were studying at

[8] https://www.topuniversities.com/university-rankings (2019-09-30)

the time, providing information on "international students" was hard, also because it was not clear who would qualify as such. Would a student with foreign nationality who went to obligatory school in Japan count as an international student as well? Reputational surveys were also an important part of the assessment and since the company doing the ranking was an English one, they asked the university to 'provide' them with addresses of companies that they could ask. Being problematic because of laws of confidentiality and the fact that the university would nominate their reviewers, they declined. Naturally, not providing data did not help in the rank that they received (Ishikawa, 2009, p. 162).

This exemplifies two points. The first point is that the results of the rankings are in no way reflecting the messy process and the uncertainty that lay behind their production. This was one of the points that Espeland and Sauder (2007) made in their discussion of "commensuration" but it is also an argument that is more generally made in STS for scientific facts and the "deletion of modalities" of their construction (Latour, 1987; see the next chapter). The second point is that the definitions of "international student" or ideas of what kind of data can (or should) be provided to the rankers come from the original context of the ranking body. And those definitions are modeled after the universities that are closer to home – handicapping universities from other contexts and countries that work under different assumptions and laws.

So, when considering how successful global rankings could or could not enter the minds of people in a given context, it makes sense to look at ranking landscapes that might already exist there. Rankings are always constructed with an audience in mind: university administrators, policy makers, academics, and probably most important (also in their own statements) – students (Brankovic et al., 2018, p. 278). And while students are the main "imagined consumers" of rankings, there is no immediate reason why they should rely on one ranking over another just by virtue of 'the best ranking methodology' – especially if alternatives already exist, alternatives which might be much closer entangled with existing practices and actors than the new global rankings could boast.

Japan has several domestic rankings in place[9], some of them published by newspapers or websites with similar ranking methodologies like the global rankings (Yonezawa, Nakatsui, & Kobayashi, 2002, p. 380-381). But there is also a ranking of universities by the difficulty of their entrance examinations, a normalized score that is called the *hensachi* of a university, to which I will turn later in detail (Goodman & Oka, 2018). Something similar also exists in the US, namely the SAT-scores, but a ranking based on the threshold of the SAT-score needed to get into a given university is not as explicitly developed as in Japan.

[9] Since I will give an overview of the Japanese education system in the case description, I will only introduce the literature on ranking and university policy here, keeping the parts that relate more closely to my topic of inquiry for later.

There have also been efforts made to develop ranking systems that combine the multi-indicator approach of global rankings with the particularities of the Japanese higher education system (Hayashi, 2009). Based on reputation surveys answered by big Japanese companies, the rate of graduates finding jobs in firms, and the entrance difficulty (*hensachi*), this approach is argued to be more 'sustainable' than the global rankings, because it does not put so much emphasis on short-term results – and should thus be less prone for manipulation (Hayashi, 2009, p. 36).

While there are several "flagship universities" in Japan, this means only something in relation to other universities in domestic rankings. Concerning international competition and "research excellence", Japanese universities have appeared in the early 2000s to 'lose' against other, especially non-Japanese Asian flagship universities (Yonezawa, 2007, p. 489). Less foreign students seem to choose Japan as their country of destination and even the most elite institutions in Japan seem to pale in comparison with the top-ranked universities in the world (Ishikawa, 2009, p. 165-166). While for the most part of the 20th century the Japanese ministry of education pursued an 'equal' treatment of domestic universities, because of the new competition that has been created through global rankings, in 2001 it planned to "foster around 30 world-class research universities" (Yonezawa, 2007, p. 490). This meant a considerable change of funds into certain selected universities that were pushed for global competition and academic excellence.

At the same time, the number of open study spots in Japanese universities became higher than the high school graduates trying to enrol at them. This meant that while bigger parts of public funding went to a select group of universities (most of them the old-imperial universities), many smaller and mostly private universities struggled to stay in business (Nakai, 2007, p. 12). In Hazelkorn's terms, Japan is striving for "world-class universities" and not a "world-class system" (Hazelkorn, 2015, p. 217-221). One way to 1) improve in the global rankings, and 2) secure at the same time more public funding by doing so is to focus on attracting more foreign students. This endeavour of "internationalization" has been a buzzword in Japanese higher education lately, and many universities try to build whole campuses aimed at international students (Breaden, 2013).

But while the ministry seems to want to push select universities for world excellence, in pre-tertiary education other reforms are taking place. With the goal of increasing individuality for pupils (Bjork, 2016) and providing more "choice" for prospective students to choose their elementary and middle schools (Kariya, 2016), efforts were made to equalize education chances for the population. Ironically, these reforms had not necessarily the envisioned outcomes, but provided even more instances where socio-economic factors of students and their parents played a role in school allotment (Kariya, 2016, p. 163).

Most of the works relating to university rankings in Japan either investigate the topic on an

administrative (Breaden, 2013; Ishikawa, 2009), comprehensive (Hazelkorn, 2015; Yonezawa et al., 2002) or policy (Kariya, 2016; Yonezawa, 2007) level. And they all usually mention another domestic ranking by which the Japanese hierarchy of universities is decided – *hensachi*, but they never explain it or problematize it (with the exception of Goodman & Oka, 2018). The issue that plays the central role in them is clearly the increasing internationalization of Japanese higher education and there appears to be no question that it is necessary for Japanese universities and their staff to become more international (this usually means raising the quota of foreign staff or publishing in English-speaking outlets). But what does this do with the people studying in Japan? Is the internationalization of Japanese higher education also affecting the bulk of students in a society where higher education has been massified?

One of the few works that dedicatedly puts students as the main focus is Brian McVeigh's *Japanese higher education as myth* (2002). Based on teaching experiences in 'low-level' Japanese universities[10], he shows how little at these institutions is about learning, and how much about making it appear as if. The book is not explicitly concerning itself with rankings (and even less with global ones) but it shows what is happening in universities which are considered on the 'bottom' of what appears to be the most important ranking in Japan. Through things like the "dumbing down" (p. 124) of classes, it is guaranteed that almost all students in courses manage to finish them successfully. Especially in the last year of university education, an increasing amount of "filling in of forms, list making, signing, stamping, dating, whiting out, and in general, paperwork" (p. 129) is practiced, not necessarily to prove the obtained education, but to make it seem as if. McVeigh calls these make-appear activities "simulated schooling" and argues that "the more simulated an institution becomes, the more ritualized and elaborate its associated ceremonies and activities become. (p. 123)" While this would appear to not be in the interest of students, many of them chose certain universities (or going to university in general) exactly for that reason. Learning is not the goal but to have a relatively easy time that can be spent before entering the workforce, while at the same time feeling that this (some would argue wasted) time is necessary to get a proper job afterwards (p. 211-213).

2.2.4.Rankings and Students

There are also works that investigate the relationship between students and university rankings. Especially in the North American context, there have been studies (mostly from economics) that measured or modelled the impact that certain university and college rankings (would) have on applications and matriculations (see also Bergerson, 2010 for a review of literature on college choice). Concerning the US News ranking that I introduced earlier (Espeland & Sauder, 2007), several studies

[10] Meaning that they have a *hensachi* of <50; what that means will become clear later.

have investigated how it relates to student preferences.

One proposes a model that characterizes university rankings akin to fashion trends (Dearden, Grewal & Lilien, 2019). Like luxury items, university prestige does not have any superior value in itself but becomes useful when it can give an advantage in social situations: "If future employers use university ranks to assess the human capital of university graduates, students have an economic reason to attend better-ranked universities, independent of the quality of the education they receive. (Dearden et al., p. 694)" The authors argue that because university prestige works similarly to luxury goods, it makes sense for ranking producers to 'let' the rankings change frequently and to introduce some measure of randomness in it. This gets achieved through changes in ranking methodology, and according to them explains why ranking indicators not necessarily cover the same issues that students find important. In that way, rankings create trends that change over time, and students are reacting and consuming these trends.

How much influence rankings actually have on students' decisions for universities is a different question. Studies have looked on the effect of rankings on student applications in German medical universities (Horstschräer, 2012), on application numbers in universities in Ontario (Drewes & Michael, 2006) and on inscription rates in colleges in the US (Luca & Smith, 2013). The first two studies used data provided by centralized application services and concluded that a higher position in the rankings positively affected application numbers. But other indicators, like research output were negatively corelated with undergraduate university choice (Drewes & Michael, 2006, p. 797), while geographical proximity of institution was in every case a strong factor for university choice. In the US case a rise of one rank in the US News rankings corresponded to a rise of one percent in application numbers at the respective colleges (Luca & Smith, 2013).

But not only the rank of the university, also the "salience" of the ranking matters. According to Luca and Smith (2013), depending on how explicit ranks are provided and how much input is needed by viewers (for instance if a ranked list is proved or if viewers must decide which indicators are most important), the effectiveness of rankings changes. Their statistical study found no significant correlation between application numbers and ranks if the list is not ordered by rank (meaning for instance alphabetically) (p. 62). In the same vein, the more the US News ranking extended its explicit listing of universities[11], the more those newly included universities profited from their listing.

Going into the opposite direction of this ranking are so called "personalized college rankings" (Hou, Morse & Shao, 2012, p. 768). Starting with the CHE-Hochschulranking in Germany in the 1990s, other 'anti-salient' rankings, with the point to exactly not pre-define a ranked list based on weighted

[11] At the beginning, only the top 25 were listed by rank and everything below only in "group 25-50" and so on. This rank-by-rank listing got gradually extended.

indicators and culminating in a single value, are also being produced (Horstschräer, 2012, p. 1165) (another instance is the U-Multirank ranking, an initiative funded by the European Commission). These rankings argue with the opposite point – that by making the ranking more individual to the user, they can provide better results – and thus should rather be understood as "matching" tools instead of university rankings (Hou et al., 2012, p. 774).

But regardless of the type of ranking that is investigated, the consensus is that they seem to matter for student choices – although with limitations. A higher socioeconomic background seems to increase the reliance on rankings – reflecting a better access to the 'free' market of colleges and information about them (Bergerson, 2010, p. 35). Regarding global rankings, undergraduate applications are only weakly affected. Bachelor programmes recruit their students mostly from the local or national vicinity, and in these cases the fit between the domestic education system and a possible university ranking becomes important (as we will see in chapter 4). But the 'higher' the degrees go up, the closer one gets to publishing and other scientific research practices – and it is here where global university rankings are able to attract students more effectively (Furukawa, Shirakawa & Okuwada, 2012).

While there appeared to be strong reactions by funding bodies, the ministry of education and university administration towards global rankings, I have not found much on how students in Japan 'react' to those. Clearly, money allotment has been adapted to allow certain "flagship universities" to compete for world-class excellence, but does this matter for prospective students who are about to apply for higher education[12]? If there are rankings that are important for the choices of and the meanings that universities have for students, how do they relate to students? What I am interested in is not only if and 'how high' the impact of rankings is (which was mostly the aim of the studies I mentioned above), but what it does to the ideas that students have about universities, when they heavily rely on rankings. To achieve that I treated university rankings as technologies, which allowed me to investigate them as actors who actively engage and bond with students:

2.3. Concepts for thinking about rankings as a technology

My main guidance tool in how to make sense of my case was actor-network-theory[13] (ANT). This was not a decision that I made before, expecting it to be useful to understand university rankings in Japan, but a tool that started to propose itself during the analysis. I will give a short introduction to ANT,

[12] In Germany, for instance, it appears to matter (Horstschräer, 2012, p. 1164).

[13] About how to write ANT out and issues with the name see Latour (2005, p. 9). Other names include "actant-network theory" (Gieryn, 1995, p. 443), "material semiotics" (Law, 2009) or "sociology of translation" (Callon, 1986, p. 196; see also Latour, 2005, p. 106).

mostly based on the works of Michel Callon (1986), Bruno Latour (1987) and 'Jim Johnson' (1988) and show some developments that have happened in its more than thirty years of existence.

2.3.1. "Classical" actor-network-theory

Actor-network-theory is probably the most famous export of STS to other disciplines, mainly owing that to its inclusion of non-humans and the subsequent focus on this analytical move in comments on the approach. One of its distinguishing marks was its symmetrical treatment of humans and non-humans for the analysis, meaning that before one investigates a situation, the observer should not pre-decide what or who is an actor (or actant). This can only be the result of the exploration, and thus the analytical terms of what acts on who (or vice-versa) have to be applied regardless of the 'humanness' of the actor. This extended agency should not be (but has frequently been) understood as an extension of motives or agendas to things, but as their capacity of *making others behave in ways that they would not without* the actor(s) in question.

One of the most cited works of early ANT has been an article by Michel Callon (1986) on the cultivation of scallops by fishermen in a bay in France. He introduces several analytical terms for the "sociology of translation" in his paper, which he uses in that case to "study […] the role played by science and technology in structuring power relationships" (p. 197). He proposes to follow "three methodological principles" (p. 200-201). The first is *agnosticism*: it means abstaining from taking sides in controversies, but not only when describing scientific or technical arguments but also when identities and the social environment are concerned – things like "social class" are not invoked to debunk claims of people. The second is *generalized symmetry*: when conflicting viewpoints are introduced, they must be explained in the same terms and by the same standards (the symmetry of Bloor, 1991). But not only that, this vocabulary must also be the same regardless of the nature of the concrete issue – meaning that humans and non-humans need to be described with the same kind of words. The third is *free association*: what counts as actors in the case at hand cannot be decided beforehand. So, instead of using frameworks to make sense of a situation, who (and more importantly what) might be playing a role cannot be known, and thus should not be pre-structured. "Follow the actors" is the way to find that out.

With these principles in mind, Callon proceeds to describe a controversy between scientists, their academic colleagues, fishermen and scallops; using the same vocabulary for all those parties. He chooses to follow the scientists in his paper, and from there on describes how they interact with others and try to get their agenda through[14]. In "four moments of translation" (p. 203-219) he describes: how

[14] According to the three principles, the choice of the scientists as the 'lead actor' is an arbitrary one, and while other actors as starting points would deliver a different description, either description should *in principle* be as valid as any other

they attempt to make themselves and their plan indispensable ("problematization" – creating an "obligatory passage point (OPP)"), how they try to make others align with their planned positions ("interessement"), how they negotiate the multiple roles and positions of the other actors and create alliances ("enrolment"), and how they try to scale their negotiations towards the bodies that were represented ("mobilization" – replacing representatives through translations and then hoping that when one 'translates back' to the whole group the associations made still hold).
The point that he wanted to make is that in describing a scientific endeavour in-the-making, it makes sense to address all elements involved in an equal way. Through that, "social explanations" (more to that later) are avoided and replaced by a realist description of who and/or what contributed to the outcome.

Another programmatic early ANT work was published by the renowned American technologist 'Jim Johnson' (1988). More specifically, he treated the role of non-humans in our daily lives and described their ability to act on others. Again, one dedicated goal of the paper is the proposal of a language that can treat humans and non-humans in the same terms when it describes the interrelations of both. Unlike Callon, 'Johnson' begins with a practical example and then theorizes about it. In this case it is a door-closer, a piece of seemingly simple technology that strives to separate the cold outside with the warm inside, and while doing so takes over a lot of work that would be done by many humans and/or non-humans otherwise. In his words: "every time you want to know what a nonhuman does, simply imagine what other humans or other nonhumans would have to do were this character not present. This imaginary substitution exactly sizes up the role, or function, of this little figure. (p. 299)" So, in his terms non-humans act on (non-)humans not only because they 'do' something (or take away the need to do something), but they also make others do something in a certain way – they *prescribe* behaviour onto other actors. This is the first of several language proposals that 'Johnson', leaning heavily on the repertoire of Madeleine Akrich (1987), presents for his indiscriminate analysis of humans and non-humans. Others being: *script* (the possible ways in which presupposed actors can/should behave), *description* ("the retrieval of the script from the situation" (p. 306)), *transcription/inscription* (translating a script into a more "durable repertoire"), *subscription* vs. *des-inscription* (following proposed scripts vs not doing so) and *pre-inscription* (all the work and expectations needed from actors before they meet up at the situation of prescription).
Especially the term of *inscription* is important for the overall argument of his paper, since it denotes the transfer of meanings and ideas (often) into artefacts[15]. The important point is that the *inscription* of something into another form is a *qualitative transformation*, or in ANT-terms: a *translation*. This is

[15] See also Latour's chapter „Technology is Society Made Durable" (1991).

a point that Latour and Woolgar (1986) develop extensively in *Laboratory Life* (especially in chapter two), where they show how claims are gradually made more durable by transforming them in several steps through what they call *inscription devices*, while at the same time deleting the record of these steps (= *modalities*).

Because of the possibility of delegation (or *in/transcription*) between humans and non-humans, 'Johnson' argues that social and technical determinism of action are both inadequate. A sociology that stops at the borders of human entities (or does not enter it) does not see relations that cross these artificially erected borders, and which would greatly help to explain actions – provided one has the right vocabulary.

Besides these two essays[16], Bruno Latour's *Science in Action* (1987) is an early synthesis of ANT, re-stating some of the methodological principles from Callon's article as seven "rules of method" and six "principles". Building strongly on the empirical work described in *Laboratory Life* and on other case studies done by Latour and his colleagues, this book is really about scientific claims, and a programme that wants to track how people try to convince others of the facticity of their claims.

Ranging from citation behaviour, to laboratory practice, to the dissemination of facts into school books, the monograph wants to trace the transformations that scientific ideas go through on their way to a scientific fact (or not). While there is an abundance of terms and concepts introduced, I will only shortly introduce a few of them, for reasons of usefulness in my case and their general importance in STS:

Technoscience: instead of always referring to "science and technology" and also because of the boundaries that often come along with these two terms, Latour uses the word "*technoscience*" for the phenomena he is studying. It combines several meanings, with the most obvious one being the intertwinement of technological and scientific development. New scientific theories and/or facts can often only be tested, validated, and sometimes even thought of by using technologies. On the other hand, technologies are often (but not always) built on scientific understanding that lays the groundwork for them. This becomes especially visible in the setting of the scientific laboratory. Another meaning, and especially important for the tracing of networks in ANT, is that *technoscience* goes much further than "science and technology". For ANT, who or what plays a role in the stabilization of claims is not pre-ordained and can thus range from bacteria, to the postal service, to journalists: "in the construction of technoscience we have to include all the people and all the elements that have been recruited or are doing the recruiting, no matter how foreign and unexpected

[16] A third one would be John Law: "On the Methods of Long-Distance Control: Vessels, Navigation and the Portuguese Route to India" (1986). The reason why I focused on the two above will come in the next sub-chapter.

they seem at first. (p. 163)" *Technoscience* extends towards work done that would often be delineated as the 'social context' of science (for instance lobbying). But because this work is just as important for the construction of scientific facts as the work done at the laboratory workbench, to trace the network of a claim you must follow "the inside and outside scientists" (p. 159).

Black boxes & trials of strength: blackboxing is "the way scientific and technical work is made invisible by its own success. When a machine runs efficiently, when a matter of fact is settled, one need focus only on its inputs and outputs and not on its internal complexity. Thus, paradoxically, the more science and technology succeed, the more opaque and obscure they become. (Latour, 1999, p. 304)" A *black box* can be a machine or a scientific fact, in both cases it gets taken for granted. According to Latour, the goal of a scientist is to be able to make a claim that will eventually become a *black box* – something that will be so fundamentally accepted that no one would think to question it. Accordingly, it gets very hard to open something up again, once it became a *black box*, because of all the other things that would need to be questioned as well. This test of a claim is called a "trial of strength" (1987, p. 79), a move that tries to disconnect a representative from who or what they represent. The resources that one has to mobilize to be able to win a *trial of strength* against a claim is proportional to the amount of connections that the target managed to establish with other actors (they might be facts, black boxes like machines, experiments or people). Thus, the more entrenched something is in other things, the harder it not only gets to dislocate it, but also to even think about questioning it.

Centres of Calculation: the seventh rule of method reads (something like this): 'thou shalt not put forth cognitive explanations of science and technology' (p. 248). In more sensible words: technoscience is done through actor-networks and not thought of by geniuses. The more things one can gather, and the further one can extend one's network, the better one can "act at a distance" (p. 224). A laboratory can be such a *centre of calculation* (or accumulation), where things are brought in from the outside, transformed, and manipulated in the laboratory. Nature gets reconfigured and adapted in a way that makes it possible to do things that would be impossible or take much longer on the outside (Latour, 1983). Such *a centre of calculation* has the strong advantage that it can de-contextualize things, bring them together in new constellations, build a claim around these things and then present this claim with the whole force of the network behind it. The last thing that then happens is that these steps in between get deleted from the representation, and the claim is presented as if it would stand for itself – directly received from 'nature'.

Useful for later[17]: in my case of the *hensachi* ranking, *black boxes* and *trials of strength* will help us to make sense of things. The more a convention is embedded in practices and the less people think about it when it gets invoked, the harder it becomes to question it (or even think about it as something artificial). Thus, a *trial of strength* to question a technological convention like *hensachi* would need allies (for instance university reforms or the assistance of future employers) and would also need to question the practices that back *hensachi* up (the centrality of entrance examinations and cram schools).

The notion of *technoscience* (and the analytical openness) will also be helpful to stay open for all kinds of actors that might pop up in the interviews. Not only personal interactions, but also lists and advertisement pamphlets help to stabilize situations.

2.3.2.Chicken in space

The three works that I introduced above have all been from the 80s. And while they are still widely read and cited, it does not mean that ANT has not developed substantially, or that it has been a fixed entity to begin with. In conversation with other disciplines, but most importantly with other scholars in STS, actor-network-theory has been critiqued, criticized and debated. One of those debates happened between Harry Collins and Steven Yearley (1992a; 1992b) on one side and Michel Callon and Bruno Latour (1992) on the other side (with Steve Woolgar (1992) on a third side).

Collins and Yearley (1992a) criticize approaches in science studies that they put in the category of "relativism", with "reflexivity" and proponents of "new literary forms" as the first example of them (mostly writing about contributions to Woolgar, 1988a). They argue that by 'allowing' multiple voices, it seems as if everyone got a say but the (real) author still decides who can say something. At the same time, because of this "multivocality", arguments are not really coming to conclusions and texts are "getting nowhere" (p. 305). Because the aim of those reflexive projects seems to be only to problematize, but not to manage the problem, "social realism" is the way to go (p. 308).

The second critique is aimed towards "The French School" (meaning ANT) (p. 309). They argue that actor-network-theory extends the symmetry of the strong programme to non-human actants by their semiotic approach. But the problem is that the original emphasis on being symmetrical towards "the true and the false requires a human-centered universe" (p. 310-311). They then proceed to deconstruct the "French approach" by looking at Latour & Woolgar (1986), Callon (1986) and Johnson (1988) – also the reason why I introduced two of the works more extensively earlier.

One point that they make about *inscription devices*, which are so central to the arguments made in

[17] At the end of each sub-ANT-chapter, I will argue what of the introduced concepts will be useful later. Because I am referencing entities that will mostly appear in the empirical section (chapter 4), some things will stay unfamiliar up until then.

Laboratory Life, is that because of Latour's methodological decision to play the "estranged outsider" (and even being proud of "his failure to understand what he was doing"), they seem so powerful. If he would have strived for more understanding of what the scientists in the lab were doing and treat also the consumers of the produced inscriptions as experts, the inscriptions would not be immutable[18] (p. 311). On the other hand, Collins and Yearly then admit that the 'immutability' of inscriptions goes only as far as others do not care to challenge it, and that Latour also says that in (Latour, 1987).

The second essay that they discuss is Callon's work about scientists, fishermen and scallops (1986). The first comment is about the focus of ANT on powerful actors and its sidestepping of questions of politics (a critique that has also been made by others: Jasanoff, 2004, p. 23). While the "radical symmetry" of Callon should treat non-humans and humans in the same way, the account is still made with the party in the centre that had arguably the most power in the situation – the scientists (and not for instance the scallops). They argue that the "radical" approach of granting agency to non-humans is just a trick with vocabulary. The story would be the same with the tools of history of science, making it in the end more conservative than the sociology of scientific knowledge (SSK, the position that Collins and Yearley are representing here) (p. 315-316). On the other hand, when Callon writes about the behaviour of scallops, he should first be knowledgeable about them, in the best case "be *more* of a scallop expert than the others if he is to speak more authoritatively on the subject" (p. 316).

Here, I think, Collins and Yearly fail to heed one of the central points of ANT – namely that by doing such a thing the analysist would be explaining things away by their own 'knowledgeability'. The whole point is to stick to the things at hand in each situation/controversy. If the scallop scientists invoke knowledge about scallops to make their claims towards their colleagues, this must be included in the account, since it is a resource that the scientists use in their trial of strength. But if the analysist would give 'the real explanation' in the text, it would just patronize the people studied.

At last they critique (Johnson, 1988), their main point being that 'Johnson' uses no real method to make his central point – how to 'measure' what an object does for us. They argue that the "counterfactual method" (p. 319) is basically just a little mind exercise and does not satisfy scientific standards (referring to the quoted passage from above, where the function of non-humans is arrived at by substitution). One of the main points that Collins and Yearley make for all the "post-relativist positions" (p. 322) is that they fail to explain things. Because they put so much emphasis on elaborate description, and 'listen' to scientists and other people instead of coming up with explanations by themselves, they fail as theoretical positions.

[18] 'Incidentally' an approach that Collins employs himself.

Callon and Latour (1992) reply[19] that the main reason why Collins and Yearley attack their position is that any attempt of giving explanatory power back to nature would undermine the project of social studies of science (p. 346). The denial of the ANT positions happens because of a misunderstanding of what their goals are: both (SSK and ANT) try to "attack scientists' hegemony on the definition of nature"[20] (p. 348) but ANT never accepted the definitions of "natural" and "social". They then proceed to list "four empirical mistakes" that Collins' + friends' position makes (p. 352-358):

The first is that SSK fixes ontological positions as the analyst. Instead of leaving roles, groups and statuses of actors open, they decide on one version and use that in the description (this will later be introduced as the "first" and "third uncertainty" by Latour (2005)). Because the people under study are uncertain and in contest over the ontological status of entities, we as analysts should leave that uncertain (or rather as hybrids) as well. The second mistake is that they misinterpret language for something unimportant. When they re-wrote Callon's story about scallops in their terms and equalled it with a history of science version, they replaced the ANT terms with their own words or said that it did not make a difference ("actors (or actants-it makes no difference)", Collins & Yearley, 1992a, p. 317). According to Callon and Latour, it does make a difference, and that the whole point of overcoming the artificial divide of natural and social (first mistake) is being made possible through using a vocabulary that is symmetrical to 'both sides' (although there should not be two sides anymore). Thirdly, instead of following the actors, in SSK the analyst decides who (usually only who) is important. Because of SSK's focus on human actors in controversies, they fail to see the role that non-humans can play in the closure of these controversies – not as 'truth from nature' but as uncertain factors that help in the consolidation of facts. As the fourth and most profound mistake, they refute the claim made by Collins and Yearley, that when the analyst makes claims about a field (or scallops or door closers), they should be an expert in this field. According to Callon and Latour this claim would revert sociology of science back to Mertonian standards, where the content of scientific knowledge would not be touched. (On the other hand, this would also apply to all SSK-practitioners as well, making them lack credentials unless they are trained in the discipline they are looking into.)

In the end they argue that they start at the point where Collins (Yearley seems to have vanished) gives

[19] Woolgar (1992) also gives a reply to Collins and Yearley (1992a), arguing that they are not treating their own inquiries with the same standards as they approach natural scientists. Sociologists are somehow able to have more frames of understanding, while they deny this ability to those they study. In the end, he argues, SSK is afraid of taking reflexivity serious because then it would not be able to do its case studies. However, Collins and Yearley (1992b) chose to extensively ignore Woolgar's reply in their reply.

[20] The "attack" on scientists' hegemony spawned a whole situation of 'attacks' on and 'defenses' of Science, starting with a monograph (Gross & Levitt, 1994) that lumped varying disciplines and positions in these disciplines together and attacked them. The whole episode is better known as the "Science Wars" (see also Gross, Levitt & Lewis, 1996; Sokal 1996a; 1996b; for the 'other side': Ross, 1996; Hilgartner, 1997; Jasanoff, 1999; Latour, 1999).

up in his explanations: when he invokes 'society' as the reason why a controversy closes in the way it does.

In their reply, Collins and Yearley (1992b) react to the piece from the (not anymore) "French school". While acceding that ANT provides a nice descriptive vocabulary, it only describes – and thus explains in a conservative way. SSK, on the other hand, provides more explanation (a "social explanation", what Latour (2005) would say). Besides that, the practical difficulties in 'network analysis' are also mentioned. Where to stop? How far has one to go until it is enough for the description?[21]

They say that the move ANT makes to problematize the divide between the social and the natural is a valid step, but an unnecessary one. It is always possible to continue "turning resources into topics" (p. 378), meaning that assumptions are being questioned layer by layer downwards. While SSK did this move with questioning scientists' distinctions between true and false, ANT did it again with questioning the boundaries between humans and non-humans. It is here that the three positions (SSK, ANT, reflexivity) can be put in relation to each other. SSK argues that the first step is enough: now there is a field, cases and suitable methods to investigate scientific knowledge. ANT wants to go two steps: a second dimension is added to the accounting of scientific findings – the establishment of the categories that make up these findings. Reflexivity argues that the most important step is the next step: being reflexive about own assumptions and those of the works that one builds on. What Collins and Yearley criticize about ANT is that while they can understand the arguments made for the second step (although they do not agree with them), they cannot accept the reasons made by ANT to stop there – namely to "just write" (p. 379).

Useful for later: the paragraphs above did not really introduce new concepts, but they mention some possible limitations. The point about "where to stop?" is a very practical one. Since this is a masters' thesis, I am limiting myself to the traces I found in interviews and a body of secondary literature (which should be understood as only backing up the empirical data). As I will mention in the conclusion, this logically leaves some ends open, where future research can pick up.

Is ANT only description? While one aim of my thesis is to see how much *hensachi* is entrenched (for instance in school guidance), I am also interested how this reliance on it changes perceptions of universities and students. I will still stick to the quotes from my interviewees when doing that, but the nature of the network might change. While I will propose (grounded) interpretations at the end, they should not be taken as absolute statements – and should not be taken as *inherently* more valid than the messages of my interview partners.

[21] These questions come up very frequently when ANT is first encountered, since it gives no answer to that. Theoretically 'the network' would extend indefinitely wide.

2.3.3. "Post"-ANT

As I have shown above, while ANT is probably the most famous export of STS, it is far from accepted by the majority. But episodes like the chicken debate, the "Science Wars" and cross-disciplinary conversations with philosophy, social, cultural and medical anthropology, or art theory all had their influences on the ANT corpus. What Mike Michael (2017, p. 115) called "Post-ANT" (from there is also the name "classical" ANT), has its most distinguishing mark in its emphasis on "ontological multiplicity" (Mol, 1999).

What gets often called the "ontological turn"[22] is in STS a turn from the "representational idiom" towards the "performative idiom" (Pickering, 2017, p. 137). It is a recognition of the position that instead of 'seeing things from different perspectives', 'things are actually different – and multiple'. Coming out of the turn to practice in early STS studies (mainly laboratory studies, which for the first time systematically approached the places of production of the sciences and looked at *practices*, instead of logics of the sciences), this meant that through (scientific) practices people *enact* different realities.

This is not only about the natural sciences but also applies to social science methodology (Law, 2004). Law's argument is in the end that our methods to make sense of the world enact the realities we describe – and therefore should be taken more seriously (and not only as different ways of interpreting the world 'out there'). One question, and one that has so far been rather untouched in actor-network-theory, is that if there are different ontologies possible, and constantly enacted, should we not strive for some, and not others?

This can be called "ontological politics" (Mol, 1999). While *perspectivism* (what I quoted as "representational idiom" above) argues that there exist many exclusive viewpoints of the same thing, *constructivism* argues that during controversies (which are usually in the past) more possible versions of a fact or artefact were possible, but because of historical contingencies one version won over the others. The first admits plural viewpoints and the second plural possibilities, but both result in one reality. Multiple realities (or ontologies) on the other hand, are things that are constantly *performed* (or *enacted*, in Law's words) (Mol, 1999, p. 75-77). People might talk about the 'same thing', but they relate differently to 'it', perform 'it' differently, so that in the end the 'it' becomes a 'them'. In ANT terms this does make sense: actors are not just existing 'out there'. They are always defined in relation to other actors in their vicinity. I am not a student without a university, and a university means something different without students, but what 'being' a student means for me is different from everybody else. Depending on the relations that are looked at when considering a specific actor, the

[22] There are different "ontological turns", for instance in social and cultural anthropology where the focus is more on methodology than performativity of realities (see Heywood, 2017; Holbraad & Pedersen, 2017).

actor will *be* different (*not appear* different).

The way Latour approaches this multiplicity and uncertainty of 'things' is by going from "matters of fact" to "matters of concern" (Latour, 2004; 2005, ch. "Fourth Source of Uncertainty"). The second thing that he advances in these two chapters is the critique that ANT aimed towards the social sciences as a social theory[23]. That is that sociology (especially "critical sociology", Latour, 2004, p. 237-241; 2005, p. 49-50) starts with what it is supposed to explain. Instead of showing how things are assembled, the "sociology of the social" (meaning not ANT-sociology, which he calls "sociology of associations") gives "socials explanations"; substituting 'perceived' causes (by the actors) with 'real' causes (identified by the analyst). This might work in cases were entities are rather fixed (for instance when talking about nation-states as actors), but in controversies or in contexts of innovation (where the lab-studies intervened), things are uncertain and thus the analyst should not explain things away (2005, p. 11-12). In these cases it is important to identify what is a *mediator* (an entity that makes a difference by being there – it transforms meanings in the process) and what is an *intermediary* (an entity where the output can be predicted by its input).

But by realizing that this way of explaining things did not work for investigating natural science practices, Latour and friends came to the conclusion that there is no reason why it should work anywhere else. This is then the different understanding of "social" that the ANT-school advances, and which seems to have been misunderstood in the past[24]. Instead of a resource or domain that explains other things, it is the connections in-between humans and non-humans that is the "social". It is an extension of relations, and "social construction" becomes in that sense the work that scientists do through connections with other scientists and with things like laboratory equipment, scientific papers, funding partners, and so on.

To quote Latour a last time: "the critic is not the one who debunks, but the one who assembles. (2004, p. 246)" When doing an analysis, we should not strive to show how little the people we study understand about their lives but show how much can be understood if we take seriously what they tell us. If we do not limit our perception to humans or things like social class, we will find a host of entities that play a role in our lives; and since these actors are always historically and locally contingent, seemingly generalizable things like "university rankings" might work very differently if we look closely enough.

Useful for later: *performativity* is central when considering university rankings. They are not just 'measuring' things but by measuring, weighting, and listing them, they create the entities described.

[23] In this book (Latour, 2005) we find another wave of principles/rules, which are now called "uncertainties", which overlap strongly with (Callon, 1986) and (Latour, 1987), but are described in much more detail.

[24] That is why in the second edition of *Laboratory Life: The* Social *Construction of Scientific Facts* (Latour & Woolgar, 1986*)* the word "social" is dropped from the sub-title.

Hensachi does not just describe fixed hierarchies of universities but *enacts* those hierarchies through its listing of difficulty of entrance. In that way, *hensachi* acts as a *mediator* – it not only transports meaning but subverts it in ways that cannot be fully predicted before.

Hensachi is a term that will be used in different instances (personal *hensachi*, institutional *hensachi*, and the combination of those two) but it often gets conflated into 'one thing'. How people relate to 'it' make 'it' a very different thing: it makes a difference if a student took dozens of practice tests to raise their[25] personal *hensachi*, or if 'it' is talked about as a general concept that exists in Japanese education because one was able to dodge it by taking a different university entrance procedure. There is also a lot of uncertainty about *hensachi* and its production in the accounts of students; so, while I attempt to explain *hensachi* in the empirical part, this should be understood as a tentative description – leaving some uncertainty in to reflect how it is often (mis)understood.

2.3.4.Situated knowledge(s) and on being reflexive

While ANT has been my main conceptual guiding tool for the empirical data, I am also drawing on another strand of theoretical considerations in this thesis. This section should be understood as an attempt to contextualize my own master project, and to apply one of the most important lessons (in my opinion) that the social studies of science and technology have brought to us: about how people 'make' claims convincing.

What I mean by this is that there have been many case studies that showed how practitioners of technoscience have tried to take themselves out of the picture – with the aim of making their scientific work more 'objective' (see Galison, 1998 on "seeing" and objectivity; Porter, 1995 on numbers and objectivity; and most importantly Haraway, 1988, which I will write more about below). This idea comes mainly from the importance of rigorous methodology and replication in the 'statistical sciences' (what I mean by that are mostly natural sciences but also parts of psychology or sociology fall into this category). It goes like this: the less the analyst/scholar/scientist puts 'themselves' into the project (meaning the less 'subjectivity'), the more reliant is the end result; and in that sense, it should not matter who does a certain experiment. If the experiment is 'true' then it should be replicable by anybody else who has adequate knowledge, and the same results should be arrived at. This is also one of the points why science as a system of knowledge is so successful: on each work that others do (and to which I agree with the fundamentals), I can build my own work and thus 'advance Science'.

The first thing that is problematic with this view is what "adequate knowledge" means. One of the early insights of the laboratory studies (and especially Harry Collins' work) is that in practice

[25] "Their" will be used instead of "her/his" throughout the thesis as a neutral personal pronoun for the third person.

experiments are very hard to replicate; and even if possible, by what standards should one decide if the replication experiment is good enough to 'proof' that the first one worked? Also, is it even desirable or valued to 'just replicate' other experiments (Mulkay, 1988)? This, theoretically endless, loop of experiments to (dis)proof other experiments and/or theories was called "the experimenter's regress" (Collins, 1981). Closely related to it was the role that *tacit knowledge* played in instances where it was only possible to replicate experiments when people were involved in or at least physically there during the initial experiments.

Another fallacy of this idea of the 'detachment' of the analyst is that it empirically does not hold. At the same time while scientists tried to take themselves out of their accounts (also through literary means), the lab studies showed how important locality, the knowledge of technicians and the social (already in the extended-ANT sense) relations of the actors in- and outside of the lab were (Latour & Woolgar, 1986). This did not only hold for natural sciences but also for psychology, where for instance difficulties in the process of measuring babies' faces where not visible in the end-product anymore, instead being superseded by definite numbers with statistical significance (Peterson, 2016).

The aim of the laboratory studies was not to de-valuate the sciences (or attack them) but to de-mystify the representations of the sciences. In that way, their point was quite banal, and most scientists could agree to it: it matters who and what gets assembled in a laboratory to make experiments work. But on the other hand, this did not fit well with the way that the sciences wrote: the passive voice is usually employed in papers ("it was shown that …") as if it did not matter who showed it, or if the experiments did themselves, with the scientists just observing what was happening. In Donna Haraway's words: "Social constructionists make clear that that official ideologies about objectivity and scientific method are particularly bad guides to how scientific knowledge is actually *made*. (1988, p. 576)"

This description appeared in an essay that Haraway published in the late 80s on feminism, science (studies) and how to bring those together with a new understanding of "objectivity". To quote a bit more extensively:

> *I would like to insist on the embodied nature of all vision and so reclaim the sensory system that has been used to signify a leap out of the marked body and into a conquering gaze from nowhere. This is the gaze that mythically inscribes all the marked bodies, that makes the unmarked category claim the power to see and not be seen, to represent while escaping representation. This gaze signifies the unmarked positions of Man and White, one of the many nasty tones of the word "objectivity" to feminist ears in scientific and technological, late-industrial, militarized, racist, and male-dominant societies, that is, here, in the belly of the monster, in the United States in the late 1980s. I would like a doctrine of embodied objectivity that accommodates paradoxical and critical feminist science projects: Feminist objectivity means quite simply* situated knowledges*. (Haraway, 1988, p. 581)*

This paragraph summarizes the most important arguments that she makes in the paper. It is a call for *situated knowledges* and *partial perspective*, meaning that authors should try to do the opposite of what she accuses many scientists are doing – performing the "god trick" (p. 584). The god trick is the 'deletion' of one's own position from the account, the ability to see without being seen. It is the answer of many natural science accounts to 'problems' of subjectivity – by simply omitting the author from the text, the content appears to be more 'objective' (often by virtue of being provided by 'nature'). In the social sciences this 'problem' of recursivity with the object of interaction is nothing new (how do I describe social things when I am part of them and through description change them at the same time? See also: Luhmann, 1997). On the other hand, at the other extreme stands relativism, and it performs a second version of the god trick: vision from everywhere. The 'advantage' that both of these positions have is that because they appear to come from either nowhere or everywhere, they claim a critical distance which absolves them from accountability (they are "irresponsible", p. 583).

The 'solution' that Haraway puts forward for "feminist objectivity" is fairly simple: it means making the account accountable. It means to take a partial position, to make clear from where one comes from (in the disciplinary and the physical sense). By making oneself/myself/the author *locatable*, one becomes not less, but more objective (in the limited sense proposed here). "Critical positioning" (p. 586) means not only making clear where one comes from and who one is, but it also includes what one *does* from that position. It makes a difference which partial position one inhabits, both for the outcome of the inquiry and the way this inquiry can be critiqued.

What goes together with this situatedness of knowledge is of course not only the locality of the researcher but also of the research object. Limiting what one can see[26] through a conscious positioning means also that 'the' object appears from a certain standpoint. And this is where ANT can join in, since that is one of the arguments it also makes. The only extension to the description of ANT that I gave above is that the author (me) is an actor as well, and that I can just understand about my topic what I can see from my partial perspective. My description in the end will not be 'the description of *hensachi*' or 'students and their relations to university rankings in Japan' but an interpretation made by me, of a picture that was produced by my interview partners in specific situations with me.

But how to put this claim to partial perspective into practice? In the best case, this would be shining through at every part of the thesis; but since I am neither proficient enough with writing, nor experienced enough with doing social science research, I (artificially) split the two parts apart. I took some inspiration from an edited volume by Steve Woolgar (1988a), which treats reflexivity in science

[26] While Haraway argues that this self-limiting should be made explicit in writing, it is no question that every inquiry is inherently limited by the context of its production. Even, and especially, if one claims to have an 'objective' view from nowhere in the written account.

studies and the “new literary forms” that help express it (it is also the volume that Collins and Yearley (1992a; 1992b) had their disagreements with).

There the argument is as well that it is not sufficient to ‘be reflexive afterwards’. It is not enough to just push through with an empirical programme until the end, and then put some disclaimers in about how it was necessary to do something that should not have been done, because too much self-reflexivity would lead to a “self-defeating relativism” (Woolgar, 1988b, p. 19-21). Reflexivity should be achieved together with the community of inquiry (see also Tavory & Timmermans, 2014, ch. 7), which in the case of the text means that the reader should build reflexivity together with the author of the text. This is made possible by making the conditions of the production of the text as transparent as possible.

At the end of each chapter in the book (Woolgar, 1988a) “reflexions” are found, where Woolgar as ‘the editor’ gives some smartass remarks about how (non-)reflexive the texts were. I have borrowed the practice of the Woolgar-volume and included reflexions after each chapter, but with a slightly different purpose. Instead of just showing how (non-)reflexive I have been in the preceding pages, I want to contextualize the content which has been written there. I want to re-open the *black box* of doing the thesis, which is often obscured in final accounts of research projects. While this might at the first glance look like a counter-productive step for the credibility of my claims, I strongly believe that only by making explicit from where I come, what my limitations where and what my motivations were, my thesis can strive for a specific kind of “objectivity”. In that sense, in the next chapter I will state my research questions, introduce my case study and show how I approached my empirical material.

Second reflexion

The problem with a state of the art (SotA) is always that (just like with ANT), I have to limit by choice where to stop. At the same time, the aim of a SotA should always be to 'prove' that I know about works related to my topic and that I, by doing so, show a gap that I will propose to fill with the present study. This state of the art (and all others) is strongly influenced by the discipline in which the thesis is written. If I would have done this thesis at the Japanese studies department, the case study might have been the same, but the body of literature that I would need to relate to would have been different. For the same reason, many of the papers I read are, even when writing about a closely related topic, seemingly oblivious to each other. Articles published in economics journals have a certain type of structure and reference other papers with similar approaches. This also explains why I initially did not find many works on student-ranking relationships. Most of the qualitative accounts about rankings investigated how they interact with university practices or critiqued assumptions made by rankings. Quantitative papers, on the other hand, had less interest in questioning rankings, but in seeing if they produced measurable effects in student choices. Depending on your (the reader's) background, the satisfaction with my state of the art will change.

The specific place that my description of the sensitizing concepts has in this thesis might not be to everybody's liking. I gave a quite long theoretical introduction into a group of methodological and theoretical guiding tools which are considered controversial by many people. This introduction is also focused on several (mostly early) works from and about ANT – and my limited viewpoint should be considered here as well. I also did so without telling you (yet) what this thesis is about more concretely. This is always the problem with theoretical parts in academic papers, do I give an often-dry introduction first and them show my case or do I do it the other way around? While I chose[27] to write about actor-network-theory first and describe my case, method and results later, this does not represent the order of how I did my work. The decision to let ANT guide my interpretation-work was made fairly late in the process of analysis and happened in discussion with my peers in the master seminar. I did not think in advance that ANT might be 'especially enlightening' when considering university rankings in Japan but realized that it made sense to connect my case with the sensibilities of ANT after many hours of coding, grouping and sorting through data from my interviews.

[27] *Did I really 'choose' to do it that way? There are certain structures that are expected from a masters' thesis, and one of those is that theoretical introductions should happen before the study itself. This did not develop out of nowhere, and when we look at quantitative papers this structure is very clear cut. Of course, there it does not make sense to 'do things first and then consider theory and method later', since what will be done is strongly reliant on theoretical guidance before. That this is often not the case with qualitative approaches (or even explicitly the opposite of many qualitative programmes – especially* grounded theory*) makes this theory-first structure a bit weird.*

3. Case and methods

3.1. Research questions

As I mentioned in the state of the art, while there is a lot of literature on university rankings, students' perspectives are largely missing. The case that I am presenting in this thesis is about university rankings in Japan, or as I will show, one specific university ranking that is the dominant way of sorting and understanding universities. I want to ask how this ranking is embedded in practices in and narratives about the Japanese education system, and what implications this has for students. Do rankings play a role when pupils are thinking about, if and where to study? Is being at a highly ranked university valued – by oneself, by peers or by 'the economy'? My main research question is thus:

How do university rankings play a role for students in how they make sense of and evaluate universities and students in the Japanese higher education system?

As will be shown in the next chapter, while university rankings are an important part of the Japanese education system and market, there is one specific system of ranking – called *hensachi* – that I will investigate further. By interviewing students of Japanese higher education, I want to find out how this way of ranking is perceived by them and in which situations it becomes relevant for them. I want to find out why exactly this ranking system, and not others, seems to be the dominant system – through looking at practices in which it is embedded and looking at narratives that keep it in place. Thus, my first two sub-questions, both aimed towards understanding the importance of *hensachi* for students are:

In which situations and how does hensachi *become a thing to consider for students?*

How does hensachi fit into students' narratives of the education system?

As this is a social constructivist thesis, I do not only want to find out where and how *hensachi* pops up for students, but also how they make sense of it – in general and in the concrete situation of the interview. I want to see how the stories they tell me about their experiences relate to popularly shared narratives, and how they interpret possible discrepancies. I am not only interested in their own contacts with university rankings but also in how those shape their way of talking about universities and students. Thus, my third sub-question is:

How do hensachi-*related expectations relate to experiences of students and how do they play a role in talk about universities and students?*

The three questions above are all aimed to be answered by my chosen method of data collection – interviews. But since *hensachi* is such a central part of these questions, I will also attempt to find

answers to why *hensachi* is as successful as it is in being the most considered ranking by students. These answers will be explorative, but nonetheless grounded in what my interviewees told me and what I could find in the literature. Thus, my fourth sub-question is:

Why and how is hensachi *normalized as a way of ranking universities and what (individual and institutional) practices hold it in place?*

Before we get to the answers to these questions, I will shortly introduce the structure of the Japanese education system and the methodology I employed to get to these answers

3.2. Case description

Figure 1 provides an overview of the Japanese education system. Compulsory education lasts nine years and consists of elementary (six years) and lower secondary/high school (three years, what I will call "middle school" from now on). Although upper secondary/high school (three years, from now on "high school") is voluntary in Japan, more than 95% of the population have graduated or are expected to graduate from higher secondary education[28]. Between middle and high school, and especially between high school and university are entrance examinations. Most of these are based on standardised "examination knowledge" (Yoneyama, 1999, p. 144) and determine who gets into which university/high school, which are in turn highly stratified based on their selectivity. Since this stratification by selectivity will be a central part of the empirical part, I will leave it at that, but it is exactly on this transition from high school to university where the most emphasis is put on in Japanese education, and also in this thesis.

Kindergartens, schools and universities are either run as *national*, *local* or *private*[29] institutions. National means that the Japanese state is the legal body behind the institution and its main financier. Local means that local governments (mostly municipalities or prefectures) are the ones responsible for financing and running the institution. Private institutions are run by private legal persons (which must fulfill certain requirements from the ministry of education) and are subsequently financing most of the costs through student fees (ranging from kindergarten children to university students). National and local institutions are sometimes (this happens especially in the university context) subsumed as *public*[30], a distinction that is mostly relevant for the lower price that public schools and universities have (Sugimoto, 2014, p. 129).

[28] http://gpseducation.oecd.org/CountryProfile?primaryCountry=JPN&treshold=10&topic=EO (2019-08-01)

[29] 国立、公立 or 私立

[30] 国公立

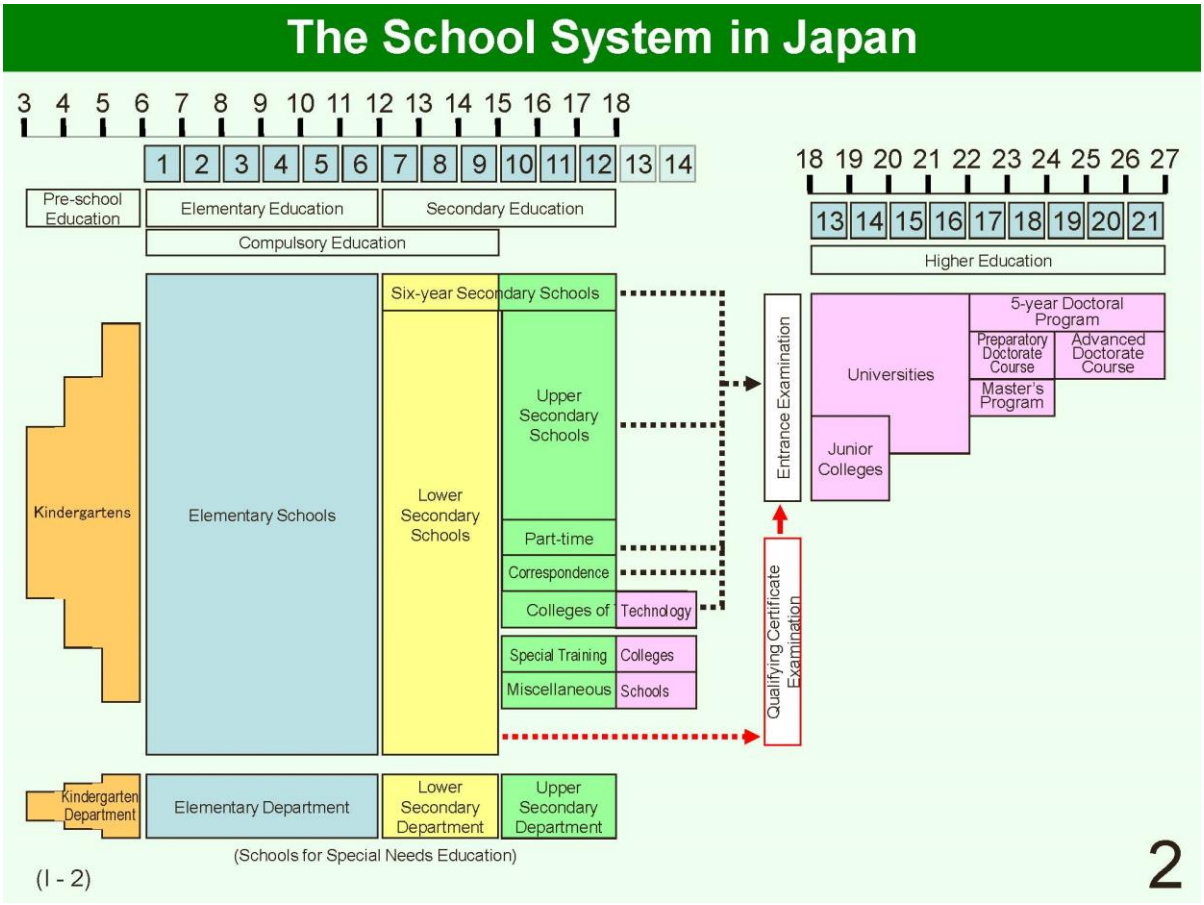

Figure 1: The education system in Japan. (http://www.criced.tsukuba.ac.jp/keiei/kyozai_ppe_f1_02.html, 2019-08-10)

For elementary and middle schools, local institutions are by far the most common type of school (98.5% and 91.7% of schools respectively in 2018). For kindergartens and high schools, which are both outside of the compulsory education system, this number lessens considerably (35.7% and 72.7% of schools respectively in 2018[31]). The relative decrease of local institutions is caused mostly by private schools and kindergartens. A few national kindergartens and schools are also in place, which are usually associated with national universities that act as their parent institutions.

While almost all young Japanese finish the high school level, after that several options are available for them. Sugimoto (2014) gives four options that graduates from secondary education can take. The first is university (50%). The other three are junior colleges (two-year academic institutions with a highly vocational character[32] 16%); work (17%); and "privately managed vocational colleges" (p. 130), which are employment preparation schools outside of the formal school system (17%) (p. 129-130).

[31] For both of the school numbers: https://www.e-stat.go.jp/stat-search/files?page=1&layout=datalist&toukei=00400001&tstat=000001011528&cycle=0&tclass1=000001123176&tclass2=000001123177&tclass3=000001123178&tclass4=000001123179&stat_infid=000031776316 (2019-08-07)

[32] These are almost exclusively (90%) attended by women who according to Sugimoto have: "little academic motivation, [and] many females regard their time in these institutions as a phase between high school and marriage" (2014, p. 130).

This study will focus on parts of the 50% that advance to university, and it is for those people that intense competition to get into the 'right schools' matters. This competition is publicly known as "examination hell"[33] and refers to the stage in life of pupils who try to get into the highest-ranking universities in Japan, and thus spend almost every waking hour studying for entrance examinations. While because of a considerably lower cohort size of young people (compared to the population in the 80s and 90s) low-ranking universities are basically accepting everybody that can pay the study fees, the higher ranked and public universities have entrance examinations in place for selectivity (Kinmonth, 2014, p. 163).

Entrance examinations are a central part of the (image of the) university system in Japan and should be differentiated depending on the type of university. Public (meaning national and local) universities have a standardised examination called the "National Center Test for University Admissions"[34] (from now on "*center exam*") in place which is the first step to university admission. Depending on how well students do on the *center exam*, they will apply at a different public university during the second step of the admission procedure (more on the why and how to choose a university in the empirical chapter). Many private universities also accept students based on their results in the *center exam*, and thus further the incentive for students to perform well at this test.

It is exactly this situation between high school and university, where young people have to decide for which university to go for, where university rankings play a role, and also where I am putting my focus on in this study. To get to accounts about this time of transition and to students' perspectives about university rankings, I conducted five interviews with students who study or studied at Japanese universities.

3.3. Interviews

Interviews as a method of empirical inquiry helped me to get to stories that people tell about their experiences and how they construct meaning in a specific situation. While parts of my questions were about the education system in Japan and to get general information about universities and their ranks, definite accounts of how things are, were not my main goal. Qualitative interviews were my chosen method to create situations where Japanese students talk about their motivations for going to university and to see what kind of (and if there are) commonly held stories and beliefs they share in this regard (Silverman, 2006).

[33] 受験地獄

[34] From 2021 on it will be replaced by a new version called the "Common Test for University Admission" (大学入学交通テスト, my translation). In addition to asking facts and standardised knowledge, the aim of this exam will be to check things like critical thinking and abilities to express one's ideas (MEXT, 2017).

From November 2018 to May 2019 I had five interviews. Based on Flick (2000, p. 126) I conceptualised them as "episodic interviews" – which are a version of narrative interviews but with a more limited scope. They allowed me to combine an open-ended approach with a more targeted questioning and made it possible to accommodate all of that in roughly one hour. I asked my interview partners to tell me of their experiences of the transition from high school to university, how they chose their respective universities, how this happened in practice and everything else that they thought important in that regard. After that, the interviews usually delved more into the time before that (high school) as well as into their time at university afterwards.

The interviews were audio recorded and verbally transcribed by me, using the software InqScribe (Paulus, Lester, & Dempster, 2014). During the transcription I pseudonymised names but kept myself otherwise very close to the original recordings. Since the interviews were held in Japanese, I also asked a native speaker for help during the transcriptions several times (when I was not sure what the recording said), while making sure that the identities of my interview partners were kept unrecognisable. For all the formal interviews, informed consent was assured after going through a print that informed my interviewees of their rights and by explaining what my research was about (appendix B). After a short introduction to how I imagined my interviews to go, I started with the following opening question: "Well, first I would like to hear more about the experiences you personally made. I would like to hear the story of how you came to be a university student, and the process that was involved in that"[35]. In addition, I had prepared areas and questions that I wanted to have covered during the interviews (appendix C). While I could have started with a question directly related to university rankings, I chose this narrative prompt to keep our line of talk more open. I wanted to see at which point my interviewees would come up with university rankings by themselves[36] (which they all did, sooner or later) and in what way they would talk about it (either personal experience, matter-of-fact, etc. – see the "*initial coding*" section in the next sub-chapter; Roulston, 2010). Following a tenet of qualitative research, those were adapted slightly each time, to accommodate new questions that came up in the interviews before and to answer to my evolving research questions (eg. Charmaz, 2006; Flick, 2000, p. 60-61).

While all of my interview partners were (ex) students from Japanese universities, I did not conduct my interviews in Japan. I joined in weekly get-togethers of Japanese exchange students and people interested in Japan in Vienna (mostly students from the Japanese studies programme) to find

[35] では、まずちょっとP？の個人的に経験したことについて話したい。P？はどのように大学生になった、まその過程のストーリーを聞きたい。

[36] Since I introduced my interviewees to my research topic before the interviews, university rankings were already mentioned by me – although I tried to encourage them to talk about what they, and not I, found important.

interview partners. Through this opportunity I had many informal talks with exchange students and asked some of them if they would be willing to be interviewed by me at some point. For the first two interviews I chose two persons who make up "maximally contrasting cases" (Rosenthal, 2015, p. 103). Picking out two interview partners with differing profiles provided me with the possibility to see if I would already find different stories and experiences that I could relate back to their situations. P1 is female, in the second year of her bachelor programme, studying at a mid-highly ranked[37] private university and was in Vienna for an exchange year. P2 is male, in his doctoral studies, was/is at different universities (very highly ranked national university for his bachelors, and at a lower ranking private university for his master's and PhD) and at that time doing research in Vienna.

After those initial interviews, I transcribed them and started some initial analysis (more to that in the next sub-chapter), adjusted my interview guideline where it fitted and then conducted three more formal interviews over the following months. P3 is a male bachelor student at a highly ranking national university. Unlike P1 and P2, who study in close proximity to their hometown, P3 moved a long way to get to his university of choice. P4 is female, studied at a mid-high local university and finished her undergraduate degree three years ago. P5 is also a female student at a (different but around the same rank) local university, in her third year of her bachelor's and the only of my interviewees who studies a natural science programme.

Tavory and Timmermans (2014, p. 72) propose three types of variation of observations (in the broad sense of data collection here) that are helpful when doing qualitative research. Those are "dataset" (different cases or instances of similar things), "time" (seeing how something develops and looking at different stages) and "intersituational" (to "follow phenomena across settings and situations") variation. In my case, since I relied on interviews of (ex) university students, I was mostly limited to dataset variation (students in different contexts who were at the same time similar enough to be "members of a preconstructed set" (ibid, p. 67)). But I also tried to include time variation by having interview partners in different stages of their studies and by asking at which times university rankings play(ed) a role in their lives. In the best case, I would have been able to interview the same persons multiple times (for instance while in high school, then university and then afterwards), to see how their talk about rankings change, but in the short time that I was conducting my interviews, these situations were not changing too much. As for intersituational variation, this would be interesting in further inquiries into my topic, since the interviews and the secondary material that I looked into because of my analysis introduced me to many other settings where university rankings can be observed in Japan.

[37] The "ranks" I am referring to here are the measure of selectivity (*hensachi*) ranking that I will further introduce in the next chapter.

At this point it is important to mention that this way of interviewing students from Japan in Europe has had its definite impact on what kind of students I interviewed. Firstly, nine out of ten exchange students that I talked with were from social science or humanities programmes. One of my interviewees mentioned that it would be strange for natural science students to do a study abroad because they have so much studying to do. Besides the point of how students imagine university life to be in other programmes (see the empirical chapter), this pre-selected from which kind of disciplines the bulk of my interviewees came from. Secondly, because studying is expensive in Japan, most students were looking to finish their programmes in four years – and a year or semester abroad would possibly extend that period of study and payment. This meant that most exchange students either were coming from rather well-off socioeconomic backgrounds or really wanted to do an exchange year/semester in Vienna (which is usually related to their field of study, which is then usually a non-natural science one). Thirdly, because of exchange agreements between universities in Vienna and Japanese universities, the institutions from where students originated were limited. While it would be possible to arrange a study abroad privately, this would entail a large amount of organisation and money and I did not meet any students who did it that way. A bit unsurprisingly, the Japanese universities that had exchange agreements with Austrian universities were usually the bigger, more prestigious and famous, and higher ranked ones.

Thus, while it would have been very interesting for my sample to be otherwise, these limitations resulted in the fact that my (actual and possible) interview partners were all: students from universities in the upper third of the *hensachi* ranking (again, next chapter), wealthy enough to afford a semester or a year abroad, and quite internationally orientated – thus being able to speak at least German or English moderately well.

3.4. Analysis

To analyse and make sense of the interviews and their transcripts I oriented myself at constructivist grounded theory methodology (Charmaz, 2006; Hohage, 2016) in combination with "abduction" as a way of analysis (Albrecht, 2016; Rosenthal, 2015; Tavory & Timmermans, 2014). In practice that meant several rounds of coding and categorising on different levels (which I will shortly describe below), supported by ATLAS.ti – a software for qualitative and quantitative data analysis (Friese, 2016).

3.4.1.Step one: *initial coding*

The first step was a stage of *initial coding*, which helped me to make first sense of the material and approach it in an open manner, without being stuck in preconceived ideas. While this is usually recommended in a line-by-line or instance-by-instance fashion (Charmaz, 2006, p. 51), I proceeded to segment my codes either when the topic of conversation or the mode of talking changed. It made

sense to not only base my units of analysis on the content, but also on how my interviewees talked about it.

More concretely, I categorized talk into *argumentation*, *description* and *narration* (Rosenthal, 2015, p. 165-167): *Argumentations* were segments where things were stated as a matter of fact, often oriented to our situation in the interview – where I was the 'outsider' that needed things to be explained ("in Japan it is so-and-so"). *Descriptions* were parts where my interviewees told me things that they experienced but as "condensed situations" (ibid, p. 165), meaning that these experiences were described as events by themselves, without much explanation of what went before or after. *Narrations* were sequences of events and experiences (imagined or actual) that my interview partners told me in a more extensive manner, and which were related causally or temporally to each other. Those segments were usually longer than those of the other two modes and often provided an interesting contrast to statements made before (usually categorized by me as *argumentations*).

For instance, when talking about university entrance exams, my interviewees switched in rapid succession between how "everybody" prepares for it, their personal experiences in a condensed version and a story of personal hardship. When contradictions came up, those were usually things told in different modes.

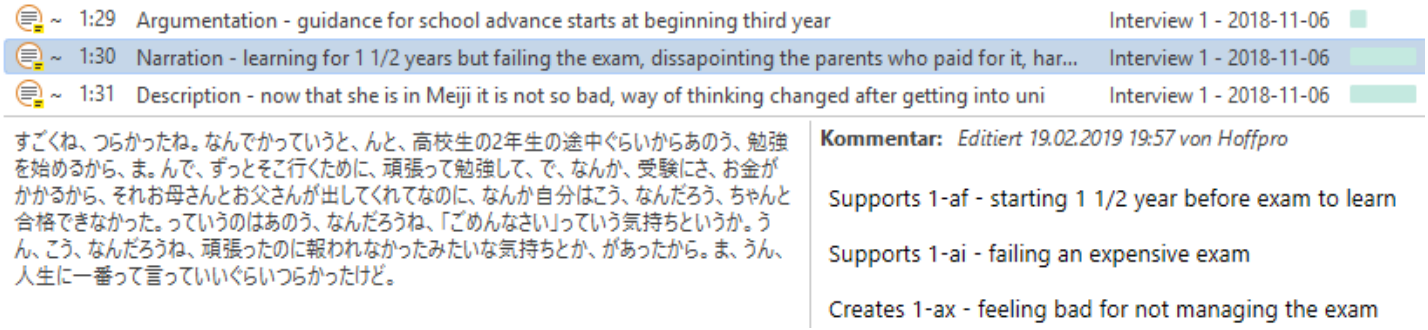

Figure 2: Initial codes *as QUOTATIONS in the QUOTATION MANAGER (Up: QUOTATION with title. Down left: Content from the transcript. Down right: Comment section)*

In practice that meant giving each of the thus identified segments a name (i.e. the *initial code*), often as (translated) *in-vivo* or process-oriented codes in the forms of gerunds (Saldaña, 2011, p. 95-98). In ATLAS.ti terms this meant creating a QUOTATION[38] for each segment and assigning it a title that included the mode of talk and the *initial code* as name (see figure 2). Those QUOTATIONS then have three elements: title, content (linking back to the transcript) and comments (see next coding step).

[38] Whenever I mean ATLAS.ti elements I write in CAPITAL LETTERS, to differentiate them from general concepts such as "codes" or technical terms from constructivist grounded theory like *initial codes*.

3.4.2.Step two: "*abductive coding*"

The next step fulfilled two important functions in the analysis – the creation of hypotheses and subsumption. Based on the idea of abduction I created initial hypotheses that could possibly explain or be reasons for the respective content. They should help me to think about what my data were possible instances of (Tavory & Timmermans, 2014, p. 53).

Each of those hypotheses was created as a CODE in ATLAS.ti with an alphanumeric signature and linked to QUOTATIONS. At the same time, I checked for each following *initial code* if it either created a new hypothesis or if it supported, extended or contested an existing one. The comment section of my QUOTATIONS described their relationship to their connected hypotheses and also served as a space to include first memos and notes about the data (figures 2 & 3).

Let me give an example: the CODE "1-ar Taking many exams is encouraged"[39] was set up when P1 explained in QUOTATION 1:19 about how young people take different university entrance exams in Japan. After creating this hypothesis, I linked several later (and one earlier) QUOTATIONS to that CODE that supported it (for instance when P4 mentioned how the exams at different universities are temporally set up in a way that makes it possible to apply for as many private universities as possible). Other *initial codes* extended "1-ar" (not only entrance exams but also preparation exams are encouraged to take a lot) or contested it (students are encouraged to apply at more than one university but not at 'many' – just enough to have a few backup choices ready if their #1 choice university would not accept them). After relating "1-ar" to more and more *initial codes* that were relevant for it, it became better defined, accumulated more commentary and in the end explained more things.

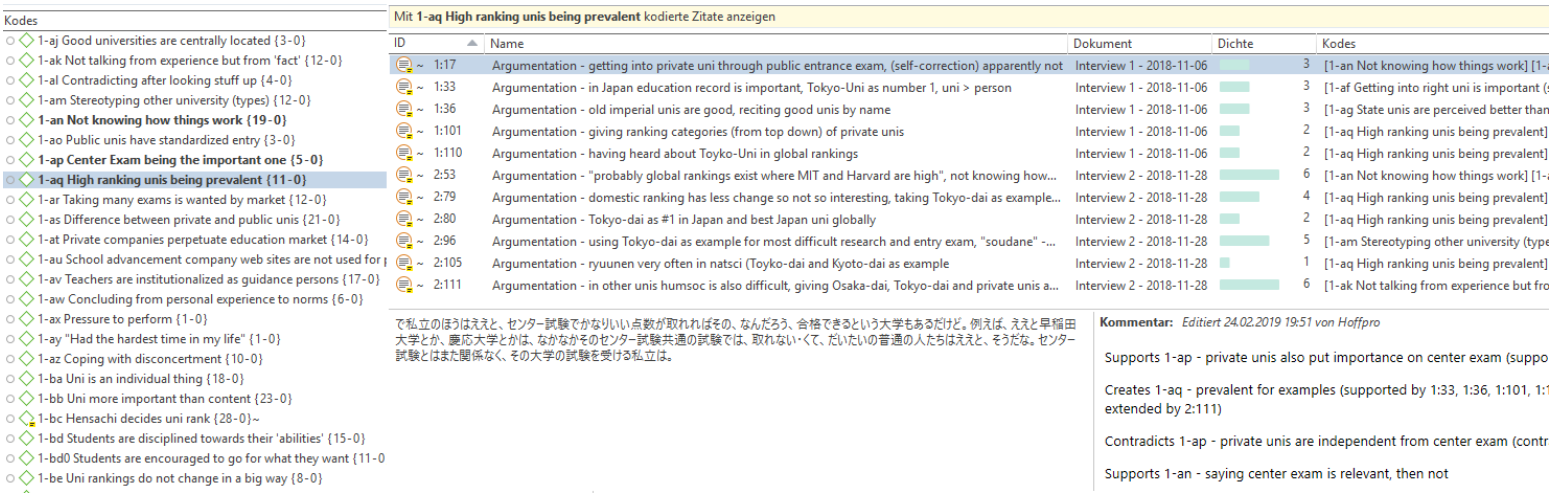

Figure 3: Abductive codes *(abstractions and hypotheses) as CODES (left column) in the QUOTATION MANAGER*

Going through a similar process for all of my "*abductive codes*" allowed me to explore different ideas

[39] You can see in figure 3 on the left side the CODE listed as "1-ar Taking many exams is wanted by market" – in the process of the analysis many codes got renamed.

and hypotheses at the same time and to see which of them were empirically durable. They also showed links between statements occurring at very different times and across interviews, and in that way enabled me to compare data with data, data with codes and codes with codes.

3.4.3.Step three: commenting and grouping

The third step was then to go through all my *abductive codes* and to write a memo for each of them (in the comment section of the CODES). I considered all of the connections to the *initial codes* together and put them into relation to each other. Through that my hypotheses got more closely defined, sometimes renamed and it was checked which of them were the more probable to explain my data. I subsequently put my *abductive codes* into groups (non-exclusively), to help me further them in the next step.

3.4.4.Step four: *focused coding*

For the *focused coding* (Charmaz, 2006, p. 57-60) I summarised most of my *abductive codes* into *focused codes*. Like the step before, the bulk of the work was spent in writing the memos for each of the new codes, describing how my different hypotheses complemented each other or created new questions to follow up. Unlike the grouping from before, this time each *abductive code* was permitted only one subordination to a *focused code*, which made a hierarchical structure of my codes possible. In ATLAS.ti this work was done in the CODE MANAGER, with *abductive* and *focused codes* both being from the CODE type and the groups from step three being CODE GROUPS (figure 4).

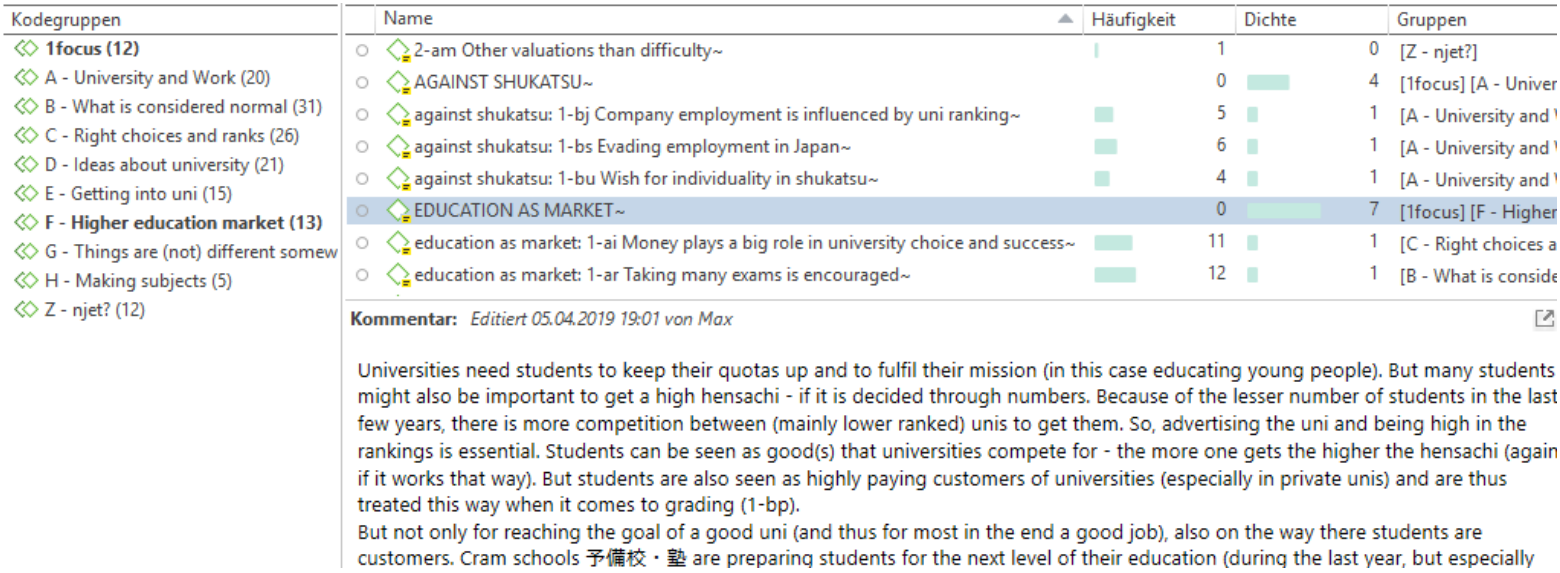

Figure 4: focused codes *as CODES in CAPITAL LETTERS*

Although steps one to four are described as happening one after another, this was only true for the first two interviews, which I analysed together. For each interview after that, the *initial coding* stayed mostly the same – to keep myself open to new things that have not been addressed in the interviews

before and to not get constricted by my developed coding scheme. But steps two and three were usually done together, since less and less new hypotheses were created for each interview, thus showing a saturation of themes and stories coming up in my interviews. The focused coding happened in a way all the time, since I usually visited older parts of interviews again when the newer interviews were analysed, and thus ensured that while I was moving towards a higher level of abstraction, I also stayed close to the material.

The twelve *focused codes* that I got from this step were again put into relation to each other and thus created the basis for the structure of the empirical, and next, chapter.

Third reflexion

I wrote around four pages about how I analysed my interview transcripts. I did so by staying rather close to my actual work, and not by introducing very much theoretical and methodological background about 'how to do it'. This had mainly two reasons:

The first was that while reading other theses and empirical case studies, the methods chapters usually were some summary of method books and/or articles. Let us take studies that use grounded theory methodology as an example. Most of them write about basic assumptions, how important it is to stay open to the data, and how coding was 'done' at different stages. Then there were usually some quotes from works like Charmaz (2006), where the different kinds of coding (mostly initial and focused coding) were introduced. At least for me, this did not work out at all. While there are a lot of nice examples in the many "how to" books of how coding is done in practice, coding a whole project is another issue. In many methods sections it seems that those guidelines could be adopted rather unproblematically, while I had my problems with "abstracting" the interpretation one level further. I did not want to just present my "way of analysis" without mentioning the process of getting there – especially because the method that I ended up with was established after several false starts.

The second reason is the qualitative 'staying vague'. There are no fixed ways of doing things as in quantitative approaches or more deductive methods. Qualitative projects seem to be very dependent on the researcher, although this can also depend on the epistemic culture *(for a study of differences in sociology in Germany and France see Keller & Poferl, 2016). I think that this is the reason why I read so often rather 'theoretical' accounts about "how things were analysed", without ever becoming concrete about it. By 'masking' the own analytic work in quotes from methods literature, and by stating that "things have been done as proposed by (insert method here)", it seems to make the own work less subjective. I chose to make the coding-in-action understandable, and by that more 'objective' (in the Haraway sense), and also more objectable – making it possible to put in objections. If I would have stayed vague about what I actually did, and only referred to "I did initial coding as described in Charmaz, 2006"; not only would nobody have any idea what I actually did, I would also redirect all the possible criticism towards an external source. In ANT this would be a normal move to bolster my own claim of 'facticity' ("if you want to criticize my approach, you also have to criticize this important work that everybody cites"). But since one of my convictions is that it is much more interesting to stay open (also in retrospect), I chose to present my approach in a more concrete way.*

Also, I think that especially grounded theory (methodology) gets used extremely inflationary in qualitative social sciences, and that without any closer description of what was specifically done, it could mean anything from a rather close adherence to coding paradigms to "staying open" – whatever that would mean in practice.

4. Empirical part – looking for values and traces of a ranking

"Here [pretending to point at high school in a list] I would not be able to get into a good university" or "If I get into this high school I could get into a pretty smart university" … I thought about stuff like that since middle school. (1:56)

That's why, in the past people went to high-level universities to get into these companies. Now, getting into university is often becoming the goal. (2:68)

To be honest (laughing), no one would say "I'll go to university and study a lot!" (3:130)

In the end a good university is one where people can get credits and graduate easily. That seems pretty important in Japan. (5:102)

These quotes from some of my interview partners might seem a bit contradictory. On the one hand, going to university seems to be a decision not lightly made and considered quite a time before the end of high school. On the other hand, the act of studying and learning at a university seems not to be the primary concern to some of my interviewees. Are these just differing opinions that I juxtaposed here, which can be explained by the fact that these are different people? In this chapter I want to argue that these quotes are rather consistent with each other and show how it is possible to have seemingly contradicting ideas/statements about university in Japan.

The whole empirical part is generally structured in a way that follows what my interview partners told me. So, while the next three sub-chapters will read like a characterization of the Japanese higher education system, they are neither my attempt to uncover the hidden structures behind it, nor a simple synthesis of secondary works (although there are references to literature to substantiate claims and further elaborate). They are a condensed version (arrived at through coding and categorizing) of things that my interviewees told me were important and/or mentioned a lot when they told me their stories.

They also reflect a tendency of the interviewees of answering questions about their personal experiences in the beginning of the interviews with general descriptions about 'how things are in Japan'. While I did not specify how well I am versed in the Japanese education system, they felt the need to explain certain things, either to justify their own behaviour, to help me understand, or to show how 'different' the Japanese case is from others. In that way, the following three sub-chapters are a description of the characteristics of the Japanese education system – but as they are told by (ex-) university students and interpreted by me.

It will help me to set the stage for answering my research question – *how university rankings play a role for students in the understanding of universities and students in the Japanese higher education*

system. By first describing what is (re)performed by Japanese university students about what is important in higher education, I want to show a reason for why just one domestic ranking seems to be important, and why global rankings are not considered in that regard.

I will begin by providing said characterization of the Japanese higher education system. The three characteristics that I will describe are 1) a strong focus on entrance examinations in the Japanese education system; 2) a high degree of privatization and marketization of education; and 3) a tight coupling of (ideas of)[40] 'good' jobs with educational credentials.
In a next step, I will talk more about *hensachi*, a ranking technology that connects these three characteristics and makes them relevant for the individual students. Two situations will be introduced where *hensachi* acts as a *mediator* in students' (to be) lives.
After that I want to show how this way of ranking and relating universities and students affects how students talk about universities and other students. I especially want to put an emphasis on situations where the expectations about universities in Japan do not align with the experiences that my interviewees told me from their study time.

4.1. A strong focus on entrance examinations

One way to characterize the Japanese education system is its reliance on entrance examinations. Especially during the transition from middle to high school and from high school to university, entrance exams are the most common way to admit students. As already mentioned before, obligatory school lasts nine years in Japan – meaning elementary and middle school. But nevertheless, more than 95% of the children in Japan attempt *and* finish high school. Also, for the higher education level the attendance rates are over 50% of the young population. But since school is compulsory only until the end of middle school, the number of spots in *public* high schools and universities are much more limited than in the grades before (this will be discussed more in the next sub-chapter).
Having upcoming entrance examinations on the horizon certainly seems to have effects on the content of classes before. According to Bjork (2016) the recent efforts by the Japanese education ministry to reform Japanese public schools towards a "relaxed education" trajectory have had very different effects, based on which stage of school one looks. The proposed higher emphasis on individual pupils and the de-emphasis on standardised testing are much more accepted and put into action in elementary schools, while in middle schools most teachers as well as many parents look at these reforms with worry. He makes the argument that this is because elementary schooling is already much closer to the goal of a less 'fact cramming'-based education than teaching and learning as it is done in

[40] With that I mean that both the idea of what a 'good job' is, as well as the possibility to get one are shaped by a meritocratic ideal.

middle schools. And the reason for this difference can be found in the simple fact that for getting into (at least public) middle schools there are no entrance examinations in place, while for all high schools there are (ibid, p. 109-111).
Because not all school subjects are (can be?) tested in these examinations, almost automatically the focus gets put on the ones appearing (see next quote), with other – more liberal – subjects like art or spoken language classes getting less time and emphasis. For the entrance examinations of public high schools and universities these subjects are the same:

> *The exam for high school? Uhm, there are also private and local high schools and for most of the local ones in Japan, or at least in Kanagawa where I am from, everybody takes the same exam. The same test with five [school] subjects: Japanese, maths, English, science and social studies. (5:46)*

As the quote mentions, the exams that are administered are highly standardised to make cross-prefectural and even cross-country wide comparisons and competition possible. This has not always been the case but should be understood as part of an answer to manage the strong increase in application numbers in post-war Japan (Zeng, 1999, p. 121-126) – a point that will also be taken up in the next section. Now, what happens when only a limited number of subjects is tested in exams which are considered very important, and when these exams are highly standardised and usually done in multiple choice questions? A lot of class time in these subjects gets used to prepare for these exams, and this is mostly done through practicing with questions from previous years or by tailoring the lessons towards the transmission of facts (Bjork, 2016, p. 116).
This can spawn conflicting stances towards the rest of the subjects, depending on the level of education the students are in, what importance they lay on upcoming entry exams and how well they do in classes in general. It is interesting to see that in middle school the most favoured subjects of pupils were exactly those not in the upcoming entrance exams (ibid, p. 92), while for others in high school "*the subjects that are not used in entry exams have to be studied as well, which was really concerning*" (3:73) – meaning that every lesson that is spent on non-examination knowledge reduces the time that they can prepare effectively.

So, as we can see, the looming examinations have effects on the curricula before. The results of pupils on these examinations are also used to assess teachers in the respective school subjects. But another thing that I want to mention is that this focus on entry exams also has the outcome that less emphasis is laid on the finishing of a grade. If we think of the education system in Austria, at the end of high school the Matura (also more standardised now) has the role of making sure that the people that pass it have some general degree of studying done and are now allowed to study at institutes of higher education. In Japan, the end of high school has no 'big finals', but entrance examinations instead. This

shift from the end of a school stage to the beginning of the next one might not seem as much of a deal at first glance, since you need to study at around the same time supposedly similar things. But the big difference is that for final examinations the school in question can harmonize their idea of a curriculum with the way that the content will be examined in the end (at least inside of the bounds that national curricula and directions from the ministry of education allow).

This way of putting the emphasis on entry instead of graduation is also continued into university. For master programmes there are entrance examinations in place, and students that go for further studies certainly have to learn a lot for the next round of examinations. But since the vast majority of students end their studies after the bachelor, a big part of the incentive to learn disappears for most students. Based on my interviews, I think that the way the pre-tertiary education system is structured has a big influence on how students think about learning. Starting at a point in elementary school where learning is promoted for learning's sake, it gradually narrows down to a focus on knowledge that will get asked at the entrance exams into universities. This structural idea of 'hard entry – easy graduation' got reiterated by my interviewees at several points, usually with a comparison to Europe or the US as contrasting cases[41]:

> *At Japanese universities, getting in is difficult, but once you are in it is like playing (laughing). Somehow, in Europe and the US getting into universities is relatively easy, but after that it seems that you have to study a lot. (2:103)*

This easiness of graduation is not necessarily thought of as a bad thing, as can be seen in the last quote with which I started this chapter but has to be understood in tandem with the difficulty of inscription. By passing through an extremely competitive and demanding process of selection to get into certain schools with limited places, one has earned an easy time afterwards – or at least that is how the story goes.

What has to be mentioned here is that this relationship of entry and study difficulty is only considered to exist in social science and humanities programmes – called *bunkei*[42] in Japanese. For natural science (*rikei*[43]*)* programmes, even more difficult entry examinations are followed by difficult years at university. This *bunkei-rikei* divide is definitely something very prominent in the minds of students in Japan and has been mentioned by all of my interviewees – with some supposed exceptions in *bunkei* at the highest-ranking universities, but more to that later.

Since the questions in the *center examination* for the two type of programmes are different, starting in the early years of high school pupils have to decide for which of the two they want to go for. And a

[41] If that is really the case might certainly be questioned.

[42] 文系

[43] 理系

reason that some people try to go for the even more competitive option of a *rikei* programme has to do with the imaginations that people have of the relationship between university degrees and job placement (which will be talked about more in the third sub-chapter):

> *But it is said that for* rikei *finding a job is easy. Probably that is why so many people want to get into* rikei*, although it is hard. Eventually, in* bunkei *it is harder to find a job I think, although I am not sure. (5:89)*

Having a system in place that puts much emphasis on entrance exams, rather than final exams, accounts in part for why classes in *bunkei* seem to be so relaxed – because the biggest examinations are already in the past. The whole pre-tertiary education system in Japan can be said to be trimmed towards a culmination in the university entrance exams. This is in part a (seemingly) necessary answer to the large number of students that want to get into a small number of prominent universities. In addition to the effects that that has on the content of classes, it also spawned a large private sector of education related enterprises, which will be the next characteristic of Japanese education.

4.2. A privatization and marketization of education

The next things that were mentioned again and again by my interviewees are two sections where private enterprises play a big role in defining education in Japan. One concerns formal education – meaning private middle and high schools, and universities; and the other concerns informal – or "shadow education" (Stevenson & Baker, 1992) – meaning mainly cram[44] schools (institutions that help students with their homework, to keep up in class or to prepare for entry exams). While the first section reaches into the higher education system, cram schools are in place up until the transition from high school to university. Let us start with the first section.

4.2.1. Private formal education

In addition to the dichotomy between *bunkei* and *rikei* that I talked about above, another dualism that has been brought up by each of my interviewees is the differentiation between private and public universities in Japan. Indeed, when I asked how they decided to which university to go, the matter of public vs private came up every time – usually in connection with a reasoning of why they tried to get into a public one:

> *Hm, in Japan there are private and national universities and private ones are really expensive, REALLY expensive. If you go to a national uni you pay around half of the half of the half of the price, for real. And well, because my family isn't rich, I tried to get into a national one. (5:6)*

[44] "Cram" as in "cramming facts".

As could be guessed, this reason is money. There is an incentive to get into a public university just because of the fact that you can save a lot of money once you are in. But this in turn fires up competition for the limited spaces in public universities – and raises those universities' position in the *hensachi* ranking (this specific ranking will be described a bit later – but the main thing is that it is about entrance selectivity). But when we look at the situation of student allotment in 2018, 77% of universities were private and more than 73% of students (the percentage is even a bit higher when we only consider undergraduate courses) were enrolled in private universities[45]. This makes the very pervasive narrative of trying to get into public universities first so interesting for me, since it is clear that for more than 2/3 of the students it will be impossible. Besides the price of tuition that is much higher in private ones, two things are noteworthy when we consider the implications that privatization can have for ideas and choices about universities in Japan.

The first one relates back to the prevalence of entrance examinations. While examinations are the most common way to get admitted to public as well as private universities, the conditions for taking entry exams are very different for the two cases. The first exam chronologically each academic year is the *center examination*. It is Japan-wide the same test (with different versions for *bunkei* and *rikei*) at the same date, mandatory for all who want to get into public universities through examinations. Usually in January, this examination is the one that is focused on the most – by media and preparing students alike. After taking this exam, young people (with the help of cram schools) can calculate their chances of getting into certain public universities. At this point no university has to be chosen yet, this happens at the second round of examinations, which are individual for the universities. But what is most important for my point here is the students have the freedom to choose but can choose *only one* university. That means that for the university-specific second round of examination the students have to take their chances – either they get accepted at the one they choose or they cannot get into a public university at all, at least not this year (although there are usually some second dates provided for the second round of examinations, if some spaces are still left unfilled; here it is then also possible to go for a different university).

This limitation of choice has big implications for which university adolescents want to go for. Do they go for a highly ranking public university and take their chances? Or do they go for a safer choice, a few points lower on the *hensachi* scale? One way to help students make this decision is to create backup options by applying at private universities as well:

> *That depends on the people. Some people don't take private exams at all because they don't have much money. There are people who only go for the* center exam *and for a public uni, but usually,*

[45] http://www.mext.go.jp/component/b_menu/other/__icsFiles/afieldfile/2019/05/22/1417059_11.xls (2019-06-29)

because you are worrying so much, hmm, you take some safety measures [meaning private university entrance examinations]. This then soon costs 300-400[46] thousand yen. (1:24)

What P1 talks about here is that the choice of public university often depends on how much risk students can mitigate by taking entrance examinations of private universities first. As already mentioned, things run a bit differently here. There is no limit to how many private entry exams you can take – as long as you manage to show up at the exam date and, more importantly, are able to pay the examination fees. The entrance examinations for private universities are positioned in such a way that you get the results of these before the deadline of application for the second round of public entrance exams.

The safe way goes like this: you take the *center exam*, look at the results that you achieved and thus estimate your chances for getting into a university of a certain difficulty. Then you take as many entry exams for private universities as you fancy to create backup choices. If you would be accepted in a highly ranked private university you might try your luck with an even higher public one during the second round of exams (or you stop trying, because you are content with this one). If you cannot get into a high enough private university you might go for a lower-ranking public choice, to not be stuck with a suboptimal choice while still having to pay the high tuition fees.

So, unsurprisingly most of the people that want to continue into higher education try to go for the public universities, since they are much cheaper. But those spots are very limited and thus very harsh competition for these places ensues. This competition for the cheaper spots is reflected in and partly responsible for the position that universities attain in the *hensachi* rankings. This goes as far as that the relationship between limited spots and abilities of students gets reversed:

In the end having less subjects is easier [private exams test less school subjects than the center exam*], that's why everybody ends up going to private universities. Even if they want to go for a national uni at the beginning, people manage to keep up with studying less and less, and eventually many people limit the amount they have to study and go for a private uni. (5:34)*

Because getting into public universities is assumed to be the goal for everybody, it appears to follow that those who did not manage to get in were 'too weak' to do so. That it is structurally impossible to accommodate all the people who want to continue studying in public institutions did not appear to be much of a topic. Similar ideas also exist about high schools (although here private high schools can have much better standing than local ones, in part because they have more freedom to tailor their curriculum towards entrance examinations):

[46] 2,500-3,000 Euros

Hm, there is the image that when people are in private high schools, it means they did not get into national.., local high schools. That means people who did not get in and took a backup choice instead. Because there is the image of people not being good enough to get into local high schools and only being able to get into a private one, in addition to the high tuition fees, because of that everybody wants to go to local high schools. (4:15)

This idea that people in private institutions are there because they were too weak to get into public ones is really pervasive and is thus a really strong incentive for high/middle school graduates to study all day – every day for the last part of their school life. But thinking about that from a different angle, it helps to explain why in all of my interviews there was a certain expectation that in private universities classes would be easy.

This brings me to my **second point** about private formal education – how classes in private universities are perceived. In addition to a possible continuation of the line of thought from before (that only the 'bad' students get into private universities), there is another factor that has been brought up to explain a perceived laxness in courses. Namely that that the universities *should not* fail their students. Just by looking at the numbers of students who entered universities in 2014 and those who graduated four years later, you get a graduation rate of 93%[47]. This corresponds neatly with the story that gets told again and again: that getting in is hard but getting out is more or less a matter of form (and forms – see McVeigh, 2002, p. 129). When my interviewees talked about this situation, they usually had negative sentiments towards that, especially after their experiences of studying abroad in Vienna:

Getting credits is quite easy. Because for private universities, students are already, they are customers who pay millions [Yen], really a lot of money, how should I say this? They are going easy and are nice, it is really seldom that people don't manage to graduate in four years in private universities. (1:120)

Yeah, that's widely known. Japan is really the total opposite to the US, it is often said that in the US getting into unis is really easy, but graduating is difficult, right? It's the total opposite, to be frank, in Japan once you get into uni, 90%, 99% everybody graduates. Without taking longer. It's easy. It's a mess. (3:98)

This impressive record of having such a high percentage of graduates (which on a short glance looks like a through-and-through positive thing and is often regarded as such from outside of Japan) brings to the fore some issues that can arise when education gets privatized. As P1 mentioned in the quote, private universities are almost exclusively dependent on entrance, admission and study fees of their

[47] Same as footnote 5.

students for their financing. Students on the other hand pay these heaps of money to get their education – but more importantly – their degrees. It makes sense for both parties that the number of dropouts is kept at a minimum – at least if we think of this relationship in market terms.

Since both sides seem to want to get as many students through as possible, teachers are discouraged to let people fail classes, resulting in situations where students sleep during sessions or just sit silently there, not answering even when asked something directly. McVeigh (2002), who taught in (lower ranking) private universities in Japan called this way of non-teaching students but letting them graduate in numbers "institutionalized mendacity", arguing that the more focus gets put on rituals like entrance and graduation ceremonies, and the more practices are formalized, the less 'real' education gets done in the end.

The question that begs to be asked in the end is: why would people then still want to go to private (and the lower in the *hensachi* ranking one gets, the more this image gets stronger) universities if it is so expensive and supposedly very little is learned? This will be talked about in the next sub-chapter, but first I want to explore the second part of this section: the informal part of private education in Japan.

4.2.2.Shadow education

In parallel to elementary, middle and high schools, there is an array of private education related companies that help students with their learning. Usually summarized under the name "cram schools" or *juku*[48], these private enterprises should be understood as responding to different needs that students (and often also their parents) see unfulfilled in the formal education system. These needs might for instance be help with homework, finding motivation for studying, developing techniques for self-studying, and – most relevant for my case – preparation for entrance examinations. It is important to differentiate between these different kinds of cram schools because in practice they operate very differently but still get subsumed under one category in media accounts and the frequent criticism targeted against them (Roesgaard, 2006, p. 17-19).

The cram schools that are directly related to the university (but also cascading back to high and middle school) entrance examinations are called *shingaku juku* or *yobikō*[49]. Y*obikō* are usually associated with high school graduates that did not manage to get into a university (of their choice) and spend one year of preparation for the subsequent entrance examinations – these students are called *rōnin*[50]. These *shingaku juku* are mostly meant when popular media depictions write about cram schools. Usually

[48] 塾 (private coaching school)

[49] 進学塾 (private coaching school for school advancement) or 予備校 (preparation school)

[50] 浪人 – „masterless samurai", since they do not have a school that they belong to anymore.

this happens either with a strongly positive message of elevating 'underperforming' students to high achievement levels or a decidedly negative vibe, lamenting the long hours that young people spend in these institutions cramming facts and preparing for entrance examinations (Goodman & Oka, 2018, p. 581-582). When I will mention cram schools from now on, I will use it as a synonym to *shingaku juku* and also refer to these examination preparation coaching schools, and not to those that help with homework or keeping up with classes. This is also close to how Stevenson and Baker have defined "shadow education", which is "a set of educational activities outside formal schooling that are designed to improve a student's chances of successfully moving through the allocation process" (1992, p. 1640).

The reasons for why *shingaku juku* exist are, without a doubt the entrance examinations for the different school stages and the importance that they appear to have. They are the answer to the 'need' to get into highly ranked university and their popularity can be understood as the strong entrenchment that this 'need' has in the minds of Japanese students:

> *P3: That is probably different for everybody, but in my case, for the first two years in high school I just went to school normally, and during the last year I also went to cram school. Well, it was really from the morning until evening (making a tired sound)… it was not like a lecture but rather that I studied there alone in a private room.*
> *I: Hmm, this going to cram schools, is this something that many people do?*
> *P3: Yeah, everybody, I think really 100% do it. At least around 90%-100% go to cram school. (3:6-7)*

As mentioned, cram schools can be understood from two opposing sides. They either help to equalize education, so that people who did not manage to get into good schools (which are assessed by their graduates' acceptance rates at famous universities) also have chances of getting into their desired institutions. Or they can be seen as perpetuating inequalities, since pupils from higher socioeconomic backgrounds are more prone to attend them (Stevenson & Baker, 1992). In any case, it is important to remember that, since they are private enterprises, they always cost money. So, if you are too poor to afford them there is also no possibility of equalizing something, and often doing not so well in school and coming from precarious households goes hand in hand (Roesgaard, 2006, p. 20). Arguments have been made that this is not necessarily an unintended side-effect, since the aim of entrance examinations in Japan is selection rather than assessment of scholastic abilities (ibid, p. 7).

As I already mentioned in the first sub-chapter, entrance examinations have effects on the content of classes in the grades before them. But since the competition for limited spots in the most famous and high ranking schools and universities is so high, and the goal of the official school curriculum is a general education and not the preparation for the next entrance exams, most pupils feel the need to attend a cram school to be able to answer the questions of the entrance exams:

Well, there are people who don't go to cram schools, but since I have been in a local high school, and in local high schools the pace of classes is really slow, we haven't even done the content at the time when the center exam *was happening in January. Because there is quite a lot of content that isn't covered at the time, there are really few people who learn for the exams only by attending high school. (5:40)*

Because attending a cram school has become so normalized and so many people want to get into these, there are also rankings of cram schools, which are rated by the acceptance rates of their 'graduates' into famous institutions. This becomes as absurd as that there are entrance examinations that school children take to be accepted into their cram school of choice, with the goal of preparing for entrance examinations to get into their university of choice (ibid, p. 36).

Seemingly at the opposite range of the spectrum of the goals that going to *juku* (now in the more general meaning) can have, there are for instance companies that offer English education exactly in the way that is *not* assessed at entrance examinations – basically meaning conversational English (in differentiation to "English"[51], which is "an academic subject necessary for passing exams" (Aspinall, 2013, p. 130)). Here also adults are a big part of the clientele.

What both of these types of *juku* have in common is that they exist because of the strong focus on entrance examinations and the repercussions this has on formal schooling. And while the first tries to provide the parts that are not covered enough in formal school to get through the entrance exams, the second tries to make up for the version of English that is not so easy to assess in written exams – and thus disregarded in school.

But all that I have written up until now does still not explain why so many young people in Japan try so hard and spend so much money to get into specific universities. Maybe they all really want to study a specific programme at a specific university because it has been their dream since childhood? After having done my first interview, and with no exception in the following ones, it became evident that there is a different reason for submitting oneself to "examination hell".

4.3. A tight coupling of (imaginaries of) 'good' jobs with university

This reason seems also somewhat to be the cause for the strong focus on entrance examinations and the high degree of privatization in education. To put it concisely: it is the idea that you need to have a university degree to find a good job. For example, the first thing P1 said during our interview, after I asked them to tell their story of how they became a student, was this:

[51] In Japanese these two versions of English are termed 英語 and 英会話, with the first meaning "English language" and the second "English conversation".

Uhm, in Japan, generally if you don't go to university, if you don't attend university for four years you can't find a proper job. (1:1)

There are at least two things in that quote that should be talked about more. One is that while P1 talks about "attending university", what they actually meant by that (after receiving some follow-up questions) is attending and graduating from (as a matter of fact) a 'good' university. And a 'good' university is identified through looking at its *hensachi* rank. This has importance in this context because students are not the only party interested in the rank of universities, future job providers are as well. Or at least they are imagined by students to be interested. And it is actually this expectation of importance of one's university's rank and name that makes it a goal for students to aim for highly ranking universities, and not the quality of education that one can get there.

The higher a university is in the ranking the easier it seems to be for students to get accepted in a good company. And this is the second thing I want to go a bit further into: what is a "proper job" or a "good company"? These have been described unanimously as big, Japan-wide companies like Panasonic or Mitsubishi. Getting a job in a company like that seems to be ultimate goal for young people and apparently to be able to get into one of these big corporations you should have an as-high-as-possible (concerning rank) university degree.

And when we think of what would happen if really everybody wants to get into the same few companies, it makes a lot of sense that these companies come to rely more and more on some kind of quick way to sift through large numbers of applications. This is a good example of a self-fulfilling prophecy, a social mechanism that can be used to describe situations where an expected outcome is brought into being because it is expected, and which has been used to make sense of university rankings before (Espeland & Sauder, 2007). Because so many students apply at the same spots from all over Japan, to be able to handle the numbers these companies use the *hensachi* ranks of the universities to sift through their applicants:

For instance, I mean it depends on where you apply, but if you apply at big companies, let's say if you want to get a job at a good place, I mean there are hundreds of universities in Japan right? And if you are in the lower half, then it does not matter how much you try or how excellent you are, you won't have the chance to begin with. Yeah, there is this thing called "credential filter"[52], and a university that falls below that line is a no-go. (3:114)

This story of the "credential filter" has been told to me in exactly the same way by P1 and in a very similar fashion by P5. And although P1 and P3 come from very different parts of Japan, study different things and go to different types of universities, this narrative seems to be very pervasive, even though

[52] 学歴フィルター

the ideal of the "lifelong employment" in big companies has stopped to be attainable for most of the people in Japan for years now (or never has been) (Sugimoto, 2014, p. 91). There certainly seems to be the expectation that you need a university degree to find a 'proper' job, but still more than half of young people get into the workforce after high school, and those are not necessarily 'bad' jobs (Lesch, 2018). But, as it seems, the jobs that you get into after university are perceived to pay better and that is reason enough:

> *But I think with only a high school degree, the jobs that you can get have a really low salary. I think the money to be made is really low (5:112).*

But this tight connection of universities and the search of a job afterwards is not only something that students imagine to be important; it is also institutionalized in the university programmes themselves. The fourth and last year of most undergraduate programmes is spent focussing on two things: writing a thesis (if one needs/wants to, since it depends on the university/programme if students can do additional classes instead of their thesis) and finding a job. During my year at a Japanese university I experienced just how important these activities are for the graduates to-be and how much help is provided by the university. These job searching activities happen at the same time for all fourth-year students or reach even farther back into the third year. They are usually a combination of seminars provided by the university to prepare for different kind of job interviews and those interviews themselves. There is a whole load of manuals about how to dress properly for job interviews, how to act during interviews and how to assert oneself in group exercises. This makes at least the first few rounds of job interviews into mass events of people who all dress the same and try to be the perfect candidate[53]. This goes even as far as that two of my interviewees, who were then approaching the end of their third year (November), conducted skype interviews with possible future employers in Japan, to not fall behind their peers.

In the end it is not clear if companies pay so much attention to applicants' university names or if universities with a higher rank prepare their students more intensively for their job interviews. What is important is that the chances that one has with a degree from a certain university to find a 'good' job, is something that students care a lot about. And those universities with a 'good name' are in the end those that have a high *hensachi* ranking, by virtue of how this ranking is produced. And since I mentioned *hensachi* quite often now, it is time to look closer at this ranking of students and institutions in Japan.

[53] Try searching for "就活" in the search engine of your choice and look at the pictures to get a feeling.

4.4. *Hensachi* in the middle

Now that I have set the stage with a description of particularities of the Japanese (higher) education system I want to set out to specifically answer my research questions. I did this preparation work to be able to not only to describe what my interviewees told me and to interpret that subsequently, but to provide *a* form of causal explanation why this would be the case. Causality should in this case not be understood as a simple cause-effect relationship but more as "mechanistic causality" (Tavory & Timmermans, 2014, p. 87-88), providing explanations for phenomena on a lower level of abstraction. As shown, there are certain values and images of how things at university are (supposed to be). But those values are not just 'there' because they are truer than others. They are usually transmitted either verbally as stories (Czarniawska, 2004) or in the form of materialized values (Johnson, 1988) – in other words: technologies. *Hensachi* is one such pivotal piece of technology of sorting and ranking that works as a "*mediator*" (Latour 2005) to (re-)perform ideas about the relationship between universities, students and rankings of both in Japan. It is a centerpiece that connects the examination culture, the privatization of education and the coupling between jobs and universities in practice and, most importantly, with the students. In the next part I want to answer: *in which situations and how does* hensachi *become a thing to consider for students?*

Hensachi certainly seems to be an actor in Japanese higher education that plays an important role in ordering universities and influencing ways of thinking about them. In this part I want to show how *hensachi* touches on students' lives – in which situations it appears, in what forms that happens and what other actors are implicated in these instances. I want to show why in some cases it makes sense for students to not use or ignore *hensachi* and why in others it becomes something that they have to keep in mind and cannot (should not?) do without – an obligatory passage point, as my non-existent friends in the French military like to say (Callon, 1986, p. 205; Johnson, 1988, p. 302).

A good way to start explaining something that matters today is to look from where it comes from. Initially, *hensachi* is a Japanese term from statistics, and means the standard- or normal- or z-score. Its main purpose of use is that it makes results from different tests and other normal distributions comparable, since one quality of normalizing the score is that it becomes dimensionless. Especially important in the context of Japanese education is that the normal score always gives a relative positioning to the mean of a distribution of values. The formula of calculating a z-score is the following: $z = \frac{(x-m)}{\sigma}$, with x as the actual score (usually of a test or some other result), m as the calculated mean of all the values considered and σ as the standard deviation. This formula would set the mean of the z-score to 0 and its standard deviation to 1. The Japanese educational *hensachi* used in these cases is defined with 50 as its mean and 10 as its standard deviation, so the formula becomes: $hensachi =$

$\left(\frac{(x-m)}{\sigma} * 10\right) + 50$ (Zeng, 1999, p. 107).

In the mid-1960s, the population of young Japanese in their high school age increased dramatically, mainly because of the 'effects' of Japanese soldiers returning from the second world war. This period is important for my case because of two reasons: 1) the educational system, and especially higher education, got strongly privatized to accommodate the sharply increasing number of high school graduates (from 870,000 in 1962 to 1.56 million in 1964). This massification of (higher) education is a major factor that needs to be considered to explain the lasting presence of *hensachi* today. 2) As one way to deal with this high number of institutions and the high number of prospective students, a Japanese teacher (remembered as "Mr. Hensachi" – RIP) started to use z-scores of preparation exams to help his students to get a better feeling of where to apply for university. Because of the structure of the university entrance system (being only able to apply at one public university), it was important for students to know at which universities they would have a chance to also get accepted, and to not waste too much money, time and mental health on applying to and failing to get into the 'right' universities.

For example: an imaginary student named "Uru" regularly takes *mock tests*[54] (practice tests consisting of questions of previous examinations) to see how good they perform in them. At the same time, many other students also take the same tests, and so the companies running these tests see how good everybody is in relation to the others. Based on these results (the personal *hensachi*, as calculated with the formula from above) the students are advised by their teachers (either in formal or in cram school) for which university they should go. The better they are in comparison, the higher the probability to get into more difficult universities.

After Uru participated in the *center exam*, they see how much points they got and then decide at which university they definitely want to apply. Because Uru did not take any private entrance exams, they eventually choose a public university with a *hensachi* slightly lower than Uru's personal *hensachi*. This should give Uru a good chance to get accepted while still being in a fairly difficult, and thus well-perceived university.

Of course, the cram school that helped Uru to prepare for the entrance examinations is interested if Uru managed to get into their chosen university. By asking this from enough students, they calculate a *hensachi* value that expresses a point at which a chosen probability to get in is arrived at. For instance, the "probability to pass the entrance examination between 60% and 80%"[55]. And thus, the new *hensachi* of a university for a given year is calculated, which will be used as a baseline for the people

[54] 模擬試験

[55] https://manabi.benesse.ne.jp/doc/faq/univ_index.html#06 (2019-07-21)

applying there the year after.

This shows that the rankings of universities and the rankings of students are closely related. This relationship also urges students to use the university *hensachi* that 'their' cram school produced, because this will be the one that can most accurately tell them their chances. Because different cram schools have different groups of student-customers, their *hensachi* rankings of universities can differ (up to a certain point, the highest university in one ranking will never be in the lower 50% of another).

But as it is so often the case, instruments developed to do one thing can easily be re-purposed to serve another cause. So, with the 'help' of cram schools, *hensachi* developed from the probability of entrance into a certain school to a numerical value that educational institutions got assigned, ranked by and which often gets understood as a proxy for quality of these institutions (Goodman & Oka, 2018, p. 588).

To put a stop to this explicit hierarchisation of universities (and increasingly also high and middle schools), the Japanese education ministry banned the use of *hensachi* in public elementary schools in 1991 (Roesgaard, 2006, p. 62-63) and in public middle schools in 1993 (Goodman & Oka, 2018, p. 592). The main issue was that teacher-student guidance was heavily reliant on *mock tests* to assess the *hensachi* score of students. Although these were offered by cram schools, up until that point they were conducted in the classrooms of public schools, and often during class time. Because there were frequent cases of verbal agreements between schools of different levels (in this case middle to high schools) about the allocation of students before the entrance exams were held (based on the *hensachi* scores of students), the ministry tried to undercut these agreements, since it went against its idea of a meritocratic and equal school system. This led to even more reliance on private education companies as a venue for *mock tests* and also for student guidance (Goodman & Oka, 2018, p. 592).

At around the same time, other ways of ranking universities were also coming up in Japan, which focused on more than just the selectivity of universities. These were mostly published by newspapers, cram schools, or other companies, such as the *Asahi Shinbun University Ranking* (which is with its methodology rather close to global rankings, e.g. research funding budgets, number of publications produced, number of citations received, …) or a ranking based on student satisfaction (Yonezawa et al., 2002, p. 380-381). And while these have had an influence on the accountability of universities and their self-perception, when we talk about student choices, *hensachi* still reigns supreme and is strongly normalized today.

And this does make a lot of sense, at least when we consider all the parts of the Japanese education system that are entangled with *hensachi*. It was not just used for the fun of it but because students can only apply for one public university/school. This was important because private institutions cost much more and at least at the university level have a worse image. And also "employers today still

stick to the selectivity or prestige of institutions" (Yonezawa et al, 2002, p. 380), and even if not, they are imagined by the students to do so. Because there are all these links to examinations, privatization and the job-university coupling, and many institutionalized practices including it, it was impossible for the ministry to abolish *hensachi*. We can say that it has won in this *trial of strength* (Latour, 1987).

Back to the present. I will look at *hensachi* in two different contexts and will describe these in three ways: looking at the *practices* that my interviewees tell me about – I will provide examples of where *hensachi* 'actually' comes into contact with them; looking at *reasons* that keep these practices in place – what makes it hard to ignore it in these cases and how they relate to examinations, privatization and the job-university coupling; and looking at *meanings* related to the use of *hensachi* in these cases – what effects it has on ideas about and conceptions of universities to rely on *hensachi*.

4.4.1.Situation 1: *hensachi* in high school

Hensachi rankings do not suddenly pop up right before high school students graduate and think about where they would like to go for university. On the one hand, starting to think about their wished-for university happens already much earlier and on the other hand, ranking students in relation to each other is something that happens throughout school and thus is not perceived as something strange. This makes it much less of a conscious decision to use *hensachi* when deciding about a future university.

4.4.1.1. Practices

When my interviewees talked about making choices of where to apply at for university, all of them mentioned the guidance from their high school teachers. These seem to be expected to know much about universities and the processes of getting into them:

> *Around the third year of high school, when career guidance started for real, my wish was to get into* Tokyo University of Foreign Studies*, so the teacher meant "alright, let's look into foreign language universities". So we looked, but according to my teacher, focusing only on foreign language programmes limits the number of universities quite much, so when you take foreign language and culture you might find much more. And eventually we looked into quite a number of universities from the highest rank top down. This way we continued, and the teacher told me which public unis could be possible and which private unis should be considered. Because they [teacher] had a lot of experience they knew really well what they were talking about. (1:74-76)*

This quote does not only show that P1 talked with their teacher about which university to apply for, it also shows that finding the 'right' university is not just done by interest. Although P1 already had a concrete university in mind, their teacher looked for other universities that fit a similar profile, and P1 eventually ended up in one of those. Why did they not just go for *Tokyo University of Foreign Studies*?

Teachers do not only help students to look for university programmes that they are interested in but look for programmes where they have a realistic chance of getting into. At this point *hensachi* comes into play. Obviously, to know how high the chances are, teachers need to have some idea about how 'good' their pupils are. Since the implementation of *hensachi* assessment tests has been forbidden in public schools, teachers have to 'ask' their pupils to take these tests outside of school, and to tell them the results, to be able to give them appropriate counselling:

> *There are these tests over the year, not tests from our school but tests in all over Japan, which happen, well around once per month. Students across Japan take the same test, that way you can understand your own level and, hm some ranking comes out. […] Hmm, some of them you have to take because the school tells you to, others you decide by yourself if you take them or not. (2:25-28)*

The pupils are supposed to take these (personal) *hensachi* assessment tests in order to understand their own level in relation to others. So, even in the (rare) cases where students are not enrolled in cram schools for exam preparation (where taking these tests is a central part of preparation work), because the teachers in high school need the *hensachi* value of their pupils, these are urged to take assessment tests for their *hensachi* level. If one wants to enter a Japanese university through taking entrance exams (what they call the „normal entry", other ways of entry will be introduced later), no way leads around taking these assessment and preparation exams.
So, when I asked from where they know the *hensachi* ranks of the different universities, I usually got some rather vague answers like "I don't know. But probably all the exchange students here know that [the ranks of universities], I think." (1:104). I only got more concrete answers when I decidedly asked about times when they *saw* these rankings:

> *Um, these were posters distributed to schools by exam preparation cram schools. The school did not make them, those exam preparation cram schools, the cram schools distribute them to all the high schools. They provide a lot of information, and part of this are the university rankings. The* hensachi *made by these cram schools…, the* hensachi *ranking for the universities all over the country that has been researched by these cram schools, I remember those overview tables hanging there. Somebody, well, I guess the teachers put them up there. They were hanging in front of the classroom. (4:55-56)*

This omnipresence of rankings, hanging on schools' corridors the whole time, might explain why I got this response only in one of the later interviews. And not only university rankings, also school-internal rankings of pupils, based on their performance in tests, is nothing unusual for Japanese school children, although it depends on the teacher and the school subject if the results are used to rank the students. These rankings are then hung on the hallways next to the university *hensachi* rankings that cram schools brought to school:

Um, basically the results of all the subjects got put up on the wall at the end of the term. Although it depends on the teacher but especially my English teacher liked to do that, so the English tests got put up every week. Week after week. But in the other subjects, especially maths, there were also frequent tests, but they did not get put up, that was because the maths teacher decided to not do that. (4:77)

Rankings were used both as a means to rank students and universities, and both types were put up on lists on the hallways. Although the personal *hensachi* values of students are their private business, the general practice of being ranked in relation to others is nurtured in schools.

I want to show one more case in relation to high schools were *hensachi* becomes visible, even when it is not explicitly mentioned. One way that high schools (but also further back down the line) get regarded as being a 'good' school is the number of graduates they can get into 'good' (= difficult entry) universities. So, if a school manages to get a fair number of students into these institutions, they also want to show that. One venue of showing off these results are school newsletters. One of my interviewees was kind enough to show me an online version of their high school where they proclaim their successful entrees into universities (figure 5). The headline in red reads: "Public university acceptance newsflash". What I find interesting in this picture are mainly two things:

1) there is an obvious split between public and private universities. The 21 boxes with a pink flower each signify the entry of one student into a public university. Each box contains in the following order: name of university, department, initials of graduate, the class, and the middle school from which they came. The smaller part on the bottom with the blue vertical box on the left mentions the entrees into private universities. Here only the university name and the number of graduates entering it are written. After the last entry there is a small "など" [= etc.], meaning that this list would continue further. The difference in space assigned to each of these parts suggests that getting into a public university is seen as something better than getting into a private university.

2) Also, the 21 public university programmes shown here are not ordered randomly or alphabetically, but roughly according to their *hensachi* rank. Even when it is not explicitly mentioned, the ranking by *hensachi* is something that people recognize when they see it – as my interviewee did when they mentioned that Kobe University was "obviously" first on top of this page.

Figure 5: High school advertising its successful graduates (http://www.fujimi.ed.jp/archives/4865 (2019-10-28)

4.4.1.2. Reasons

Thinking back to the three characteristics that I started with to characterize the Japanese higher education system (examination focus, privatization, job-university coupling), can we find some of them reflected in the quotes from above?

In the guidance talks P1 had with their teacher, we can see that they went through (probably a list or a ranking of) universities from the top down – meaning from more to less difficult to enter. We can also see that private and public universities were considered separately from each other because the conditions of how many exams you can take per type are different. So, when considering where to go to university, the advice that pupils get from their teachers cannot ignore the fact that they will in most cases get there through entrance examinations. Even though P1 mentioned that their wish was to get into a specific university, their teacher guided them to also apply for others – to have a backup in case P1 does not get in. The instrument both of them used to predict P1s chances of getting into certain universities were P1s *hensachi* scores. In situations of teacher-student guidance *hensachi* acts as a *mediator* (it makes a difference if the ranking is not there) to align the wishes of students with the way that university admission is handled in Japan.

In P2s and P4s quotes we can see the role that cram schools play in producing and disseminating *hensachi* rankings. The "levels" of students that are used to find a fitting university are known because students take *mock tests* provided by cram schools. Here we can observe the intertwinement of informal and formal schooling, and how much middle and high schools rely on their accompanying institutions of shadow education. This can go as far as that some of these tests (which are carried out by cram schools) are included in the tuition fees of the formal school, as was in P2s case.

And while both P2 and P4 went to private high schools, which are not so strictly bound by ministry directives, also in public middle and high schools most schools seem to refrain from using *hensachi* and *mock tests* only in so far that they do not let the students take those tests on school grounds. Cram schools need formal schools as a source of customers and help to cover some of the shortcomings in their education (either if they need help to keep up with classes or if they feel that formal school is not providing enough preparation for entrance exams); and formal schools need cram schools to help make informed decisions during their student guidance. In the end, both sides profit for each student that gets accepted in a higher stage of education (because for both institutions this is their main selling point – figure 5), and the harder the place was to get into the better. Thus, it makes sense that teachers in middle school give out flyers for *mock tests* from cram schools and ask their students "*how about everyone takes these tests?*" (5:64)

Again, we can recognize the reliance on exams and the privatization of education in those quotes. Not only are these *mock tests* and rankings produced by private companies, the tests themselves are

simulated entrance examinations. The *hensachi* levels of students are assessed solely on their performance on entry exams from previous years. Since the university entrance exams are the things they are preparing for, entry exams from previous years are the closest things they can get for preparation. But since the ministry of education forbade the use of *mock exams* in formal schools, taking these tests (and in conjunction getting one's *hensachi*) cannot be done without private companies.

4.4.1.3. Meanings

What difference does it make that *hensachi* appears where it does, and does it have implications for how students think of universities? From what I heard; it makes a difference that *hensachi* is the predominant way of identifying what a good university is. When I asked them how they would imagine a world where they would have to find a university without *hensachi*, they were rather limited in their imagination:

> *Impossible, it probably would be impossible. You would be at a loss, I think. How…, how would you do that?* Hensachi *is… (…), well… . Wouldn't you have to decide by place? (laughing) If you want to go to Tokyo then Tokyo, if you want to go to Kobe, then…., I don't know. Really, really more than 90% of students decide by looking at* hensachi*…, university and stuff…, if there would be no* hensachi*, it would be a great confusion, I think. (3:121-122)*

It is so normalized as a tool to help making decisions, that using it seems not even to be a choice for many. Because entrance examinations are a big deal in school, in student guidance and as a market, what a good school is gets defined by its difficulty to get into. This makes it hard for students to argue to go for a school that would be 'under their abilities'. So, comparing one's *hensachi* scores with those of universities not only helps you to see where you can get into, it also makes it hard for you to decide by other means. On the other hand, it makes it possible to not have to think at all about where you apply to. While the popular image of university rankings is that they help students to make informed choices in a competitive environment (Brankovic, Ringel, & Werron, 2018), the producers of these global rankings would probably argue that a blind reliance only on their list would be a bad idea. But because *hensachi* is related to so many practices and actors, it seems acceptable to take it as the sole deciding factor:

> *Yes, in the end I took an extra* rōnin *year, but in my last year of high school when I did the exams, I really didn't think a lot about it, I just applied somewhere that fit my own abilities. I thought it would be a university where I can get in withy my abilities, but I ended up becoming a* rōnin*. (2:5)*

According to the same student, almost half of the student population in Japan are deciding where they want to go to university not by what they want to study but rather by up until what rank they can get in. Of course, this does not mean that this is really the case or that they are just justifying their own way of handling things back then, but the argumentation of deciding for university only by its difficulty seems to be a valid one to make.

I have already talked a bit (and it will come again in the next situation) about the importance of a high *hensachi* university for finding a job. But this is not the only place where students argue for why it is important to get into a high *hensachi* university. When I asked them if they think that the grade of difficulty of the entrance exams has a relation with the study done afterwards, they all agreed to some extent. That this idea may not always fit together with the experiences they made in university afterwards, is a point that I will go further into later (see section 4.5 at the end of this chapter).

Since the quotes from above were centred around *hensachi* in high school and during the transition from it to university, it is also important to notice that high schools themselves are ranked in the same way. But the big difference is here that although the number exemplifies selectivity as well, the meaning of a high *hensachi* high school is not the same as a high *hensachi* university. In other words: the way of calculating the institutional *hensachi* value is the same (probability-hurdle that is arrived at by comparing real acceptances of students with their *mock test* results), but it represents a different meaning. Being in a high school with a high *hensachi* means that students have (statistically) better chances to get into difficult universities. Being in a university with a high *hensachi* is an achievement in itself, one that is rewarded (supposedly) with good chances in good companies.

This is important to mention because high schools are measured mostly by their ability to get students into famous universities, and if these are public ones then even better. And since private high schools have more leeway with their adaption of the official curriculum, they can spend more time on concrete preparation work for the university entrance examinations. But since they are still private schools, they cost a lot of money, unlike public high schools which became free of charge in 2008. So, while there are similar considerations going on like with the choice of university (price vs difficulty=rank) the choice of university seems to be the one with the heavier focus. Meaning that it is worth it to expend a lot of money for a private high school and/or cram schools to save more money by not taking too many private university entrance exams and/or paying the expensive study fees:

> *But if you take private high schools, because their pace is really fast, I heard that there are many students who don't go to cram school. (5:42)*

One thing that happens through this is basically a shift of trying to get into the 'right school' further back in time. When a certain high school gives good chances (measured by graduate acceptance rates)

into famous universities, this high school 'naturally' becomes the goal of many middle school children and their parents. When too many people apply for these schools their admission is usually regulated through entrance examinations – and you get another situation of intense competition. Now we have a similar situation three years earlier and these high school examinations are according to Bjork the reason why the type of schooling changes drastically during the second year of middle school (2016, p. 205).

This also relates to worries about proposals that tried to introduce a 6-year long middle school (as reminder: usually both middle and high school take three years each). Thought of exactly as a way to stop the pressure that builds up before high school entrance examinations, the schools where this was tested showed that the timing shifted three more years earlier again, now to the transition from elementary to a longer middle school (Okada, 2016, p. 167-168; Roesgaard, 2006, p. 79).

In the end, the more standardised the ways become how schools and universities are considered 'good' and being valued, the less it is possible to argue for students to do it in a different way. It will get 1) harder to conceive of them in a different way to begin with – if it is 'obvious' which university is the better one, students do not have to think so much about it themselves. And 2) even if they choose a university based on different principles, it will be harder to do so without having to justify why they do not take the higher *hensachi* university if they would have the possibility.

4.4.2.Situation 2: *hensachi* and job hunting

After having chosen a university to go for and gotten into one, *hensachi* seems to play a role again towards the end of the undergraduate degree. For graduates of Japanese undergraduate programmes there are usually two ways open for them: either continuing for a master's course or aiming for a job. While this is quite similar to other countries, the way that this "job hunting" is organized is quite fixed in Japan.

4.4.2.1. Practices

Almost the whole of the fourth year is spent on applying at companies, going to job interviews and assessment exercises (maybe this is the reason why bachelor programmes take four years in Japan), and for writing a thesis (which is not always necessary). Getting into a big company seems to be the goal for many young Japanese, mainly because of the ideas of good pay, job stability and the possibility to take vacation[56]. As already mentioned, when many students want to apply for the same big companies, these companies have to find a way to deal with that large number. And what better to use than an 'objective' ranking of programmes that these students graduated from? This (imagined,

[56] There is a nice 'culture' of not taking the earned vacation time in order to help the company.

but not necessarily imaginary) application of *hensachi* has to be considered when thinking about choosing at which university to apply for:

> *You apply for many companies, and when you send those out.., for instance when you are a student from a university below a certain line, they won't even look at your application. Yeah, this happens a lot in Japan. (1:62)*

And while in the 'good old days' it seemed to be enough to get into a highly ranking programme, nowadays having a good university name behind one's back is not sufficient to land a nice job:

> *That's why, more than a really high-level university, people high in skills that are needed for that company get hired. No matter, for example, even if you graduated from the most difficult university in Japan, if you don't have the abilities that that company wants, you get dropped. Well, in the past it maybe was really so that when you graduated from a high-level university, that you got to choose from any company, but now it isn't that way anymore. (2:63)*

Getting into a highly ranking university is not all that matters nowadays anymore, but it is still seen as a prerequisite to even be considered for a 'good' (= big company with big pay) job position. The idea that having a good school record is important for one's later life is mentioned many times across all of my interviewees, even in areas ranging further than finding a future job:

> *Hm, maybe more than such technical things [meaning content of university courses], to live in Japan – to get a normal job after all you need to graduate from a university, at least. If you don't, you can't find a job and, for instance taking loans or buying a home or a car, when you need a loan for that, here it also more or less has an impact, I think. School record is important in Japan. (3:43)*

Since my interviewees were mostly still undergraduate students, their experiences with *hensachi* in the process of job hunting were mostly things that they heard from others. But notwithstanding if they only think that *hensachi* is used as a sorting tool by employers, or if it is actually used by many of these companies to sift through their large numbers of applicants, they apparently choose their universities according to that expectation. Of course, they do not come up with those ideas by themselves, and again, teachers in high school (and probably earlier) may play a 'guiding' role here:

> *P4: Anyway, I still remember what my English teacher said during class. "All right you guys? Life is in the end about money! Money!" (laughing) "People who have no worries about money have no worries in their hearts. They can do good things. It's said they can do good things in society. Therefore, to have a life without worries about money, in the end you have to get into a good company. To get into a good company you have to get into a good university. To get into a good university you have to excel at the* center exam*!" or something like that (laughing).*
>
> *I: They really said that?*

P4: They did, they did. I remember that very well. They said that during the English class.

I: In English? Or in Japanese?

P4: Eh? In Japanese. They were pretty bad at English! (4:25-26)

Besides the anecdotal point about English teachers who cannot speak English (remember what I mentioned about examination English vs conversational English?), this is the classic story of how the ideal normal life is imagined to be for many in Japan. To get further in the application process for these big companies, a well-known university with a high *hensachi* seems to help. And since this view seems to be very common with students and gets reiterated by teachers and adults alike, the selectivity of universities and their ability to place students in big companies tend to reinforce each other:

Well, the more people want to get in, for example because everyone wants to get into famous universities, for instance if 500 people apply for 50 spots, if that happens it gets harder to get in – their hensachi *rises. (5:76)*

The *hensachi* of a university rises with its selectivity – meaning that higher examination scores are needed to get a good probability of getting in. But at the same time, a university with a high *hensachi* has the advantage that just by virtue of having a high *hensachi*, it will attract enough highly performing students (through the logic of going for the most difficult option). But because the meaning of a high *hensachi* for a university is its reputation/promise to get many graduates into big companies, it will try to get them into those, and thus keep its *hensachi* on a stable high:

But because their hensachi *doesn't change too much, in the end famous universities are better for job hunting. I want to get into a company where people don't get accepted because of their [too low] universities, and when I apply for that company, I will introduce myself. When I submit my application and if I have a famous private or state university written on it, I will get an OK for the second round. (5:77)*

The two situations where *hensachi* comes up are related very closely. Pupils often choose their university with their future workplace in mind. The status that they will gain from getting into a specific university will come in handy when they apply at companies. In both situations the *hensachi* value in question is the same (the university's rank) but how the students relate to it is different.

In the first case they try to get into an institution through preparing painstakingly for the entrance exams. They use their own personal *hensachi* scores as indicators where they have a good chance to get into, and by raising their own value they extend their horizon of possible universities.

In the second case students are part of a (hopefully) highly-ranked university programme and can use this rank as a resource. By showing to possible employers that they managed to get into a difficult programme, they can make a case for becoming employed. We can say that while the first situation

foreshadows a future where the efforts that are being made will hopefully come to fruition, the second situation refers to the past, to argue that because of the difficult programme that they got into they would be good workers. But the important thing is that in the second case they refer to the entrance examination, not the things that they have done in university. And if they do, they might fix their image up a bit:

> *I: Hm, but for example, are there also companies that put their focus on what was learned during university?*
> *P3: Well, yes. There are but, they don't ask very thoroughly. So, during interviews, people lie a lot about what they learned... I do that as well (laughing). They don't ask too deep, and it's very fuzzy. Yeah, well, I don't know, it might be different but that's my opinion. (3:99)*

Again, I think there are some things that can help us to explain why this should be the case.

4.4.2.2. Reasons

One of them is that there seems to be not too much differentiation between getting admitted to a programme and finishing it. It is expected that students finish their undergraduate studies in four years, and that "*especially in private universities it is almost impossible*" to fail a programme (1:119). Particularly for *bunkei* students, because it seems so easy to graduate in the end, university gets called "*life's last summer break*" (5:83).

It is hard to determine if the focus of employers on the entrance examination score is the reason for the seemingly easy time that students have in university; or if this well-known focus on non-academic activities during university years is the reason for employers to look at university names instead. But again, I think this is an outcome of a combination of the focus on entrance examinations and the privatization of education.

Just like in pre-tertiary education limited entrance to schools plays an important role. Especially the university entry exams as the pinnacle of high-stakes testing in Japanese education, get parts of their importance for the very reason that future employers seem to base parts of their decisions on the difficulty of universities. Privatization and marketization also seem strongly related to this. Because the numbers of applications from students from all over Japan at the same companies are so high, *hensachi,* as an easily accessible indicator gets used to make first decisions. And because of the importance of satisfied student-customers and high graduation rates for private universities, it makes sense that once people are admitted to programmes, and are paying their fees, to keep the number of hurdles for them low.

But we can also see things changing. P2 mentioned that companies are increasingly shifting towards

a skill-based hiring and that coming from a famous university is not enough anymore. If you only rely on the name of your university, you may end up without finding a job:

> *Somehow, taking Japan nowadays, there are a lot more graduates who come from really high-level ranked universities, but who are not working and spend their time idling around at home (laughing). In the past this would be a bit unthinkable, but now many people like that are around. Yeah, although they are really good at studying, they can't get a job. This happens a lot now. (2:67)*

The story that P4s teacher told their pupils about getting a good job from entering a good university seems to hold only up to a certain point. But it is not that coming from a highly ranked university is not needed anymore, it seems to have become a must-have in addition to qualifications that individuals have to bring to the table – or have to lie about during their job interviews.

Another thing that can help in thinking about this close-knit relationship between universities and job-finding practices is comparison. Taking the Austrian higher education system again, it is not too unusual that students are enrolled in different universities, and even less in different programmes in the same university at the same time. In the Japanese case, on the other hand, I have yet to meet an undergraduate (or graduate) student who is enrolled in more than one programme. The reason for this is not that students are more narrowly focused in their interests or less inclined to explore different things, but the way that higher education is conceptualised.

At least from the experiences that I have from talking with students, there is quite the choice available for elective subjects and extracurricular activities that are offered to students. But what came even more to my mind was the streamlined form of university education. The 'natural' duration of an undergraduate programme is four years. By that I do not only mean the "minimum duration"[57] but also the fact that this is in nearly all of the cases also the actual duration of study. Taking an extra year has its own term: *ryūnen*[58], which is the same term that gets used for people who have to repeat a year during school (which also does not happen very often, because of the focus on entering schools instead of graduating from it[59]).

The point that I want to make is that it would make less sense for companies to sort students based on their university if it would be possible for them to inscribe in more than one. Although I don't think that in theory it would be impossible for students to do so, the high cost of universities and the hassle

[57] The "Mindeststudienzeit" in German, which is the benchmark for measuring how long a programme is *supposed* to take *at least*.

[58] 留年 – literally „staying a year"

[59] Rather than not letting children advance who failed to learn a minimum amount each academic year, it is possible to proceed to the next school year even without showing up once. The reason for this is simple: if students fail to learn enough, they will not be able to get into the next school, and thus the problem 'solves itself', with the additional bonus of having stellar graduation rates (Yoneyama, 1999).

you have to go through to enter one (including that you can only apply for one public university, actually inscribing in more than one is not even a thing that seems to make sense) makes it impossible in practice. Once you are in a university, in addition to courses there are also things like university gyms, festivals and clubs that all work towards the goal of making a university more attractive, and to make students identify with it more:

> *But when we cheerlead, the university's song will play, and at university events it [the song] will definitely appear, for instance at the university festival it will for sure come as a main thing. Somehow, the love towards the university gets stronger, I kind of get to feel like "I love my university". (5:125)*

At least from my experience from studying in Austria, while there are parties and marathons and all kinds of events where students can spend their time at/with people from the university in their free time, the main reason for going to a university is to study. If you do not perform to a certain extent, you will fail your classes and will not be able to graduate. For my interviewees, it seemed that the hardest part was over when you entered university and that "*once people enter university the knowledge that they had at the entrance exams goes down steeply*" (5:87).

Having the knowledge that companies will look at university names and thus the performance of students at the time of the entrance examinations, gives them the 'room' to have a good time for the next (almost always) four years. And when I write about "university names" I do so not incidentally. While the *hensachi* ranking is usually done at the programme level, the image that tends to stick is related to the university. So, while it might be possible to get into a bit easier programme of a high university, it is still the prestige of the whole institution that gets related to that feat. On the other hand, if your programme is higher than the average of the rest of the university, you are certainly encouraged to be proud of that.

To put it bluntly: because there is no examination at the end of undergraduate university (except for master programmes), there is little reason to study a lot. This is because the whole pre-tertiary education system is built that way. But companies still need to be selective because of the number of applications that they (at least the big ones) receive. So, they use the results of the last big examinations – the university entrance exams instead.

Or to put in in P3s words:

> Hensachi*, hmm… is after all the score that you have when entering uni, so until entering, everybody is really smart! Now, after entering it seems that there is no more studying done. So, you basically get your job because of your credentials [of schools entered], and once you got in, it does not matter how stupid you are, you can get into good banks or good companies. It's all a real mess. (3:97)*

4.4.2.3. Meanings from using *hensachi*

It is exactly because of this strong relationship between academic achievements and one's possible place in society (as represented in working at a good/big company) that being ranked in relation to other students (and subsequently as belonging to a respectable institution) starts to count (Yoneyama, 1999, p. 46). Not very surprisingly, the closer job-hunting is to the lives of my interviewees, the more *hensachi* becomes relevant when talking about it. P1 and P3 were the two who were starting their job-hunting activities at the times of the interview and those were the two that talked most explicitly about the "credential filter". P5 was one year earlier (meaning one year younger, since being in a higher grade almost always means being also older) and they talked only a little about it.

An interesting question to ask is why people think that they should all apply at the same big and Japan-wide companies? I think that this idea in part gets created through this ranking of institutions and it certainly gets sustained by it. The "super-meritocracy" (ibid, p. 46) of Japan makes it a no-brainer to go for the best workplace when you are able to excel academically. And the best workplaces seem to be (similar to universities) the one where it is hardest to get into. And how does a workplace get more selective? – If more people apply for it. Because Japan-wide companies have their recruitment events going on in different cities at the same time, more students apply for them, and when more apply at these companies, they get more selective – and this is again decided (it seems at least initially) through student's *hensachi* ranks. Only that this rank is now not the personal score that people could attain at *mock exams* in cram schools, but the rank of their institution.
Because of this relationship of getting harder the more popular it gets, the probability of getting into a 'good' company seems to go up the higher one's university's *hensachi* is, and thus reinforces the narrative that P4s teacher told them in class.

According to the (extended) quote from P2 at the beginning of the empirical chapter, this was the usually expected reason to pick a university in the past:

> *That's why, in the past people went to high-level universities to get into these companies. Now, getting into university is often becoming the goal. Instead of planning what to do afterwards, getting entry into the university itself has become the objective. That's why (laughing) they don't learn, and after graduating they idle around at home. That happens pretty often recently. (2:68-69)*

But apparently recently "the university itself has become the objective". I think this quotation shows nicely the different meaning that attending university can have in different cultural contexts. In Japan (probably also because of the costs related to it), going to university for the sake of learning seems not to be something widely spread. The whole massification of the higher education system should be understood in its relationship to the labour market afterwards. So, when P2 mentions that the

university has become the goal, the practices at university itself did not seem to change (in their description). A change towards the university as an objective in itself (instead of the company afterwards) was not accompanied by a change towards studying as an objective in itself. As easy graduation still seems to be expected, we the arrive at bizarre situations like with P2, where an extremely competitive entrance exam is followed by four years of almost not attending university (but still paying for it).

On the other hand, when it matters so much to get into a university/programme with at least a certain difficulty, the content of study gets put in the background more and more:

> *Regardless of what you study, because there are these uni rankings... when you are below a certain line, companies just won't employ you. (1:63)*

Being in a difficult programme is more important than studying something that interests you, and if these two things cannot be reconciled, it is often *hensachi* that will win out. The perceived importance that the university/programme *hensachi* has for the job market (apparently much more than what is learned during university) has the effect that higher education loses its right to be called education, and becomes more of a simulation (McVeigh, 2002).

Hensachi reifies through its persistent ranking of universities that adolescents should try to go for the most difficult option possible. If they can achieve high scores in their *hensachi* values and then manage to get into the best university (possible for them), why should they not also use this resource and make the best out of their employment options? And historically (or popularly – and in this way still alive nowadays) the reason to take this hardship onto oneself was to get into a good position afterwards – either as a public servant or in 'good' companies. If the certainty to get a good job after attending a selective university disappears (as it seems to have), what is left is a ranking with some of its core reasons for existence taken away – but still needed because it is still necessary to come from a highly ranking university (it is just not enough anymore). That can explain why a shift of focus to get into a specific university for the university's sake (which might arguably be a good thing) seems to happen for what I would argue is the wrong reason – that is its rank (= difficulty) and nothing else. It resembles a tradition where its origins are lost. What is left is a set of practices without meaning.

With these two situations I wanted to show where *hensachi* seems to matter the most for my interviewees (finding the right school/university and getting a good job) and why this is the case. But, as it is so often the case, there are also ways to escape from or resist the dominance of *hensachi*. This will bring the sub-chapter on *hensachi* to a close.

4.4.3.The dodgeability of *hensachi*

The story I have told so far has been one of *hensachi* as playing an integral and often defining part in the trajectories of student lives. But people on 'both sides' (meaning students as well as university administrators and education officials) are finding ways and reasons to stop relying on *hensachi*.
The most obvious option for a student is to not continue to university. If students do not plan to attend university, it is possible for them to ignore *mock tests* and to not raise their personal *hensachi* in competition with others of the same age. Reasons for that can be that they see how hard it is for people in their vicinity:

> *I did not want to study, to study so much, because at the end of middle school I had no intention of going to university. Because I did not plan to continue to university after I would finish high school, I did not try to get into a local high school where I would study a lot, quite the opposite…. My older sister…, I saw how hard it was for her – she had to do exercises every day and had to study a lot, because of that I certainly did not want such a high school life. I wanted more free time and an easier high school. (4:14)*

As the quote shows, this not only makes a difference at the end of high school, but even earlier, when students decide for which high school they should aim. Since P4 is part of my sample, they obviously continued to university, even if they had no intention of doing so in the beginning. This was possible because, while they resented the examination-oriented teaching at 'good' high schools and did not participate in taking many *mock tests* and did not go to cram school; there are other ways to get accepted at university. These other ways make it possible for people who 'lost' in the examination race (= have a low personal *hensachi*), or those who did not participate to begin with (like P4), to get into higher education. There are two different ways how that is possible, which I want to describe shortly:

- *Admissions office* (*AO*): two of my interviewees got into their university through what they called "admissions office" or "AO" entrance[60]. This is an entrance procedure that happens significantly earlier than the examinations (October/November vs January-March) and consists of interviews, application letters and some kind of presentation (depending on the study programme).The biggest difference to the entrance examinations besides the timing is the content of the procedure. While the examination-way is depending on a certain kind of standardised test knowledge, the *admissions office*-way is more about personal study reasons,

[60] In 2006 40% of students entered Japanese universities through non-standardised test ways, in private universities already 50%. Many public universities put forward the goal to raise the percentage to 50% as well (Nakai, 2007, p. 14).

goals for the future and self-presentation (see the quote from P5 in the "recommendation"-point below).

Most importantly, students do not need a high personal *hensachi* level to be able to get into universities that would be very competitive. Exactly because it is not necessary to cram a large amount of positivistic facts, and more emphasis is laid on individual screening, this way provides an option to enter university without relying on cram schools (although there are probably also some that prepare for this).

Despite all the focus on the individual students, for both P4 and P5 their teachers played an important role in going for and managing this way of entrance:

My homeroom teacher believed that I could do the AO *entrance, and with their help we prepared really good for the presentation and these things. I got a lot of support for practicing. I thought that this was a really good teacher. (4:24)*

My science teacher in high school told me about the AO *exam in October and asked me why I don't try it out. So, I just went for it and did this presentation and I somehow got accepted. It was like "wow, I did it!" (laughing) (5:19)*

Again, teachers are trying to get as many of their students into the best universities, and while the result may be the same, getting them in through the examination-way seems to count more (more about that at the end of this sub-chapter).

- *Recommendation*: "recommendation" as a way to get admitted to university is similar[61] to the *admissions office* option, but has more emphasis on the activities of students during high school:

With recommendation *you can probably get in only with your high school grades, while for* AO *it's more like PR I think. So, your grades are not that important but experiments that you did or your debating skills, I guess. You then go to the university and do an experiment, or you write a report and through things like that you are evaluated [meaning* AO*]. That's why…, I think* AO *and* recommendation *are different, and* AO *is more like a PR-examination. (5:11)*

Rather than the presentations that P4 and P5 gave, in this case a good study record (which is *not* the same thing as a high *hensachi*) or good results in club activities matter a lot. This naturally puts the pressure to perform on different aspects, but it keeps it in the formal school (instead of outsourcing it to cram schools). Club activities are an integral part of Japanese

[61] This is not an official distinction, but one that I made. Some students that I talked to see AO as an "individual" sub-version of recommendation.

schooling and cannot be taken lightly as recreational pastime. Seen from that perspective, the *recommendation* entry provides a different possibility of getting into the next stage of education, but it can also be seen as additional hurdles that students have to consider in school. Instead of 'just' being good in examination knowledge, they have to keep up a good relationship with their teachers (which are also the heads/trainers of their after-school clubs). This is because the teachers of their current school play a crucial role in getting students into their next stage since – as the name suggests – the recommendations have to come from a teacher (Yoneyama, 1999, p. 126-127).

While the *AO* option is theoretically open for all students who apply for it, it is not possible to get in through *recommendation* by oneself. But once the students have made it in, they are not always required to build up on the reason of why they got accepted in the first place. For example P3, who got into their high school because of their good results in the middle school tennis club, but then never participated in the tennis club of their high school.

The possibility of a *recommendation* entry usually depends on the relationship between the originating and the target institution. Sometimes "all levels from kindergarten to university" (Roesgaard, 2006, p. 100) belong to the same private conglomerate – which makes it considerably easier for parents to get their children into a specific university if they bring them 'on track' as early as possible. These so-called "escalator schools" (ibid, p. 100) decrease the amount of stress that students feel at the end of middle/high school because there are usually a number of spots reserved for graduates from these schools. But reversely, this means that getting into these escalator schools becomes the aim very early on, and since they are private schools, an expensive one.

While these two options make it possible to get into universities without going through the examination circus, they are still overshadowed by the prominence of entrance examinations. For P3, who got into their high school through *recommendation*, getting into university through *recommendation* was not really an option:

> *There are some, but very few [who get into university through* recommendation*]. Yeah, it's because you know…, after you get in, you get made fun of by everybody. Getting in through* recommendation *takes just an interview, and that's easy, so… you are not very smart. (3:54)*

Doing it the hard (= examination) way provides a "*strange pride*" (3:58) and seems to be valued higher than other ways of getting into university (interestingly, this pride did not seem to play a role when P3 got into high school). But this is not only a thing that students think about, also for teachers it seems to make a difference through which way they get their students into university:

> *Teachers who get students into the same public university, for instance even if they make you succeed through* AO *or* recommendation*, getting students in through the normal examination – the* center examination *gets valued higher, I think. That's because* AO *or* recommendation *don't test any content of classes. (4:23)*

And this is a point that I want to explicate a bit. While obviously P4s and P5s teachers had knowledge about these *AO* procedures and improved the chances of their students to get accepted, because it was not the examination-way, it seemed to matter less. In the picture that I showed a few pages ago, there is also no mention of the way that students got into their respective universities.

It seems very paradoxical to me that exactly those points that are more and more outsourced to private education companies – the preparation for entrance exams – are the ones that appear to be valued in formal schools when people get into university the competitive way. On the other hand, personal student guidance for *admissions office* entrances, which seems to rely heavily on the teacher doing this guidance, does not count too much towards the 'abilities' of the teacher.

Since entering university through entrance examinations is considered the "normal way", these alternatives are automatically thought as being the exceptions. This can be seen when we look at how students choose their universities – by their *hensachi* rank. So, even if the student-related part of their personal *hensachi* does not matter anymore in this case, the university-related part is still the benchmark by which a good university is chosen. And because this ranking is solely relying on entrance *examination* selectivity; schools, teachers and students are not always upfront with how they got themselves/their students into university. This way you get the 'best' parts of both: a less competitive, expensive, and draining procedure of admittance AND the status that goes along with having mastered exactly this more intensive procedure.

In the next (and last) section of the empirical part I want to write about how this *hensachi*-related status impinges on how students reconcile possible frictions between their expectations and their experiences and how they talk about (other) students and universities.

4.5. How students talk about ideas and experiences of university

I already wrote at the beginning of this chapter about the expectations of conduct and difficulty of classes in private *bunkei* programmes and that dropout rates there are really low. In general, the expectations of *bunkei* programmes were that they were supposed to be easy (and if further specified, then only that in private universities they would be especially easy).

On the other hand, the relationship between examination difficulty and study quality was also expected to be directly given:

When you have difficult studies at a university, if you don't get people with a certain level of academic skill, obviously in the end the study at this university can't be done. If you don't have the academic ability, then even if you get into a university, eventually you can't raise the level of research of this university. That's why, if the study and research of a university is on a high level, it is necessary to make the test to enter the university difficult. (2:94)

Just to be clear, P2 did not talk about *rikei* courses here, but about the reason why their own *bunkei* programme had such a high *hensachi* rank. According to this logic, a university programme justifies it entrance difficulty by the difficulty of study afterwards. Most of what I talked about in the sections before hinted towards that a programme's *hensachi* is rather arrived at according to principles of supply and demand, together with a portion of advertisement ('look how many graduates are in big companies') and prestige. But this does not mean that all these factors cannot be representations of a programme's quality of study. But let us see what P2 says about their experience at university:

But bunkei *is really easy. It was* bunkei*, but still I was at university only once a week (laughing). I was just enjoying myself all the time, for four years, … it lasted for four years but I got more stupid in the end (laughing). (2:106)*

This is very different from what they just told me a few minutes earlier about why a specific university programme should have a high difficulty threshold. This is even more interesting when we consider that P2 is talking about a course and a university that is one of the most difficult to get into, according to one *hensachi* ranking[62] (but significantly lower according to another[63]). While I already mentioned in the last section that the *hensachi* of programmes and universities are often conflated (in the way that is more beneficial to students; meaning that even if a student gets into a programme with a lower hensachi, they will often still be measured by the university's *hensachi*), the same thing happens with the public prestige that a university has. And P2s university has been consistently and unambiguously understood as the #2 institution in the country, just after the eternal goal of every student: Tōkyō University.

When I asked P2 (after their shared experiences of (not) studying at university), they were not sure anymore why their university was supposed to be #2 in the end. But they still came back with expectations that the classes would be different in other places:

But at Osaka University*, there are also in* bunkei *courses frequently people that have to repeat years. Also in private universities…, even in* bunkei *you have to learn really a lot, it is completely different*

[62] https://manabi.benesse.ne.jp/ap/daigaku/search/nanido/
[63] http://www.hensachi.jp/daigaku/kyouto.html

depending on the university, I think. Probably at Tokyo University*, you have to learn in* rikei *as well as in* bunkei*, hmm. (2:111)*

Similar things were coming from P1 and P3 as well:

Getting credits is quite easy. Because for private universities, students are already, they are customers who pay millions [Yen], really a lot of money, how should I say this? They are going easy and are nice, it is really seldom that people don't manage to graduate in four years in private universities.
I: Ok, mhm.
P1: Hm, but for national universities, it's different, I think it is a bit different. (1:120-121)

Ah, this is you know, because Hosei *is a private uni! Private ones are quite different, I think. Yeah, they have money, so they also have a lot of professors. (laughing) That's why, … national unis don't have money, because of that there is only a limited number of professors, and that's why there have to be a lot of students in lecture-type classes. (3:95)*

We are now entering a territory where the things that my interviewees say seem to contradict each other. At the beginning I argued that private universities are supposed to be easy, and now P2 is saying the opposite? Obviously, these quotes should not be understood as factual statements about reality (in addition to that people can have different opinions). They are rather statements made in the situation of the interview, where my interviewees act in a way that should make it possible for me to understand them but also be consistent with the way they want to present and understand themselves (Hammersley & Atkinson, 2007, p. 99; Silverman, 2006, p. 117-118).
Seen from this perspective, talking about instances where 'things are different somewhere else' makes sense – it helps to keep up the narrative of correlation between a programme's difficulty to get into and its difficulty of study afterwards. P3 had similarly to P2 not the best experiences of classes in their university but they just the same insisted that "*a university with a low* hensachi*, […] would only have stupid students*", and thus nobody would learn much there (3:23).

A similar split of narrative/experiences can be observed when we take the relationship between high schools and universities. As I mentioned before, a good high school is one where many graduates enter difficult universities. Because this is the main defining factor (and then the reason for having a high *hensachi* to begin with), private high schools are sometimes even in higher demand as public ones (because they have more leeway with their curriculum and can aim it towards entrance examinations). Both P3 and P5 mentioned specifically that they picked their high schools for their acceptance rates. But P3 and P5 were attending cram schools for their whole high school duration and even before that, to prepare them for entrance exams. Also, P1 and P2 attended cram schools, but even more intensive,

since they both took a *rōnin* year between their high school graduation and university entrance. Only P4 did not attend any cram school, and this was because going to university became an option relatively late in high school, and only through the *admissions office* entrance.

While it were either the cram schools (P1, P2 & P3) or the teachers (P4 & P5) that appeared to be responsible for most of the preparation (and arguably also success) for entering their respective universities, the story about 'getting into a good (public) high school to get into a (public) good university' was there in every case nonetheless. But because of the dominance that entrance examinations have for defining what a good institution is, this story is always understood to be about getting in through the examination-way[64].

Here as well, my interviewees stayed with the popular version of this relationship and did not challenge this notion through their own experiences.

But of course, it would be harder to continue to trust in something if every experience made would provide proof against that. There are also situations where the 'high difficulty of entry = high level of content' relationship seems to fit neatly. Interestingly, both P4 and P5 told me of their experience of falling behind their classmates in English:

> *But the one thing that I struggled with after getting in through* AO *was English. I got almost no points in the TOEFL [a type of standardised English proficiency] test. And as expected, the people who got in through the normal way were only people with a high learning aptitude. Especially because in my programme of* International Arts and Science Studies*, English was one of the main foci. Thus, there were a lot of students who were quite good at English. (4:29)*

> *Well, once in the first year of university, my English scores dropped…, even lower than at the beginning. I was really surprised by that and studied hard [to get them up again]. (5:90)*

This does not appear to be coincidence. While most classes in university are distinctively different to the classes in high school (which focus on transmitting the knowledge needed for entrance exams), the way of teaching English seems to have stayed almost the same. Students are still measured by the "scores" that they can reach in standardised tests. As soon as similar conditions of testing knowledge are in place as have been for the entrance examinations, the students who got in through *AO* start to feel as if they "*played around a bit too much at towards end of high school*" (4:32). Because these English certifications play a role again when they apply at jobs in their last year, achieving highly at the entrance examinations is doubly paying, and seen as a confirmation of the believe in meritocracy.

[64] The "acceptance rate" of high school graduates into universities certainly includes every way of entry and every student mediated through cram schools. But it is displayed as an achievement of the high school in preparing particularly well for the entrance examinations.

But regardless of the fit between experiences and expectations, the logic (and more importantly the meaning that *hensachi* gets ascribed to – the quality of education) of choosing a certain university and the reasons why this is done gets reproduced in the accounts of my interviewees.

4.5.1.Comparing smartness

The last point that I want to go into a bit more extensively is the one that brought me to this project to begin with. There is a certain way that (mostly) students talk about other students and universities:

> Hokkaido University, Tohoku University, Tokyo University, Nagoya University, Kyoto University, Osaka University *and* Kyushu University *are old imperial universities, and these are places where you can say: "they are smart right?" (1:36)*

The "they" in the quote refers to students in these universities. The students who get into these famous institutions are by extension of being able to get into them "smart". Interestingly, this term is also used for the universities themselves, but again, only in relation to the entrance difficulty:

> *I: Is it about the content of study in universities?*
> *P1: Um, it means universities where smart people can get in. (1:70)*

This is not an idiosyncratic manner of speech of P1, but got used by all of my interviewees, for instance when they talked about the "*smartest high school in town*" (4:5). All this talk about students "being smart" when they are able to enter difficult schools has effects on how young people are assessed – and in extension how they think about themselves. It becomes a measure of intelligence, but one with a cruel twist. Because by the very nature of how *hensachi* is calculated (in relation/competition to others) half of the young students *must be* dumb – if we use the benchmark of P3 and P1 that only universities on the upper half of *hensachi* rankings can be considered. Naturally, students who live in a society where having a high *hensachi* value is important, but find themselves in the lower half will not be very motivated (Bjork, 2016, p. 205):

> *As Sugimoto (2010, p. 137) explains, '[B]ecause the emphasis on* hensachi *marks generates a culture in which scholastic ability is viewed as the only measure of individual competence, low* hensachi *performers also tend to have low self-esteem'. The expression '*hensachi ningen' *(*hensachi *humans) came to refer to the idea that products of the Japanese education system were best thought of as nothing more than their* hensachi *scores. (Goodman & Oka, 2018, p. 589)*

There is even a YouTube channel (by two students in high-ranking universities) that does nothing but to visit different spots in Japan and to interview young people on the street about their universities or

high schools[65]. The viewer can always see the university programme where the people are in, together with the *hensachi* value next to it in brackets. Every conversation follows the same principle: if the interviewees were/are in a low-level school/university they are being made fun of; if they are in a high-level institution the two interviewers are impressed. It almost hurts to see how, when some people tell them what they are doing now, the two interviewers mock them because of the low level of their schools.

This situation might seem strange when viewed in Austria, but it makes sense when we consider how much the competition between students gets ingrained through education. By that I do not only mean the competition to get into the limited spaces of university or high school programmes, but also how people talk to each other:

> *(asking if there are different ways to assess what a good university is)*
> *P3: There is only* hensachi *isn't it? Everybody only talks about* hensachi *all the time. For instance, if somebody says they are from* Tokyo *or from* Osaka University*, I would be impressed: "wow, that's higher than my own* hensachi*". Everybody only talks about* hensachi*, and after we take [*mock] tests*, we get our own* hensachi *presented: 69 or 70 or something like that. It's like a contest between everybody. (3:74)*

By calling someone who has a high *hensachi* value a "smart" person, it follows in reverse that those who do not have high scores are either dumb or lazy. This way of talking further strengthens the belief in a meritocratic system where 'as long as students study hard enough'[66] it is possible for them to reach the best university. That it has been shown again and again (Kariya, 2016, p. 150; Roesgaard, 2006, p. 102; Yoneyama, 1999, p. 52) that socioeconomic conditions of students and their families play the biggest role in academic achievement, is something that is easily forgotten.

The race to the most difficult universities has become the goal of Japanese education, and the students who manage to get into those are considered "smart". Because this struggle for limited spots is the thing that measures success, it is not surprising that many students are content with 'arriving' at their university. Rather than trying to get into a certain university to learn something, the act of gaining admission itself is proof enough of being a good student.

This can also be seen in that while before the entrance examinations, the personal *hensachi* gained by doing many *mock tests* counts, but after gaining admission, it is the university *hensachi* that gives

[65] https://www.youtube.com/watch?v=lZBMbDyQtHk (2019-07-22)

[66] This is nicely captured in the Japanese phrase "ganbaru" 頑張る - which means "to make an effort", but when translated directly, means "to hold out".

status. And it is this status that should make it possible for students to live the good life in Japanese society.

In this chapter I wanted to do three main things. Firstly, I presented a view of the Japanese education system that followed what my interviewees told me, and at the same time would help to explain why *hensachi* as a ranking technology makes sense in this context. Secondly, *hensachi* and a short history of it were introduced, and then it was shown in which situations it impinges on students' lives, what the effects these situations are and how hard it is to not rely on it. Thirdly, I wrote about how the expected relationship of *hensachi* and university practices often do not realign with each other, and how students' talk about each other is mediated through *hensachi* scores.

Fourth reflexion

In the preceding chapter I argued that hensachi *delimits what kind of universities are acceptable for students. If students could decide between two, it seemed that most would go for the higher one, just because it is higher. But this observation has been made by talking to students from very highly ranked universities. What about those who are in the lower 50%? There are certainly enough of them (just by definition of how* hensachi *is calculated, half of the student population have to be in the 'lower half'). I can imagine that for them other things count, or at least they had to find other things to cope with a situation where they emerged as the 'losers' (according to how my interviewees described the situation). Maybe they would argue that they chose a certain university for other specific reasons, like experiences of family members, local integration of the university or specific professors. It might also be that they argue by the same logic, only that they define new 'losers' – those who are in even lower universities. By having the specific sample of interview partners that I had, I got the stories of the relative 'winners' in Japanese higher education – which is also the narrative that seems to be widely circulated. By interviewing students from low-*hensachi *universities, I would have certainly gotten a different outcome – and maybe a narrative that would not delineate those in the lower 50% as 'losers' of the education race.*

How much of my own narrative of studying in Austria could you read out of the chapter? I tried to make it rather obvious that I come from this specific study environment and based most of my comparisons on it. Maybe other cultures of higher education are much closer to the Japanese case than to the Austrian one. My goal was not to present Austrian universities as the 'normal' case and Japan as deviating from that norm. But since I cannot escape my own socialization, it made sense for me to point out things that I found intriguing – which were usually differences. What I tried to do, and try to do in exactly these reflexions, is to make this socialization more visible – to make it easier for the reader to understand why I would come up with certain conclusions and thus make my account more transparent.

Pointing things out by their difference is also something that my interviewees did. In their statements I found an image of US American universities that was constructed in opposition to the Japanese ones. While discussing these issues with some North American students in the STS programme it was interesting to see that they could relate a lot to the description that my interviewees gave from their experiences in Japan, and that those two cases might not be as far apart as they seem to be convinced. That some of the biggest post-war reforms in Japanese higher education were modelled after College structures in the US might help to understand this.

5. Conclusion

"Here [pretending to point at high school in a list] I would not be able to get into a good university" or "If I get into this high school I could get into a pretty smart university" … I thought about stuff like that since middle school. (1:56)

That's why, in the past people went to high-level universities to get into these companies. Now, getting into university is often becoming the goal. (2:68)

To be honest (laughing), no one would say "I'll go to university and study a lot!" (3:130)

In the end a good university is one where people can get credits and graduate easily. That seems pretty important in Japan. (5:102)

Coming back to the quotes that I started the preceding chapter with, they should make more sense now. I set out to explore how rankings in Japan influence how students talk about universities and students. It quickly became clear that one ranking dominated these understandings – *hensachi*[67]. I wanted to show how this ranking shapes the accounts that I got in the interviews, while at the same time trying to reconstruct through my interviewees the conditions that make *hensachi* so obdurate. Based on the stories that my interview partners told me and in combination with secondary literature, I *enacted* a version of Japanese (higher) education that fits snugly together with *hensachi*. This does not imply a causal relation that gave 'birth' to this ranking, but points towards the co-development that the ranking and the education-employment system in Japan have gone through. In practices and objects entrenched in schools, cram schools[68] and employment procedures I have found traces of the work that is constantly being done to keep *hensachi* in place.

I will once again talk about the four quotes above, but this time with the exploration in mind that I provided in the last chapter. Then I want to put forward some things that we have learned in the course of this thesis, followed by an outreach towards wider issues and how my case can contribute to it. Lastly, I will explicitly link my case back to actor-network-theory as a way to explain the 'how' of the establishment of this university ranking, followed by some concluding remarks.

5.1. Main findings

Because of how young people are assessed in Japan (either by their personal *hensachi* score or after that the institutional *hensachi* score) it is important for them to get into the most difficult university possible (which means the university with the most difficult entrance – not necessarily study). This

[67] As a reminder: the statistical measure of probability of getting into a given university, representing this university's difficulty of entrance.

[68] Private institutions giving private preparation lessons for entrance examinations.

assessment happens at least twice, at the time when young people try to enter a university and when they apply for employment afterwards, but both refer to the same crucial passage point – the entrance into university. Thus, getting accepted by a good university is the goal of many adolescents in Japan, for a combination of reasons related to (narratives about) the labour market, expectations of parents, and personal goals. But how to know what a 'good' university is? This is often decided by the same means that the probability of entrance is calculated. Meaning that more often than not, the best university equals the one with the most difficult – but still possible – entrance. And getting into the most difficult university is the goal that many students, with the 'help' of cram schools, aim for.

But at the same time, exactly because *getting in* is the goal, it makes sense that the study afterwards gets marginalized. Only a minority goes to university to *study* because the vast majority attends university because they think they have to. *Hensachi*, when standing for a university, should be understood as a ranking completely aimed towards the job-market, and not something that represents quality of study (however that would be measured numerically). Viewed like this, it makes sense that P2, after having done their undergraduate studies in Japan's #2 university (measured by *hensachi*) went for their master's and PhD studies for a low-*hensachi* university.

The focus on *hensachi* both *before* and *after* undergraduate programmes provides the context for a specific understanding and meaning of universities in Japan. By providing a metrified assessment of universities and students, a situation becomes possible where students spend years of preparation to get into an as-difficult-as-possible university, and then spend the time there mostly relaxing and taking a break before the 'real life' afterwards begins[69]. But it is important to understand that this dominant understanding of a hierarchy of universities is not something that could have been achieved by just providing a methodologically well-done ranking. First, *hensachi* was not intended as a ranking of universities, but as a tool to help high school graduates decide at which university they will apply for. Second, the difficulties of entrance examinations existed before *hensachi*, and reflected the hierarchy that universities had before this ranking – with the old imperial universities at the top. Third, because of the university-centered hiring practices of big companies and government agencies, getting into a university was considered the more important threshold than graduating from it – and *hensachi* was a useful measure for that purpose. Fourth, this probability of getting into a university gradually became what it was supposed to measure – instead of a proxy to represent the difficulty to get into a chosen university, this proxy became the way to choose a university instead.

[69] As I mentioned in the empirical part, this view of "the last summer break" is a popular one, but that does not mean it describes every student in Japan. There are enough students who study seriously and who went to university with the aim of studying something (especially students getting in through the non-examination way appear to be keener on learning). But nonetheless there exists the possibility to graduate in many undergraduate programmes with very little effort, and the fact that this narrative is repeated so often is also important.

So, what did my interviews tell me about how students perceive universities and the things and people ranked by *hensachi*? When talking about university choices and reasons why they studied, my partners sometimes mentioned *hensachi* as their way to choose a university but in most cases other considerations like geography, and most importantly money also played a role. But when they mentioned things like hierarchies between universities, and when they talked about images of universities, *hensachi* was always at the first place. This also got reflected to the students going to these institutions, giving them a certificate of "being smart".

One thing that surprised me was the relation of how students get into a specific university and this university's image. A university's *hensachi* gets derived from the acceptance of students in their entrance examinations, based on their results in practice tests provided by cram schools. This number then gets ranked[70] and the higher the rank is the more 'prestige' the institution and its students get (this got expressed in the way that my interviewees talked about students from the 'best' universities and their chances in the workplace). At the same time, increasingly other ways to enter universities are provided, promoted and used. Interestingly, I found several statements that point towards a split between a higher desirability and a lower esteem of these 'alternative' entrance procedures at the same time. I observed this for instance when P4 talked about the assessments of high school teachers and how high schools present their successful graduates. P3 also talked about a "*strange pride*" (3:58) that comes with getting in the 'hard way'. There was also talk about the pros and cons that come with the standardised and the individualized way of entry, for instance in being bad in English assessments vs being good in seminars.

The interesting thing is that there appear to be very little alternatives to images of universities and their students outside of the *hensachi*-ranking. But since the prestige through difficulty always comes from the standardised way and not the non-standardised ways, the new question is: what does this increase of non-standardised entrance possibilities mean for the *hensachi*-ranking?

But just as it is the problem with global rankings, once a certain way of perceiving universities (in global rankings it is the "world-class university" (Hazelkorn, 2015, p. 217)) has been established, it gets harder and harder to understand them differently. In Japan, universities are primarily understood as workforce selection devices (Sugimoto, 2014, p. 131), and when we compare them to universities in other national contexts, it is important to remember that.

According to my interviewees, many universities with a high *hensachi* have at the same time worse teaching conditions than (mostly private) universities with a lower *hensachi*. If we think of global rankings and their methodologies, things like student-teacher-ratios, student satisfaction or the

[70] Obviously favouring institutions where people with high personal *hensachi* (from cram schools) applied a lot.

funding available for a university are usually indicators that improve a university's rank. Arguably, these are also indicators that would represent a better study environment for students (besides the costs that are usually higher in these institutions). It is interesting to see here that indicators that rankers argue are important for one of their target groups – students (Brankovic et al., 2018), have little weight in a ranking that seems to be the only one that counts for undergraduate students in Japan (similar to what Dearden et al., 2019 argued – it makes sense for students to not pick the university where they would have the best study environment).

If global rankings (or for that matter also domestic rankings like the *Asahi Shinbun* ranking (Yonezawa et al., 2002, p. 374)) have 'better' methodologies and are providing information more relevant for (prospective) students, how does *hensachi* manage to stay not only relevant but also the most important ranking? This cannot be explained by 'the best methodology' or internal logics of certain rankings, but by looking at the instances where and when each ranking comes into contact with young Japanese people. This then also became the quick, but not obvious (if one does not spend time to get familiar with the education-employment system in Japan) answer to why global rankings, so much regarded by university administrators and policy makers, could not get a hold (yet?) on students in Japan. It is not only up to the students to decide which ranking to use (they are not the only ones acting for this choice); because of ideas of teachers, parents and employers of what a 'good' university programme is, one ranking offers itself as the 'most natural' one – and it is called *hensachi*.

5.2. The JIF and *hensachi*

The reforms towards "relaxed education", which I mentioned in the state of the art and the empirical chapter, have not been the first or only ones aimed towards sometimes explicitly abolishing or weakening the position that *hensachi* has in the Japanese education system. It has been and is officially the position of the ministry of education that *hensachi* mock tests and the use of it in student guidance activities are prohibited (Roesgaard, 2006, p. 62-63; Goodman & Oka, 2018, p. 588). At the same time, it appears to be as strong as ever, especially in the way that undergraduate students seem to choose and value university programmes. This has some strong similarities to a different ranking tool, which has also been a topic in STS: The *Journal Impact Factor* (JIF).

In 1961 Eugene Garfield founded the *Science Citation Index* (SCI) to be able to track who cites who in journals in the natural sciences. Since resources were limited, a tool was created to determine which journals would be included in this database: The *Journal Impact Factor*. Initially used for the inclusion of journals and as a tool for librarians to be able to decide which publications to buy, it has been and is increasingly used as a research evaluation tool (de Bellis, 2014, p. 32). Already at the time when it was introduced, it was clear that the JIF would have limitations concerning coverage of language, field

and place (Garfield, 1973). There are quite a few methodological and general issues with the JIF, concerning its focus on the natural sciences, journal-centered publishing and calculation errors (Moed, van Leeuwen & Reedijk, 1996). But this did not stop journals from proudly presenting the JIF on their homepages, being able to boast how visible publications in their journals would (statistically) be – with the goal to attract the best authors. Maybe inspired by the JIF, a similar metric for individual researchers (or sometimes also research groups) also exists – the *h-index* (Hirsch, 2005). Again, it is a composite of publications and citations, but while the JIF is always in relation to the most recent two years, the *h-index* is a number that goes up the longer one is in business. And just like the JIF, there has been criticism mounted against the metric, not least because of its immediate impact on the lives of scholars (Burrows, 2012). Both metrics are extensively used for assessment purposes and not just for the 'informational' purposes for which at least the JIF was made for (and the warnings of their founders are usually eclipsed by the 'usefulness' of these metrics – Wouters, 2014, p. 58).

The parallels with *hensachi* are striking: First, in both cases the founding figures introduced their measures for a specific reason. Both numbers were a composite of many others, which could (or should) not be used to get back to the individual entries that made up the numbers (a point which Derek de Solla Price made when he introduced his scientometric research programme (de Bellis, 2014, p. 36)): "Mr. Hensachi" envisioned the probability of getting into certain universities as a tool to help students make a good choice when resources were limited. Garfield created the JIF as a tool to decide which journals to include/buy when resources were limited.

Second, these numbers that were conceived of as decision-helping tools, were increasingly used as evaluating the single entries that make up the numbers. Being able to 'boast' the belonging to the entity which 'has' the number was seen as a sign of excellence: High school students in Japan are competing for an ever higher *hensachi*, with the goal to be able to enter the highest possible *hensachi* university. This in turn would give them the status of belonging to an elite institution, even if the way that they got in (AO or recommendation) is not necessarily relating to the institution's rank. Being able to publish in a high-JIF journal is seen as a sign of academic excellence and increasingly used to assess researchers for hiring purposes and also used in the process of ranking universities. Having many publications in top-tier (meaning usually Q1-journals, a segment of the top-ranking journals by JIF) journals gives the status of being a highly visible scientist, even if the JIF of the journal is not necessarily relating to the citations that the single publication gets.

Third, both technologies of ranking are highly criticized and there have been efforts to ban specific forms of their use; but nonetheless they seem to stay. It is hard to not play "the numbers game" but not sacrifice too much of one's own future: Students in Japan are complaining about the "examination hell" that they have to go through, that they are only viewed as a number by future employers and

the high cost of the examination industry. At the same time, it is hard to not act in accordance to these things. The ministry in theory banned *hensachi* from formal schools but it is still in use in practice and in cram schools. Things like AO and recommendation entries are ways to circumvent the examination hell, but the way that universities are chosen is still mainly by using university *hensachi* lists. The narrative that a highly ranking university secures a safe and well-paying workplace is still strong. The JIF is by no means uncontroversial as well. On the one hand, is constantly being pointed out for being partial towards English-language and natural science publications. This is not itself the problem but rather the way that the JIF is used in assessment exercises. Because it is such a convenient shorthand for 'good scientific publications', all that is not measured by it gets lost. This is especially problematic in fields which 1) publish often in other languages than English; and 2) publish in other formats than journal articles (for example law, and most of the social sciences and humanities). On the other hand, it is nice for scholars to write on their CVs that they published in so-and-so many Q1 journals, and maybe a publication in the highest JIF-journal in the field might get them the position that they are applying for. At the same time while it is criticized, "the indicator game" is played (Fochler & de Rijcke, 2017).

What does this comparison tell us? It shows how easy it is for metrifications to develop into something not intended at the outset. Rankings travel easily, in great part because the conditions of their construction are not visible in the finished product (the *modalities* of their process of construction have been deleted, to put it in Latour's terms (1987)). The power lies in de- and re-contextualization, in the ability to use metrics in a way in which they were not intended to be used to begin with (Porter, 1995). And once certain uses and understandings are translated into practices and objects, it becomes harder and harder to argue for something different.

5.3. A number as an actor-network

I let my interpretive work be guided by actor-network-theory. When my interviewees talked about rankings, they invoked 'the positions' as something fixed and as knowledge that "everybody knows". Only after asking several times did I get to instances of where they found these positions – lists hanging on the hallway of schools and teachers who handed out materials sent to them by cram schools. It is those material figurations of rankings that make them so durable, but at the same time so all-around that people often do not know from where they have the information. But not only in these material representations of rankings, also in the practices that have been established for "student guidance" and the way that future employers sift through their applicants, *hensachi* has firmly entrenched itself. A global ranking trying to become relevant for students in Japan would have to win *trials of strength* against *hensachi*. It would need to convince students that the relations that the new ranking would

propose are better for them than the ones of the *hensachi* system. It would need incentives to sever students' belief in a connection of a high *hensachi* and a good life afterwards. For policy makers these new relations (for instance getting prestige in a worldwide competition of knowledge production) seem to be good enough, especially when we consider that they were not endorsing *hensachi* anyway. But for students there are still many practices in place which support *hensachi*, and not multi-indicator rankings.

This can explain why, unlike in the results of studies looking at effects of global rankings, in my case we have a ranking that is considered to be important by aspiring undergraduate students. The relevance of global rankings seems to go up with the academic degree; up until the point of resource allocation by policy, where global competition wins out over domestic workplace allotment. The practices ensuring this relevance at the undergraduate level are responsible for the disparity in viewpoints of different rankings by students and make it possible for me to come to a similar conclusion than a paper in marketing research (Dearden et al., 2019).

One important group of events that hold these practices together are entrance examinations. They are the basis on which *hensachi* is calculated, inhabit an important place in the minds of young people and in media accounts, and have a heavy impact on the content of study in high schools. Classes get tailored towards these examinations, with the obvious result that more and more standardised knowledge gets "crammed" – in formal schools and in cram schools. Because entrance examinations are so central for the idea of a meritocratic education system, the process of 'de-examinationing' entrance applications is a tedious one (also because there is as much criticism towards new entry modes like AO and recommendation as towards the standardised entrance examinations, Nakai, 2007).

Not only entrance examinations, also the high degree of privatization of education and the close relation between the job market and education credentials keep *hensachi* in place. When I described these things, I did not 'explain' the Japanese education system 'how it really was' in order to make sense of the statements from my interviewees, but I used their descriptions of what they told me that mattered. If they would not have mentioned things like the importance of finding a good job, how expensive education is and how much they want to get into a public university, or how hard it was to prepare for the entrance examinations, I would not have included it.

But the strength of *hensachi* lies not only in its embeddedness, it is also its simplification of understanding universities. Because it is so successful (also historically), it is so obscure. Its place at the center of all the practices regarding student guidance, university choice, and workforce sorting makes it a *black box* that does not seem to be questioned easily or voluntarily. When I asked my interviewees what other ways they could come up with, when thinking about valuing universities, they were a bit taken aback. To not use *hensachi* when talking about universities seemed somewhat radical.

And while this big thing called *hensachi* was present in all my talks, by looking closer it became clear that it was not uniform at all. All of my interview partners had had their own experiences with mock exams, university application, and job hunting; and all these experiences impinged on their understanding of '*hensachi'* – for one it was a matter of pride, for another it was all that is wrong with the Japanese education system. But initially what was talked about was always "*hensachi*". This also caused quite some confusion for me during the analysis, until I realized that this term could mean many things. Depending on the discipline my interviewees studied, on their progress in education, on their goals for the future, they all had different connections towards *hensachi* – making them not only represent 'it' differently but enacting it in various ways.

What certainly came up in all cases is the role that cram schools play to produce *hensachi*. Many of my interviewees actively went there to prepare for entrance examinations and all of them took at least some mock exams to assess their personal *hensachi* score. Taking actor-network-theory seriously, this would be the next step to "follow the actor", and not just by reading about the production of this ranking, but by going there physically.

5.4. Concluding the conclusion

One aim of this thesis was to show that the social and material contexts in which universities are embedded are important to consider when we try to make comparisons between universities. I certainly do not want to establish the Japanese education system as the 'odd one out' but I wanted to show that it is different – but probably not more different than other education systems. We can look at any country and when we describe it detailed enough, we will find that things run differently there (to where?). The meaning of big parts of the higher education system in Japan is not the "higher education" (McVeigh, 2002) but the preparation for the workforce (Sugimoto, 2014). Nonetheless, "the university" gets still equaled with "universities" in other countries, where the structural conditions and probably also the goals of many programmes can be radically different. This should be a reminder that it does *not* make sense to compare universities globally as if they would all have the same goals and purposes. But nonetheless, policy (also in Japan) seems to want exactly this. What gets constructed through that is a dominance of certain types of universities (the "world-class university" – Hazelkorn, 2015), which at the same time gets naturalized as the best way to assess academic excellence.

Another aim was to not only see if rankings matter for students (in terms of their university choices) but also what this does to students. I think it makes a difference if university rankings are consulted when the time to choose comes, or if the understanding of what a 'good' university (and in conjunction often what a 'good' student is) is thoroughly dominated by a single metrical representation. A "smart"

student is someone that made it into a “smart” university, which is a university where only “smart” students can get in. This seems like a logical short circuit, but only when we forget that the “smartness” of both the students and the university are measured by the difficulty of the entrance examinations. Having an as difficult as possible entrance examination gives a university (and its students) prestige – and thus makes it more popular for students in the next year, which again raises the competition (and the difficulty). The interesting thing is that this evaluation of students and their “smartness” is not limited to talk about university choices but comes up in many different situations. Young people get interviewed by YouTubers on the street about their personal *hensachi* or their university affiliation, followed by impressive remarks when the number is high enough; when students meet each other for the first time or talk about other students, the university that they managed to get into impresses the counterpart; programmes inside the same university compete against each other, each trying to be the one with the highest entry bar. But what does *not* happen in these situations is that the content or conditions of study of these programmes is talked about. To have passed a difficult entrance bar is ‘proof’ enough that one accomplished an impressive feat (and by the amount of study necessary, it is impressive indeed).

Here it became interesting to see how alternative ways of entrance played into this situation. There are ways to circumvent the extremely competitive standardised entrance examinations, but still get the prestige of having entered a difficult university. And especially with the reform of a new central entrance examination coming up in 2021 (MEXT, 2017), it will be interesting to see, how cram schools react to these changes – or if anything substantial changes at all. In an uncertain situation, new connections between actors are made, people have to be notified of changes, and thus positions have to be argued for; it is in situations like these where investigating them makes most sense, especially as an ant.

Last reflexion

*With this last reflexion I am concluding the work. You might wonder why I bothered to write these or question their usefulness in the thesis. That is quite alright, since their goal was not really to be 'useful' for the arguments; they might actually seem like doing the opposite. Besides the reasons I gave at the end of chapter two, writing "reflections" was something that we did quite frequently during the STS programme. They were usually texts that we wrote more for ourselves than for the course, and which should make us think about what we learned in the course of the class. I wanted to include them in the thesis to take some of the lessons that we learned and 'apply' them in a situation where I have not seen them before. As I mentioned when writing about the Haraway (1988) paper, one of the early central goals of STS has been to show that the (mostly experimental) practices of the natural sciences and the representations of results look very differently. This holds also for the rest of the scholarly work (or all the "*Wissenschaften*" – in German this distinction between natural and social sciences is not so explicated). What social scientists publish afterwards does not simply reflect how they researched things. I am not saying that publications should become faithful reports of research activities, but that they tend to report findings in a way that make them appear more absolute than they are. I think that leaving some uncertainty in them makes them not only more interesting, but also more faithful to the messiness of human activities.*

In that way, the inclusion of these reflexions should be understood as an experiment to put the end-result of the thesis closer to its process of production (or maybe make it only appear so?). For people who have already published papers and written theses, it might seem self-evident that the written account and the work going into it are by no means equal (or even similar). But the same argument has also been made for the lab studies – no scientist (or at least STS people said so) would argue that what they wrote in papers was really what they did. Nonetheless, getting insights into how laboratories worked proved useful – especially for people not frequently there. Maybe these reflexions will be useful in a similar way. Thank you for reading them.

Literature list

Albrecht, Y. (2016). Forschen als Spiel? Kreative Facetten innerhalb des zirkulären Forschungsprozesses mit der GTM und die Möglichkeit der Innovation mittels Abduktion und dem Serendipity-Prinzip. In C. Equit, & C. Hohage (Eds.) *Handbuch Grounded Theory: von der Methodologie zur Forschungspraxis* (pp. 240—256). Weinheim, Basel: Beltz Juventa.

Aspinall, R. W. (2013). *International education policy in Japan in an age of globalisation and risk*. Leiden: Global Oriental.

Bergerson, A. A. (2010). College choice and access to college: Moving policy, research and practice to the 21st century, *ASHE Higher Education Report, 35*(4), 1—141.

Bjork, C. (2016). *High-stakes schooling: What we can learn from Japan's experiences with testing, accountability, and educations reform*. Chicago, London: University of Chicago Press.

Bloor, D. (1991 [1976]). The Strong Programme in the Sociology of Knowledge. In *Knowledge and Social Imagery* (pp. 3—23). Chicago: University of Chicago Press.

Brankovic, J., Ringel, L., & Werron, T. (2018). How rankings produce competition: the case of global university rankings. *Zeitschrift Für Soziologie, 47*(4), 270—288.

Breaden, J. (2013). *The organisational dynamics of university reform in Japan. International inside out*. London, New York: Routledge.

Burri, R. V., & Dumit, J. (2008). Social studies of scientific imaging and visualization. In E. J. Hackett, O. Amsterdamska, M. Lynch & J. Wajcman (Eds.) *The Handbook of Science and Technology Studies* (3. ed.) (pp. 297-317). Cambridge, MA: MIT Press.

Burrows, R. (2012). Living with the h-index? Metric assemblages in the contemporary academy. *The Sociological Review, 60*(2), 355—372.

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis* (2. ed.). London: Sage Publications.

Callon, M. (1986). Some elements of a sociology of translation: domestication of the scallops and the fishermen of St Brieuc Bay. In J. Law (Ed.), *Power, action and belief: A new sociology of knowledge* (pp. 196—233)*?* London: Routledge & Kegan Paul.

Callon, M., & Latour, B. (1992). Don't Throw the Baby Out with the Bath School! A Reply to Collins and Yearley. In A. Pickering (Ed.), *Science as practice and culture* (pp. 343—368). Chicago: University of Chicago Press.

Collins, H. M. (1981). Son of seven sexes: The social destruction of a physical phenomenon*. Social Studies of Science, 11*(1), 33—62.

Collins, H. M., & Yearley, S. (1992a). Epistemological Chicken. In A. Pickering (Ed.), *Science as practice and culture* (pp. 301—326). Chicago: University of Chicago Press.

---- (1992b). Journey into Space. In A. Pickering (Ed.), *Science as practice and culture* (pp. 369—389). Chicago: University of Chicago Press.

Czarniawska, B. (2004). *Narratives in social science research*. London: Sage Publications.

Dahler-Larsen, P. (2012). *The evaluation society*. Stanford: Stanford University Press.

Dearden, J. A., Grewal, R., & Lilien, G. L. (2019). Strategic manipulation of university rankings, the prestige effect, and student university choice. *Journal of Marketing Research, 56*(4), 691–707.

Drewes, T., & Michael, C. (2006). How do students choose a university?: An analysis of applications to universities in Ontario, Canada. *Research in Higher Education, 47*(7), 781–800.

Espeland, W. N., & Sauder, M. (2007). Rankings and reactivity: how public measures recreate social worlds. *American Journal of Sociology, 113*(1), 1—40.

Fochler, M., & de Rijcke, S. (2017). Implicated in the Indicator Game? An Experimental Debate. *Engaging Science, Technology, and Society, 3*, 21—40.

Fochler, M., Felt, U., & Müller, R. (2016). Unsustainable Growth, Hyper-Competition, and Worth in Life Science Research: Narrowing Evaluative Repertoires in Doctoral and Postdoctoral Scientists' Work and Lives. *Minerva, 54*(2), 175—200.

Flick, U. (2000). *Qualitative Forschung: Theorie, Methoden, Anwendung in Psychologie und Sozialwissenschaften* (5. ed.) (= Rowohlts Enzyklopädie; 55546). Reinbeck bei Hamburg: Rowohlt-Taschenbuch.

Friese, S. (2016). Grounded Theory -Computergestützt und umgesetzt mit ATLAS.ti. Der Computer gehört für mich mit dazu. In C. Equit, & C. Hohage (Eds.) *Handbuch Grounded Theory: Von der Methodologie zur Forschungspraxis* (pp. 483—507). Weinheim, Basel: Beltz Juventa.

Furukawa, T., Shirakawa, N., & Okuwada, K. (2013). An empirical study of graduate student mobility underpinning research universities. *Higher Education, 66*(1), 17–37.

Galison, P. (1998). Judgement against objectivity. In C. A. Jones & p. Galison (Eds.), *Picturing Science, Producing Art* (pp. 327—359). London, New York: Routledge.

Garfield. E. (1973). Which journals attract the most frequently cited articles? Here's a list of the top fifteen. *Essays of an Information Scientist, 1*, 485—486.

Gieryn, T. (1995). Boundaries of Science. In S. Jasanoff, G. Markle, J. Petersen, T. Pinch (Eds.), *The Handbook of Science and Technology Studies* (pp. 393—443). London: Sage Publications.

Goodman, R., & Oka, C. (2018). The invention, gaming, and persistence of the hensachi ('standardised rank score') in Japanese education. *Oxford Review of Education, 44*(5), 581—598.

Gross, P. R., & Levitt, N. (1994). *Higher Superstition: The Academic Left and its Quarrels with Science*. Baltimore: John Hopkins University Press.

Gross, P. R., Levitt, N., & Lewis, M. W. (Eds.) (1996). *The Flight from Science and Reason*. Baltimore: John Hopkins University Press.

Hammarfelt, B., de Rijcke, S., & Wouters, P. (2017). From Eminent Men to Excellent Universities: University Rankings as Calculative Devices. *Minerva, 55*(4), 391—411.

Hammersley, M. & Atkinson, P. (2007). Oral accounts and the role of interviewing. In *Ethnography: Principles in practice* (2. ed.) (pp. 97—120). London, New York: Routledge.

Haraway, D. (1988). Situated knowledges: The science question in feminism and the privilege of partial perspective. *Feminist Studies, 14*(3), 575—599.

Hayashi, S. (2009). Yūshū na daigaku to ha nani ka: atarashii daigaku ranking hōshiki no kensaku (Identifying excellent universities in Japan: In search of a new ranking system). *Aoyama keiei ronshū, 43*(4), 1–38.

Hazelkorn, E. (2015). *Rankings and the reshaping of higher education: The battle for world-class excellence* (2. ed.). Basingstoke: Palgrave Macmillan.

Heywood, P. (2017). Ontological Turn, The. In F. Stein, S. Lazar, M. Candea, H. Diemberger, J. Robbins, A. Sanchez & R. Stasch (Eds.), *The Cambridge Encyclopedia of Anthropology*. http://doi.org/10.29164/17ontology

Hilgartner, S. (1997). The Sokal Affair in Context. *Science, Technology, & Human Values, 22*(4), 506—522.

Hirsch, J. E. (2005). An index to quantify an individual's scientific research output. *Proceedings of the National Academy of Sciences in the United States of America, 102(*46), 16569—16572.

Hohage, C. (2016). Kathy Charmaz' konstruktivistische Erneuerung der Grounded Theory. In C. Equit, & C. Hohage (Eds.) *Handbuch Grounded Theory: Von der Methodologie zur Forschungspraxis* (pp. 108—125). Weinheim, Basel: Beltz Juventa.

Holbraad, M. & Pedersen, M. A. (2017). *The ontological turn: An anthropological exposition*. Cambridge: Cambridge University Press.

Horstschräer, J. (2012). University rankings in action? The importance of rankings and an excellence competition for university choice of high-ability students. *Economics of Education Review, 31*(6), 1162–1176.

Hou, A. Y.-C., Morse, R., & Shao, Y. E. (2012). Is there a gap between students' preference and university presidents' concern over college ranking indicators?: A case study of "College Navigator in Taiwan." *Higher Education, 64*(6), 767–787.

Irwin, A. (2017). If the Indicator Game is the Answer, Then What is the Question? *Engaging Science, Technology, and Society, 3*, 64—72.

Ishikawa, M. (2009). University Rankings, Global Models, and Emerging Hegemony: Critical Analysis from Japan. *Journal of Studies in International Education*, *13*(2), 159—173.

Jasanoff, S. (1999). Book Review: A House Built on Sand: Exposing Postmodernist Myths about Science. *Science, Technology, & Human Values, 24*(4), 495—500.

---- (2004). Ordering knowledge, ordering society. In S. Jasanoff (Ed.), *States of knowledge: The co-production of science and social order* (pp. 13—45). London, New York: Routledge

Jöns, H., & Hoyler, M. (2013). Global geographies of higher education: The perspective of world university rankings. *Geoforum*, *46*, 45—59.

Johnson, J. (Latour, B.) (1988). Mixing Humans and Nonhumans Together: The Sociology of a Door-Closer. *Social Problems, 35*(3), 298—310.

Kariya, T. (20 16). Understanding structural changes in inequality in Japanese education: From selection to choice. In D. Chiavacci, & C. Hommerich (Eds.) *Social inequality in post-growth Japan: Transformation during economic and demographic stagnation* (pp. 149—165). London, New York: Routledge.

Keller, R., & Poferl, A. (2016). Epistemic cultures in sociology between individual inspiration and legitimization by procedure: Developments of qualitative and interpretive research in German and French sociology since the 1960s. *Forum Qualitative Sozialforschung, 17*(1).

Kinmonth, E. H. (2014). Edited by Ikuo AMANO. The Origins of Japanese Credentialism. *Educational Studies in Japan, 8*, 163—164.

Latour, B. (1987). *Science in action: How to follow scientists and engineers through society*. Cambridge, MA: Harvard University Press

---- (1991). Technology is Society Made Durable. In J. Law (Ed.), *A Sociology of Monsters: Essays on Power, Technology and Domination* (pp. 103—132). London, New York: Routledge.

---- (1999). *Pandora's hope: Essays on the reality of science studies*. Cambridge, MA: Harvard University Press.

---- (2004). Why has critique run out of steam? From matters of fact to matters of concern. *Critical Inquiry, 30*(2), 225—48.

---- (2005). *Reassembling the social: An introduction to actor-network-theory*. Oxford: Oxford University Press.

Latour, B., & Woolgar S. (1986). *Laboratory Life: The Construction of Scientific Facts* (2. ed.). Princeton: Princeton University Press.

Law, J. (1986). On the Methods of Long-Distance Control: Vessels, Navigation and the Portuguese Route to India. In J. Law (Ed.), *Power, action and belief: A new sociology of knowledge* (pp. 234—263)*?* London: Routledge & Kegan Paul.

---- (2004). *After Method: Mess in social science research*. London, New York: Routledge.

---- (2009). Actor Network Theory and Material Semiotics. In B. Turner (Ed.) *The New Blackwell Companion to Social Theory* (pp. 141—158). Oxford: Blackwell Publishers.

Lesch, V. B. (2018). Kōkōshūshokushidō no shakaigaku: 'Nihongata' ikō o saikō suru (Sociology of senior high school job placement guidance: reconsideration of the 'Japanese type' transition). *Social Science Japan Journal, 21*(1), 161—163.

Luca, M., & Smith, J. (2013). Salience in quality disclosure: Evidence from the U.S. News college rankings. *Journal of Economics and Management Strategy, 22*(1), 58—77.

Luhmann, N. (1997). Die Gesellschaftstheorie der Soziologie. In *Die Gesellschaft der Gesellschaft* (pp. 16—35). Frankfurt am Main: Suhrkamp.

McVeigh, B. J. (2002). *Japanese higher education as myth*. London, New York: Routledge.

MEXT (Ministry of Education, Culture, Sports, Science and Technology) (2017*). Daigaku nyūgaku kyōtsū tesuto jisshi hōshin* (Plan for the realisation of the common test for university admission). Published in 2017-10 at: http://www.mext.go.jp/a_menu/koutou/koudai/detail/1397731.htm.

Michael, M. (2017). On Some Post-ANTs. In *Actor-Network theory: Trials, Trails and Translations* (pp. 115—138). London: Sage Publications.

Moed, H. F., van Leeuwen, Th. N., & Reedijk, J. (1996). A critical analysis of the journal impact factors of Angewandte Chemie and the Journal of the American Chemical Society – Inaccuracies in published impact factors based on overall citations only. *Scientometrics, 37*(1), 105—116.

Mol, A. (1999). Ontological Politics: A word and some questions. In J. Law, & J. Hassard (Eds.), *Actor Network theory and after* (pp. 74—89). Oxford: Blackwell Publishers.

Mulkay, M. (1988). Don Quixote's double: A self-exemplifying text. In S. Woolgar (Ed.), *Knowledge and Reflexivity: New Frontiers in the Sociology of Knowledge* (pp. 81—100). London: Sage Publications.

Nakai, K. (2007). *Daigaku nyūshi no sengoshi: juken jigoku kara zennyū jidai e* (A post-war history of university admission: From the examination hell to the era of declining enrollment). Tōkyō: Chūō Kōron Shinsha.

Okada, A. (20 16). Political discourse and education reforms concerning "equality of educational opportunity". In D. Chiavacci, & C. Hommerich (Eds.) *Social inequality in post-growth Japan: Transformation during economic and demographic stagnation* (pp. 166—175). London, New York: Routledge.

Paulus, T. M., Lester, J. N., & Dempster, P. G. (2014). Transcribing audio and video data. In *Digital tools in qualitative research* (pp. 93—113). London: Sage Publications.

Peterson, D. (2016). The baby factory: Difficult research objects, disciplinary standards, and the production of statistical significance. *Socius: Sociological Research for a Dynamic World, 2*, 1—10.

Pickering, A. (2017). The ontological turn: Taking different worlds seriously. *Social Analysis, 61*(2), 134—150.

Porter, T. M. (1995). *Trust in numbers: The pursuit of objectivity in science and public life*. Princeton: Princeton University Press.

Rosenthal, G. (2015). *Interpretative Sozialforschung: Eine Einführung* (5. ed.). Weinheim, Basel: Beltz Juventa.

Roesgaard, M. H. (2006). Japanese education and the cram school business: Functions, challenges and *perspectives of the juku.* Copenhagen: NiAS Press.

Ross, A. (Ed.) (1996). *Science Wars*. Durham: Duke University Press.

Roulston, K. J. (2010). Asking questions and individual interviews. In *Reflective interviewing: A guide to theory and practice* (pp. 9—32). London: Sage Publications.

Saldaña, J. (2011). A survey of qualitative data analytic methods. In *Fundamentals of qualitative research* (pp. 89—138). Oxford: Oxford University Press.

Shore, C., & Wright, S. (2000). Coercive accountability: the rise of audit culture in higher education. In M. Strathern (Ed.), *Audit Cultures: Anthropological Studies in Accountability, Ethics and the Academy* (pp. 58—89). London, New York: Routledge.

Silverman, D. (2006). Interviews. In *Interpreting qualitative data: Methods for analyzing talk, text and interaction* (pp. 109—149). London: Sage Publications.

Sokal, A. D. (1996a). Transgressing the Boundaries: Toward a Transformative Hermeneutics of Quantum Gravity. *Social Text, 46/47*[71], 217—252.

---- (1996b). A physicist experiments with Cultural Studies. *Lingua Franca, May/June*, 62—64.

Star, S. L., & Ruhleder, K. (1996). Steps toward an ecology of infrastructure: design and access for large information spaces. *Information Systems Research, 7*(1), 111—134.

Stevenson, D. L., & Baker, D. P. (1992). Shadow education and allocation in formal schooling: transition to university in Japan. *American Journal of Sociology, 97*(6), 1639—1657.

Stipek, D. (2011). Education is not a race. *Science, 332*(6037), 1481–1481.

Strathern, M. (2000). The Tyranny of Transparency. *British Educational Research Journal, 26*(3), 309—321.

Sugimoto, Y. (2014). *An Introduction to Japanese Society* (4. ed.). Cambridge: Cambridge University Press.

[71] This is the double-issue of *Social Text* on which (Ross, 1996) is based, but Sokal's article was (obviously) not included in the edited volume.

Tan, Y. S., & Goh, S. K. (2014). International students, academic publications and world university rankings: The impact of globalisation and responses of a Malaysian public university. *Higher Education, 68(*4), 489–502.

Tavory, I., & Timmermans, S. (2014). *Abductive analysis: Theorizing qualitative research*. Chicago, London: University of Chicago Press.

Woolgar, S. (Ed.) (1988a). *Knowledge and Reflexivity: New Frontiers in the Sociology of Knowledge*. London: Sage Publications.

---- (1988b). Reflexivity is the ethnographer of the text. In S. Woolgar (Ed.), Knowledge and Reflexivity: *New Frontiers in the Sociology of Knowledge* (pp. 14-36). London: Sage Publications.

---- (1991). Beyond the citation debate: towards a sociology of measurement technologies and their use in science policy. *Science and Public Policy, 18*(5), 319—326.

---- (1992). Some Remarks about Positionism: A Reply to Collins and Yearley. In A. Pickering (Ed.), *Science as practice and culture* (pp. 327—342). Chicago: University of Chicago Press.

Wouters, P. (2014). The citation: from culture to infrastructure. In B. Cronin & C. R. Sugimoto (Eds.), *Beyond bibliometrics: Harnessing multidimensional indicators of scholarly impact* (pp. 47—66). Cambridge, MA: MIT Press.

Yoneyama, S. (1999). *The Japanese high school: Silence and resistance*. London, New York: Routledge.

Yonezawa, A., Nakatsui, I., & Kobayashi, T. (2002). University Rankings in Japan. *Higher Education in Europe*, *27*(4), 373—382.

Zeng, K. (1999). *Dragon gate: Competitive examinations and their consequences*. London, New York: Cassell.

Appendix A: quotes in Japanese[72]

P1 (2nd year undergraduate, private university):

ええと、日本では、まだいたい、大学に行かないとあのう、大学 4 年生、4 年生大学に行かないと、ちゃんとした企業に就職できない。(1:1)

人によるんだけど。全然受けない人は、てか、「お金があまりないです」という人は本当にええと、「センター試験と国立試験しか受けません」という人もいるし、それぞれだけどでも、心配でたくさんこう、なんだろうな、保険をかけていく人はたぶん 30 万 40 万かかったりする。 (1:24)

旧帝国んとね、あ、北海道大学、東北大学、東京大学、名古屋大学、京都大学、大阪大学、九州大学が旧帝国大学で、それがま、「頭いいね」って言える？？所で、ええと。 (1:36)

だ、「高校に入ったらあまりいい大学に入れないな」とか、「こっちのとこの高校に入ったらけっこう頭のいい大学入れるかもな」とか、を中学生の時からま、調べてはいる。 (1:56)

で、それをたくさんの企業にま、出すんだけど、それを出したときに、んと例えばそのある程度、そのある程度ライン以下の大学の生徒であったらもうその紙をみ、見ることもしませんというね。ことをうん、するというのは、けっこう日本でよくあることで。 (1:62)

うん。なにが、なにを勉強したとしても、その大学のランキングがあるから、ま、そうだね、あるそのラインに以下であれば、「私の企業は取りませんよ」っていう。 (1:63)

I: 大学で勉強する内容ということ？

P1: ええと、頭のいい人が入れる大学ってこと。 (1:70)

で、でま、実際その高校 3 年生ぐらいから、本格的にその進路相談っていうのは初まって、そういう時に私はま、そこに興味があったからま、「その東京外国語大学に行きたいんです

[72] The original quotes will appear in numerical order, *not* by order of appearance. The first number refers to the interviewee (P1, P2 …), the second to the number that the quote has in ATLAS.ti. Only quotes appearing in the thesis are included.

けど」っていうのを言って、したら、ま「その外国語系で、探すんだね」というのは言われて、でなんだけど、？？、んと、うん、探してて、でも外国語だけに絞ると、そんなに数たくさんないから、外国語と後文学も受ければ、けっこう探せるかもね、という話しを先生から聞いて、ってんと、まいくつかその大学をけっこう上からこう探していて、ってのやって。んで、というのはま、先生と進めていて、後は、ねま先生がだいたいそのｍｍｍｈ、「国公立だったら、ここがいいんじゃない」とか、ｍｍｈ、「私立だったら、ここはいいんじゃない」とかっていうのはあの、すごく経験の長い先生だったから、よく知っていていろいろお進めてくれて (1:74-76)

（笑）なんでだろう？でもたぶんこっちに来てる留学生はみんなわかると思うけど、だいたい、うん。そうだね。 (1:104)

特にない。あまり、ありえないに、私立は。 (1:119)

単位を取るのが簡単なんだ、けっこう。私立の大学は、で私ｍｍｈ、そうか、その大学がもう、生徒は、その百万とか、高いお金を払ってるお客さんだから、なんていうかな。や、緩い、優しいから、あまりその出られ、「大学を 4 年間で出られませんでした」というのは私立大学では少ない、かな。 (1:120)

ま、国立とかだと、違うま、ちょっと違うとは思うけど。ｍｈｍ。 (1:121)

P2 (PhD student, private university (national university during undergraduate)):
そうそう、で結局 1 年浪人にしたんだけど、高校 3 年生の時に受験した時は、まあまり何も考えずに、なんか自分の能力にその、なんか合った、自分の、自分の能力で行ける大学を単純に考えただけど、浪人することになって、 (2:5)

ええとね、テストがも 1 年中その、テストがあって、そのま学校のテストじゃなくて、その全国の日本・日本のテストというのは、ま月にな、月に、何か月に 1 っ回ぐらいにやって、でそれは日本中の学生が同じテストを受けて、それでその自分のレベルがどれぐらいかというの、まランキングが出たりするけど […] あああ、やらないけいればやつもあるし、その

「学校は受けてください」っていうテストとあと自分でその、自分の意思で受けるかどうか決めれるやつだ。 (2:25-28)

だからその、ものすごいレベルが高い大学よりかは、そのある、その会社が必要としてる能力が高い人を、やっぱり会社を雇うようになってる。いくら、例え日本で一番難しい大学、を卒業しても、その会社が欲しい能力がなかったら、もう落とされるし、ま昔は本当に大学レベルの高い大学を出身だったら、もう会社はどこでも選べたかもしれないけど、今はそうでもない。 (2:63)

なんか最近の日本だったら、そのなんか、すごいレベルのランキングの高い大学出てるけど、はたら、働かずになんか家で、ぼうとしてる人がけっこう増えてて（笑）、昔じゃ、ちょっと考えられなかったけど、今はそういう人は多い。うん。仕事がなくて、すごい勉強ができるけど、その仕事がもらえない。今多いよそれ。 (2:67)

そうだね。だから、昔だったら、その会社に入るために、レベルの高い大学に受けたと思うけど、今はその、その大学に入ることがそのゴールになってることは多い。 (2:68)

その後に「どうこう」っていうよりかも、そこの大学に入ること自体が目標になってたりする。だから入ってから、（笑）、勉強しなくて、で卒業してから、家でぼうとしてるみたいな。それもけっこう多い最近。 (2:69)

でその大学の中の勉強は難しかったら、やっぱりそのある程度勉強はできる人が入らないと、やっぱりその大学の勉強はその、その人学ぶことはできないし、学ぶ力がないと思うし、でその大学に進んだ時にも、進むとなってもやっぱりそのその大学の研究レベルを上げることはできないと思うから、やっぱ大学自体のレベルが中の勉強とか研究のが難しいとやっぱりその、そこに入るためのテストも難しくする必要があるよ。 (2:94)

なんか日本の大学は入るのは難しくて、よ入ってから遊ぶみたいな。（笑）なんか、アメリカとかヨーロッパの大学は入るのは割とそんなに難しくないけど、入ってからがけっこういっぱい勉強するみたいな。 (2:103)

で文系はもうちょう楽。もう文系だったけど、もう週に 1 っ回ぐらいしか大学行ってなかって（笑）、そずっと遊んでて、4 年間、4 年間、4 年立ってもと頭悪くなって（笑）。 (2:106)

でもそういうこと、大阪大学は、けっこう文系でも、たまに留年する人いるし、…でも私立だったら、文系でも、すごい勉強しないといけないし、けっこう大学によって全然違うと思うね。たぶん東京大学だったら文系も理系も勉強しないとだめだと思うし。ｈｍｍ。 (2:111)

P3 (3rd year undergraduate, national university):

P3: ええとね、またぶん人によっても違うと思うけど、僕の場合はだい・高校 3 年間のうちの最初の 2 年間は普通に学校の授業だけ、受けてて、最後の 1 年は塾に通って、そうだねもう、朝から晩まで（息）その、なんていうのかな、レクチャースタイルじゃなくて、こういった自習室で朝から晩まで一人で勉強してた。

I: ｍｈｈ、その塾を通うことは、もうなんかみんな…したか。

P3: そう、みんなもう、本当に 100 パーセントだと思う。90 パーから 100 パーぐらいもうみんな塾行くね。 (3:6-7)

ある。大分ある。もうそもそも偏差値低い大学は、ま、ちょっと言い方悪いけど、生徒のあまり頭が良くない子ばっかだから、勉強みんな全然しないし、で教授もやっぱりそういう生徒たちばっかりだから、やる気がない（苦笑）あまり。だから、あると思う。 (3:23)

ｈｍ、たぶんその技術的なものよりもやっぱりその、日本で生きていて普通の仕事を取れにやっぱり、せん最低大学卒業してないと、だれ仕事も探せないし、例えば、ローンとか、家

買うとか、車買うとか、の時にローン借りる時も、やっぱりその辺も多少影響あると思うから。たぶん学歴は大事だね、日本は。 (3:43)

あるけど、めっちゃ少ない。うん、で、なんかちょっとあれなんだけど、入った後はね、皆にバカにされる。推薦に入るの面接だけだから、簡単だから、まあまり頭良くない。 (3:54)

そうそう、でやっぱり皆変なプライドあるから、（。）かな。わからんけど、一般入試でだけど。 (3:58)

だから、その中でだから、最後の年めっちゃ忙しくて、毎日勉強してる時でも、いやでもその自分が受験で使わない科目も学校で勉強しないといけない。それが気遣ったね。 (3:73)

I: ま、とか偏差値以外の。

P3: 偏差値ぐらいじゃないかな。偏差値とてもみんな、偏差値しか話しない。例えば、あいつがこの例えば、東京だったり、大阪大学と言うったら「ええ、俺より偏差値上じゃん」みたいな、みんな偏差値でしか話しなくて、テストも受けた後に自分の偏差値じゃ、書いとくね。69 とか、70 とか、でそれでも、みんな勝負しあうみたいな。 (3:74)

あ、あれよね。法政って私立だよね。私立はたぶんけっこう違うと思う。そうそう、お金あるから教授もいっぱいいるよ。（笑）だからあれは国立お金ないから、もうひ・限られた教授しかいないから、いっぱい生徒読んで、授業みたいな。 (3:95)

偏差値、なんでやろうね。その時偏差値のあれがやっぱり入学した時の点数だから、入学するまではみんなすごい頭いいよ。で入学して勉強しなくなってからって感じだけど、学歴で基本就職先で決まるから、もう入ってしまえばどんなにバカでも、いい銀行だったり、いい会社に入れれる。っていうすごいめちゃくちゃ。 (3:97)

うん、有名有名、日本は本当にアメリカとか真逆で、アメリカって入るのめちゃ簡単だけど、卒業するのは難しいってよく言われるじゃん。全く逆だ、日本で正直入学してしまえば90パー、99パーみんな卒業できる。留年もせず。簡単。めちゃくちゃ。 (3:98)

I: ｈｍ、じゃでも、例えば逆にそういう大学に勉強した内容を中心してる企業もある？

P3:ま、ある、じゃあるんだけど、そんなに深くは聞かれないから、いくらでも嘘つける面接で「俺はこういうことを学んだ」っていうのをめっちゃ嘘ついて、俺もよくあるけど（笑）。あまり深く聞、なんか聞かれないし、でもけっこうくらくら。うん、と、もう、わからん、違うかもしれないし、俺の意見。(3:99)

例えば、もうｍｍｈ、まそれも人によってばらばらけど、大企業とか、大企業を例えば、いい就職先で仮定すると、もう、日本の大学で何百であるじゃないか。そのじゃ、半分より下は絶対どんなに頑張って、どんなに優秀でも、基本入れない。そう、学歴フィルターっていうんだけど、それに引っかかるような大学無理だから、(3:114)

無理、無理じゃないかな。途方に暮れると思う。なんやな？どうやるんだろう。偏差値なんか、（。）ったらー。もう、立地で決めるんじゃない？（笑）東京行きたかったら東京とか、神戸行くと…わからない。本当に、本当にたぶん学生の内90パー以上の人は偏差値で見てるから、大学とか、偏差値ないと、たぶん大混乱だと思う。(3:121-122)

（笑）正直「大学でがっつり勉強するぞー」ってやつそこまでいないと思う、そんなに。(3:130)

P4 (finished undergraduate, local university):

で、やっぱりその私は地域で一番だい・レベルの低い私立高校に入って、姉は一番高い何々高校っていう進学校に入って、何々市の中一番頭のいい公立高校。で、私は高 1 の時姉は高 3 だったんだけど、全然、全然勉強の内容が違う、同じ高校生だけど。ｈｍｍ、姉の場合はええと、高校 2 年生の 2 年間までで、高校 3 年生で終わる内容全部やるの。2 年生のうちに高校 3 年生までの普通のカリキュラムを全部超ハイスピードで終わらせて、3 年生の時は 1 年間受験勉強だけで、私の高校はそんなに、その大学に本気で入りたいっていう人と半々ぐらいいたから、あの、今 3 年間かかるから、3 年間かけてやったから、すごくスピードはゆっくりだし、宿題の量も全然違うし、んと、夏休みの課題とか、その量が全然違った。で、

姉の高校の人は、ほとんどのほぼ全員、9 割だと塾に持ってた？？けど、私の場合はほとん・あまり塾に行ってる人はいなかった。大学を受ける人はそんなに多くなかった。 (4:5)

で、私はそんなに勉強、勉強、勉強したくなかったし、その中学校卒業する時は大学に行きたいと思ってなかったから。だから、だいがｋ・高校で終わってその、なんか大学に行くつもりがなかったから、その「公立高校で一生懸命勉強したくないな」と思って、むしろなんか、勉強は…ある程度その…。姉は、その姉を見てたから、すっごい大変そうで毎日課題と勉強等で、だから絶対こんな高校生活嫌だと思って、もっと余裕のある、「ゆるーい高校がいいな」って思って。でも私立は学費が高いからと思ったけど、その特待生とかあるって知って、自分はそれでできるなと思って、やってそういうそれで、貧乏だけど、私立に行けた。推薦って… (4:14)

うん、なんか私立にはい、私立の高校の人イコール国公、国、公立高校に入れなかった人たちっていうイメージがある。だから、入れなくて滑り止めで入った人。そもそも高校に最悪、え、こう、え、公立高校に入れるほどの学力がなくて、私立しか選択肢がなかったっていう人のイメージがあるから、そしてさらにそれプラス学費も高いから、みんな公立に行きたい。 (4:15)

で、先生はその同じ国公立に入れた、で例えば入学させた、合格させられたとしても、AO とか推薦入試よりは一般入試・センター試験で合格させたほうが、たぶん評価がいいと思う。AO とか推薦は全くその授業で今までやった内容、テストするわけじゃないから。 (4:23)

でも私のクラスの先生は私が AO ですごいできると思ったから、「私がやりたい」って言ったし、だからすごいプレゼンテーションの準備とかすごい手伝ってくれて、練習とかすごいやってくれて。私は「その先生で良かったな」って。 (4:24)

P4: ちなみにその英語の先生が授業の中ですごい言った言葉で私には、いｔ、言いまで覚えてるのが「いいか。お前ら。人生は結局金なんだよ。かね！」（笑）「金に余裕がある人は心にも余裕もあるし。いいことができる。社会にいいことができるんだって。だから金を、

に余裕がある生活をするためにはやっぱりいい会社に入らなきゃならない。いい会社に入るためにはいい大学に入らなきゃ。いい大学入るためにはセンター試験に乗り換えなきゃいけないんだ。」みたいなことを言ってて。（笑）

I: 本当に言ってた、そういう？

P4: 言ってた。言ってた。すごい覚えてる。それは英語の授業の時言ってた。

I: 英語で？か日本語で？

P4: ええ、日本語で、その人は英語良くないもん。 (4:25-26)

でも私は AO で入って、一つ苦労したのが、英語。の試験で TOEFL で全然点が取れなくて、でもやっぱり一般試験でセンター試験の点数と大学の 2 次試験の点数で入った人は、ある程度の学力が高い人しか入れないから、で特に私が国際総合科学部だったから、英語が一番重視されてて、で英語は結構得意な人がたくさんほとんどみんな英語ある量できる人だった。 (4:29)

バカにされるとかはなかった。でも、「ああ AO と AO 推薦と一般の差だねえ」っていうのはみんな言ってて、みんなというか、特に AO とか推薦に入った人たちうち逆的にそう言ってた。自分たちで。「ああちょっと高校の最後遊びすぎたな」とか言って。 (4:32)

ええ、それはその進学塾がもう、学校ごとかに配ってるポスター。自分で自分たちで作ったじゃなくて、その進学塾、塾、塾が各国高校に配るの。なんかそういういろんな報告とか、それの一つがその大学ランキング。その塾の偏差・塾、塾がリサーチした全国大学偏差値ランキング、の一覧表がなんか気づいたらなんかあった、貼ってあったから。誰が、またぶん先生が貼ったと思うけど。その教室の前に貼ってあった。 (4:55-56)

ええとね、張り出されてたのは、基本的に全部の科目の合計、が学期末に張り出されるのと、英語は、先生によると思うけど、特に私の英語の先生がそういうことが好きだったから、英語の週テストは毎回張ってた。毎週毎週。でもほかの科目は、別に数学とかも、定期的にテ

ストとかあったけど、でもそれは張り出されなかったから、それは数学の先生がそれはやらなかっただけど。でそれは先生によって違うと思う。 (4:77)

P5 (3rd year undergraduate (natural science programme), local university):
あああ、なんか、ええと、まそんなに私の家はま、お金持ちじゃないから、なんか日本は私立と国立があって、私立は本当にお金がめっちゃ高くて、本当に、すごい高い、でその国立っていうのに行けば、ま本当に半分の半分の半分ぐらい、のお金になるから、まとりあえず国立っていうま (5:6)

ええ、推薦はたぶん高校の成績だけで入るやつが推薦で、AO はなんか PR かな、結構、それが強いと思う、だから高校の成績はそんなに重要じゃなくて、自分でやったその実験とか研究とその、ディベート力とか、かな。後実際に大学に行って、なんか実験をしたりして、あんかレポートを書いたりして、その点数とか。かな、だから、ちょっとｈｍｍ、推薦とも違うかも、AO っていうなんかちょっと PR 試験みたいな感じ。 (5:11)

したら、高校のあの理科の先生がその 10 月にあるなんか「その AO って試験受けてみたら」って「チャレンジしてみたら」って、あの教えてくれたから、「あ、じゃ、やって見よう」と思って、そのプレゼンテーションとかをやったらまなんか受かったから、「あ、やったねー」って終わった(笑)。「やったねー」って感じで、入れた。かな。(笑)。そんな感じ。 (5:19)

やっぱり科目が少ないほうが楽だから、だからみんな私立で行きがちだけど、最初は国立を入りたいって思ってても、だんだん勉強が間に合わなくて、なんだろう、勉強する科目を減らして、私立にするみたいな人も多いかな。だから、大変というか、ま全部大変だけど、勉強をする教科の科目が多いと思う、国立のほうが。それは大変かも。 (5:34)

なんか、予備校に通わない、行かない人もいるけど、なんか、公立の高校だったから、公立の高校は、すごく授業のペースが遅い、すごく、なんかセンター試験が 1 月なんだけど、その 1 月までになんか、サイエンス・理科の、あの何？テスト内容を終わらなかったりすろも、

センター試験に間に合わないのとこが結構あるから、だからみんな、高校の勉強はなんか、復習というか、高校だけで勉強する人は結構少なかったかな。 (5:40)

でも私立とかだと、すごいペースが速かったりするから、予備校に行かない人も多いって聞く。多いみたい。 (5:42)

ああ、高校の試験？ええと、だいたいはぜん、全部、全国で公立、高校も公立と私立に分かれてて、公立はええと、私は神奈川県なんだけど、神奈川県で全員同じ試験、同じテストを 5 教科、国語・算数・英語・理科・社会、で 5 個あって、そのトータルの点数 500 点 100 点 200 点 200 点 100 点 100 点の 5 教科の点数で、ま入れるは決まる。 (5:46)

そうだね、そういう試験、中学校にもなんか、例えば塾の「このテストを受けませんか」っていう手紙がいっぱい届くの。だから、それを先生が配ってて、「是非みんな受けてみたらどうですか」って先生も… (5:64)

まあ、入りたい人が多ければ、例えば有名な大学のほうがみんな入りたいから、その例えば 50 人しか入れないとこに 500 人応募が来たりするから、そうするとやっぱりちょっと、入りづらくなって、偏差値は上がったり、するかな。 (5:76)

でも、そんなに、偏差値 5 個？？は変わらないから、有名な大学のほうがやっぱり、就職の時はいいっていうかな。なんか大学の名前でなんか落ちたりするっていう就職したいって思って、この会社に入りたいってなんか、紙を出したときに、「P5 です、お願いします」って出したときに、例えば、その有名な大学私立の大学とか、国立とかを書いておけば、とりあえずおっけって、「じゃ 2 次面接来てね」って言われるけど (5:77)

ｈｍｍ、なんか、なんか、大学生は人生の夏休みっていう日本語があって、（笑）それは文系大学生の話たぶん。文系の人は本当に試験大変でも、いっぱい歴史覚えて、たくさん勉強しても、大学入ったら本当に大学に全然行かない人もいる、全然行かなくても、普通に卒業

できるから、なんか大学生は人生のな・なんか人生の最期の夏休みとかっていう人もいるけど、 (5:83)

I: じゃ、文系の場合は本当に大学より入学試験のほうが大切？

P5: うん！全然全然全然全然！なんか日本はそうだと思う。なんか、大学入学した時のほうが英語のスコアがいいという場合がすごく高い、英語とか、数学、ｈｍ、ま歴史とか、まなんでもそうだけど、知識が全然入学して、どんどん下がってくる人が。日本はすごいと思う、海外は逆でしょう？普通。違う？ (5:87)

でも理系のほうが、なんか就職は簡単にできるって言われてる。だからたぶん理系に入りたい人多いと思う。大変だけど。文系の方がやっぱり就職活動が大変だったりすると思う。あまり詳しくないけど。 (5:89)

なんか私も一回大学 1 年生の時に英語のスコア下がって、最初よりも、「ええ、やばい」って思って、すっごい勉強したんだけど、ましない人のほうが多いし。 (5:90)

その大人が、なんかその大学、そうだね、いい、なんか大学・「この大学はいいね」って思われるのには、やっぱりみんな単位を楽に採って卒業できてるっていうのが日本では結構重要みたいで (5:102)

でも高校卒業しただけで、就職できる会社はすごいお金が安いと思う。もらえるお金が全然安いと思う (5:112)

でも、チアをやってるとその大学の歌を歌ったりとか、大学のなんか、イベントに絶対出たりとか、大学のフェスティバルになんか絶対メインで出たりとか、なんか大学のなんか、愛が強くなる、「首都大大好き」って思うようになるし、 (5:125)

Appendix B: informed consent sheet in Japanese

インタビュー調査協力の同意書

卒業論文のための「大学ランキング」についての研究にご協力くださり、ありがとうございます。このインタビューには 60 分程度の時間がかかります。インタビューへのご協力は任意です。このインタビューを通じてご提供いただいた情報に、研究者と指導教授以外の第三者が触れることはありません。また、研究成果の報告では、複数の協力者から収集したインタビューデータを統合した形で扱いますので、個人名が出ることはありません。なお、研究データに誤りがないよう、インタビューの音声を記録させていただきます。この記録は研究データとして慎重に扱い、第三者が聞くことはありません。

もし、質問に答えたくない場合には、お答えにならなくても結構です。また、インタビュー調査への協力を中断したい場合には、その旨お申し出があればいつでも中断します。 以上の条件でインタビュー調査に協力することに同意いたします。

（　　-　-　）

令和　年　月　日（　曜）

協力者

お名前＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿サイン＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿

ご連絡先＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿

インタビュー担当者

Markus Hoffmann＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿

ウイーン大学・科学技術社会論研究所

Universitätsstraße 7/Stiege II/6. Stock, 1010 Wien

もし、質問があれば、ご遠慮なく連絡してください。

markus.hoffmann@univie.ac.at

Appendix C: interview guideline in Japanese

まずはちょっと P？の個人的に経験したことについて話したい。P？は初めて大学生になると考えた時を覚えてる？その時から入学したまでの過程のストーリーを聞きたい。ちょっと長ければでもいい

If questions asked:どの時点からでもいい、自分の経験を聞きたい。全部の大事だと思うことを聞きたい。もっとも印象的なことはなんだった？

特に高校生の時に興味がある。どうやって大学を選んだ？誰と相談した？つらい時があった？

大学で勉強することは P？のためにどの意味を持ってる？

偏差値をどうやって使った？偏差値が低い大学でいいんじゃない？なぜ大学に行くのは大切だと思う？偏差値の差の理由？

予備校か塾に行った？その模擬試験とかのことをちょっと説明してくれない？予備校と模擬試験お金もかかる？予備校の時にセンター試験のためだけ？

私立と国公立の大学の違い？お金のことだけ？

理系と文系は基本的に違う？入学した後の勉強と試験の勉強の比べ？

もし、偏差値が低い人たちばっかりはすごいレベル高い大学に応募したら、どうなる？なぜそういうことが起こらない？

もし、学歴フィルターがなかったら、どんな大学でもいいんじゃない？

偏差値レベルの差がなにを意味してると思う？入学試験の難しさはなぜ違う？

入学試験の難しさと大学生活の楽しさの関係？

End:その大学と大学ランキングの話題に関して、まだ話してないが、言いたい経験か意見がある？

Appendix D: abstracts

German:

In letzter Zeit haben sich sowohl die Meldungen über Änderungen in der Hochschulfinanzierung als auch über Manipulationen bei Universitätsaufnahmeprüfungen in Japan gehäuft. Als einer der Gründe wird eine geringe Anzahl von Universitäten in Japan genannt, welche auf „Weltklasse-Level“ gebracht werden sollen, unter anderem mit dem expliziten Ziel bei globalen Universitätsrankings besser abzuschneiden. Auch auf administrativer Ebene der Universitäten schreitet die Internationalisierung der Hochschulen voran, unter anderem durch Maßnahmen den Anteil an internationalen Studierenden und Fakultätsmitgliedern zu erhöhen.

Gleichzeitig existieren in Japan gefestigte Hierarchien zwischen den Universitäten, welche sich nicht an den Indikatoren für globale Rankings orientieren (z.B. Publikations- und Zitierzahlen, Reputationsumfragen, …), sondern sich durch den Schwierigkeitsgrad der Aufnahmeprüfungen manifestieren. Es ist auch diese Art von Ranking, welche für die meisten (potentiellen) Studierenden von Relevanz zu sein scheint, in Bezug auf die Wahl, aber auch das Verständnis von Universitäten (und Studierenden). Wie schafft es sich dieses Universitätsranking für Studierende als die ‚normale‘ Art Universitäten zu evaluieren, zu etablieren?

In diesem Masterprojekt habe ich fünf japanische Studierende zu ihren Erfahrungen und Meinungen zu Universitäten, dem Studieren und anderen Studierenden interviewt, und mittels einer qualitativen Herangehensweise interpretiert. Im Verlauf der Analyse hat es sich mir angeboten Actor-Network-Theory als konzeptuelle Landkarte zu verwenden, um herauszufinden wie relevant diese Schwierigkeitsrankings (*hensachi*) in der Praxis für Studierende sind. Dabei wurde *hensachi* als Technologie angesehen, welche sich durch Einbettung in Praktiken und Objekten in Schulen, Nachhilfeschulen und dem Arbeitsmarkt als ‚natürliche‘ Art anbietet, Universitäten auszuwählen und zu bewerten.

In Bezug auf globale Universitätsrankings stellt sich dann abschließend die Frage, inwiefern es Sinn macht Universitäten global vergleichbar zu machen, obwohl die lokalen Bedeutungen und Aufgaben von Universitäten sehr unterschiedlich sein können.

English:

Recently there have been reports on changes in higher education finance policy and on manipulation of entrance examinations in Japan. One of the reasons given is a small number of universities, which are to be pushed to “world-class level” with the explicit goal to excel in global university rankings. The internationalisation of higher education is also happening on an institutional level, visible in measures to increase the share of international students and faculty.

At the same time, there are hierarchies of universities in Japan that are not calculated by indicators used by global rankings (for instance publication and citation counts, reputation surveys, …) but orient themselves on the difficulty of entrance examinations. It is this kind of ranking that seems to be relevant for most (aspiring) students, for how they decide where to study but also for how they understand universities (and students) in general. How does this ranking manage to establish itself for students as the ‘normal’ way to evaluate universities?

In this master’s project I interviewed five Japanese students about their experiences and opinions on universities, studying and other students. I approached the interpretation of these interviews in a qualitatively open approach, during which actor-network-theory suggested itself as a tool to find out how relevant these difficulty rankings (*hensachi*) are in practice. In this process *hensachi* has been conceptualised as a technology that embeds itself in practices and objects in schools, cram schools and the job market, and thus offers itself as the ‘natural’ way to choose and evaluate universities.

In the end the question arises how reasonable it is for global university rankings to make universities globally comparable, despite the fact that their local meanings and functions can be radically different.