IDENTIFYING THE CULTURAL CHALLENGES OF FINNISH AND CHINESE COLLABORATION IN UNIVERSITY EDUCATION OF SOFTWARE ENGINEERING

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Foreword

I would like to thank the mystic spirit of the universe – or whatever it is that makes the world's biggest wonders happen – for a coincidence that resulted in Prof. Pasi Kuvaja and I chatting at a University of Oulu restaurant. We were unfamiliar with one another, but in a way, he made the subject of my thesis fall from the sky. So, thank you Pasi, without you this thesis would have not been written. Special thanks also go to Prof. Markku Oivo who liked the idea of my thesis, as well as to Dr. Jouni Markkula, who helped me with the practicalities and offered me many valuable tips on how to do my research. With help from these three experts from the field of information processing, it was possible to visit the Nanjing Institute of Technology (NJIT), which hit the nail on the head. It really made my thesis more informative and interesting.

The major acknowledgements for giving my thesis an anthropological approach go to my first supervisor Dr. Johanna Ylipulli and my second supervisor Prof. Hannu I. Heikkinen from the Cultural Anthropology Department. They supported my anthropological mind and helped me with my journey from an insecure novice to a more independent and self-confident writer.

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Last but definitely not least, I would like to thank my family and friends and specifically my little boy, Miko, who really ensured that I had breaks from writing my thesis. This journey has not been merely a thesis for me, as part of my heart belongs in China.

Sincerely,

Elina Roininen

1 Introduction

My thesis is related to the ongoing education export project in the University of Oulu's (UO) Software Engineering Research Unit, M3S[1]. The research unit is part of the Faculty of Information Technology and Electrical Engineering. The UO in Finland and the Nanjing Institute of Technology (NJIT) in China started planning a joint software engineering bachelor's degree programme in 2016. The first students started their studies in autumn 2018. At UO information processing science has two specializations: software engineering (SE) and information systems (IS). The Finnish programme exported to China focuses on SE and the education export is a double degree. The students will get a bachelor's degree in SE from NJIT in four years and from UO in three years. UO offers twenty courses for NJIT students. The Finnish and Chinese teachers collaborate, so that in practice the Finnish teacher is teaching at NJIT for two to four weeks for every course offered by UO and the local teacher will be assisting with the practice groups.

My objective was to identify the cultural and practical challenges facing collaborative education between Finland and China. The topic of the thesis is important for Finland's economy, as the Finnish government is investing heavily in education export. In past years the income from education export has been around 260 million and a goal was set to raise this to 350 million by 2018. To achieve the goal, the government reduced legal restrictions on education export. Focusing on the financial aspect increases the risk of problems, especially if cultural differences are not taken into account. (Keto-Tokoi 2016.)

Like the Finnish government, the Chinese government is investing heavily in education. According to Shang-Ling Jui (2010), Chinese software training faces challenges such as outdated teaching materials and the lack of interaction between industry and educational institutes. Furthermore, the exam-focused education in China is problematic because it lacks a practical dimension and its competitiveness does not encourage group work. Jui claims that information processing science students in China often do not have enough experience in software production. Moreover, Chinese companies do not find suitable employees and they must invest in long-term training for their new personnel, resulting in huge costs. (Shang-Ling,

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[1] The official name of M3S is Empirical Software Engineering in Software Systems and Services.

Jui 2010: 136-139.) However, the quality of SE education varies between Chinese universities and at NJIT new kinds of expertise are needed and welcomed from Finland.

My research is based on interviews and participatory observation. I was particularly interested in investigating the Chinese experiences of studying SE at UO and comparing these to their study experiences in China. In addition, I reflected on the information I acquired from my visit to NJIT in March 2018.

I also have a personal interest in the topic of my thesis, as I have been to China twice as an exchange student: in Chengdu (Sichuan Staff University of Science and Technology) in 2009 and in Hong Kong (Chinese University of Hong Kong, CUHK) in 2011. When I started my exchange at CUHK, the tutors introduced the campus and said that every year a student commits suicide by jumping off the roof of a building at the campus. Unfortunately, that also happened during my exchange. In my experience, studying at CUHK demanded a lot of work and was success-oriented. One poster on the wall of the students' apartment at CUHK (Figure 1) reminds me of exam-focused atmosphere: Students are encouraged to study for the exams for example by being offered an orange as a reward.

Figure 1: Poster at CUHK encouraging active exam participation. (Photo E. Roininen 2011)

When I heard about this education export plan, I thought it would be relevant to make use of my experiences and do some further research on the subject. However, I must point out that my experiences at CUHK cannot be directly linked to education in China, because Hong Kong[2] is an autonomous special territory with history as a British colony during the last century. Mainland China[3] is very different and China itself is a huge country with vast cultural differences. However, there are some common characteristics of Chinese culture throughout China, including Hong Kong. My thesis concerns Nanjing, which is located in the Jiangsu province, Eastern China (Appendix 1).

Based on my own experiences, I think Finnish education is more flexible and individualistic than Chinese education. Although Hong Kong seems to be more liberal than Mainland China and is influenced by British culture, the prevailing atmosphere at CUHK was hierarchical and teacher-oriented. For example, in the Chinese language class everyone had to read a book for a few minutes, close it and recall the text, one by one. However, some anthropology lectures had student-centred features, for example writing an essay in which we created our own theory based on articles we had read. The aim was to make students creative and independent thinkers. In addition, there were some field trips with the teacher. All of this got me curious about the factual side of the teaching models in Mainland China.

I acknowledged my own presumptions and remained conscious of these during the research process. My research questions were based on my own experiences as well as previous research. Before I continue, I would like to introduce some general features of Chinese education. It is commonly thought that students in East Asia are under heavy pressure and education is exam-focused (CNBC 2016). For example, Cheung and Chiu (2016) state that the pressures of the education system are considered to be one of the reasons for student suicides in Hong Kong. Competition in China and the high number of young students also create a real business opportunity for tuition companies that assist students with the national university entrance exam, called *gāokǎo* (高考). The tutoring business is also a major phenomenon in Hong Kong, where the *Best tutors attract banker-sized salaries and the cult status of pop stars* (Financial Times 2015). Parents often invest in their children's education right from kindergarten age by sending them to after-school tutoring centres (Qian, Chen 2018).

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[2] The official name is the Hong Kong Special Administrative Region of the People's Republic of China.
[3] Generally, Mainland China refers the continent of the People's Republic of China, excluding the special autonomous regions of Hong Kong and Macao.

1.1 Previous Research

There is previous anthropological research about solutions for reducing the cultural conflicts faced in education. Cathie Jordan (1985) studied the poor academic performance of Hawaiian-Polynesian school children from lower socioeconomic classes, which improved with the help of anthropology. Key factors were a multidisciplinary approach, ethnography and creating elements for the school environment which reminded the children of their own culture. For example, the children were not used to the authorities or parents communicating directly to one child in their home. Instead, communication with the children as a group and the significance of the peers when doing homework were essential. When this was understood, peer work got more attention and teachers did not address questions directly to individual children, but rather to groups of children. (Jordan 1985.) However, more beneficial for my thesis was Huhua Ouyang's (2000) anthropological research into the conflicts faced in Chinese education regarding traditional and communicative teaching methods. I will address this topic later in my thesis.

It seemed that most of the comparative studies of Chinese and Western education which I found concerned Hong Kong. For example, one previous study addressed the challenges that American teachers face when teaching managerial communication at the University of Hong Kong. These challenges were related to classroom management, plagiarism, collaborative writing, oral and written skills, interaction and differences in reasoning and learning styles. (Roberts & Tuleja 2008: 476.) The article discussed the differences in study methods from both collectivistic and individualistic viewpoints. It appears that Chinese education is often teacher-oriented, which is characteristic of traditional classrooms. Nanjing University was the first Chinese university to launch a student-centred approach to teaching (PRC Study 2002–2008). Hong Kong has also tried to replace the traditional teaching model with a student-centred one since the 1980s, but without success. Primary school students seem to favour the rote learning model; constructivist models, which involve asking questions, are rare. (Yeung 2009: 377.) Risto Rinne, Joel Kivirauma and Erno Lehtinen (2015: 37) describe constructivist thinking to be an active process, in which beliefs or past experiences have a central role in observing and interpreting the environment.

In addition, there are practical issues which may slow down the adoption of student-centred teaching. According to Dan Wang (2011: 157) these impediments are for example a centralised

curriculum and teachers' lack of time. Student-centred teaching tends to be time-consuming and lacks predictability. Teachers in rural areas in particular are eager to practice teacher-oriented teaching methods. It is not that they prefer the traditional teaching style, but they feel that implementing student-centred teaching in practice is infeasible. The strict standards of the centralised curriculum and the tight schedules for learning the predetermined material mean teachers must teach the basic knowledge from the textbooks within a certain time frame. This was challenging in rural areas, where the students' performance was generally weak. A student-centred teaching method and decentralised teaching are difficult to achieve in reality. Lack of time leads to an unequal situation between rural and urban schools, which is visible at an economic, cultural and educational level. (Wang, 2011.) Teacher's time can be examined from a financial aspect as well. Dieter Timmermann explains that self-guiding in education can be seen from the labour or capital point of view. The former emphasises the teacher's role in education, which is demonstrated for example by investing in teachers' time. The latter focuses on the self-guiding aspect of student learning, which may be demonstrated for example by investment in software programmes. (Timmermann 2017: 151.) If Chinese education is based on labour, teachers' time may arise as a problem if what the literature shows is to be believed. The economic point of view may reveal something about the perception of humans and education in general.

Taoism, Buddhism, socialism and communist background also influence the concept of learning in China, but several articles emphasise the importance of Confucianism. According to Ouyang (2000) for example, textbook and examination reforms, as well as decentralised curricula, contribute to the communicative discourse system in China. Nevertheless, several researchers (Lo 1984, Zhong 1999, Hayhoe 1996) share the view that *Confucian conservatism as a long-standing and deep-rooted ideology continues to prevail in the Chinese education system through highly centralized curricula, which are characterized above all by being textbook, teaching/teacher, and test-centred.* (Ouyang 2000: 399.) In addition, Mark Bray, a professor at the University of Hong Kong, says that many East Asian countries consider education as a strong determiner of the future success of an individual and the Confucian heritage of the area emphasises the belief in the efforts and the benefits of education (Tan 2015). Chinese learners' habit of using deductive reasoning to save face is said to have its roots in Confucianism. In practice this is manifested by speaking indirectly to show others respect, giving one piece of information at a time and moving smoothly to the main point, which differs

from the direct, inductive reasoning typical of Western learners. (Roberts & Tuleja 2008: 482). Since the literature emphasises the significance of Confucianism, I have dedicated a section on this later on in my thesis.

1.2 Research goals and research questions

My objective was to find out the differences in the conception of learning between contemporary Finnish and Chinese education systems, specifically in relation to the teaching of SE. These can be recognised from the chosen teaching methods and their relationship to independent information acquisition and creation, which can be seen as culturally dependent. I also paid attention to how the concepts of hierarchy and freedom manifest themselves in teaching. A significant source of information for this was Chinese students' experiences of studying SE at UO compared with their study experiences in China. From the following research questions, I was able to gain information to achieve the ultimate goal: identifying the cultural and practical challenges facing collaborative education between Finland and China. The acquired information can be used when developing the education export of SE courses.

1. What is the status of and the relationship between the student and the teacher in Finland and China?
2. What are the differences in the conceptions of learning between Finland and China?
3. What cultural factors can influence the understanding of the differences in education?

Additionally, I aimed to find out about the kinds of preconceptions Finnish SE teachers have about Chinese culture and education and whether they have faced challenges if they have taught Chinese students. My goal was to examine any differences that arise in a broader sense, by looking at social relationships at the cultural level. I should mention that Chinese and Finnish cultures as a whole were not the targets of these research questions. However previous research and the findings of my thesis can give some insights into these cultures in a wider sense. It has to be remembered though that there can be variations between universities and classrooms.

2 Theoretical framework

The broad topic of my thesis, researching teaching methods from a cultural perspective, lies within the fields of educational and applied anthropology. The applied purpose was to identify which areas can be problematic for Chinese students in Finnish SE education. To achieve my objective, I used theoretical support from the following framework: Mary Douglas's *Grid and Group theory* (1982)[4], which forms the common thread of my thesis, in conjunction with Douglas, Verweij and Thompson's cultural theory of the four ways of life (2003). In order to use these theories, I examined the manifestation of individual agency, focusing on the classroom context. I also aimed to find out if there are any cultural differences in relation to collectivism and individualism between Finland and China. According to the collectivist thinking model, individuals are subordinate to the community. Only communities are significant and individuals are seen as part of the community. In political terms, collectivism is linked to the joint ownership of industrial and agricultural production. (Tieteentermipankki 2016.) Individualism defends the selfishness of the individual and recognises the individual's autonomy, self-determination and maximally unrestricted rights in society (Salonen 2000: 102).

Situated identity and *global and local mindsets* are also significant concepts related to the Grid and Group theory. In brief, situated identity means the structuring of a new identity for a new environment. Globally-oriented individuals are more likely to reshape their identities. Additionally, a general review of cultural perceptions of social relations, Richard Lewis's (2006) model of intercultural communication differences and Michael Berry's (2009) research into Finnish quietude give theoretical support. Confucianism and cultural differences in educational systems such as teaching models, constructivism and conceptions of learning, as well as Ouyang's (2000) traditional and communicative discourse systems are also significant.

2.1 Cultural differences in understanding social relations

Cultural perceptions of social relations are built differently in different cultures and their understanding gives some insight into the common thinking structures of cultures and acts as a starting point for my topic. For example, Roland Muller (2000) studied the interpretation of

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[4] Douglas first presented her theory in *Natural Symbols* in 1970, on which the later theory (1982) is based.

Gospel music in different cultures and made a distinction between cultures by defining three different world views: *innocence versus guilt, honour versus shame,* and *power versus fear.* Each culture has features of each view, but often one or two views are dominant. These views are not static but change along with the historical events that shape the cultures. In Western countries, there is a strong belief in right and wrong and guilt is avoided, while in Eastern Asia, the fear of losing face comes first. (Muller 2000: 20, 23, 69.) Anthropologist Ruth Benedict (1946) also wrote about the cultures of guilt and shame. She points out that in Japanese culture, the feeling of shame has the same kind of power as the feeling of guilt in Western cultures. Japanese know the exact rules for behaving correctly, which gives a sense of safety, but if those rules are disrupted, when, for example, confronting different cultures, harmony may be lost and Japanese may feel reserved. (Benedict 1946: 222-226.) Muller (2000:50) stated that generally in shame-based cultures, shame and honour represent the whole group and gives an example of Japanese school pressure: *In many eastern cultures, if shame cannot be hidden, the way out is suicide.* This can be very difficult to understand in cultures that emphasise individualism.

Marco Blankenburgh (2013), an expert in intercultural communication, wrote that innocence versus guilt societies are often individualistic and being right is crucial. The emphasis on right and wrong is also visible in the education system and the communication style is often very straightforward. Such behaviour can cause confusion in cultures where, for example, shame and honour are more important than being right. A person from an honour versus shame background cannot easily express his or her own opinion directly because groups are very collectivist, with the group as the primary consideration. (Blankenburgh 2013.) In Western countries, feelings of shame are often associated with poor self-esteem, but in many Eastern countries, shame is seen in a different way. Honour is expressed by speaking aloud only when there is something wise to say. (Muller 2000: 48-49.)

The aforementioned conceptions are examples of how the social environment can be seen in different ways in different cultures. This leads me to think that in Finland the dominant view may be innocence versus guilt, while Chinese culture emphasises the honour versus shame view, because, for example, saving face is crucial. It should be noted that the borders between these three views are not rigid nor black and white. An individual may have grown up in a power versus fear culture, an honour versus shame family and go to school under the innocence versus guilt system, not forgetting the individual tendencies for guiding thinking (Muller 2000: 70).

2.1.1 Agency and Grid and Group theory

Agency refers to how independently individuals are acting and making choices as a part of society. According to Maria Jensen (2014: 1) an individual's activity can be observed from a viewpoint where the society is seen as the main contributor towards shaping an individual's behaviour, or from the agent's point of view, where behaviour results from an individual's conscious choices. The former is related to Michel Foucault's (1980) thought that a person cannot think of ideas outside the structure to which he or she belongs and that thinking models are a result of historical processes. The latter is related to Pierre Bourdieu's (2000) idea that thinking patterns are born in social contexts. (Jensen 2014: 3-4.)

Tuula Gordon (2005: 115) connects agency to influence and power, as it generally refers to the capacity of individuals to make and implement decisions. From an individualistic perspective, an individual builds his or her own future and is also responsible for it. This belief is especially common among modern cultural and economic right-wing ideologies (Gordon 2005: 115-117). Lisa Adkins (2000) suggests that releasing the agency from the structure affects the ascriptive roles, by weakening them as determinants of individuals. Ascriptive means that roles such as gender, age or race define status in a society. Detraditionalisation, which refers to a decline in the significance of tradition, and individualisation, which emphasises an individual, start to appear and more space is given to rules and norms. (Adkins 2000: 259.) Piritta Pietilä-Litendahl (2014: 117) argues that the boundaries set by the community can make it more difficult for the individual to reach towards new agencies. Outsiders can see this as an individual having a weak ability to make decisions independently, which is represented as a behaviour of passive agency.

Global and local mindsets play a central role in determining the level of agency, especially when the restrictive boundaries become weaker. This is related to Ulf Hannerz's (1990) idea about *locals* and *cosmopolitans*. Global mindsets i.e. globally-oriented individuals are more sensitive to building new, situated identities, whereas those with local mindsets may settle for less change. As Clark and Gieve (2006) explain, the post-structuralist viewpoint seeks explanations for behaviour from the reshaping process of the identity. The impact of place on identity is one factor in explaining Chinese behaviour in Western classrooms. It means that in a new and unknown context, one's own national culture is suppressed or disturbed and a new kind of identity is created. (Clark & Gieve 2006.)

The agency of an individual and the cultural perceptions of social relations can be viewed, for example, through of power. For example, if power rests on a particular group, it can affect the individual's agency in the community. For example, the one-party regime controls citizens' actions in a different way than the multi-party system. Political environments are also reflected microcosmically. Outward representations of power may be recognised for example in military-style organisation or in that only an authority, such as a teacher, is speaking and the students are listening. A large group wearing similar uniforms or the locations of the rooms of authorities can also reveal something about power. According to anthropologist David I. Kertzer (1988), rituals justify power and power relations are seen as symbolic forms in culture. He gives an example of Confucian philosophers in ancient China, who realised that effective administration needs rituals. An individual's behaviour is influenced not only by their own conscious thinking but also by the rituals they are involved in. (Kertzer 1988: 13, 48-51.)

Agency in a classroom: activity as an ideal

In societally-restricted cultures an individual cannot or does not want to – or is not even aware of the possibility – to diverge from a group and question the authorities or on the other hand begin to construct information independently. Members have high loyalty to their own group, as the structure of hierarchical culture is different in principle to that of individualistic culture. This may also be reflected in the different learning styles in the classroom, perhaps as encountering difficulties to self-construct information. According to Gordon (2005) students who are quiet and sitting still in a classroom often give an impression of weak agency. This view may be misleading however, as Western culture often emphasises the activity that is understood through visible signs in a classroom. Gordon argues that often the best grades may come from students who exhibit superficially passive-looking studying. She discovered that learning is perceived to be feminine in Finnish classrooms, where boys are seemingly active and behave in an unfeminine way to express their masculinity. The mind can actively learn without external movement or speech, but the level of the agency depends on the interpreter. (Gordon 2005: 124-126.) However, the interpretations and definitions of agency are culture-related. Seeing quietness as a matter of honour may explain the Chinese students' taciturnity in a classroom, as irrelevant talk may be considered shameful.

If students sit quietly and do not take part in a discussion, why turn this into a visible activity if their grades are good? Leena Kurki and Tuukka Tomperi (2011) encapsulate the reason: external dialogue or debate with others is the primary method for developing thinking. The Western origins of this view lie in Ancient Greek culture, from 500 to 300 BCE. However, in China debating was already used as a teaching method from 1046 to 256 BCE. (Kurki & Tomperi 2011: 27-28.)

Communication skills are important when working in the international field of software development. Therefore, studying just to get good grades is not beneficial enough for the students. According to Kurki and Tomperi (2011) a teaching method based only on memorising single pieces of information is not an efficient way to learn, because the technology of information processing has developed rapidly. Critical thinking, for example, helps to pick up relevant information from the media. Referring directly to sources is typical for students because well-known and general opinions give a sense of security. Creative thinking is a way to see beyond the ego and gain new views, though going outside the comfort zone may feel uncomfortable. (Kurki & Tomperi 2011: 7, 172.) Creative thinking and an individual's activity are also desirable traits at the societal level. According to Anneli Eteläpelto, Tuula Heiskanen and Kaija Collin (2011: 11-12) creativity, critical thinking, risk assessment, problem-solving and management of emotions are for example targets of the European Union's education policy and entrepreneurship and initiative are seen as the main strengths of the lifelong learning.

China also launched the New Curriculum Reform in 2001 at all levels of education, the aims of which are for example creativity, diversification of curricula, switching passive and rote learning styles to problem-solving and active learning styles. Others include acquiring knowledge independently, increasing co-operation, promoting other evaluation methods in addition to exam-focused assessment and evaluating not only the growth of the student but also the development of the teacher and the school. Furthermore, there is a targeted effort to change from a centralised curriculum towards a decentralised one, where locality can have a role. (OECD 2016: 30-31.) Chinese education is increasingly decentralised and has non-governmental private sectors as well, but it is mainly run by the state (OECD 2016: 9). Applicants for higher education should follow the four basic principles of China: follow discipline, follow the law, love the motherland and be strong-minded in order to study hard for the socialist reform programme (OPH 2008: 12).

Grid and Group Theory

The Grid and Group theory by Mary Douglas (1982) can be used to further explain the cultural features behind agency. For example, high group pressure and hierarchy tend to restrict the agency of an individual. This may cause representatives of individualistic and egalitarian cultures to see individuals of hierarchical and collective cultures as passive agents in terms of expressing their opinions or thinking independently. *Grid* (network) is located vertically on the framework and represents the rules and the amount of control the group members can tolerate. *Group* is on the horizontal axis and reflects how controlled the individuals are within the group. Individuals are moving between the axes of their own free will and because of constraints of circumstances. Collective pressure maintains group coherence and this level of pressure varies. For example, a member of a group devoted to a religion has much stronger pressure to belong to the group than a person who occasionally visits a church. Such a group is heavily controlled from the inside and the members tolerate intense power over them. At the extreme end of the Grid-axis, you can see a highly hierarchical society where regulation is strong. At the opposite end there is a society that emphasises equality and whose individuals are free from the group pressures and structural constraints. (Douglas, 2007.) At the individual level, the location within the axes is more sensitive to change. However, if we think about the societal level, the location is more stable, but it changes in response to historical processes.

Sun-Ki Chai, Ming Liu and Min-Su Kim (2009: 194) emphasise the applicability of the Grid and Group theory for intercultural comparisons related to beliefs and values. They think that individuals who share the same views transfer their thinking patterns to the group, so the values at the individual and group levels do not often differ radically. This also works in reverse, so that individuals' behaviour, attitudes, beliefs and values are controlled by the culture. According to Chai et al. (2009) the location within the Group and Grid axes is defined by socio-economic factors and geographical location. They see that cultures sharing the same geographical area tend to have identical cultural characteristics and that generally for developed countries the influence of both group and grid is weaker than in developing countries. In addition, they point out that grid and group variables are found to be significantly less varied within a society than between different cultures. Ethnic and religious uniformity also resulted in similar features in group and grid variables. (Chai et al. 2009: 194-205.)

Douglas extends the Grid and Group theory with Verweij and Thompson by presenting four models for justifying, arranging and observing social relations: fatalism, individualism, egalitarianism and hierarchy (Douglas et al. 2003: 100). This extended theory is widely used in studying attitudes towards risks and beliefs. Individual behaviour is shaped by the surrounding culture, which can be detected when observing individuals' commitment to the group (Chai et al. 2009: 194). The following diagram (Figure 2) clarifies the grid and group and the four models in it.
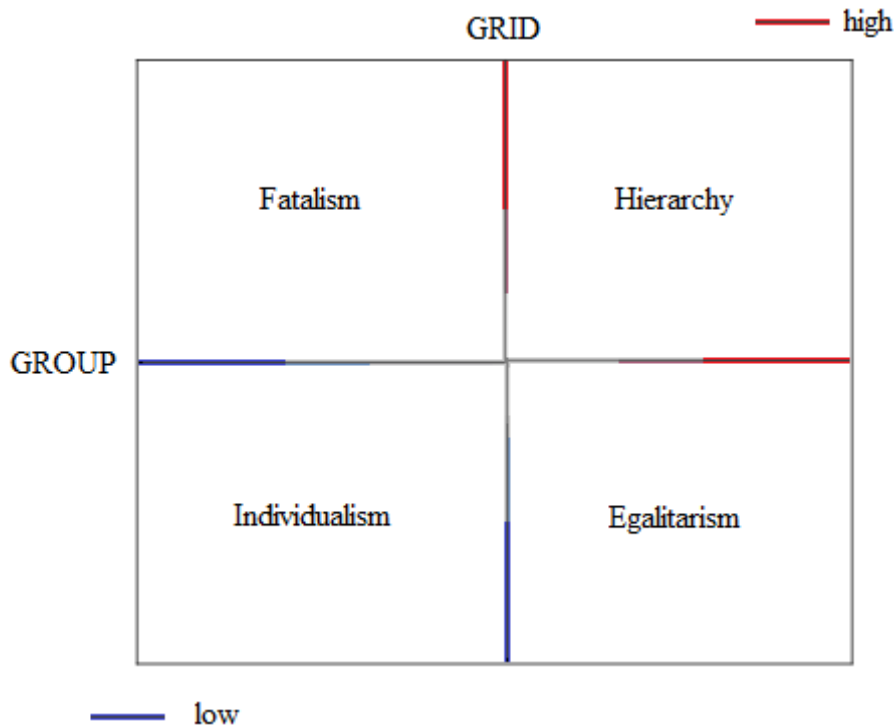
Figure 2: Different perceptions of social environment (Applied from Oltedal 2004: 19).

The fatalism quadrant emphasises correct behaviour (Douglas 1982: 4). In this square group boundaries and personal autonomy hardly exist, which may lead to high passivity (Handelman 1982: 164-165). It suggests that individuals do not have an influence for example in politics. (Oltedal 2004: 35.) An organisation where the prevailing view is fatalism can be recognised by its obedient, inferior and isolated members (Evans 2007: 10). In the hierarchy quadrant there is an appreciation of family and traditions and high-ranking members are allowed to have more power (Oltedal 2004: 34). For example, large institutions have hierarchical systems where the loyalty is appreciated (Douglas 1982: 4). Compared to a society

with low a grid value, a hierarchical society is stable over a long time and has less serious disagreements (Rayner 1982: 260). The square of individualism represents a competitive society, where classifications are negotiable because there are no ascribed statuses defining someone's place in the society. Individuals are significantly on their own and have more trust in dyadic alliances than groups because they are less threatening. (Handelman 1982: 165.) The egalitarianism square has clear outer boundaries, but the inner ones are unclear. Formal roles are not important. (Evans 2007: 8).

Seija Ronimus (2012: 3) has applied the Grid and Group theory to explain transitions in social environments, defining group as being related to the impact of other people or groups on an individual and grid as being related to classification, control and symbols of the environment. Ronimus shows with the Grid and Group theory how perceptions of the social environment are variable and applicable at not only an intercultural but also at a small-scale level. The theory can be used for example to analyse transitions during an individual's lifespan.

2.1.2 Cultural differences in social relations

According to multicultural specialist Richard D. Lewis (2006) the Chinese' *perception of time* is cyclical. Westerners often call for quick decisions, which is unfamiliar to Asians. Asians need long-term thinking and consider the past; time is moving in circles for them. Their commitment to problem solving matures in their minds for a longer time than with Westerners. Life itself is also seen as circular in Buddhist cultures, as things occur naturally despite rushing and controlling. This circular feature is seen in relationships, too, and Lewis gives an example of a business meeting between Americans and Chinese. The Americans can leave the table in a rush and go to the airport to return home, because they think the relevant information has already been discussed. By contrast, the Chinese will remain unsatisfied, as they have not yet reached a level of intimacy sufficient to gain trust. (Lewis 2006: 58-59.) I see this as being related to Chinese *guānxi* 关系, where the time-consuming building of relationships is of primary concern. This also relates to the previously mentioned differences in reasoning styles in Chapter 1.2 (Roberts & Tuleja 2008), which can be seen for example in working culture. In a Chinese context the relationship comes first, as opposed to matters in the Western context. However,

guānxi is a complex term and has a much deeper aspect to it, which I do not delve into in my thesis.

The Chinese are also particular about time; they even feel sorry when taking up the time of others. For them, it is not polite to leave a meeting without informing others beforehand. (Lewis 2006: 58-59.) Lewis (2006: xviii) has developed three models for explaining behaviour within cultures, which are: *linear, multi-active* and *reactive*. Lewis (2006: xix) describes examples of the reactive model as: *Those cultures that prioritize courtesy and respect, listening quietly and calmly to their interlocutors and reacting carefully to the other side's proposals. Chinese, Japanese and Finns are in this group.* In addition, *Finns, like Asians, think in silence.* (Lewis 2006: 36) On this basis, Finns and Chinese have similarities in communication styles, which reduces the challenges of collaborative education. Listening quietly, however, is based on various things, which I have already referred to, for example hierarchy and the Confucianist heritage in China: *It's a shame to talk if you do not have anything wise to say.* (e.g. Muller in Chapter 2.1)

Lewis (2006: 333) says the reasons for quiet listening are a lack of knowledge or shyness but Michael Berry, historian and researcher of Finnish culture, Donal Carbaugh and Marjatta Nurmikari-Berry (2009) argue that listening is a way to show respect. Being silent is a natural state for Finns, as it is related to harmony with nature and its quietude. Finns are able to be silent without feeling uncomfortable (Berry et al. 2009: 50-51). For example, in a business meeting, those who listen carefully before expressing their own opinions are respected in Finland (Berry 2009: 93-94). According to Berry, Americans had misunderstandings with the Finns (Berry 2009: 93): *There were problems with Finns because they didn't talk much, if at all. This American didn't know what the Finns were hiding, if they ever thought independently or whether they were even interested during the group discussions.* In this respect, Chinese and Finns are very similar.

2.1.3 Confucianism

Chinese individuals' behaviour patterns in Western classrooms have often been considered to be influenced by Confucianism. These patterns are for example a lack of critical thinking, passivity, rote learning and an unwillingness to participate in class discussions. (Clark and Gieve 2006.) China expert Jyrki Kallio (2017) confirmed in a conversation with me that *also*

in China quietness is a matter of honour and the reason for this is namely Confucianism[5]. Confucianism was the official creed of China from 136 BCE to 1905. It is a moral and societal philosophy, known in China as the school of *Ru* (儒家). It covers Confucius's[6] thoughts and the principles of the Ru knowledge. Confucianism has been interpreted in different ways depending on the era. Hierarchy, respect for ancestors, male domination and a focus on family were the ideals of the old times. Generally, the main virtues have been for example wisdom, respectability, filial piety, loyalty, respect for traditions, humility, self-cultivation, the ability to feel shame and behaving according to social roles. (Kallio 2017: 12-20.) Regarding courtesy, Confucianism gives the following advice: *Treat others as you would want them to treat you* (Kallio 2017: 19), a quote well-known also in Christianity.

The history of Confucianism is linked to education, as the Confucian temples were established in connection with the schools to educate the officials. The requirement for the position as an official was to know the Confucian canon. The attitude towards Confucianism has varied over time from blind obedience to outspokenness against the rulers. It has been an obsessive ideology where *breaking the traditions was seen as a greater risk to the state than famine* (Kallio 2017: 17) but it has also been used as an administrative tool by the rulers, who were considered as role models which the subordinates had to obey. (Kallio 2017: 12-20.)

The hierarchy emphasised by Confucianism affects the Chinese education culture. Kallio (2017) shares this view and reveals that in the early 20th century the teacher was called *Xiānsheng* (先生) i.e. literally "born before". However, Confucius himself did not emphasise the hierarchy as it has been understood later. He blamed one of his disciples for being useless for never saying anything against him (Kallio 2014: 100) and stated: *studying without your own thinking is deceiving and thinking without studying leads to danger.* (Kallio 2014: 93) Regarding hierarchy, Confucius said for example that the gentleman: *must discipline himself by following the hierarchical traditions*; *remain silent until he knows what he is talking about*, *study and teach without getting bored*; *recognise what he does not know* and *follow the ancient teachings without creating new ones and engage fully in ancient culture*. (Kallio 2014: 60, 110, 156.) Confucius encouraged his followers in studying and moral growth. He thought that a good administrator needs to criticise the ruler if it seemed that the ruler did not act for the good of

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[5] In this chapter all translations of Jyrki Kallio are translated by the author.
[6] Also known as Master Kong, Kungfutse, Kǒngzǐ (孔子) or Kongfuzi, 孔夫子 (born around 551–566 BCE).

the government, (Kallio 2017: 12-20.) but everyone must comply with their status in society (Kallio 2014: 182).

Today Confucianism is emphasised once again. Since 2004 China has established Confucius institutes around the world to raise awareness of the Chinese culture and language (China Daily 2017). Kallio (2016) states that today's political leaders in China are striving to achieve a leading position in the West by emphasising the Confucianist values of traditional teaching such as obedience of the rulers. The idea is to strengthen the honour and national unity of China.

2.2 Teaching models

Generally teaching models are divided into teacher-oriented and student-centred. According to teacher-trainer Leo Jones (2007), the student-centred model includes learning from each other and working in pairs or groups. Instead of the teacher's role as a knowledge transmitter, the teacher is seen as a guide to rely on when problems occur: *in a student-centred class, the teacher is a member of the class as a participant in the learning process*. (Jones 2007: 1-2.)

Education reformer John Dewey criticised traditional classrooms already in the early 1900s for being inflexible and forgetting the students' personalities. Students were seen only as passive knowledge absorbers instead of active information processors. In these classrooms the unified learning material and teaching method worked because all learning was based on listening. Dewey argues that reading a book is one form of listening, as the point is to adapt what others have said. When moving towards a student-centred approach, different variations of teaching and learning start to take shape. Dewey compares the change in education to a revolutionary transition, where the focus shifts towards the student. (Dewey 1915: 31-35.) He refers to Copernicus, who turned a geocentric view into a heliocentric one: *the child becomes the sun* (Dewey 1915: 35). Pauli Siljander (2014) talks about a similar phenomenon when he refers to the constructivist turnround in the social sciences, which originated in criticism against behaviourist learning conceptions in the late 1900s. This turnround launched the reformation of school curricula in Finland. Learning and the creation of knowledge, including rules, attitudes and social institutions, began to be seen as constructions of the mind. Moreover, the objective reality was no longer assumed to be the only basis of truth. At the individual level, constructivist theories believe in for example schemas, self-regulation and mental processes to

be relevant for learning and information acquisition, whereas at the socio-cultural level, the formation of knowledge is seen as cultural and communal. In Finland the emphasis has recently shifted from the individual to the community, so that socio-constructivist theories are emphasised in education. (Siljander 2014: 215-219.)

According to Risto Rinne et al. (2015: 206), Jean Piaget introduced a constructivist interpretation of cognition, where individuals actively adapt to their environments, assimilate new knowledge into existing knowledge or reshape new information to fit existing schemas, referred to as adaptation, assimilation and accommodation. Everyone interprets the basic structures of information in a similar way but constructs information either through assimilation or accommodation. Piaget's theory started the process of reforming the curricula and the assessment of learning outcomes, which have developed into important elements of education. Previously education emphasised the amount of information remembered. (Rinne et al. 2015: 37.) The student-centred model creates space for constructivist conceptions. The limited constructivist conception may can be seen in students' perception of information and ability to create and gather information themselves. It is also obvious that the teacher-oriented model may weaken individual's capacity for independent information acquisition. Furthermore, if a culture has for example strong hierarchy, individuals may have a high level of trust in authorities and they may be reluctant to express their own opinions. The Grid and Group theory can be used to explain differences between student-oriented and teacher-oriented models in relation to the learning environment. These models are represented in the diagram below (Figure 3).
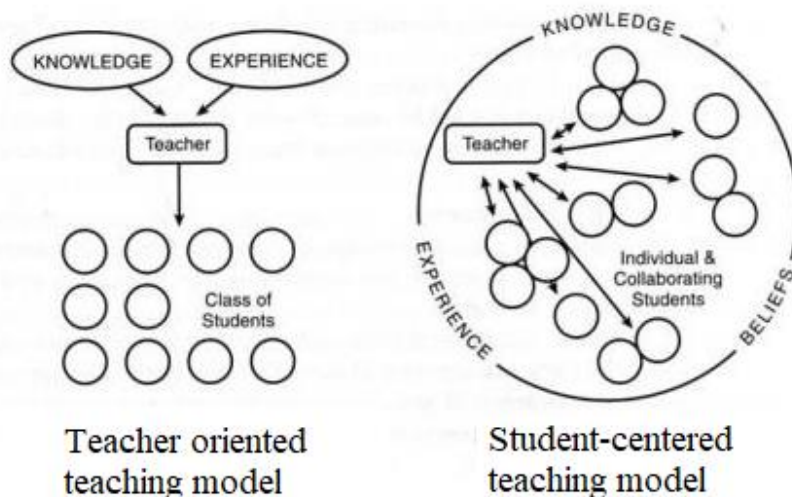

Figure 3: Teaching models (Applied from Ekta: 2016)

2.3 Traditional and communicative discourse systems

Ouyang (2000) presents the following story to demonstrate educational changes in China: to narrow the quality gap in teaching English between rural and urban areas in China, in the 1990s some rural teachers were sent to the developed metropolis of Guangdong to study at Guangwai (the Guangdong University of Foreign Languages). The purpose was to educate rural teachers in new communicative methods for teaching English, as in rural areas teaching was typically based on the traditional methods. However, this was problematic. Firstly, the fact that they were at the same level as or even an inferior level to the younger master's students caused confusion among the rural teachers. Secondly, it was common that they got poor exam results because the new evaluation method was based on a wider concept of things learnt instead of right or wrong answers. Furthermore, the skimming and scanning method of reading[7] differed from the intensive reading style. Ouyang gives an example of a teacher named Cheng, who, after a painful learning period, adopted the new communicative method and returned to her home school with enthusiasm. Unfortunately, the authorities there disrespected her new method and some students felt lost and lacking in support. This was because communicative teaching gave the opportunity for students to create ideas for themselves. In addition, parents regarded the new method as a threat if their children started to forget their place in society and acted too independently. (Ouyang 2000.)

At that time teachers in state-owned schools enjoyed the *iron rice bowl* support, which guaranteed a permanent job, healthcare and housing support from the government. Teachers sent to Guangwai signed a contract in which they promised that if they quit their job at their home school, they must pay a heavy fine and they will lose the permit for their personal dossiers needed when applying for governmental work. Furthermore, they will lose their iron rice bowl. Despite this, most of the teachers quit their jobs after leaving Guangwai and succeeded in getting higher-paid jobs in foreign companies or, like Cheng, teaching jobs in developed areas. Cheng devised a new teaching method in which she rejected the radical communicative method but approached the traditional values more gently, guiding the students towards interaction and developing themselves. Teachers like Cheng were not dependent on the iron rice bowl anymore.

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[7] Skimming is reading in a way that you get the general meaning of the text. It is not reading word-by-word but understanding the context. Scanning means searching for particular items in the text. It is used to find an answer fast without reading the whole text. (IELTS Advantage: 2007)

This kind of story created a new platform for reforms to take place and change was possible because the socioeconomic situation allowed it. (Ouyang 2000.) After Cheng's transformation, she felt displeasure when thinking of herself as an authority for the students: *Cheng had changed in such a way that now she was practicing as an egalitarian liberal in a strictly stratified hierarchy of authoritarian conservatism*. (Ouyang 2000: 414).

Ouyang describes the reshaping of the rural teachers' identities as being related to changes in different *discourse systems,* as described by Ron Scollon and Suzanne Wong Scollon (1995). Rural teachers contributed to the ongoing wider social reform in China and operated as pioneers, embedding the new communicative discourse system in the classrooms. At first, they rejected the communicative method because they were looking at it through the traditional discourse system. This same rejection happened in the traditional classrooms where teacher Cheng was not understood. (Ouyang 2000.)

Nanjing is a developed city and at NJIT there is experience of communicating with Western teachers. However, Chinese students may come from different parts of China and be more familiar with the traditional methods. Additionally, teachers may be older, with a traditional teacher identity, or they may come from rural areas. Whatever the situation is in the rural areas today, there are presumably still traditional roots in the education system.

3 Research methods and materials

My research is ethnographic and theory-guided. Jouni Tuomi and Anneli Sarajärvi (2004: 116) describe theory-guided research as being based on theory connected with the empirical data emerging during the research process. My material consists of interviews and observation. I acquired background information by interviewing Finnish information processing science teachers who will teach at NJIT. My main interviewees are Chinese who have experience of studying SE at UO. Interviews with Chinese teachers and students from the field of information processing science at NJIT also play a valuable role in my thesis. I did participatory classroom observation in the information processing science classes at UO and NJIT. At UO, I observed master's and bachelor's level courses. Some of them were taught in Finnish, but some of them were international and taught in English. Furthermore, most of the teachers and students in the master's programme at UO were international. At NJIT I observed bachelor's level courses

taught in Chinese. In addition to the lectures, I tried to observe various teaching models. At UO I observed a poster seminar, an individual-based practical class, a group presentation and computer practicals. When I visited NJIT, I had the chance to observe one practical class about distribution frames and a computer practical. The table below (Table 1) gives an insight into my observation times:

	UO	NJIT
Observation period	13.2 - 28.2.2018	5.3 - 15.3.2018
Lectures	11 h	14 h 45 min
Practical classes	8 h 50 min	5 h 50 min
Total	19 h 50 min	20 h 40 min

Table 1: Observation at UO and NJIT

I informed the teacher and students about my research whenever it seemed reasonable but in most cases it did not seem essential to report on it openly and transparently. To get a wider view and avoid distractions I always sat at the back of the classroom. I felt introductions were not always needed because I did not observe the students personally but instead focused on the general situation. At NJIT I was visible, because my ethnicity is obviously not Chinese and there were barely any other foreigners. I believe my presence did not have a significant impact on student or teacher behaviour during any of my observations. However, one interview with a Chinese teacher was conducted before the lecture, which may have affected the teaching style because unlike the other teachers he tried to have more interaction with the students. On the other hand, he was the youngest teacher and the only one with some experience of Western education. It should be noted that teachers' transnational mobility may have an impact on their teaching style.

I had a preliminary planned observation system which helped me to pick the relevant elements from the classes. I paid attention to how the studying and teaching were happening in practice. I wrote down for example observations of teachers' and students' behaviour and interaction, behavioural divergences from the usual studying patterns and details of my own participation if e.g. someone talked to me. When planning my observation form, I encountered

Andrei Prytkov (2017), who has compared Finnish and Russian teachers' communicative body movement. He observed e.g. facial expression, eye contact, gestures and aspects of voice like pitch, volume, tempo and intonation. He also counted movements such as how many times a teacher nodded. I did not find this method to be relevant to my research, however it probably helped me to better recognise the nuances of the voice and body movements. To provide more detailed information about my observation system, I have listed its themes in Appendix 2.

The interviews in my thesis were semi-structured theme interviews. A semi-structured interview is a theme interview because certain themes, planned in advance, are guiding the interview process (Tuomi & Sarajärvi 2004: 77). The aim of the Finnish teachers' interviews was to find out the teachers' expectations and presuppositions about Chinese students and whether they faced any challenges teaching them. By categorising these interviews, I was able to get some background knowledge on my topic and outline the different themes. For the interviews, I chose two teachers who did not have much experience of China or Chinese students and two with more experience. However, the interviews revealed that everyone had visited China, so they all had some kind of perception about the country. The teachers with more experience had visited the country several times and thought they knew Chinese culture *pretty well*. The two teachers with less experience had both visited China twice and felt they did not know that much about Chinese culture. Three of the teachers had 15 – 17 years of teaching experience and one had less than one year of teaching experience. The teacher's pedagogical studies varied from a few courses to 60 credits. They had no experience of teaching Chinese students in particular and one teacher did not have any international teaching experience. Two teachers had experience of teaching international students in general within the international master's programme, of which Chinese students might be the largest group.

My main interviewees were eight Chinese students who had experience of studying SE at master's level at UO. The purpose was to find out their conceptions and experiences of studying at UO compared with their learning experiences in China. It was important to recognise what kind of cultural differences they encountered and what factors in particular caused difficulties. I interviewed three of them in Oulu, three in Helsinki and two in China. Six of the students had already graduated from the GS3D master's programme[8]. All of them had earned their bachelor's degree in a Chinese university except one, whose degree was from a University of Applied

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[8] Master's Programme in Software, Systems and Services Development in the Global Environment

Sciences in Finland. To my surprise, one had graduated from NJIT. The longest time any interviewee had been in Finland was seven years and shortest just one and a half years. The students came to Finland between 2011 and 2016, so all the information gained about Finnish education was fresh. The study experience of a bachelor's degree is not totally compatible with master's studies, which may weaken the comparisons of Chinese and Finnish education.

At NJIT I interviewed six Chinese bachelor's level students (years 2 – 3) and six teachers, all from the field of information processing science. The students were between 20 and 22 years of age and majored in information engineering or communication. Their studies were related to software development, computer engineering and information processing. The teachers at NJIT had been teaching from 5 to 23 years. A few had received guidance from other teachers on how to teach and some had attended pedagogical courses, which varied in length from a few months to two years. I have to add that at NJIT I observed every teacher whom I interviewed but at UO I observed only one teacher whom I had interviewed.

Informants are anonymised due to ethical reasons. Furthermore, not everyone wanted their name to be published, so I have maintained privacy for all interviewees. The participants are coded to protect their anonymity and the codes show which group is in question. The code TR referred to in the direct quotes means translator and for ease of readability these quotes have been edited. Below is a summary of the interviewees and codes. (Table 2)

Informants (15 males, 8 females)	Date of the interviews (month/year)	Age of the informants				
		20-24	25-30	31-40	41-50	51-65
Finnish teachers, coded O1-O4	4/2017			2		2
Chinese with experience of UO, coded S1-S8	1–3/2018	2	5	1		
Students at NJIT, coded X1-X6	3/2018	6				
Teachers at NJIT, coded L1-L6	3/2018			2	4	

Table 2: General overview of the interviews

The use of voice recorders and the abnormal situation may have affected the informants' answers, as well as my status as a researcher and a foreigner. There was a great risk for misunderstandings due to the language barrier. Naturally there were less language problems with the Chinese who had studied at UO because generally their English skills were better. All but two of the interviews carried out at NJIT involved a student translator, which also increases the risk of misunderstandings. Fortunately, I often managed to have the same students as translators, so I did not have to explain the same things for every interview. Sometimes the interviewees or the translators did not understand my English and wanted to see the questions in written form. At times a mobile phone was also used to help with the translations. However, understanding for example the word *activity* was problematic even after translation. There is also a reason to believe that with the students' interviews at NJIT, most of the participants were at the top level of the class. This is because when the teacher asked for volunteers, a few students came from the first rows. However, one participant I found myself.

Students at NJIT preferred to come to the interviews in pairs or when there was a group of people around. I informed them that the interviews are private and conducted them with one individual at a time and also explained that others should not listen to what the interviewee is saying or to my questions. I also said that I would prefer one translator to be present but otherwise the environment should be quiet. Because of the language problems and cultural differences, my wishes were not always fulfilled. For one student interview there was an informant, a translator and the informant's classmate who also said she was a translator. On one occasion the interview included a teacher, his assistant and two translators. Sometimes I decided to ignore the possible errors on the recording caused by too many people being present. I knew that collectivism and relationships, related to the previously mentioned guānxi, means more than trying to achieve things according to my own wishes.

In some of the interviews at NJIT there was some giggling but mostly the interviews were calm and smooth. I cannot guarantee that the opinions were completely those of the interviewees, as they could have been mixed up with the translators' own opinions. Furthermore, one translator said to me that the answer is same as that of the other interviewee and I had to say that I do not allow that kind of answer, as the translator has to pay attention to the expressions of each individual interviewee. Sometimes, two translators turned out to be beneficial because they collaborated and translated in turns or checked translations with each other. During one teacher's interview the translators were laughing and the atmosphere was

relaxed and I felt I was becoming closer with the people at NJIT: At the end of the interview everyone including the teacher smiled and I felt we shared the same sense of humour despite the language problems. Later one of the translators told me that *It was hard to avoid laughing because the teacher tried to be so serious.*

For the themes for my interviews, some topics were chosen from the literature, for example Confucianism. My interview questions focused mainly on finding out the relationship between the position of teacher and student and the conceptions of teaching. The Finnish teachers' interviews included for example conceptions about the Chinese education system and the cultural and educational differences between the Finnish and the Chinese. The teachers' own teaching styles, ethics in education and assumptions about education export were also discussed. The students at NJIT faced questions related to copying others' work, respect for the teachers, teaching methods, students' behaviour, personal learning styles, the students' level of activity, initiative, studying experiences and thoughts about Confucianism etc. For more detailed information, I have attached two interview forms to show an example of my questions (Appendices 3 and 4). After transcribing the interviews, I analysed the material to extract the emerging themes. Similar opinions were collected under the same topics.

As part of the analysis process, studying agency is complicated. I discovered that Gordon (2005) used the method established by Jill McLean Taylor, Carol Gilligan and Amy Sullivan (1995), where the idea is to code the self-expressions from the interviews. Taylor et al. (1995) observed how young women talked about themselves, focusing on the activity of the speech as they picked "I" expressions connected to a verb, combined them and removed the rest of the speech content. After this, they were able to analyse at what level the individual was in the social and cultural system. The contextuality is seen for example in experiences, conceptions and feelings related to the restrictions and possibilities of agency. Observing self-expressions can help to get some idea of the individual's conception of their own agency. This is revealed for example by how often the interviewee uses "I" versus "we" expressions (Gordon 2005: 119-123.) I did not use this method systematically, but this idea probably helped me to pay attention to some "we" expressions from the interviews, which I will come back to later.

4 Exploring educational cultures

Firstly, I will describe the general differences between the Finnish and Chinese education systems from the point of view of student life and introduce some structural differences between NJIT and UO. After that I will describe the teaching methods and then move on to the interview findings and analyse the materials in light of the theories.

4.1 General differences between UO and NJIT

In China students live in dormitories on campus. Females and males are separated and it is typical that around four to six students share the same room. Student life is somewhat controlled for example by curfews and restrictions on visits by the opposite sex. Dormitory life may be seen so that students are taken care of, they can feel safe and socialise with the other students, being young adults, who usually start university around 18 years of age. It is also possible that they come from another city and be far from their parents. In Finland students often live independently and sometimes near the university in so-called student apartments.

The buildings on the NJIT campus are separate and distant from one another, but at UO the campus has one main building, which covers several faculties. The campus area at NJIT is huge, with a beautiful environment of plants and a lake which make it comfortable. I got also a chance to visit the library, which was big and seemed to be a convenient place for concentrating on studying. I asked to see the English books and found out that there were not many of them. The students at NJIT were helpful; they took care of me and made sure that I got my daily coffee or found the right classroom, for which renting a bicycle was convenient. One student also brought me a chocolate bun, cup of noodles and a soya milk for a lecture and on one cold and rainy day one interviewee brought me a heater. Sometimes the students accompanied me to the lecture. It did not matter if they were ordered to assist me, as other students were also always helpful. Students liked to take pictures with me and add me on WeChat[9].

When thinking about the SE curricula at NJIT and UO there are some structural differences, as studies at NJIT include also mandatory courses like Marxism, military studies and sports.

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[9] WeChat (Wēixìn 微信) is a Chinese Social Media application used for example to share pictures or send messages.

Students can choose a sport from various options such as football, basketball, volleyball, wushu (a martial art), yoga etc. Students may also choose voluntary subjects like Japanese or music. In Finland there are no compulsory sports courses at university. One informant assumed it is due to Finnish weather: *Here* [at UO] *there are no* [compulsory] *physical education, music, history or politics courses. Those are mandatory in Chinese universities. I think maybe because of the weather in Finland those kinds of sport courses are not allowed.* (S1)

4.2 Teaching methods

At UO there are various ways to complete the course but in China the courses are usually passed by sitting final exams. At UO there are several different teaching methods, like lectures, computer practicals, presentations, essays, seminars, diaries, assignments, discussions, articles, group work, e-learning and remote learning, which may be for example watching videoed lectures. Digital platforms are also commonly used at UO, but hardly ever at NJIT, even though some exist. Furthermore, e-learning does not exist at NJIT. One teacher reported: *Chinese students don't need the e-learning because we study all day so we don't need to have this* (L2). Teaching methods at NJIT are mostly limited to lectures and some practicals[10] but also included visits in enterprises. Some informants mentioned competitions, group discussions, speeches and presentations as well, but these are rare.

Studying at UO takes place in smaller groups, but also in bigger classrooms with lots of students, while at NJIT, the number of students in a single teaching situation was often close to one hundred. During my observations the number of students was 5 to 38 at UO, compared with 48 to 117 at NJIT. During the practicals, the number of students varied from 11 to 31 at UO and from 22 to 37 at NJIT. However, the latter number is misleading because the teacher has three classes at the same time, with 120 to 150 students to be taught in total. At UO, the atmosphere felt spacious and there were numerous empty seats and space between the students, while at NJIT, students were sitting close to each other and the atmosphere felt more crowded. At NJIT, all the students were in their twenties but at UO the age range was wider.

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[10] At NJIT the commonly used term for practical class was 'experiment'.

Lectures

During the lectures students paid more attention to the teacher at UO than at NJIT. Interaction between the students and the teacher was limited at NJIT. Some students were actively listening to the teacher, especially in the front rows, while some others slept or played with their phones. At UO, it was also common for some students to play with their phones, but this happened less often than at NJIT. At UO, some students also used their laptops, which is forbidden at NJIT. The observation was carried out during the Winter Olympics and some Finnish students watched ice hockey or skiing on their phones. At UO the students chatted more with each other, sometimes even without using a quiet voice, especially in the international lectures. At NJIT there was hardly any communication between the students during the lecture and if there was a small discussion it was more like whispering.

Generally, the teachers at UO had a less expressive performance style than the Chinese teachers at NJIT, whose style sometimes felt attacking due to their loud and intensive voices. Their fast and rhythmic way of speaking is natural because Chinese language has four tones. Teachers at UO were the opposite, generally tending to be monotonous and calm speakers, though some of them spoke faster and in a livelier way, but still far less so than the Chinese teachers. The Chinese teachers also spoke continuously, but teachers at UO took more pauses. Sometimes the teaching style of the Chinese reminded me of the authoritarian style. I think it was because the expressive style works better for a higher number of students, but it also somehow keeps the order, a feature of Chinese culture. At NJIT, PowerPoint slides and sometimes the blackboard were used for teaching. Textbooks were also commonly used and most teachers browsed the book a few times and asked students to find a particular page. This suggests that the teachers have to teach a predefined knowledge set from the books. Chinese teachers did not react if the students slept, for example. Students stood up to answer the questions with three of the teachers, sometimes using a microphone. The teacher might stand in front of the student whose turn it is to answer and keep talking for a few minutes before allowing the student to sit. To me it looked like training. On one occasion a teacher spoke with a grumpy face to the student who was answering and the other students laughed. I asked my assistant why they were laughing and he told me that it was an easy question but the student didn't know the answer. This suggests that the teacher has a high status and the students are under pressure to answer correctly in front of their classmates as well and because of this the

atmosphere felt more serious at NJIT. However, at NJIT there was also another performance style: one teacher tried to have more interaction with the students, who often laughed. I asked my assistant more about this laughing and he replied: *Teacher is trying to teach some interesting thing with jokes.* The following picture (Figure 4) represents a typical lecture at NJIT.

Figure 4: A typical lecture at NJIT in 2018 (Photo E. Roininen 2018)

The total number of students in the lectures was around four times greater at NJIT than at UO. It has to be noted that the number of students may impact on their interaction with the teacher. At NJIT, individual students stood up eight times to give an answer and four times a small group of students answered at the same time in chorus. The latter, of course, was regarding short calculation or yes/no questions. At NJIT there were only a few times when a student said something without standing up. There were also more situations where the teacher said something and the students laughed. After class six students went to talk to the teacher at NJIT, which was similar to the number at UO. It is more common in China to ask questions after the

class rather than during the lecture. At UO the teachers did not assign questions to individual students; if the students wanted to answer questions they raised their hands or just spoke aloud, but they never stood up. The most important difference was that there were discussions during lectures at UO, which were not present at NJIT. One international lecture at UO was lively, with lots of laughing and debating. In some of the lectures the students actively discussed the topic, but in others they were mainly quiet. In other words, there were some traditional lectures at UO as well. The total number of students' spoken reactions during the lectures at UO was 63, compared with 17 at NJIT. The actual number was higher at UO in those lectures where there was discussion because it was not possible to count the spoken reactions during lively talks. I created a table to demonstrate the amount of interaction during the lectures, excluding the combined lecture-practical at NJIT. (see Table 3) In this table, S means student and T means teacher. Another table (Appendix 5, pp. 93) provides a closer look at the lectures at NJIT.

	Number of students	Language	S is sitting and saying something to the T	S are answering in chorus	S is standing up to answer	T is speaking, and S are laughing	Discussions	Total nr of S reactions
6 lectures at UO	5	Eng	1					1
	37	Eng	1					1
	14	Fin	6				+	6
	38	Fin	7				+	7
	30	Eng	28	1		++	+++	28
	14	Fin	19			+	++	19
UO Total	**138**		**62**	**1**				**63**
8 lectures at NJIT	105	Chi			1	+		1
	51	Chi			2			2
	74	Chi		1		+		1
	73	Chi	1			+		1
	117	Chi	3	1		+++		4
	82	Chi	1	2	2			5
	48	Chi			3			3
NJIT Total	**621**		**5**	**4**	**8**			**17**

Table 3: Summary of number of interactions from the lectures at UO and NJIT

Practical classes

I observed four different types of practical classes at UO: 1. The group presentations took place during an international class, where one group had to oppose the other. The students were

relaxed and there was a lot of discussion. At one point there was a high-tempered debate and the teacher had to cut the discussion short. At the end, everyone had to give oral and online feedback about the course. 2. A practical class which involved a choice of either group work, which was done in the practical class, or individual work. The group work class had a teacher's assistant who just introduced the task. The groups worked independently and there was hardly any interaction between the assistant and the students. Students were able to find the introduction, slides and group discussions in Optima, the virtual learning platform. 3. Computer practicals were done individually or in groups. The teacher circled around the class, discussing and helping students with the exercise. Students who had completed the exercise often had to wait for the teacher to check it. The atmosphere was relaxed, with some students for example taking selfies and laughing. 4. The poster seminar had three teachers because it was the final class to combine the teacher from the lectures and teachers responsible for the practical groups. The course included lectures, practical classes and essays and students got extra points for attending the lectures and seminars. The course had some distant learning groups as well, which meant that the students could study remotely. The atmosphere in the seminar was relaxed and teachers showed an encouraging picture to the students which is presented below. (Figure 5)
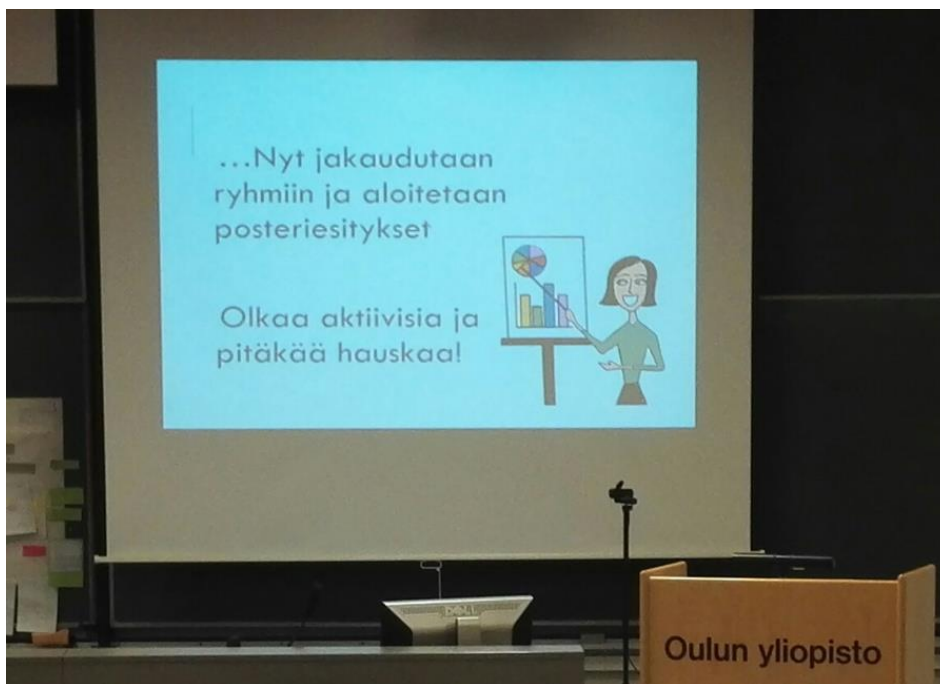

Figure 5: Students are encouraged with the text *Now we divide into groups and start the poster presentations. Be active and have fun!* (Photo E. Roininen 2018)

At NJIT, during the computer practicals the teacher visited each class in turn, as three classes were taught at the same time. When entering the classroom, the teacher talked continuously and walked behind the students and then back to the front, repeating this a few times before continuing to the next classroom. The students studied independently using the computers. During one observation the teacher also stopped on a few occasions for a short period of time to talk to the students and together they looked at the computer. At NJIT I also observed a practical class combined with a lecture. After the lecture everyone moved to the so-called experiment room to practice using the distribution frames. The teacher demonstrated the task and communicated with the students. The students worked in groups and wrote notes. The atmosphere was relaxed and noisy. For example, there was kidding around and playful slapping amongst the male students. In addition, one student wore headphones and practiced some dance steps and another took a short phone call. During the same class, when the teacher had to fill out my informed consent form, I was surrounded by six to ten curious students. One of them helped the teacher to fill out the form, looking up the teacher's personal information on the computer, as well as conversing with the teacher. The relationship between the students and the teacher seemed like a friendship. Below is a picture (Figure 6) of the practical class about distribution frames.

Figure 6: Students practicing using distribution frames at NJIT (Photo E. Roininen 2018)

4.3 Cultural differences between Finnish and Chinese in general

In this chapter, I introduce first the interviewees' aspects of general cultural differences between Finnish and Chinese with experience of studying at UO and then move forward to Finnish teachers' views. After that I cover the difference in perception of time in general between the educational cultures.

The Chinese interviewees with experience of studying at UO generally defined Finns as being not as open as the Chinese and eager to keep their own privacy. However, some also mentioned that Finns have topics they do not speak about, like asking about another's age or salary and that they speak more directly than the Chinese, with whom you need to think what they really mean. For example, one interviewee mentioned that when doing group work, Finns will express their opinions, both negative and positive, about others' work. It can be concluded from these views that Finns tend to keep their own privacy but when they speak, they are direct.

In Finland you prefer to have personal space or kind of privacy, maybe it's not privacy for you, but I think it's kind of privacy for Chinese people. Like you don't like people to ask a lot or get too close to you. (S3)

I think in general Finnish people like to keep their distance from others. At university, in a company, it's the same. […] *Try not to talk about personal stuff in Finland or if you talk about it, people will think you are so weird. All the people just talk about the weather and movies but not family nor friends.* […] *We don't like to talk about the weather.* (S5)

Conversely, the Finnish teachers emphasised that communication is not straightforward in China and for example saying *no* is avoided. Finnish communication style was regarded as more direct and some also pointed out that Chinese fear losing face. Chinese society was defined as being hierarchical, but some also mentioned that it is communal and family-oriented, differing from the more individualistic Finnish culture. Furthermore, it was thought that the Chinese perception of the world may be limited due to censorship. Two teachers considered Chinese as well as Finns to be reserved. Generally, Chinese people were referred to be polite,

formal and hardworking. The following example from a Finnish teacher represents common view amongst of Finnish teachers:

The word "no" is barely used so for the Westerners, the communication is a bit difficult at first, it is not straightforward in the same way as in Finland. (O1)

I also noticed during the interviews that the speaking style of some of Chinese informants was not always straightforward and sometimes it was hard to get the real meaning. I don't believe the language was always the problem but more likely the Chinese habit of speaking in an indirect way. These kinds of customs are probably related to individualism and collectivism, which I will focus on more later.

4.3.1 Perception of time

At NJIT a school bell rings to indicate the beginning and end of lessons and the ten-minute breaks. At UO there are no ringing bells and there was only one break during the long lecture. A few times I was late for class at NJIT, for example, because at the beginning I did not realise the huge size of the campus. To go from one side of the campus to the other took around 15 minutes of fast cycling, then I had to find the right building and classroom, which was not always easy. Once my assistant brought me to the door of the right class and said it is embarrassing to go in late and left. The class had started three minutes earlier, so I knocked lightly on the door, apologised and went shamefaced inside. The teacher just indicated to me to take a seat and the lecture continued normally. However, on another occasion one student came in four minutes late and everyone laughed including the teacher. From all my observations at NJIT, only two students were a few minutes late. Looking at UO, 81 students were late, 24 of whom were more than 15 minutes late. The importance of Chinese punctuality discussed early in this thesis in Chapter 2.1.2 (cf. Lewis: 2006) was therefore visible during my observations. Additionally, one informant with experience of studying at UO informed me that in China students do not dare to come to class very late and their absence affects their grades. Going out of the class and returning, as well as leaving the class before it was over, also happened more often at UO than NJIT.

4.4 Teachers' narrated perspectives

In this chapter I focus on teachers' aspects on perceptions about educational differences and their personal teaching styles. Finnish and Chinese views will be discussed, respectively.

4.4.1 Perceptions about educational differences

All the Finnish teachers thought that the teacher is the authority in China. Chinese education was considered to have less independency and initiative compared with education in Finland. Some teachers mentioned that it is hard to get the Chinese students to participate in a lecture because they do not ask questions. However, all the Finnish teachers also considered that the Finnish students do not participate actively during lectures either. As a matter of fact, one teacher explained that at UO the large group sizes and time-consuming planning make implementing interaction difficult whereupon this interviewee defined teaching SE at UO to be mostly teacher-focused. When the teachers thought about teaching at NJIT, they raised concerns such as language problems, the students' access to information (as Google is prohibited in China), the availability of the English materials and information security.

> *Respect for the authority there, in the Chinese is that bigger factor so that it is not easy to say against. If there is a boss with you, you will agree.* (O2)

> *The relationships are not so close; maybe I could describe it so that students really do what they are told to do. In the corridors, they instantly just talk to the teachers, but in the classroom situations, I have noticed, that they sit very nicely and neatly like in the old days.* (O4)

Correspondingly, Chinese teachers' experience of Western education was limited. It was pictured to be for example more practical, having more interaction with the teacher and respectful of the students' abilities to develop their own ideas, even before starting university. Other perceptions were also revealed, such as getting bachelor's degree may be easier in China or that Western teachers are more relaxed, as one teacher had noted in Europe: *Sometimes they can drink coffee and maybe go on holiday.* (L4) It was also mentioned that Chinese students are

not so healthy because they are working too hard before university and that is why Western students can give more attention to studying at university. The following opinion suggests that Chinese education has a tendency to focus on labour as noted by Timmermann (2017) in Chapter 1.2, as the teacher's time was seen as a crucial factor:

Compared to the Western students, Chinese students tend to be shy, so they mostly listen to the teachers, but they don't communicate with them, but I think this education is effective because we can save the time. (L2)

All in all, Chinese teachers saw education in China as challenging because of the large population and emphasis on exams. In general, they also thought that students are not free as their attention go on grades and that education is based more on transmitting knowledge to the students. It seems that this is not the teachers' own choice, but they do not have any other options. From the Chinese teachers' interviews there emerged some aspects of individualism, such as the need for communication and the exchange of opinions in the classroom and that students should learn to use their initiative and be active learners.

The teacher thinks the class in China is too serious. (L1)

Generally, our students lack the chance to exchange their ideas with the teachers. (L3)

4.4.2 Personal teaching styles

Generally Finnish teachers prefer a conversational style of teaching. Group work and projects were also said to promote students' activeness. Finnish teachers described their personal teaching styles, for example one of them described the method where the teacher selects a student to answer a question by throwing a beanbag. After commenting, the student then throws the beanbag to the next student. Furthermore, learning by doing and constructive alignment were mentioned. The latter was explained as directing the evaluation towards those things that the teacher wants the students to learn, with the teaching focused on those same things.

It was also classified as student-centred, where the teacher is more like a guide and does not explain everything thoroughly.

I like the American style of teaching, where there is a lot of discussion and perhaps in some sense criticism and questioning and so forth. That will promote learning in a different way than just sitting and listening. (O4)

On the contrary, Chinese teachers' thoughts of their teaching style included: highlighting the students' own interests; combining theory with practice; using the blackboard instead of PowerPoint; picking students to answer questions but also letting them to come to the front to teach, when the others must give opposing views; and sharing knowledge from the book but sometimes from a computer. Some Chinese teachers brought up the importance of teaching the students how to learn, search for information and find answers by themselves. One highlighted the caring attitude of the students: *The main aim of the teacher is to discover the students' talent and teach them how to learn and rely on their dreams.* (L5) Teachers' own working experience was also seen as helpful for students' job hunting and for combining theories from the book with the practice. On a practical level, the teacher's own teaching style was described as follows: lecturing, communicating with the students; doing PowerPoint presentations; giving interesting examples from real life; using jokes; organising some projects after class; asking some questions by pointing to a student to give the answer; and giving some questions to answer for the next class. It was also described that there may be group discussions about some given topic and the students choose one group member to give a speech on that topic. The following description represents a typical Chinese lecture: *The teacher will write the important knowledge on the blackboard; the students will write it down. So, most of the time, the teacher is talking about the important theory and the students are listening, so after class they maybe think about the what teacher said in class.* (L3)

All the Chinese teachers thought that it is important for students to search for information by themselves. The methods that the Chinese teachers used to encourage independent searching were for example giving reminders about it, giving some homework such as texts, questions or key words to study, for which there are some programmes or blogs to help. One said he

recommends English materials to read but students are not willing to read them, nor the Chinese materials for that matter.

4.5 Studying experiences in general

In this Chapter I first introduce some features of the Chinese education, study burden and then introduce the students' activity in the class.

4.5.1 Competitiveness and high school studying pressure in China

In China educational resources are not evenly distributed between the provinces, so every student must compete with all the other students in China, which means several million students per year. The university entrance exam, Gāokǎo, strongly determines the future of young students. The higher the score you get, the better the university you can get into. It often matters at which university you have studied when you apply for work. However, some informants raised the point that personality and relationships matter as well. Therefore, the importance of guānxì, where relationships are the key, comes up again. Gāokǎo is the students' path to getting a bachelor's degree and after that, they can apply for a master's degree by taking an exam called *kǎoyán* (考研) (Jiang Jing 2018). Yvette Tan (2016) describes gāokǎo as including for example the testing of students' English, mathematics and Chinese skills, as well as their knowledge of the field that they are applying for.

Studying at high school is seen as very tough and lacking freedom. Students have to study from morning until late in the evening and there is a great amount of homework. High school teachers were seen as responsible for the student' success: One student at NJIT mentioned that teachers at university are more like friends but in high school they are stricter, but that this is only to help students to pass the gāokǎo. Another interviewee, with experience at UO, compared high school teachers to parents and explained that if the teachers manage to get their students into university, their high school becomes more popular.

Competitive spirit prevails also at the university level: when I asked the students how they had succeeded in their studies, one student at NJIT responded that she was tenth in the class (40

students in total) for her exam scores. The following example give impression about the study burden:

When I studied at secondary school, I woke up at 5 a.m., and had, let me count, sixteen lessons and I would get to sleep at 11 p.m. I had thirteen minutes to have my lunch and fifteen minutes to have my supper. So, it's really wrong - you can see students running in the school from the building to the dining hall or to take a shower. So, I think students in China need some rest, yeah. But when the students in China get into university, they are too relaxed. (X2)

Chinese University tend not to be free, so the students lose their interest in study day by day. The school has put lots of stress on us, so we will lose our interest and we just want to pass the exam. (X3)

4.5.2 Workload and flexibility of studies

In this chapter I focus on describing the workload and flexibility of studies from the viewpoint of the Chinese students with experience of studying at UO. For some of them, the number of assignments, wide variety of methods to complete the course and the checking system for plagiarism in essays were challenging at UO. Finnish education was seen as more flexible because at UO there are for example three chances to do the exam but in China only one. Also, at UO it is possible to be absent for two years, students do not need to come to campus every day and they may for example e-mail the teacher and say they cannot attend the class and return their homework by e-mail. In China there is no flexibility with studying time: the bachelor's degree is four years and the last year is for job hunting.

Generally, it seemed that there is more homework at UO compared to the Chinese universities. One informant pointed out that students at Chinese universities are not eager to do homework because it is not meaningful while at UO the tasks are useful and for example part of the teamwork. One teacher I met at UO gave me an insight into student freedom when he told me that students can be crafty: one student was absent from a practical class for two hours, then came to the class and said that she/he had just attended the compulsory lecture and completed the exercise there.

Conceptions of studying at NJIT and students' impressions of Western education

Based on the conversations with the students at NJIT, education at university is also exam-focused and students lack initiative. Challenging factors for studying were mentioned to be for example the difficulty of some subjects, the huge number of new things to learn and the fast studying pace. One student was not used to studying at university, because it is oriented more towards working life, whereas with studying at high school the idea was to study the basic knowledge. Another complained that the library at NJIT closes too early (9 p.m.), which may say something about the students' motivation for studying. Some students wished they could have more practicals and more communication with the teacher:

[Studying at the NJIT] *I don't think it's very complicated, because you just need to listen to what the teacher said in class and do the things he told you to do, then you will pass the exam. […] I think we could add some communication, but the teachers are very strict and hard on us. So, I think the teachers are great but because of the situation in China, we cannot communicate* [in class]. (X2)

The students at NJIT who had some idea about Western education thought for example that students are freer before university and university is easy to enter but hard to finish, which is the opposite of Chinese education. They also assumed that Western education has group work and fewer students in the classroom, which contributes towards noticing the student personalities:

Western teachers can notice every student in the classroom so that their personalities can be developed compared to in Chinese classes. But the Chinese teachers are giving more time to the students, because they need to be sure that everyone in the classroom has got the knowledge, so the teachers in Chinese classrooms are more responsible. (X6)

4.5.3 Students' activity in class

In this chapter, I introduce first the opinions on students' activity in class from informants who have studying experience at UO and then the opinions of students at NJIT. Thirdly I present the Chinese teachers' view.

Half of the informants who have experience studying at UO defined an active student as one who offers questions. Some considered that an active student also for example reads the PowerPoint slides, listens, thinks actively, expresses opinions, answers questions, does not play with their phone and works well when defending his/her own opinions during group presentations.

The students at NJIT defined an active student as for example one who communicates with the teachers during or after class, searches for information after class, asks or answers questions, sits in the first row, follows the lessons or has a role helping other students:

[Active students] *They will ask questions, yeah and they will solve the questions for the classmates or for the teachers. Because like, if you have some problems you can ask them and they will be happy to help and also the teachers.* (X2)

From both of the interview groups only two students considered themselves as active students: one at NJIT and one who had experience at UO. The first said he asks questions directly from the teacher. He seemed to be globally-oriented and also had impressive English skills and plans of continuing his master's studies abroad. The second explained that Chinese students usually discuss matters in the class and at UO they are even more active than other nationalities. This opinion differed from those of the other interviewees, as they generally considered Chinese students to be shy listeners and not that active. However, at NJIT I had the sense that the teachers favoured some students and according to one informant, in the whole class there were three to four active students:

A boy in my class will sit beside the teacher and when the teacher begins the lecture, he will put up his hand to ask the teacher something and the teacher will answer him publicly and the rest of the class will listen. Sometimes the teacher asks him a question and he has to prepare a PowerPoint presentation for the next lecture. (X4)

The following comment from an active student reveals that relaxing and listening seems to be a habit, even if you are an active person yourself:

We Chinese students are very shy because we just listen and of course some students, even me, will be tired, so we will check our phones or sleep a bit in class, but we listen to most of what the teacher said, yeah. (X2).

The Chinese teachers' conceptions of active students included for example the following features: they are listening and sitting at the front of the class, their understanding of the topic can be recognized in their faces or eyes and they are directly answering questions. Conversely, students who are not listening were described as sitting at the back of the class, playing with their phones, talking to each other, sleeping or buying something on the Internet and so on. Generally, the Chinese teachers thought that the students are shy and not that active. However, two teachers said that most of the students are listening, which was consistent with the findings from my observations, as most of the students I observed followed the lectures of these two teachers. In the other lessons there was a wider range of student behaviour than just studying, such as sleeping or playing with a phone. The following examples give their perspective of the trait of Chinese education where students are defined as listeners:

In class, when the teacher is talking, the students should communicate with the teacher, but in China the situation is that the students are told not to speak, but to listen to the class quietly. (L1)

Our Chinese students do not actively put their hands up to answer the question. This is influenced by our traditional culture and many of them, they lack confidence and they are shy. (L6)

Most of the students are listening carefully in class, but some of them will maybe think the class is too hard and they don't understand what the teacher said. They will sleep or play on their phone in class, but after class most of the students will ask teacher some questions. (L3)

Interaction during lectures and practical classes at NJIT

This subchapter will present students' and teachers' views on interaction during the classes at NJIT. Students shared different opinions about the amount of interaction between the teacher and the students during the lectures. Half of the them considered interaction to be uncommon, while some thought it was common. Despite this, most of the students at NJIT found approaching the lecturer easy. Discussion about the differences in interaction between the lectures and the practical classes gave the impression that the practicals generally involve noisier communication and the students are more active. This means the students have more interaction with the teacher and each other, as they are working in a group. However, some students mentioned that communication with the teacher is more effective in the lectures because when students are doing group work, the teacher does not allow many questions and students should find the answers by themselves. All the students would like to discuss a topic in a group where ideas are expressed openly. However, a situation like this is rare and one student said there is no group work at all. Conversely, another student said group discussions are common and yet another said they will increase in the future. There may be some change towards more communicative methods, but the students' conception of group communication may also be different. One student mentioned the following example of competitive group work:

We have like a science competition, yeah about robots and we need to work together to develop the best robots in one hour. And I think competitions like this are interesting and we can work as one because we need to be effective. (X2)

On the other hand, from the opinions of the Chinese teachers, I got an impression that usually students are not focusing on the teaching that much during the lectures. However, in the practical classes, they need to be more active because they are working with their hands and the teacher will check their work. One also added that the lectures hardly include any interaction because the amount of knowledge the teachers must teach is huge, so only the teachers are speaking.

In conclusion, the lectures do not have much interaction between the students and the teachers at NJIT but there is somewhat more of it during the practicals, where the nature of

interaction is different. The informants' evaluation of the activity in different teaching situations was problematic for them to understand as the variety of teaching methods was seemingly limited to lectures and practicals: *There are many methods, for example in the classroom the teacher is speaking and teaching and in the practice room the students can also study well* (X3). At first, I thought it might be uncomfortable for the students to start to evaluate the teacher's style, but actually giving feedback was not new for them, as some teachers reported that they have been asking for feedback.

As Gordon (2005) described in Chapter 2.1.1, activeness is seen as an outwardly visible behaviour, which is considered masculine in Finnish classrooms. I believe excessive outspokenness may not be masculine in the context of Chinese classrooms. However, Gordon's research may not be relevant to education at the university level, even in the Finnish context. Speaking about irrelevant matters is not respected in Chinese education culture. However, active movement and childlike play during the practicals was typical for males, but that teaching method was not based on listening. Despite this, interaction is desirable because some students at NJIT revealed that behaviour affects your grade, e.g. if you raise your hand and are active.

4.6 New challenges: communication and independent thinking

The informants with experience of studying at UO generally thought that the lectures at UO involved more interaction between the teacher and the students than in China. They also mentioned that the students need to express themselves at UO, while in China students lack possibilities to do this. However, one interviewee explained that in China discussions are separated from teaching, which at UO often happened during lectures. In practice it happens in China for example so that the teacher is not present and the students do the task on their own and present it in the final class.

Most of the informants had some language or communication problems at the beginning of their studies at UO. New methods were seen as challenging, mostly because the students have to learn to communicate and give their opinions. For example, late-night discussion via Skype when doing groupwork was commented to be demanding by one informant. In addition, it was said that although the Chinese students get high scores in the English exam, when they need to communicate in a group and give their opinions, it is challenging because they are not skilled in these areas. The informants did not consider themselves as active students, but two

had learnt to be more active at UO. One of them said she had changed from shy to talkative because at UO she had the opportunity to express herself, for example in presentations. Despite this, she criticised the teaching methods at UO. In conclusion, it seems the process of change from listener to responsive student is not painless, similar to Ouyang's (2000) finding (in Chapter 2.3.) regarding rural teachers. In addition, the informants were not necessarily eager to participate in discussions, but they developed their thinking to be more independent and freer. The results suggest that rather than becoming more talkative, a more common change was developing their own ideas and learning to challenge. However, in China they were not used to communicating in a group or having classroom discussions and for most of them it was a real challenge to learn these methods.

[at UO] *Most of the time you take a group and you cooperate, you must discuss, so this was also difficult for us at first when we arrived in Finland. I am afraid to speak English, so it's difficult.* […] *The reason is not because your English is not good. It's that you are afraid to speak, because you have not got used to express yourself.* […] *Some challenges that are common for the Chinese students, but like Indians or Pakistanis, they are different, yes, more talkative.* (S8).

We are afraid of making mistakes, we feel so embarrassed when we make mistakes, that's the reason we cannot speak English. When we were in China there was no chance to practice (S5).

[Studying at UO] *It's quite different. In the beginning I had some language difficulties. There were some Scottish people and they were speaking English which was so hard to understand. And then in the lectures, they were so active and I was so surprised and I was so shy. I wasn't talking about anything and I just sat there and listened. But I think that's one different thing, that students seem to be quite active in the lectures.* (S5)

4.7 The different roles of teachers

In this chapter I continue focusing on the interviewees who have experience at UO. Generally Chinese teachers are seen more like knowledge transferrers and Finnish teachers are more like

guides who give direction based on the students' interests. Half of the interviewees mentioned that studying at UO is more than just passing the course. It was described for example so that at UO the results of studying may be realised later, but in Chinese education it is often considered a waste of time if you keep studying and still cannot get results. Moreover, a few interviewees commented that students in China are not doing any extra learning, so their knowledge remains limited. Some interviewees also mentioned that at UO it is common to study articles as these help students to broaden their knowledge because they contain the newest and most advanced knowledge.

Chinese teachers were described as standing on the podium and using PowerPoint or a blackboard to display the knowledge. Teaching was said to be based on the lectures, textbooks and some practicals, but rarely group work. If there is group work, it can be a discussion or project. On the other hand, one interviewee revealed that at UO, teachers often use PowerPoint slides as well and have asked students to come up to the podium to write down an answer. The informants revealed that Chinese are taught to take exams and get high scores in them.

They generally said that in the classroom the teacher is just speaking and the students are listening. However, three informants mentioned that Finnish students also tend to be quiet during the class and one gave an example of this: [If the teacher makes a calculation mistake in China, the students and teacher discuss this, but at UO]: *Last week there was a maths course and there was a missing bracket and nobody pointed that out* [laughing] (S6). The following examples give some critical insights into Chinese education:

In China it's like completely different - they just sit there or sometimes you know we play poker games like in the classroom when we have lectures and so we don't give a shit you know. (S3)

45 minutes of the teacher talking and the students might just sleep and play with their phones and chat with each other. I think more than half the students aren't really listening to their teachers. (S5)

[In China we read the PowerPoint slides] *We don't understand anything. Then when the exams come, okay now we read book and this and this and this and then we remember things, take the exams, take very good results and then we forget everything, yes.* (S5)

[Chinese education] *You cannot say that's education, it's not good word to describe that. It's brainwashing I think.* (S3)

4.8 Different understandings of answering and copying

For this chapter, I have collected all the interviewee groups' opinions. Firstly, I introduce the opinions of the students who have experience studying in Oulu. Next, I move on to the students at NJIT. Lastly, I examine the teachers' perspectives.

Half of the Chinese interviewees with experience at UO said that in China, the teaching method is based on right and wrong answers. At UO the answers are more flexible and there is not just one right answer. One interviewee-explained that it in the beginning this was hard to understand, so he first had to learn how he should answer because the Chinese students are just used to getting points from correct answers. He added that the Chinese characters facilitate copying of work and at UO, students have to give their own opinions, so there is no reason to copy for example the essays. Further discussion about copying revealed that it is more common in China and if someone copies, it is treated more seriously at UO, where the *Urkund* plagiarism detection system was stated to check exercises and theses. In China there are some checking systems as well, but they are not that strict, they can be easily fooled and they are often used only for theses at higher levels. Half of the informants said they learnt the correct scientific writing rules at UO. Two of them said they learnt from their mistakes when they copied directly too much without citations, as they remarked that in China it is okay to copy.

Half of the students at NJIT said that copying is condemnable. It was also said that NJIT is a good university because it reacts to cheating. I heard that some students tend to copy to pass exams, but at NJIT fewer do because they face a punishment of losing their degree.

Pressure for correct answers seems to be part of Chinese education, as seen at NJIT:

TR: *If his ideas are I mean right or suitable he would be proud of himself but if the ideas are not very suitable for the class he would communicate with the teachers after class.* (X6)

TR: *He thinks he will be excited to show* [laughing] *that he knows the knowledge and he knows the answer.* (X4)

None of the Finnish teachers came across plagiarism by the Chinese, but in spite of that, two teachers less familiar with China had a sense of prejudice specifically towards the Chinese in that they tend to plagiarise more easily. However, one of these teachers had heard that many assignments and theses are run through the plagiarism inspection system at NJIT. He thought that copying is more common in China because challenging the authorities is not typical for Chinese:

China is a quite hierarchical society, the respect for authority is on a different level than here. And this can be seen also in these plagiarism cases, so that if some great genius has said how some things are, it is not easy to change this into your own words in assignments, so it is used as it was written and that may not be a virtue in Western cultures. (O2)

Three Chinese teachers thought that at NJIT copying is seen as a serious matter and the rules are strict; for example, students do not get certified if they are caught cheating on the exam and there are records of the students who have copied. Two teachers thought that copying at NJIT is not that common compared with other Chinese universities, but one said it is. One stated that master's students may copy others' academic texts but that is dealt with by the checking system. Additionally, another teacher reported that copying homework is very simple, as most of the homework is in an electronic form: *Smart phones are widely used - you can send messages and share something together easily.* (L3)

Occasionally I was not sure if the informants were talking about copying exams, homework, assignments or theses but their answers revealed that copying is not only seen in relation to theses but also homework and exams. It seems there is some variation in attitudes towards copying and the usage of the checking system between Chinese universities. Copying others' homework in China seems to be related to collectivism, if students allow others to copy, and also to the education culture of right and wrong answers. Blankenburgh's (2013) idea (in Chapter 2.1) that Western education emphasizes right and wrong answers seems to be challenged here, as it is Chinese education which highly emphasises right and wrong.

4.9 Practical learning

In this chapter I introduce the opinions of informants with experience at UO and then focus on the Chinese teachers. The first group generally thinks that Chinese education is deficient in practical classes, which may mean for example that students in China often do not know how to apply the knowledge they learnt from their exams. They had positive experiences of the practical projects at UO, such as simulation projects or group work for a company, which can be for example usability testing for a mobile phone game. In addition, *Pestipäivä* (Pesti career day) at UO, which helps the students to connect with working life, was mentioned as a strength. Teachers at UO were said to teach in a way that the students are able to understand and learn to combine theory with practice.

Chinese education was seen as emphasising theory more than practice. An informant with no experience of studying at a Chinese university heard there are some clubs which students may join after passing an exam where students can do e.g. software. A few informants pointed out that Chinese students are not allowed to study and work at the same time, so the system is not flexible for gaining work experience. One explained that when studying SE, the significant difference between the countries is that Chinese universities focus on a certain company's interests but at UO students study as much as possible based on their own interests.

Additionally, some of the interviewed Chinese teachers considered Western education to be more practical, while some of them said they do not know about Western education. The Chinese teacher who has some experience of Western education explained that at NJIT too students can sometimes practice in the summer but generally organising the practicals is challenging because of the high number of students: *This is the Chinese situation. I cannot save it.* (L4)

5 Analysis of the material related to the theory

In the following chapters I will analyse the findings in light of, among others, the Grid and Group theory related to agency, global and local mindsets and Confucianism to understand what kinds of cultural differences produce the different conceptions of teaching between the institutions studied.

5.1 Finnish and Chinese cultures according to the Grid and Group theory

According to Ronimus, traditional Finnish families had both strong grid and group as rules were clear and the group support for its members is high. Over time, at the societal level the grid and group values have generally decreased. At present, ideologically Finnish society has high grid and high group values, which is seen for example in the taxation and the social welfare system but in reality, there is an ideal of surviving on your own, which represents individualism. Individuals are able to cross over in the framework and change their identities from one quadrant to another. For example, an immigrant starts to change his/her perception, which in Finland means adopting an individualistic identity over a collective one. Correspondingly, on a group scale, students change their identities from the comprehensive school's hierarchical model of high collective support to more grown-up secondary education models, where there is a greater need for an individual's agency. (Ronimus 2012: 13-19.) Sid Lowe (1996: 126) described the grid dimension in the following way: *In strong grid cultures, roles, status and authority are determined by ascriptive social classifications such as age, whereas in weak grid cultures roles are assigned more according to ability and achievement criteria.* In Finnish culture the ascriptive roles are less determining than in Chinese culture, where for example elders or teachers have generally higher statuses. In Finnish culture the group is not so heavily controlled and the tolerance for group control is low, so the grid is low in this respect. Chai et al. (2009: 201) state that Finland has an egalitarian culture, that is, the group aspect is high, but the influence of the grid is low. Correspondingly, according to Lowe (1996: 126), the United Kingdom has weak group and grid and in Hong Kong both of them are strong. He writes that *Strong group cultures are highly interactive and collectively co-operative, whereas in weak group cultures the individual is less dependent upon groups.* One could deduce from this that Finnish culture is collective instead of individualistic, but I see it as having more individualistic features. However Chinese culture's, strong tolerance of authority points to a high grid value.

The pressure of the grid seems to be stronger than in Finnish culture, which is a sure sign of collectivism, as I believe it raises group cohesion. Borders are not rigid and there is a number of variables which may affect the location of an individual or culture in the Grid and Group framework. For example, group borders are stressed in egalitarianism and hierarchy and this feature, the need for some Finns to distinguish Finnish culture from other cultures is also visible at the social level. On the other hand, an individual who is globally oriented and has adopted

an individualistic worldview often sees maintaining the boundaries in a different, even opposing way. In summary, I perceive Finnish culture to have individualistic and some egalitarian features, whereas the Chinese cultural model would be placed into the fatalistic and hierarchic quadrants in the Grid and Group framework.

Mari Karjalainen (2011) has studied cultural differences in following guidelines set for information security. Her findings indicate that risk perception and the value of information is lower in China than in Finland. Her study stated that according to a Chinese manager, most of the Chinese are aware of the guidelines to protect information but it is commonly thought that individuals do not consider information protection to be their responsibility but rather the responsibility of the management. (Karjalainen 2011: 95-96.) This suggests that Chinese culture has fatalist and hierarchical features, as responsibility is not seen as an individual's concern.

To demonstrate the characteristics of the Finnish and Chinese cultures, I have positioned them on the Grid and Group framework. The situated identity can be linked to Grid and Group theory, as my interviews revealed. It seems that some globally-oriented informants with studying experience at UO had constructed new identities, so we can demonstrate this in a diagram, where the identity has changed from a hierarchical background to become more individualistic or egalitarian, for which the Finnish culture offers more ground for growth. One prefers e.g. to develop ideas, just trusting himself and Google more than a teacher. On the other hand, the other prefers to follow instructions and likes Chinese education because it gives a clear structure of wrong and right. Moving from the hierarchical quadrant to a more individual and egalitarian one shows individual cultivation, which a locally-oriented student might experience. This involves e.g. developing your own opinions, as being uncomfortable and as mandatory for passing the course. As a result, they would be much less likely to make a similar move out of the hierarchical quadrant. To refer to the Grid and Group theory and rural teachers in Guangwai (Ouyang 2000 in Chapter 2.3), the teachers were moved from a hierarchical quadrant towards a more egalitarian and independent one. In discourse systems this move would be from a traditional to a communicative system. On a state level, the iron rice bowl with the Communist edges today had got some multicultural decorations with Confucian edges. Emphasising Confucianism is the way to stabilise the power on a state level. I would place this ideology in the hierarchical and fatalist quadrant within the Grid and Group theory.

Teacher-centred learning maintains a hierarchical worldview and does not offer enough space for the students to develop their own thoughts. Student-centred learning fits better with

an egalitarian or individualistic worldview. It encourages individuals in self-cultivation and constructing information. It suits a collectivistic worldview due to working with peers but at the same time aims to develop and express an individual's own thoughts to others – which then again does not necessarily suit the above-mentioned worldview. With the following diagram I complete my demonstration of the Finnish and Chinese cultures and the individuals' positions and movement on the Grid and Group framework. (Figure 7)
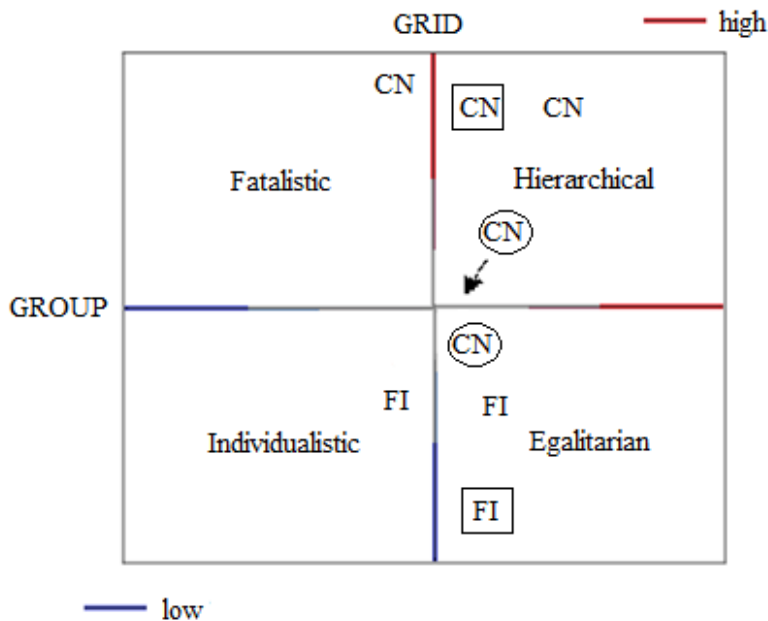
- Cultural wordlviews are not stable
- CN = Examples of the Chinese individuals' locations on the diagram
- FI = Examples of the Finnish individuals' locations on the diagram
- Individuals can be anywhere on the diagram, depending on the restrictions of the environment and their experiences and willingness to circle around the diagram (=self-cultivation)

(CN) = A Chinese individual who has been living in China his/her whole life in a hierarchical culture and then moves e.g. to Finland to study. His/her identity starts to change towards an egalitarian/individualistic one, because of open-mindedness and a willingsness to learn about new identities and because the Finnish environment has less restrictions for agencies to move.

CN FI = Positions at a cultural level

Figure 7: Individuals moving within the Grid and Group framework (Applied from Oltedal 2004: 19).

5.2 Global and local mindsets

This chapter focuses only on the Chinese informants with experience at UO. When discussing future plans, every one of the interviewees from this group thought that most of the Chinese students will return to China after graduation. The most mentioned reason for this was that China has better job opportunities. Half of the informants stated that without knowing the Finnish language, finding a job in Finland is more difficult. Another less mentioned reason was family. Two informants have already returned to China because of job opportunities. Two informants working in Finland actually had a kind of global attitude, for example:

> E: *Are you planning to go back to China?*
> S3: *Not really*
> E: *Why?*
> S3: *It's a hard question, like, go back to China or go somewhere else. For me I think it's just you know a global environment - it doesn't matter where you go, you can just take the earth as your home.*

Some informants' bond with their home country or parents was not a determinant factor in their lives. This brings to mind cosmopolitanism, which living abroad promotes, but it is more about your own desire to view the local familiar culture from a distance, forgetting national borders and having a genuine interest for others. Like Ulf Hannerz (1990) described, cosmopolitanism is the *orientation and willingness to engage with the other* and *openness toward divergent cultural experiences* and more interestingly *the state of mind* in which *self is constructed in the space where cultures mirror one another*. The attitude towards the global world's interconnected multiformity varies, depending on for example whether you are a local or a cosmopolitan. (Hannerz 1990: 237-239). My interpretation, based on the responses of the interviewees, is that it is all about the orientation of an individual, the opposing forms of which I refer to here as *global* or *local mindsets*. However, the surrounding culture and more specifically, the level of social control, may restrict the building of new identities. This can be linked to Pietilä-Litendahl's (2014) interpretations of seemingly passive agency in Chapter 2.1.1. Here it means that the kinds of boundaries present in China do not exist in Finland. It therefore follows that in Finland for example, individuals are able to reach towards new

agencies if they are oriented to do so. There is a risk that students in Chinese classrooms are interpreted as being passive learners, who are not able to make decisions for themselves. But when we look at them at UO, we can see that some informants have built new, situated identities, fitting more into the new context. That is to say that some of them communicate more because Finnish teaching methods require this, or they are allowed to because the social control, the grid, is weaker than in China. However, it should be remembered that often the Finnish students tend to be silent as well.

In a more egalitarian and individualistic culture, the agencies get a chance to loosen from the previously determined structures based on hierarchy and fatalism, which is related to the Grid and Group theory. Here Adkins' (2000) explanations in Chapter 2.1.1 become apparent: the rules are not strictly determining agency anymore, traditions start to lose their meaning and individualistic features start to arise. Therefore, the main idea is that this is all about moving between the squares of grid and group, as related to Ronimus's and in particular Douglas's research. Individuals navigate through the diagram, reshaping their worldviews and finally adopting a new identity. The process is continuous, where some may take huge leaps from one square to another, whilst others may move calmly and remain close to their starting points. Some informants, all familiar with hierarchical, collectivistic and fatalistic structures, were clearly reshaping their identities to be more liberal, egalitarianist and individualistic and moving to another square, which is demonstrated in the diagram (see Figure 7).

A few globally-oriented informants barely identified any difficulties in their daily lives in Finland. They spoke positively about Finnish education and highlighted the relaxed and flexible atmosphere. This raises some questions, such as whether they had forgotten the obstacles, were they more Western-minded or were they just trying to be? The ongoing identity seeking process in a new environment can cause changes in behaviour, for example depreciating, or conversely, overstressing a foreign or an individual's own nationality. But here, I believe studying at UO brought out the situated identities as the new identities, prevailing in the context in which they were created, in Finland. It is important to be aware that even if one's own cultural background is hierarchical or lacking initiative, an informant's orientation may be individualistic and global before settling down in Oulu. It may reach its fulfilment when the restricting boundaries disappear. The interviews reveal that some informants are globally oriented, some stay local and more traditionally Chinese and the rest, the majority, are somewhere in the middle of these

mindsets. The following example is about the process of reshaping the identity for the new context:

[About doing group work at UO] *At first, I felt a little uncomfortable when I realised how badly this might work out for me. But because I know that before I came to Finland I knew the Finnish people and that the culture here is like this, so yeah, I'm yeah, I'm totally okay with this. And right now, my communication with people is more like directly telling them my thoughts. […] Like my communicating with my Chinese friends - they always say you are totally not like the way you used to be, how you speak so strictly?* (S2)

E: *Are you active during lectures?*

S2: *Yeah I think in most of lectures. In the beginning I was not that talkative and not active at all in the first semester. But after that first semester I realised that it is very beneficial for me if I am really talkative and active to participate in every question in lectures. I can really understand what the teacher is showing in the slides. Also, after that I got better grades for the homework or essays and more skilled with English and furthermore a better understanding of the Finnish learning style.*

The following examples show adaptation to living in Finland, as some informants used the term *"we"* when talking about Finland, which is also related to identity change. Here, Gordon's method occurred to me (derived from Taylor, Gilligan and Sullivan, 1995) referred to earlier in Chapter 3 to focus on the personal pronouns used in the descriptions. This method's systematic application was not suitable enough for my analysis. However, the pronoun use revealed that some of the Chinese informants did refer to themselves as belonging in Finland by using the pronoun "we" when talking about collective circumstances in Finland.

Finland is kind of special, so first of all the lifestyle here is of a super high standard, like you, here in Finland we have very good air quality, we have very good water for example and people are nice, well educated (S3)

We have quite a healthy society [in Finland] (S5)

5.3 Collectivism and individualism

In this subchapter, collectivism and individualism will be analysed, utilizing the student aspects of the Chinese with UO experience and of students at NJIT, respectively. The discussions about family relations with the Chinese who have experience at UO give some insights into the differences between collectivism and individualism. In general, they saw parents as important and supportive of the idea of studying in Finland. Sometimes they seem to really encourage to go abroad: *At that time, they just wanted me to go abroad. They just wanted me to go outside* [from China] *and they didn't care where I go but just outside* [from China]. (S6) This is related to the previously mentioned common phenomenon that in China parents often support their children to gain a higher education and the expression, going outside, gives the impression of united China having clear borders. When discussing the role of grandparents, various answers emerged. Half of the informants said the grandparents' role is important and the other half said that they are not that close to them. According to one informant the reason for the weakened role of grandparents is that China has become more independent. These opposing views are seen in these examples:

> *In China we have kind of like a collective, quite collective cultural background. We are quite close to our relatives.* (S1).

> *Yeah, I have grandparents, but it's nothing.* [The central role of grandparents] *is quite an old tradition, maybe only family members, that's it* (S3). (global mindset)

> *My parents are living with my grandparents in the same house* […] *It's in a countryside, it's normal for people to live in a big house together.* […] *My parents, I think they have never cooked, it's always my grandparents who cook, yes* [laughing]. (S5)

The conversations about decision-making in a family do not support a strong hierarchy on the family level but rather, I would say, there is a sense of collectivism with a respectful and grateful attitude towards the parents. However, the globally oriented informants seemed to be more individualistic also when talking about decision-making in a family: One described that her family differs from other Chinese families in general because her parents give her lots of

freedom: *I'm one of those people who is very independent, so I make all my decisions myself* (S4). The following quote reveals the individualistic side of Finnish culture but also the collectivistic features of Chinese culture:

I have a [Finnish] *friend, I think he and his sister cannot visit each other unless they have called in advance. He told me that's normal here or it's rude* [to visit without calling in advance] *or something* […] *This is something I couldn't understand in the beginning - I thought that's really cruel, you are not so close to your families.* (S5)

This informant thought that living in dormitories promotes the closer relationships of Chinese students' as well, which speaks about the collectivistic side of the culture. She thought that because Finnish students are not studying together and encouraging each other, it is probably why some of them do not easily graduate. She added that the way of studying in which you find answers alone is: *almost impossible for Chinese students, we need to study with others otherwise we maybe fail those lectures.* (S5) However this depends on the person, as some informants said they prefer to study alone. Furthermore, the following example describes the importance of the dormitories in China: one informant said that compared to UO, there is more psychological support in China because of centralised dormitories, where tutors help with many things and come to visit everyone and check that everybody is present at night. This also reflects collectivism.

The importance of friends also came up with a few NJIT students: When discussing the studying experience at NJIT, two students said how they enjoyed living at NJIT. It seemed that they did not separate education from life at NJIT, as all the students lived in dormitories and the social context seemed to be a relevant part of studying. Some mentioned that in addition to studying, there were free time activities with their friends, such as playing ping-pong or baseball.

To summarise, studying together and collectivist support is great, but the collectivistic worldview may weaken the individual learning process, as Finns are taught to learn by themselves. In addition, living on the campus may weaken the students' ability to learn to live freely and gain independence. However, it is also a good point that this may make some students too lazy to graduate, while in China students mainly graduate at the same time. In the culture of collectivism and guānxì, it can be assumed that group work as a teaching method is adaptable

to Chinese classrooms. Furthermore, the history of the long-standing one-child policy[11] may increase the significance of classmates.

5.4 Respect for the teacher

In this chapter I introduce the interview findings from the student perspective. Generally, the Chinese informants with studying experience at UO saw the relationship between students and teachers in Finland as more equal, whilst in China students are expected to respect the teachers. One informant said that he has not got used to the Finnish habit to call the teachers by their first names: *I'm still not quite used to that, for example I still call some professor or teacher mister something or professor, I never call them by their names, unless I was forced to do so, for example, my supervisor forced me to call just by* [his/her] *first name* [laughing]. (S6) Respect is shown in a different way in Finland and China. In China, students show respect for example by listening to the teacher without interrupting and avoiding speaking nonsense. Respecting the teacher is a custom: *I think maybe it's like a habit we had when we were children because our parents were like you must behave good and listen to what the teacher is talking about and if the teacher is asking you to do this, you probably cannot do that.* (S1). A few informants considered Finnish teachers to be more like friends, to whom talking is easy. One added that with them, there is no pressure for correct answers. Generally, they considered respect to be mutual in Finland:

> *In Finland, I think we respect the teacher, because we feel they respect us too, so in a mutual way. In China there are some teachers who are not so nice. We do show our respect in the classroom, but that doesn't mean we like them.* (S5)

> *In China, no, the teachers are like gods. The students must listen to them otherwise I would let you fail the exam, so the students are afraid of some teachers.* (S5)

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[11] Administered by the Chinese government for curbing population growth between 1979 and 2015 and was replaced by the two-child policy in 2016, which allows Chinese to have two children.

Difference in respect was also visible when it was told that the educated teachers earn respect at UO, but Chinese teachers had to be respected even if they just read the book without having a real knowledge of the subject. Furthermore, at UO teachers say if they do not know the answer but in China they will always answer, even with something irrelevant. This may speak about the higher status of teachers. Discussion about the method where the teacher chooses a student to answer their questions also reveal teachers as having a higher status:

I never seen that [teacher pointing the student to answer the question] *in Finland - I loved that. And in Chinese universities that's quite normal, the teacher will just walk over to your place and then he asks: Could you stand up and answer this question?* (S5)

The habit of respecting seems to have historical roots. For example, one interviewee reported that it is common in Chinese culture for the elders to use *Confucian mind* for thinking, which means that the teachers are comparable to the parents, who give you your life. That is, the teachers give you the knowledge which is hard to obtain in another way. I will return to Confucianism in the following chapter. On the field, there was also some dissatisfaction for the restrictions in China as Chinese search engine *Baidu* was not considered reasonable for finding the appropriate information. This was seen for example in maintaining narrow worldview and decreasing the ability to read English articles or practice the English language. Furthermore, China was seen to be rejecting things from abroad and becoming more closed: if the students in China become too open-minded and get more knowledge, there will be revolution – *So, they keep people stupid and think "Oh! China is the best country in the world, you know.* (S3)

The responses of the students at NJIT, together with my observations, confirmed the hierarchical nature of the education system, which seems to be more organised than at UO. For example, military studies, certain books to cover courses, exact following of the ringing bells, listening to the teacher, standing up when answering, the ritual of respectfully greeting the teacher and perhaps also the teachers' way of speaking all say something about power in a symbolic form, as identified by Kertzer (1988). Rituals maintain power and the previous examples are symbolic signs of a hierarchical culture. It seems hierarchy in lectures is just a custom, tracing its roots to Confucianism and the political ideology of communism, in which both the teacher and the students are obeying the same conventions.

All the informants at NJIT said they respect the teachers and mainly show this by listening carefully. Keeping silent, doing homework properly and saying hello in the morning with a bow were other less common examples of showing respect. It was also commented that students should talk to the teacher after the class because otherwise they will waste their time.

TR: *He thinks that both in the classroom and the experiment room, he doesn't want to be active, because he doesn't want to disturb the teachers and if he has some questions he would like to get to the answers after the class. […] You should spend more time listening rather than talking.* (X6)

TR: *He is afraid, he cannot express it exactly, so he is nervous. […] The students tend to be silent and make no noise, to show their respect.* (X3)

It doesn't matter what you doing in the class, like playing with your phone or something else, but if the teacher walks over to you, you would, I mean, act as if you were listening carefully or something, but what I mean is that students always show their respect for the teacher by listening carefully. (X6)

The informants also saw the custom of respecting the teacher as deriving from Confucianism, one of them stating:

X2: *Of course, because of him, Kǒngzi. This culture is in our bones, in our flesh, in our blood, so it can't be changed.*
E: *How you show that you respect the teacher?*
X2: *We will say hello or, not hello, it means it means something in China, not just one single hello, it means I am showing you respect. I don't know how to explain.*
E: *How do you say it in Chinese?*
X2: *Lǎoshī shàngwǔ hǎo* [Good morning teacher] *and I need to bow.*

The significance of the previous excerpt is that the informant said that outside the classroom, the teacher and student are like friends: *I think, we are friends, even me and teacher. I think the communication between us is fair, is not I need to look up* [to the teacher]. (X2) So I

cannot state that the education structure is strongly hierarchical in all cases at NJIT, though in lectures it most often seems like that. The computer practicals resembled lectures, as the teachers' performing style seemed to be hierarchical and teacher-oriented. On the other hand, a teacher stopped a few times to guide the students but because these teachers have three classes at the same time, it seems they do not have any possibilities to give closer guidance. Similarly, the teacher whose lecturing style was more communicative found closer guidance to be impossible. Practical classes with the distribution frames revealed an opposite situation, as students had hands-on practice together and the interaction was more natural and relaxed. It was also an observation with the smallest number of students (22 of them) at NJIT. In addition, when I asked the teacher to fill out the informed consent for me, he asked the students to fill out the form on his behalf and when I asked the teacher how many students there were in total in the class, he asked that from the students. However, my interpretations from the practicals are limited because there were not many of them. On the other hand, Chinese education barely has them.

A few times the informants compared Chinese teachers to parents and it seems there is a less hierarchical relationship between the students and the teachers outside the classroom. I felt there was some kind of *the teacher is a parent* thought rooted in the culture. Actually, I heard that students may use WeChat for communicating with the teacher and they may go to a teacher's birthday party in China. Conversely, at UO there may be hierarchical differences between the different faculties and the hierarchy seems to be more hidden. For example, it is common to book an appointment when having a discussion in the professor's room. I also believe that communication outside the study environment is not very common in Finland, for example going to have a meal, together with the teacher, or going to a teacher's birthday party. This also suggests that Finns tend to keep their own privacy, as the informants revealed.

5.5 Confucianism

The findings gathered from all the interview groups generally indicated that Confucius created the Chinese classroom and his lectures became the basis of the Chinese teaching style. Students in ancient times used to listen his advice about the correct behaviour for a child, parent or student and so on, so Confucianism used to have a strong impact on education. The opinions about and attitudes towards Confucianism in today's China are varied. Before I continue to

present the perceptions of the different groups, I would like to bring up the main finding, which was that generally there was a slight difference between the conceptions of globally and locally-oriented informants. The following description from an informant with experience at UO presents the extreme of the global mindset by opposing Confucius:

S3: *I don't like him* [Confucius] *at all. It's like religion, but it's, I shouldn't say this but* […] *it means something to some people, but it's just a bullshit to me, yeah.*
E: *Do you think Confucianism impacts upon education in China today?*
S3: *Yeah. It is just part of the culture and it is part of a blood maybe* [laughing]*, so bullshit.*

Another globally-oriented student at NJIT also criticised Confucius, by saying that he somehow took the freedom of the Chinese, because his teachings were sown into the ancient Chinese government, as it considered him to be the only one, great thinker:

So, people don't know how to think, they just, they just think what Kǒngzǐ said is always right, but they don't know how to think on their own. In some ways Kǒngzǐ has affected our people, because we don't know science, we don't know maths or physics, we just know how to read those Zhī hū zhě yě[12], as we call them. We cannot think with our own brains. (X2)

He added that although many people still rely on Confucius, today things have changed, and elder people tend to believe in Chairman Mao[13].

X2: *Yeah, because he* [Chairman Mao] *saved us.*
E: *What do you think yourself about him?*
X2: *I think he is a really great man because he led us from the war, from the hunger, from starving to death, yes so we should thank him, but I'm a student, right? I'm not old enough, so I cannot say too many words about, you know, but I think one person has two* [sides]*, something is good, something is wrong.*

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[12] An idiom of four common characters of classical Chinese which means semi-incomprehensible speech
[13] Mao Zedong, communist revolutionist, developer of CPC (Communist Party of China), ruled the People's Republic of China from 1949 to 1976.

Thoughts about Confucianism from informants with experience at UO

Informants with experience at UO had various kinds of attitudes towards Confucianism. In contrast to the previous example I gave of the global extreme, a local perspective was also evident, which emphasised the meaning of Confucianism. This view highlighted Confucianism as being part of Chinese culture and affecting people's behaviour. For example, it was said that due to Confucianism, Chinese do not speak that strictly to others because Confucianism advises to be gentle. It also teaches to think broad-mindedly and to use a different way of speaking with different people because everyone has their own way of thinking. Some saw Confucius's quotes to be useful in their daily life, for example in decision-making, such as *Sān rén xíng, bì yǒu wǒ shī yān.* which was said to mean that if three people walk together, there must be a teacher. It can be understood that in a group of three, the other two can certainly teach you something you did not know before. Moreover, *studying without your own thinking is deceiving and thinking without studying leads to danger* (Xué ér bù sī zé wǎng, sī ér bù xué zé dài), previously cited from Kallio (2014: 93) in Chapter 2.1.3 and *think twice before you do something* (Sān sī ér hòu xíng) were considered to be useful. One informant also mentioned that Confucius's thinking can be used for example when trading on the stock market:

Things is like a circle - when you reach the top of your life, the next step is that you will go to the bottom of your life, so you don't need to be so happy and you also don't need to be so sad (S7).

The other side of Confucianism emerged when three informants said that it has lost its meaning amongst the new generation. For example, one pointed out that nowadays some companies in China have a flatter hierarchy than before and Confucianism is seen as the rulers' tool to grant them their power:

Some of us we think that Confucianism is a tool for the government to control their people or for organizations to control their employees. That's what we think about the usage of Confucianism. (S6)

This interviewee continued stating that in high school and middle school Confucianist quotes were learnt from the *Lúnyǔ* (the Analects of Confucius) but he highlighted that they were not about hierarchical things but always about good things. Besides Confucius, he brought up the importance of Lǎozǐ (老子), the founder of Taoism.

Thoughts about Confucianism at NJIT

Among students at NJIT Confucianism was still considered to have a great impact on Chinese education and culture, with two exceptions: the global aspect mentioned before but also, as pointed out by one informant, that Confucianist ideas cannot be accomplished in today's education system because of the high population. By this, the informant meant that teachers should focus on teaching the people who could be useful for society, thus following Confucius.

Generally, the students stressed that due to Confucianism, people should for example be kind, respectful, face challenges peacefully, help each other, tolerate but also listen to the teachers and do reviewing when studying: *reviewing what we have, can make new knowledge.* (X5)

TR: *She say, when she was in the primary school, she read the Confucius book, and Confucius' thinking is deep in our hearts and our behaviour is affected by his thinking. It's very important.* (X4)
E: *What kind of things Kǒngzǐ say for example?*
TR: *Like respect and tolerate and be merciful.* (X4)

The following opinion gives a sense of a religious aspect as well:

TR: *He thinks if a person is without an education like Kǒngzǐ and so on, he tends to cheat others or do something bad.* (X3)

Furthermore, the Chinese teachers generally thought that Confucianism has a great impact on Chinese education today, but one mentioned that some of Confucius' thoughts are not useful today. The teachers highlighted that because of Confucianism, teachers are respected and

students tend to be silent in the classroom. One viewed that this is related to traditional teaching but is still has a great impact on thinking because the students think they have to respect the teachers. This suggests that the changes at an institutional level are not occurring rapidly. Confucianism seems to be a deep-rooted ideology in China:

Our behaviour or our thinking is like his [Confucius]. *His thinking is very kind, friendly and merciful.* (L3)

Because of our culture, children are not allowed to speak in front of their parents to someone who is older than them, it's our culture. (L1)

The Kǒngzǐ thinking has influenced our Chinese people a lot and his thinking is deep, deep in our people. What we think and how we think and what we do and how we do, may be influenced by him. (L6)

How do Confucius' ideas influence us? Many students don't want to ask questions or answer the teacher's questions actively and yes maybe they lack confidence and maybe they're shy (L6).

The findings suggest that the impact of Confucianism on Chinese education is linked with political power. Furthermore, I discovered that at UO, Chinese students are more able to reshape their studying methods and thinking models. Therefore, moving within the Grid and Group framework from traditional and fatalistic worldviews to more individual and egalitarian ones means here moving from a teacher-oriented teaching method to a student-centred one. Just like the example of teacher Cheng in Chapter 2.3 (Ouyang 2000), which proved that the freeing of agencies, which can be seen e.g. in developing own thoughts and challenging and communicating with the teacher is emerging in a wider context in Chinese society. If this is the case, the positive factor for successful cooperation is that Nanjing is located in a developed area where there has been international collaboration for a long period of time. Furthermore, NJIT itself has international experience and it is receptive for this collaboration. Additionally, among the informants with experience from UO, it was told that the equality within companies is increasing in China. This also suggest ongoing change at a societal level and is related to

companies opening and collaborating with the Western world as well as adopting new discourse systems, specifically in the most developed areas of eastern coastal China. However, building freer agencies and moving along the Grid and Group framework is a challenge for Chinese education. Respecting and understanding this difference is vital when planning the educational cooperation. Finally, Cheng's story did not prove freeing of agency in rural China. An article from the South China Morning Post (Lau & Rui 2018) suggests a similar direction regarding the restrictions: some students were asked to report the teachers whose teaching gave different perspectives on social issues like equality. One teacher said that he lost his job when he was considered to be too outspoken. His aim was just to teach some other perspectives outside of the textbooks as well as critical thinking. He thought that some students' *constructed reality collapsed*, which resulted in his black-listing.

5.6 Chinese liveliness and Finnish quietude

Most of the informants with experience at UO thought that Finland lacks entertainment and activities and that the Chinese lifestyle is livelier. Three informants said that in Oulu they have learnt to be in their own quietude. This quietude seems to be a characteristic of Finland.

> *It's quiet here. Quiet means not only the environment, it's like the society is quiet. Like people maybe think a lot you know, like maybe inner, not peace but they behave like with quietness and peace, so that's somehow changed my life. I mean when you think about China or Hong Kong or the US like you know, the countries full of people, so it's not quiet. It's kind of messy but here I think quiet is the right word to describe the feeling.* (S3)

> *I think the biggest change is how I learnt to communicate with myself. In China I think it's a very noisy world. You always have something to disturb you or something you can do, there are so many things: you can play, you can go shopping, everything. But in Finland you have lots of time on your own, so a very important thing I learnt is how to communicate with myself.* (S4)

Adaptation to living in quietude and a lack of activities suggests that Finnish quietude is a factor which promotes concentration on studying. Additionally, individualistic thoughts have

more space, which diminishes the collectivistic needs and advances the development of an individual's own thoughts for example when writing essays.

If there is trust in right and wrong answers and speaking is indirect, the development of your own thoughts may be weakened. But if you can express your own opinions, give flexible answers and live in harmony with yourself in quietude, presumably individualistic features and a new situated identity start to grow. The interviews revealed that this is more likely if an individual's orientation is global. However, the situated identity is not the only point here. I suggest that with these changes, when Chinese students who have experience of studying at UO return to China, they are able to take advantage of their experiences in a practical sense, like teacher Cheng did. I recognised some reconstructed thinking models from the fieldwork in China as one informant appreciated UO not only for teaching to think more broadly but also for teaching the skill of demonstrating your knowledge to others. The informant added that the Chinese are not usually eager to share their knowledge, especially in companies, because having more skills earns you more money.

5.7 Behind the silent classrooms

There are several reasons behind keeping silent in classrooms. The interview findings support the explanation from Berry et al. (2009) in Chapter 2.1.2 that one reason for Finnish quietness is harmony with quietude but also showing respect for the speaker. Responding to teachers' questions with silence is not considered strange in either country, which diminishes the educational differences. However, there are several hidden reasons why Chinese classrooms are silent. One reason is the existence of hierarchy and collectivism due to the communist and Confucianist background. Like stated before, nowadays the CPC (Communist Party of China) holds the power with Confucianist ideology. In general, teachers are respected by listening to them. Other examples of reasons for silence in Chinese classrooms collected from the all interviews are the emphasis on right and wrong answers, which causes pressure for correct answers; the target of getting the degree not communication and considering interruptions or speaking nonsense inappropriate. As additional factors influential in classroom inactivity the informants mentioned for example the students' role as receivers of opinions rather than active developers of their own thoughts and students being too tired after finding high school tough, despite the fact that studying at university is easier.

One interviewee with experience at UO commented that in China, compared with high school, teaching at universities is more open because the teachers are not in charge of the students anymore and students have to learn to study by themselves, which still differs considerably from UO. He raises an interesting point about *chéngyǔ* (成语) having its own effect on silence, as Chinese tend to speak less when expressing themselves. Chéngyǔ is an idiom often made up of four characters, most of which hide an historical and moral story behind them[14]. These idioms are prevalent in daily talks amongst the Chinese and are a strict part of the Chinese culture, so it is difficult for a representative of another culture to understand their deeper significance. (Wang & Yu 2010: 11-12.) It is likely that the previously mentioned view that it is better to keep silent if there is nothing wise to say is also related to chéngyǔ. Sometimes using Chéngyǔ for expressions may be a clever choice. This may sound strange to Westerners because their language, which also means their mental thinking structure, is different. The Chinese language is based on characters and behind them there are deeper meanings which alphabetical languages lack. Thus, the way people express themselves can cause cultural misunderstandings as well. However, during my observations the students at NJIT were not quiet during the practical classes but mostly interacted with each other, which gives another perspective of the silent classrooms, not concerning just the lectures.

5.8 The 'Chinese situation'

Education in China faces the *Chinese situation*, a term which arose from the interviews and hinders the adoption of communicative models for education. It is something which has an effect right from childhood – it is learnt that studying is based on remembering and getting high scores in the exams, for which the study burden has been heavy. The great number of people and high competition impact on the situation and students are often exhausted after getting into university. I reiterate here that during my observations the number of students in the lectures

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[14] Lei Wang and Yu Shiwen Yu (2010) give an example of Chéngyǔ which is Pò fǔ chén zhōu (破釜沉舟). It originates from the Qin Dynasty (221 B.C. – 207 B.C) and means *smash the cauldrons and sink the boats.* Behind this literal meaning is the story of General Xiang Yu whose troops won the war because their tactic was to destroy their boats and other belongings after crossing the river to the enemy's territory, in order to fight for their lives without the possibility of returning. This idiom is not compatible for example with the English idiom *burning bridges* because there is no mention of failure. (Lei Wang & Shiwen Yu (2010: 11-12)

was 5 to 38 at UO, whereas at NJIT it was 48 to 117. In the computer practicals one teacher at NJIT had three classes at the same time, with the student total reaching 150. Additionally, the students do not have experience of communicative teaching methods, as the teaching method is based on textbooks with a great amount of knowledge and there is a lack of teachers' time. There are still traces of centralised curricula as well, which means that planned decentralisation is not easy to put into practice in an education system which often emphasises right and wrong answers. The students seem to face pressure to answer correctly and this does not encourage them to develop their own thoughts. Finally, it is an implicit custom to respect the teacher by being silent. In the background there are cultural factors like Confucianism and political control with communist roots, which means restricted agency. This is visible in the location of the culture on the Grid and Group diagram, which for example emphasises hierarchy. A collectivistic worldview is also apparent, in which individuals consider themselves to be part of the whole and sharing the actions. There is cohesion, collective pressure and norms which everyone is obeying. However, the individuals are bonded together as a great number of people need common rules to keep the order.

However, teachers at NJIT supported the student-centred teaching method in general, but it seems to be difficult to implement in practice because of the situation. Some of them reminded me of teacher Cheng, as they were globally-oriented and performing more interactively than others. Additionally, some interview responses revealed that the aim is not just to give knowledge but to get the students to develop ideas for themselves. At NJIT it was hard to pursue my question about different teaching methods further due to all the above-mentioned factors. Applying ideas into practice suffered from the practical obstacle – the Chinese situation. In any case, international collaboration may suggest some solutions for developing the teaching methods and removing some of the obstacles caused by the Chinese situation. For example, one previously mentioned opinion that Chinese students do not need e-learning because they study all day reveals that the teaching method is just unfamiliar. I think e-learning could replace some lectures, which gives space for communication and developing your own thoughts and keeps the students more interested, as they can do something else besides just listen. That may benefit everyone.

6 Conclusion

My purpose was to find out the differences between Finnish and Chinese SE education and the cultural and practical challenges when collaborating between Finnish and Chinese educational cultures. Theoretical support, interviews and observations helped me to reach my target. I concentrated on teaching models, differences in learning conceptions and reasons behind them. I paid attention for the independent information acquisition and status as well as the relationship between student and teacher. The results can benefit developing work of collaborative education plans between Finland and China.

The teaching model in Chinese education proved to be teacher-oriented. This was seen for example in the following features: it is exam-focused, emphasises lecturing, lacks interaction between student and teacher and emphasises right and wrong answers.

At UO the model was more student-centred, which was seen particularly in various amount of different teaching methods. Constructivist conceptions are supported, there are different options for answering questions, which are not based on right or wrong but on developing your own thoughts. There were more conversations during the lecture in addition to the traditional, quieter ones. Finnish teachers have a larger range of possibilities to teach in the way that they want and to act in the way that they want because the more individualistic culture gives them more freedom.

At UO the hierarchy seemed to be more hidden and at NJIT, the level of hierarchy depends on the situation. However, Chinese education culture was revealed to be hierarchical and Finnish egalitarian but chosen teaching methods impacted upon students' behaviour at NJIT: practical classes with the distribution frames had a relaxed atmosphere and lectures tended to be more hierarchical. Nevertheless, I would like to remind again that I observed only one practical class at NJIT, so I cannot form proper opinions on it. Notwithstanding, this finding suggests that there is a great probability for behaviour change when doing practicals. During the lectures, the students were more passive learners.

Above all, it is significant to be aware that the number of students at NJIT is four times higher than at UO and this difference has a major impact on the practicality of teaching. Chinese education faces challenges, e.g. teachers instructing a great number of students, with not enough time and teaching often based on textbooks. However, behind there is also Confucianism as an

affecting factor; teachers are respected by listening to them. Classrooms are silent, which Chinese students are used to.

The main theories used in my thesis were Mary Douglas's *Grid* and *Group* theory (1982) and the cultural theory of four models of ways of life (2003) by Mary Douglas, Marco Werveij and Michael Thompson (2003). With these theories, I explain what kind of cultural factors affect an individual's agency. The main conclusion is that Chinese culture is hierarchic and fatalistic and Finnish culture is individualistic and egalitarian. For example, collective group pressure, high tolerance of control and hierarchy are impacting factors in Chinese culture, which is seen in individual's agency. On the contrary, the agencies are less restricted by individual and egalitarian culture, in which the tolerance for control is low. When moving e.g. from a hierarchical culture towards a more individualistic one, individuals' identities can change. One reason for this can be that restricting boundaries weaken, which can be seen in my main informant group, the Chinese who had studying experience from UO, when studying the process of their adaptation to Finnish education culture. When starting their studies at UO they faced challenges, e.g. to learn to answer, as they were used to right and wrong answers, not to communicating during the class. The various teaching methods and stricter copying rules were also problematic for some. However, I found out that the individual orientation, *global* or *local*, impacts on the restructuring of identity: with the globally oriented, the identity change towards individualistic is more significant. The locally oriented may feel uncomfortable e.g. with taking initiative and with doing communicative studying tasks. The identity change can be reflected to a wider context of Chinese educational culture, as in developed areas there have been some changes from traditional teaching methods towards communicative ones. On the other hand, boundaries are present and Confucianism is emphasized today again, which can be seen as a way to keep the power.

It was an eye-opening experience to write this kind of interdisciplinary thesis. I had to strike a balance between the views of anthropology and information processing science. I tried to write my thesis to suit readers of information processing science, but a narrative aspect is apparent, as is usual for anthropological theses. Maintaining the narrow focus of my thesis was challenging right from the beginning. For starters, I had too many theories and the number of interviews was huge, but I wanted to have inclusive material because I had the chance to visit NJIT. This proper material increases the value of the information in my thesis. The topic of my thesis was politically, linguistically, educationally and in all other aspects very challenging. I

was not able to study Chinese culture extensively nor deeply because this thesis is at master's level. In addition, my Chinese language skills were not strong enough to understand the culture when listening to the interviewees. The language is deeply connected with culture and I am not able to analyse it.

Future research could fruitfully explore e.g. the above-mentioned deeper analysis involving language and culture. Furthermore, the experiences of the first academic year of this SE double degree programme, as well as other similar education export projects in the future could be other potential objects for future studies.

Although my research focuses on the differences in the learning environment between Finnish and Chinese cultures, I must still point out that there are differences in the education cultures both within the state and between different faculties within the university itself, as well as on a smaller scale between the teachers and the students. However, a red thread can be found in cultural differences and discovering that was the purpose of this thesis.

7 Reference list

Fieldwork material

Kallio, Jyrki (2017/12/13) e-mail conversation

Jiang, Jing (2018/3/15). Private discussion with the Deputy Director of the International Unit at NJIT.

Informants

Informants (15 males, 8 females)	Date of the interviews (month/year)	Age of the informants				
		20-24	25-30	31-40	41-50	51-65
Finnish teachers, coded O1-O4	4/2017			2		2
Chinese students with experience of UO, coded S1-S8	1–3/2018	2	5	1		
Students at NJIT, coded X1-X6	3/2018	6				
Teachers at NJIT, coded L1-L6	3/2018			2	4	

List of figures

Bibliography

Published material

Adkins, Lisa (2000). Objects of innovation: Post-occupational reflexivity and re-traditionalisations of gender. In Ahmed Sara, Kilby Jane, Lury Celia, McNeil Maureen & Skeggs Beverley (eds.), Transformations: Thinking through feminism. London: Routledge.

Benedict, Ruth (1946). The Chrysanthemum and the Sword: Patterns of Japanese culture. Boston: Houghton Mifflin Harcourt.

Berry Michael, Carbaugh Donal & Nurmikari-Berry Marjatta (2009). Discomfort with Silence' in a culture 'Comfortable with Quietness'. In Michael Berry (ed.), "That's not me" Learning to Cope with Sensitive Cultural Issues: pp. 39-60.

Berry Michael (2009). Finnish Intercultural Business Overlap with Student Experience Discomfort with Silence' in a culture 'Comfortable with Quietness'. In Michael Berry (ed.), "That's not me" Learning to Cope with Sensitive Cultural Issues: pp. 92-94.

Blankenburgh, Marco (2013). Inter-Cultural Intelligence: From Surviving to Thriving in the Global Space. Cork, BookBaby.

Clark, Rose & Gieve S.N. (2006). On the discursive construction of 'The Chinese learner'. Language, culture and curriculum: 19 (1):54-73.

Chai, Sun-Ki, Liu, Ming & Kim, Min-Su (2009). Cultural Understanding: Cultural Comparisons of Beliefs and Values: Applying the Grid-Group Approach to the World Values Survey. Beliefs and Values. 1 (2): 193–206.

Dewey, John (1915). The school and society. Chicago: University of Chicago Press.

Douglas, Mary (1982). Introduction to grid/group analysis. In Douglas, Mary (ed.), Essays in the sociology of perception. London, Routledge & Kegan: pp. 1-8.

Douglas, Mary, Thompson, Michael & Verweij, Marco (2003). Is time running out? The Case of Global Warming. Daedalus. 132 (2): 98-107.

Eteläpelto, Anneli, Heiskanen, Tuula & Collin, Kaija (2011). Valta ja toimijuus aikuiskasvatuksessa. In Eteläpelto, Anneli, Heiskanen, Tuula & Collin, Kaija (eds.), Vallan ja toimijuuden monisäikeisyys: pp. 11-32.

Gordon, Tuula (2005). Toimijuuden käsitteen dilemmoja. In Meurman-Solin Anneli & Pyysiäinen Ilkka (eds.), Ihmistieteet tänään. Helsinki: Gaudeamus: pp. 114-130.

Handelman, Don (1982). Reflexivity in festival and other cultural events. In Douglas Mary (ed.), Essays in the sociology of perception. London: Routledge & Kegan: pp. 162-190.

Hannerz, Ulf (1990). Cosmopolitans and Locals in World Culture. In Featherstone Mike (ed.), Global Culture: Nationalism, Globalization, and Modernity. London: Sage: pp. 237-252.

Jones, Leo (2007). The Student-centered Classroom. Cambridge University Press: Cambridge.

Jordan, Cathie (1985). Translating culture: From ethnographic information to educational program. Anthropology & education quarterly. 16(2): 105–123.

Jui, Shang-Ling (2010). Innovation in China. The Chinese software industry. London: Routledge.

Kallio, Jyrki (2014). Mestari Kongin keskustelut – Kungfutselaisuuden ydinolemus. Helsinki: Gaudeamus.

Kallio, Jyrki (2017). Kungfutselaisuus kookospähkinän kuoressa. Kiina sanoin ja kuvin (2): 12-20.

Kertzer, David I. (1988). Ritual, politics, and power. New Haven: Yale University Press.

Keto-Tokoi, Jenna (2016). Puntari: Keskustelu koulutusviennistä on yksipuolista pöhinää. Aviisi. 2: 19.

Kurki, Leena & Tomperi, Tuukka (2011). Väittely opetusmenetelmänä: Kriittisen ajattelun, argumentaation ja retoriikan taidot käytännössä. Tampere: Niin & Näin.

Lewis, Richard D. (2006[1996]). When cultures collide: Leading across cultures. Nicholas Brealey International, London.

Lowe, Sid (1996). Culture's consequences for management in Hong Kong. In Lewis, Mark & Rowley, Chris (eds.) Greater China: Political Economy, Inward Investment and Business Culture. London: Routledge: pp. 120-133.

Muller, Roland (2000). Honor & Shame. Unlocking the door. Place of publication unknown: Xlibris Corporation.

OPH (2008) Kiinan koulutusjärjestelmä. Helsinki: Opetushallitus.

Oltedal, Sigve, Bjørg-Elin, Moen, Klempe Hroar & Rundmo, Torbjørn (2004). Explaining risk perception. An evaluation of cultural theory. Norwegian University of Science and Technology, Department of Psychology. Trondheim: Rotunde.

Ouyang, Huhua (2000). One-way ticket: A story of an innovative teacher in mainland China. Anthropology and Education Quarterly. 31(4): 397-427.

Pietilä-Litendahl, Piritta (2014). Kasvatus, toimijuus ja voimaantuminen. Kasvatusantropologinen tutkimus andalusialaisten naisten arjesta. Acta Universitatis Lapponiensis. Rovaniemi. Lapin yliopisto.

Pryktov, Andrei (2017). Korkeakoulun opettajan kehollinen vuorovaikutus luennolla: Vertaileva tapaustutkimus Suomen ja Venäjän kontekstissa. Pro Gradu. Jyväskylän yliopisto. Kieli- ja viestintätieteiden laitos.

Rayner, Steve (1982). The perception of time and space in egalitarian sects: A millenarian cosmology. In Douglas Mary (ed.), Essays in the sociology of perception. London: Routledge & Kegan: pp. 247-274

Rinne, Risto, Kivirauma, Joel & Lehtinen, Erno (2015). Johdatus kasvatustieteeseen. Jyväskylä: PS-kustannus.

Roberts, Elizabeth & Tuleja, Elizabeth A (2008). When West Meets East Teaching a Managerial Communication Course in Hong Kong. Journal of Business and Technical Communication. 22 (4): 474–489.

Salonen, Toivo (2000). Filosofian sanat ja konseptit. (Ed. Sarsila Juhani). Tampere: Tampereen yliopisto.

Scollon, Ron & Wong Scollon, Suzanne (1995). Intercultural communication: A discourse approach. Cambridge: Blackwell.

Siljander, Pauli (2014). Systemaattinen johdatus kasvatustieteeseen. Tampere. Vastapaino.

Timmermann, Dieter (2017). Productivity, Effectiveness, Efficiency Basic Concepts of the Economics of Education. In Siljander Pauli, Kontio Kimmo & Pikkarainen Eetu (Eds.) Rotterdam. Sense Publishers: pp. 137-159.

Tuomi, Jouni & Sarajärvi, Anneli (2004). Laadullinen tutkimus ja sisällönanalyysi. Helsinki: Tammi.

Wang, Dan (2011). The dilemma of time: Student-centered teaching in the rural classroom in China. Teaching and Teacher Education. 27(1): 157–164.

Yeung Sze Yin Shirley (2009). Is Student-Centred Pedagogy Impossible in Hong Kong? The Case of Inquiry in Classrooms. Asia Pacific Education Review. 10(3): 377–386.

Unpublished material

Chen, Qian (2018). An exam today determines 10 million Chinese students' futures. It's fueling a more than $120 billion market. CNBC. Retrieved from 2018/8/20.
URI: https://www.cnbc.com/2018/06/07/gaokao-an-exam-today-determines-10-million-chinese-students-futures.html

Cheung, Elizabeth & Chiu, Peace (2016). Students at breaking point: Hong Kong announces emergency measures after 22 suicides since the start of the academic year. South China morning post. Retrieved from 2017/1/16. URI: https://www.scmp.com/news/hong-kong/health-environment/article/1923465/students-breaking-point-hong-kong-announces

China Daily (2017). 516 Confucius Institutes established worldwide. Retrieved from 2018/12/11. URI: http://europe.chinadaily.com.cn/life/2017-10/01/content_32720352.htm

CNBC (2016). Hong Kong student suicides prompt government to provide schools with psychologists. CNBC. Retrieved from 2017/1/16. URI: https://www.cnbc.com/2016/03/10/hong-kong-student-suicides-prompt-government-to-provide-schools-with-psychologists.html

Douglas, Mary (2007). A history of grid and group cultural theory. Course of lectures at the University of Toronto, Canada. Retrieved from 2017/6/20. URI: http://projects.chass.utoronto.ca/semiotics/cyber/douglas1.pdf

Evans, Anthony J. (2011). Towards a Corporate Cultural Theory. Retrieved from 2019/1/26. URI: http://projects.chass.utoronto.ca/semiotics/cyber/douglas3.pdf

Financial Times (2015). Teacher spurns $11m offer in Hong Kong tutor wars. CNBC. Financial Times. Retrieved from 2017/9/28. URI: https://www.cnbc.com/2015/10/16/teacher-spurns-11m-offer-in-hong-kong-tutor-wars.html

IELTS Advantage (2017). IELTS Reading- Skimming and Scanning. Retrieved from 2018/8/14. URI: https://www.ieltsadvantage.com/2016/04/27/ielts-reading-skimming-and-scanning/

Jensen, Maria L. (2014). Structure, Agency and Power: A Comparison of Bourdieu and Foucault. Retrieved from 2018/12/5. URI: https://www.academia.edu/10258956/Structure_Agency_and_Power_A_Comparison_of_Bourdieu_and_Foucault

Kallio, Jyrki (2016). Towards China's Strategic Narrative: On the Construction of the Historico-cultural Roots of China's National Identity in the Light of the Chinese Debate Relating to the Rise of Traditional Schools of Thought. Dissertation. Rovaniemi: University of Lapland.

Karjalainen, Mari. (2011). Improving employees' information systems (IS) security behavior: toward a meta-theory of IS security training and a new framework for understanding employees' IS security behavior. Dissertation. Oulu: University of Oulu

Lau, Mimi & Rui, Guo. (2018). Chill and fear in Chinese classrooms as students are recruited to report teachers with 'radical' opinions. SCMP. Retrieved from 2018/10/20. URI: https://www.scmp.com/news/china/politics/article/2169440/chill-and-fear-classroom-students-are-recruited-report-teachers

OECD (2016). Education in China: A Snapshot. OECD. Retrieved from 2018/6/27. URI: https://www.oecd.org/china/Education-in-China-a-snapshot.pdf

PRC Study (2002 – 2008). Nanjing University. PRC Study Consulting Limited. Retrieved from 2017/1/24. URI: http://www.prcstudy.com/uni_nanjing_university.shtml

Ronimus, Seija (2012). Sosiaalisten siirtymien tukeminen ohjauksen avulla. Kulttuuriantropologinen näkökulma ohjaukseen. Jyväskylän yliopisto. Kasvatustieteiden tiedekunta. Opettajankoulutuslaitos. Retrieved from 2018/6/8.
URI: https://jyx.jyu.fi/bitstream/handle/123456789/40306/URN:NBN:fi:jyu-201211132994.pdf?sequence=1

Tan, Huileng (2015). S. Korea leads exam-mad Asia in tutoring obsession. CNBC. Retrieved from 2017/9/28. URI: https://www.cnbc.com/2015/11/11/asia-spurs-private-tutoring-industry-as-exam-halts-south-korea-life.html

Tan, Yvette (2016). Gaokao season: China embarks on dreaded national exams. BBC News (7.6.2016) Retrieved from 2018/6/19. URI: https://www.bbc.com/news/world-asia-china-36457453

Tieteen termipankki (2016). Filosofia: kollektivismi. Retrieved from 2019/1/26. URI: https://tieteentermipankki.fi/wiki/Filosofia:kollektivismi

Wang, Lei & Yu, Shiwen (2010). Construction of a Chinese Idiom Knowledge Base and Its Applications. Proceedings of the Multiword Expressions: From Theory to Applications (MWE 2010). URI: http://aclweb.org/anthology/W10-3703

Appendices

Appendix 1: Map of China

Appendix 2: Collected themes from the observation form

1. General information: time, place, title of the lecture, lecturer, teaching type
2. My own participation
3. Physical environment (room, space, surfaces, building, furniture, students' materials)
4. Voices, smells, weather, temperature, atmosphere
5. Number of students, gender and age
6. Teacher characteristics: appearance, age and gender
7. Students' behaviour (appearance, position, attitude, gestures, use of voice, location, concentration)
8. Students' grouping, mutual interaction
9. Interaction between the teacher and the students (contact, activity, amount of communication)
10. Teacher's gestures (5 min): look, nodding, walking, hand movements, facial expressions
11. Teacher's behaviour (appearance, attitude, posture, gestures, use of voice, location, direction)
12. Teaching methods (traditional lecture, individual work, pair work, group work, practical class etc.) and teaching materials
13. Behaviour other than teaching or studying, factors affecting the situation

Appendix 3

Summary of interview questions for Chinese students with experience of studying at UO

Background information

- Could you tell me your name and year of birth?
- Place of birth?
- Tell me about your educational background?
- Have you studied at a Chinese university? If so, what did you study and where?
- How did you end up in Finland? When did you come to Finland? Why?
- Are you planning to go back to China? Do you think Chinese students usually return to China after graduating? Is there some reason they are doing so?

Family life

- Tell me about your family.
- What does your family mean to you?
- What did your parents think about you coming to Finland?
- How are the decisions made in your family?
- What is the role of your grandparents in your life?

Living in Finland

- What things come to mind when you think about Finland?
- Are there any differences in communication styles between the Chinese and the Finnish? What are they?
- Have you made any Finnish friends?
- Do you think Finnish people are easy to approach? Why?
- Have you encountered any difficulties in your daily life in Finland? If so, what?
- Do you feel living in Finland has changed you? If so, could you please describe how?
- Is there something you miss about the Chinese culture that you cannot find in Finland?

Education in Finland and China

- Tell me about your experiences of studying at the University of Oulu.
- How have you succeeded in your studies at the University of Oulu?
- Have you faced any challenges studying at the University of Oulu? (How did you overcome these challenges?)
- Tell me about your experience of the teaching style at the University of Oulu. Does it differ from what you have experienced in China?
- How would you describe "Chinese education"?
- Do you think education determines your position in Chinese society? If so, how?
- Do you think there are differences between a Chinese and a Finnish classroom?
- Tell me about students' behaviour in class.
- Could you please tell me about Confucianism? Does it mean something to you or to Chinese in general? Do you think Confucianism impacts upon education in China today? How?
- What do you understand by tutoring? How does tutoring work in Finland or China?
- Is studying demanding? Do you need to invest much time in it? (for example, requirements and time that has been given to do the homework and amount of homework)
- Is there a general difference in the flexibility of studies between Finland and China? (for example, changing the exam dates or choosing from a variety of different methods for completing the course?)
- Do you see any general difference in the level of motivation between Chinese and Finnish students?

Learning style

- Tell me about your personal learning style.
- Are you active during lectures? How do you show that? Does this differ if you are in China or in Finland? How would you describe an active student? Do you find any

differences between the Finnish and the Chinese students in the features you just mentioned?

- Have you encountered a teaching method where the teacher chooses a student to answer their question? How did it feel? / How would this feel? Is this typical in Finland or in China?
- Do you like to develop ideas by yourself or follow direct instructions given by the teacher? Why is that?
- What is it like to study in English? Do you think that studying in the English language is a challenge for Chinese in general?
- Do you find it easier to listen, read, speak or write in English? Can you say which one of them would be easiest for Chinese people in general?
- After a poor grade, do you ever ask the teacher what went wrong? Would you want to improve your grade? Does this differ if you are in China or in Finland?

Group work and communication

- Tell me about students' behaviour in class.
- Is it common to have interaction between the teacher and the students during the lectures at the University of Oulu? How about in China? Do/did you take part in those discussions? Does your behaviour differ between China and Finland?
- Do you feel there is a difference between China and Finland in how you can express your opinion in the classroom? What kind of difference?
- Do you see any difference between China and Finland in the levels of courage of students to speak in a classroom?
- Do you find it easy to approach a lecturer during a class at the University of Oulu? How about outside the classroom or in the lecturer's own office? How about in China? Is there a difference in approachability between Finnish and Chinese teachers?
- Do you like group discussions where you exchange perspectives and express your ideas openly? Is this a common teaching method in Oulu or in China?
- How is respect towards a teacher shown in China vs Finland?
- Do you use a name or title when you speak to the teacher? Does this differ between China and Finland?

Education export to China

- What comes to mind when you think about a Finnish software engineering education programme exported to China?
- Do Finns and Chinese share any similarities which may help the education programme work well in a multicultural environment?
- If you had to give some tips to a Finnish teacher on how to teach Chinese students, what would you say?

Ethics

- What do you think about copying academic texts that are written by others?
- Have you ever heard or seen that someone has not followed academic copying rules?
- Do you find any differences between Finland and China in how copying academic texts is regarded?

Appendix 4: Interview framework for the Chinese teachers at NJIT

Background information

- Name
- Year of birth
- Place of birth
- Education and work experience in brief
- How long have you have been teaching for at NJIT?
- Have you studied pedagogy?

Chinese education and teaching

- Tell me about the Chinese education system? Do you think it differs somehow from Western education?
- What is the teacher's most important task?
- Describe your own teaching method
- What kind of teaching methods do you have? (for example, lectures, group work, e-learning?)
- Tell me about students' behaviour in the class.
- What do you think about the activity level of the students in teaching situations? How do they show that? Does the level of activity vary between different teaching methods?
- Do you find the students' level of activity to be a significant factor in teaching? If so, how do you inspire students to be more active? Does it work? Does your approach change with different teaching situations? If so, how?
- Could you tell me about Confucianism? Do you think it impacts upon education in China today?
- Is it important that students search for information by themselves? How you get them to do so? Does it work?
- Tell me about the students' attitude towards copying academic texts written by others at NJIT?

- Have you noticed or heard that students have broken the rules set for academic texts?
- Are students asked to give feedback after a course? How is the feedback given and are the students active in giving it?

Finnish and Chinese collaborative software engineering degree programme

- What comes to mind when you think about a collaborative software engineering degree programme between China and Finland? What do you find positive about this and what are the potential challenges?
- Is there anything else you would like to say?

Appendix 5: General information about some lectures at NJIT

Number of students	1st lecture: 105 (80M, 25F) 2nd lecture: 51 (44M, 7F)	1st lecture: 74 (50M, 24F) 2nd lecture: 73 (49M, 29F)	117 (80M,37F)	82 (64M,18F)	48 (35M,13F)
Comp letion method	Lectures, computer projection and presentation	Lectures, experiments	Lectures	Lectures	Lectures, practicals
micro phone	x	x	x	x	-
black board	x	x	x	x	x
screen	x	-	x	x	x
book	2nd lecture x	x	x	x	x
Stu dents' beha viour	Glimpse: 3 back rows: mainly looking at their phones: 1 is playing a war game, 3 are sleeping, 3 are looking at the T, 31 are looking down. 4 front rows: mainly looking at the T, 1 is sleeping, 2 are conversing. Glimpse: 50% are looking down. Some use mobile phones, 1 is studying the book (headphones on). Glimpse: 25 are looking down, 2 are reading a book, 4 are using their phones.	S are mainly listening to the T. Glimpse: 43 are looking at the T, 4 are sleeping, everyone has a book, a few are using their phones. 2 whisper once to each other. 45 min. later: 35 are looking at the T, the same 4 are sleeping, 28 are looking down and a few are using their phones.	Glimpse: Back rows: 11 are looking at their phones, some are chatting quietly, 50% are listening to the T, 9 are looking down, 1 is sleeping and 1 is reading a book. 1 is writing notes and using a phone.	Almost all listen to the T. Some S are looking down. There are not many phones being used.	S are sitting still and concentrati ng mainly on the teaching. There are not many phones being used.
Inter action between students and teachers	1 S **stands up** to answer and stands still and quiet when the T speaks. After 2 min, T is shows S to sit. T says something and S laugh. 2 S **stand up to** answer using a microphone. They stand for around 5 min before being allowed to sit.	S says something to the T. 2 times T says something and S are laughing. The whole lecture was mainly T speaking and writing on the blackboard and sometimes browsing a book when speaking. A few times T says something and there is a weak murmur among the S.	T walks behind the S and asks questions from 3 S. Once T asks something and S reply in chorus and laugh. In total T says something 10 times and S laugh. Once T writes on the blackboard and uses a funny voice, S laugh.	1 S **stands up** to answer 2 times. T asks a question 3 times and a few S give an answer quietly together.	**2 S stand up to answer.** One stands up two times.