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The purposes and processes of master's thesis supervision: a comparison of Chinese and Dutch supervisors

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ABSTRACT

The number of international Chinese students enrolled in research programmes in Western universities is growing. To provide effective research supervision to these students, it is helpful to understand the similarities and differences in the supervision process between the host country and their home country. We explored which learning outcomes supervisors of master's theses aim for in two cultures, China and the Netherlands, and how they help their students to achieve these learning outcomes. Semi-structured interviews with 10 Chinese and 10 Dutch supervisors revealed, besides a strong resemblance, some clear differences between the two groups. For example, the Chinese supervisors aim to prepare their students for future jobs and use explicit assessment and regulation to monitor student progress, while the Dutch supervisors aim to enhance student well-being and use implicit regulation, emotional support and frequent posing of questions to facilitate student learning. Implications for cross-cultural and international education are provided.

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Inquiry-based learning; international education; learning objectives; research supervision; teaching approaches

Introduction

In both Chinese and Dutch universities, a master's thesis, an important component of a master's programme, typically involves the students performing a piece of research under the guidance of an individual supervisor (de Kleijn, Mainhard, Meijer, Pilot, & Brekelmans, 2012). The quality of supervision plays a critical role in the successful completion of the student research process, but it is often challenged by various factors such as the supervisory style, the learning needs and learning patterns of the students, and the congruence between the learning goals of the supervisor and those of the student (Dysthe, Samara, & Westrheim, 2006; Hemer, 2012; de Kleijn et al., 2012).

Adding to such challenges is the growing number of international Chinese students enrolled in advanced research programmes, particularly in master's programmes, in Western universities (cf. Grant & Manathunga, 2011). International Chinese students have often been described or misunderstood as passive, rote learners, lacking certain academic skills (e.g., Chinese students are often not critical because they rarely express their opinions during supervision meetings or to challenge the opinions of the supervisors).

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Though such inaccurate even stereotyped representations have been challenged by scholars with intimate knowledge of Chinese learners (e.g., Singh & Huang, 2013; Wu, 2002), these preconceptions continue to prevail and can prevent Western supervisors to from adequately recognizing the skilled performance of their international students (e.g., Mathias, Bruce, & Newton, 2013; Ryan, 2011). In addition, the inherent belief in Western superiority renders it highly challenging for Western supervisors to recognize or value the prior cultural knowledge and educational ideas Chinese students might bring into their studies (Manathunga, 2011; Ryan, 2011).

In Western universities, common aims of supervisors of master's theses are for their students to make a contribution to the knowledge base, master research skills, develop critical thinking, adopt an active defence of their stance on a topic, and gain diplomas and accreditation (cf. Anderson, Day, & McLaughlin, 2006). Western supervisors are perhaps also used to informal supervision (Hemer, 2012), and having supervising roles such as those reported by Wright, Murray, and Geale (2007): Quality Assurer, Supportive Guide, Researcher Trainer, Mentor and Knowledge Enthusiast. They may perform multiple roles, but they often prioritize one of these roles.

Much of the existing literature on the supervision of master's theses is based in Western educational settings; only a few relevant studies were about international research students from China. McClure (2005) found that Chinese international research students may expect a higher level of regulation from the supervisor, and tend to have their culture-specific expectations about what to learn at the start of their international study. However, when more prescriptions and structures were provided, international students may interpret these as signs of little confidence in their abilities (Manathunga, 2011). Thus, as Ryan (2011, p. 638) put it, 'there is a pressing need for knowledge about cross cultural teaching … that embody critical and respectful approaches and a meta-awareness of cultural issues and their complexities'. This research aims to contribute to this body of knowledge by exploring the supervision of master's theses in both the Chinese and the Dutch educational settings.

Research aims

We examined the supervision of master's theses in an Asian country, China, and a Western country, the Netherlands. We hope to explore the similarities and differences between the Chinese and Dutch supervisors and, thereby, gain greater insights into the cultural and educational knowledge that Chinese international research students may bring into their studies in the West. We posed the following research questions.

- What learning outcomes do Chinese and Dutch supervising teachers want their master's students to achieve through writing a master's thesis?
- How do Chinese and Dutch supervising teachers support their master's students in achieving these learning outcomes?

Educational traditions in China versus the Netherlands

China and the Netherlands differ radically with regard to their educational traditions and systems, in which the goals of education and teaching pedagogies are grounded.

The Chinese educational tradition has been largely shaped by Confucian teaching with its emphasis on (1) moral education and the cultivation of benevolence as the ultimate goals of education (Niu, 2007); (2) the importance of knowing though reflection (Wong, 2011) and (3) the emulation of those who have achieved supremacy of virtue and intellectual development (i.e., one's seniors) (Yang, 1993). For a long time in Chinese history, exam results were used to appoint high-ranking officials (the Imperial Examination system), and this tradition still plays a role in current Chinese education in the form of the National College Entrance Exam (NCEE), which determines not only college admission but also the later social and economic status of individuals (cf. Niu, 2007). Chinese students often perceive more functional values of higher education, particularly the usefulness of a university degree to gain better career opportunities (Lai, To, Lung, & Lai, 2012). The teacher is a highly respected authority. Students have gone through intense competition and strive to achieve excellence (i.e., average study time lasts 8–12 hours each day, five to six days a week) (cf. Mathias et al., 2013; Wu, 2002).

In contrast, Western education has been shaped by the teachings of the ancient Greek philosophers and primarily aimed at (1) the pursuit of objective knowledge via scientific inquiry and (2) use of the Socratic method (i.e., the systematic exchange of questions and answers) (cf. Hummel, 1994). Within this system, the teacher ideally does not impart information directly to students but, rather, encourages students to examine and explain their assumptions, ideas and answers to questions which they have also posed themselves (cf. Shim, 2008). A later but equally important development in the goals of Western education can be found in the Humboldtian tradition for universities, which emphasizes the development of personality, or the inner self, which is considered individualistic, self-motivated and non-utilitarian (Pritchard, 2004). Reflecting this tradition, the current Dutch education, as in many other Western countries, emphasizes both qualification and personal development (van Veen, Sleegers, Bergen, & Klaassen, 2001). Children's well-being is often considered to be more relevant than becoming highly qualified. Accordingly, the Dutch educational system rarely uses stringent entrance regulations or high exam scores. Students are allowed to play after school and encouraged to make their own decisions about their education.

Organization of thesis supervision in China versus the Netherlands

In both contexts, the written thesis is an important and also the final assessment of a master's programme. Students attend research seminars, courses and thesis workshops which address methods of data analysis and academic writing prior to starting work on their theses.

In the Chinese context, master's students are often supervised in small groups (three to five students), although this varies between universities, while the Dutch students are typically supervised individually. Upon admission to the master's programme, a Chinese student should find a supervisor who supervises the completion of the entire master's programme, including the thesis, whereas a Dutch student can 'shop around' at the beginning of the second semester to find a thesis supervisor. In the Chinese context, approval of the quality of the thesis from external reviews (often one from outside the university, and two from the same university) is required before the students can defend their theses, and only upon successful defence can they obtain their master's degree. In the Dutch context, the

supervisor and a second and independent reader from the same university together determine the final grade of the thesis (ranging 0–10 points). Oral defence is not always obligatory.

Method

Semi-structured interviews were conducted with Chinese and Dutch thesis supervisors. All interviews were audiotaped; they lasted an average of 50 minutes.

The interview guide consisted of two parts. In part one, the supervisors were asked about their experiences with the best master's thesis they had supervised to date. This was done in order to attain a variety of concrete examples of the learning outcomes identified by the supervisors and insight into how they helped their students achieve these outcomes. In part two, the supervisors were asked about the learning outcomes which they would generally want their master's students to achieve, the ways in which they support the achievement of these outcomes, and their perceptions of the relevance of the learning outcomes to the future development of their students.

The interview guide was piloted among experienced supervisors from the target universities in China and the Netherlands. The interviews with the Chinese supervisors were conducted in Chinese. The interviews with the Dutch supervisors – who have more frequent exposure to English – were conducted in English.

Participants and sampling

Ten thesis supervisors from a research university in a metropolitan area of southwest China and 10 supervisors from four Dutch research universities were selected for interviewing. To minimize the possibility of disciplinary effects (cf. Stodolsky & Grossman, 1995), we only interviewed supervisors from the language and culture departments. In both samples, supervising meetings were held mostly twice a month, but for an average of two hours in groups for the Chinese respondents, and an average of half an hour individually for the Dutch. An overview of the supervisors' background information can be found in Table 1.

Data analysis

First, the interviews were transcribed verbatim and the Chinese interviews were then translated into English. The ATLAS.ti 5.2 qualitative analysis software was used to iteratively analyse the data. This included several phases. Starting with three of the interview transcripts, two researchers worked independently to identify interview fragments which referred to learning outcomes and the support provided, then assigned descriptive codes to the selected fragments. The two researchers then discussed their descriptive codes until consensus was reached on the identification of fragments and descriptive codes.

Second, one of the researchers involved in the first phase together with a third researcher categorized the descriptive codes in order to develop a tentative coding scheme. Using this coding scheme, the first researcher coded an additional three transcripts. New codes were created and categorized as needed, and the coding scheme was discussed and adjusted accordingly. After several rounds of such coding adjustment, the

Table 1. Supervisor background information.

Background		Chinese ($n = 10$)	Dutch ($n = 10$)
Expertise[a]	Linguistics	6	7
	Literature	2	3
	Language teaching	2	2
Gender	Male	5	5
	Female	5	5
Age (years)	31–40	3	1
	41–50	4	3
	51–60	3	5
	60+	0	1
Highest degree	Master's	5	2
	PhD	5	8
Study abroad	Yes	8	8
Research experience (years)	5–10	1	3
	10+	9	7
Supervising experience (years)	1–3	1	2
	3–5	4	0
	5–10	3	2
	10+	2	6

[a]Two of the Dutch supervisors reported expertise in two of the three categories.

coding of all transcripts was complete and only a few new codes emerged from the data. The now relatively stable coding scheme was discussed among the researchers. All of the interviews were then checked and some of them recoded in places. For example, the initial codes for 'research competencies' (see Table 2) were key words in the interview fragments, including 'choose research topic', 'acquire research skills', 'perform data analysis', etc., these codes were later categorized as 'learn about the research process', and eventually 'research competencies'.

As an additional step to ensure the reliability of our analysis, we checked the inter-rater agreement; a fourth independent researcher was involved. Both the first and the fourth researchers coded one-third of one Chinese and one-third of one Dutch interview transcript independent of each other. The results were compared and discussed to clarify any disagreement about the descriptions of the codes. After consensus was reached on the code descriptions, another round of coding using new data was conducted by the same two researchers. For the third round of independent coding, the strength of agreement was moderate (Landis & Koch, 1977), with a kappa of .60 and a rater agreement of 64.0%.

Final coding scheme

Five core categories emerging from the data concerned the intended learning outcomes: research competencies, general competencies, value of student research, student well-being and preparation for future career. Examples of these core categories can be found in the subcategories in Table 2. Particularly in this study the code 'student well-being' is used when supervisors express the aim for their students to be happy and satisfied with the thesis or thesis process; wanting to build student confidence, self-esteem and sense of achievement and wanting to develop the potential of students.

Two core categories emerged for supervisory support: tangible and intangible support. Tangible support refers to supervising which deals directly with content and activities which can be seen or heard. Six subcategories of tangible support which ranged from

Table 2. Intended learning outcomes identified by Chinese versus Dutch supervisors for master's theses.

Core category	Subcategory	Chinese ($n = 10$)	Dutch ($n = 10$)
Research competencies	• Helping students learn about the whole or parts of the research process (i.e., choose a research topic, read the academic literature, acquire research skills, design and conduct research, analyse the data, write and present findings)	7	8
	• Fostering student critical disposition/thinking	8	5
	• Improving student ability to write academically	8	7
	• Fostering student independence in doing research	5	7
	• Fostering student research interests	2	5
General competencies	• Developing student language abilities	7	2
	• Improving student social and communication skills	4	1
	• Increasing student general knowledge	4	1
	• Fostering the ability of problem solving/logical thinking/dealing with complexity and pressure/organizing	4	5
	• Fostering the ability to oversee field	–	2
	• Fostering a general critical attitude	–	3
	• Developing a general independence	–	1
	• Fostering a strict attitude	3	–
Value of student research	• Emphasizing students' publications	5	3
	• Emphasizing students' contributions to the knowledge base	3	8
Student well-being	• Providing integrated education or fostering student confidence/self-esteem/sense of achievement/talent/satisfaction	2	6
Preparation for future career	• Helping to graduate or helping with job opportunities, and increasing student competitiveness on the job market	10	–
	• Preparation for future jobs is not an aim for MA education	–	2

Note: The number in parenthesis following each subcategory refers to the number of supervisors who talked about that subcategory in the interview.

teacher-focused to student-focused activities were distinguished: providing study resources; giving instructions and prescriptions; setting up or finding examples for students to learn from; having interactive discussions with students; posing questions and giving students tasks or assignments. Intangible support refers to supervising which does not deal directly with content or activities. Four subcategories of intangible support were distinguished: adapting supervision to individual students; using strategies for assessing and regulating student work; providing emotional support and teacher dedication. The code 'assessment and regulation' is assigned when the supervisors express their methods of assessment or making sure that students are doing what they should, in the right way or in the way that the supervisor wants it done. The code is also assigned when adherence to the time frame, schedule or planning is mentioned.

Results

Though the Chinese and Dutch supervisors were more similar than different, we have chosen to report in detail on the differences, while just briefly mentioning the similarities between them. We focus on a selected number of subcategories showing clear differences. Our aim in this is to describe the richness of the various intended learning outcomes and the different types of support provided by the Chinese and the Dutch supervisors.

We refer to the individual supervisors as Chinese supervisor number 1 (C1), Chinese supervisor number 2 (C2), Dutch supervisor number 1 (D1), Dutch supervisor number 2 (D2) and so forth.

Intended learning outcomes

The similarities and differences in the intended learning outcomes between the Chinese and the Dutch supervisors are summarized in Table 2, from most similar (top) to most different (bottom). In general, the Chinese and Dutch supervisors were rather similar: both considered the development of research competencies to be among the core learning outcomes for students. However, they also differed clearly in several respects.

Regarding research competencies, the Dutch supervisors emphasized the ability to provide good arguments when criticizing the research literature, even when written by established scholars in the field, while the Chinese supervisors stressed more critically examining the research literature for the purpose of identifying original research questions. The Dutch supervisors showed a stronger intention for students to become independent researchers, and in conjunction with more phases of the research process than the Chinese supervisors. More of the Dutch supervisors wanted to foster students' research interests: 'Aah, yes! To discover how nice it is to do research' (D2).

The Chinese supervisors placed more emphasis on the general competencies to be developed, language abilities in particular. The Dutch supervisors focused more on the cognitive aspects related to research thinking than did the Chinese supervisors. Two of the Dutch supervisors also explicitly mentioned improving language abilities, but only in the case of supervising international students.

The Chinese supervisors mentioned more often the relevance of publication, whereas the Dutch supervisors talked more about contributing to a particular body of knowledge and thus having new ideas/insights.

Student well-being

The Chinese and Dutch supervisors clearly differed in their attitudes to student well-being as a learning outcome (i.e., student satisfaction, self-confidence, self-esteem, sense of achievement and development of talent). Six Dutch supervisors spontaneously mentioned some aspect of this.

> What I think is very important is […] that they can develop themselves to the maximum. […] and that they are not frustrated because they have the feeling that they could have done much more or much better and we prevented them from doing that. (D4)

The Chinese supervisors rarely mentioned student well-being. On the occasions when they did, it was in relation to students developing their life values in order to make them 'a person of integrity' (C2) or help them publish high-quality papers so that they could 'have a great sense of accomplishment' (C9).

Preparation for future career

The Chinese and Dutch supervisors differed most strongly with regard to the preparation of the student for a future career. All 10 of the Chinese supervisors mentioned this as an intended learning outcome. They mentioned improving the student's competences for

employability via the experience gained through writing the thesis or helping the student to job opportunities.

In contrast, for eight of the 10 Dutch supervisors, the intention to prepare students for a future job was only addressed implicitly, if at all, in the interviews. When they did refer to this, it was largely as something which naturally happens at the end of the programme. One Dutch supervisor said, 'I don't think the MA thesis is the best moment to prepare them for a job' (D9).

When explicitly asked about the aim of preparing students for a future career, most of the Dutch supervisors responded that the aim of a master's thesis was to prepare students for their future personal or professional development. 'It's valuable in its own right. And it helps them […] in ways which are perhaps not economically productive but certainly humanly enriching' (D8). Two other Dutch supervisors (D1 & D3) mentioned primarily the relevance of developing a critical attitude for the future professional development of the students.

Supervisory support

The supervisors resembled each other with regard to the different types of support identified (see Table 3). Regarding tangible support, the most teacher-focused support (i.e., providing study resources) and the most student-focused support (i.e., giving students tasks) were most frequently mentioned by both the Chinese and the Dutch supervisors. For intangible support, both groups talked most frequently about adapting their supervision to individual students' motivation, abilities and background education. The supervisors thus agreed on the importance of individualized education.

Nevertheless, the Chinese and Dutch supervisors also differed in several respects. To start with, they differed in the extent of their use of specific types of support. While both had interactive discussions with students, the Dutch supervisors mentioned discussion with students much more frequently and also for more stages and varied purposes during the supervision process than did the Chinese supervisors.

The Chinese and Dutch supervisors also differed in how they combined the types of support. For instance, giving instructions and serving as an example were frequently mentioned by the supervisors from both countries, but the Chinese reported providing instruction and providing examples beforehand, while the Dutch reported doing this only when the students encountered difficulties with a task or requested it.

Perhaps most importantly, the Chinese and Dutch supervisors showed marked qualitative differences in the manner in which they provided specific types of support, namely posing questions, assessment and regulation, and providing emotional support. We report in detail on these subcategories below.

Tangible support

Posing questions. The Chinese supervisors generally emphasized less the use of questions than the Dutch supervisors. They also differed in the manner in which they posed questions. First, the Dutch supervisors reported deliberately not supplying answers and, therefore, frequently posing questions in response to student questions instead. However, perhaps because Chinese students do not ask very many questions, at least according to

Table 3. Support mentioned by Chinese and Dutch master's thesis supervisors.

Core category	Subcategory	Chinese ($n = 10$)	Dutch ($n = 10$)
Tangible support	• Providing study resources	9	10
	• Giving instructions and prescriptions	9	9
	• Setting up or finding examples for students to learn from	6	8
	• Having interactive discussions with students	5	9
	• Posing questions	6	8
	• Giving students tasks or assignments	10	8
Intangible support	• Adapting supervision to individual students	10	9
	• Using strategies for assessing and regulating student work	9	7
	• Providing emotional support (e.g., easing student worries, encouraging them and demonstrating confidence in them)	7	8
	• Teacher dedication	1	5

one of the supervisors (C8) in our study, the Chinese supervisors reported sometimes asking questions beforehand (i.e., as a separate, preparatory instructional step).

Second, the Dutch supervisors preferred posing series of nested questions (i.e., questions ranging from general and easy to more specific and difficult) to gradually foster students' understanding. They asked questions such as, 'What is the article about? The topic, the methodology, and the main results? And what is the most striking result?' (D1). The Chinese supervisors, however, talked mostly about the questions which they considered most important for the students to understand, questions which were not necessarily explicit or nested.

Third, the Dutch supervisors described a wider variety of questions than the Chinese supervisors in the interviews. The Dutch supervisors often asked 'what', 'why' and 'how' questions at the same time. They also more frequently reported asking students why they opted for a particular approach or alternative, and how they planned to put that approach or alternative into practice, than did the Chinese supervisors. In the words of one Dutch supervisor: 'They have to make their arguments for wanting to do it like this explicit. If they don't have the arguments, then normally there is a problem' (D4). The Chinese supervisors spoke predominantly about 'what' questions in the interviews. They occasionally also mentioned 'why' and 'how' questions, but relatively independently of their asking of 'what' questions.

One exception in the Chinese sample resembled the Dutch supervisors in the use of many and varied types of questions.

Intangible support

The Chinese supervisors gave priority to assessment and attention to rules and regulations in order to ensure progress and the quality of students' work. In addition to this, the Dutch supervisors provided emotional support for the students.

Assessment and regulation. The Chinese supervisors appeared to be more focused on the use of explicit regulation and referred more than the Dutch supervisors to giving 'approval' (C9), 'inspecting' students' work (C1) and sometimes getting 'very annoyed and angry' especially when the good students messed things up (C10). 'If you cannot persuade me, then you must do it my way!' was the conclusion of one supervisor when a student repeated a mistake several times (C4). Four of the Chinese supervisors explicitly

mentioned forewarning students about the consequences of misbehaviour, and particularly about the consequences of plagiarism.

Assessment and regulation were largely more implicit and involved more interaction and discussion with the students for the Dutch supervisors than for the Chinese supervisors. 'They have to tell me why they think that this method will lead to the best results. And if they are able to say that, then I say it's okay, they can do it' (D4).

Thesis planning or scheduling was frequently used by the Dutch supervisors for assessing and monitoring student progress. The planning was often drafted by the students and then discussed with the supervisor. The Dutch supervisors reported holding regular meetings with their students 'just to make sure that they are on target' (D5). Finally, some of the Dutch supervisors reported using grading as a means to regulate student work.

In situations in which the supervisor had little or no regulation, one Dutch supervisor mentioned that he might send a student who he had not seen in months an e-mail asking 'how is it going?' but that 'it is their responsibility in the end' (D1). In contrast, one Chinese supervisor mentioned that due to circumstances, she had to phone a student many times, and revise extensively the work of her student (C7).

Providing emotional support. The Chinese supervisors often mentioned understanding the difficulties and limitations of students, their insecurities at times and their need for encouragement to pursue their own ideas. The Dutch supervisors, in contrast, emphasized providing emotional support in the form of not directly pointing out mistakes; as one Dutch supervisor said, 'Never tell them that! […] I say "Good! Just collect more on this, collect more on that, and then later you need to try to put it together"' (D6).

The Dutch supervisors also talked about building a close relationship and creating a relaxed atmosphere in which students are not afraid to express difficulties and expose mistakes.

> I have had students here who would come to my office […] you give them tea and ask them how things are going and then they break down and cry. Then you try to find out what's wrong and see if you can help. (D9)

According to two supervisors, they often meet informally 'in the sun or in the coffee room' to discuss things as equals, or in the words of one supervisor 'teach without teaching' (D9). According to another, 'in half the cases, you become more or less friends for a very short period of time' (D1).

Conclusions and discussion

With regard to the intended learning outcomes identified during the interviews, the Chinese and Dutch supervisors highly resembled each other. Both considered the development of research competencies a core learning outcome of a master's thesis. They differed strongly, however, with regard to the ultimate goal of supervising a master's thesis: the Chinese supervisors clearly considered the preparation of master's students for a future career an important learning outcome, while the Dutch supervisors did not; they even, in some cases, explicitly stated that preparation for a future career was not the aim of a master's thesis. The Dutch supervisors focused more on student well-being. In relation to this difference, the Chinese supervisors also referred more to encouraging students to publish, and the development of language abilities, whereas the Dutch supervisors

placed more emphasis on students' contributions to the knowledge base and students' cognitive development. In addition, the Dutch supervisors clearly prioritized students' development of an active defence for their opinions, independence and research interests.

With regard to the support which the supervisors reported providing, the Chinese and Dutch supervisors both reported giving a combination of different types of support, ranging from the most teacher-focused support (i.e., providing study resources) to the most student-focused support (i.e., giving students tasks). Both talked about specific supervising strategies (tangible support), as well as aspects of the supervision environment (intangible support).

Despite these similarities, the Chinese supervisors more frequently mentioned exerting explicit regulation while the Dutch supervisors were more implicit about this and emphasized emotional support instead, meaning that the Dutch supervisors focused more on creating an encouraging atmosphere for students to discuss difficulties and expose their weaknesses. The two groups also differed strongly in their use of questions. The Dutch supervisors deliberately posed a nested set of questions in response to students' inquiries; they frequently asked students why they opted for certain ideas and just how they planned to put their ideas into practice. In contrast, the Chinese supervisors, with one exception, did not pose many questions and reported that when they did, they sometimes did so ahead of time to prepare students for the task of completing their master's thesis.

Given the marked differences in the educational traditions of China and the Netherlands, it is surprising that the Chinese and Dutch supervisors resembled each other so closely with regard to the intended core learning outcomes (i.e., research competencies) and types of support given during the writing of master's theses. However, eight of the 10 Chinese supervisors in our study had studied at or visited a Western university. Chinese education has been influenced tremendously by Western educational ideas since the 1980s (cf. Niu, 2007). The resemblances found here may be indications of how Western educational ideas have spread to Asian countries.

Preparation for future career versus personal development

The finding that the Chinese supervisors placed a strong emphasis on preparation for future career is rarely reported in previous studies. This difference may stem from the educational traditions of the two countries, but also from the social–economic conditions. China is a rapidly developing country with a booming economy, and Chinese educational policy has traditionally emphasized and still emphasizes higher education as an instrument for developing a highly educated work force. The recent unemployment problems caused by an oversupply of university graduates has also given rise to the enhancement of the employability of students as a core learning outcome for master's theses; our data support this. This is also in line with findings of Lai and colleagues (2012) that Chinese students' perceived value of higher education is strongly associated with their perceived usefulness of a degree. It can thus be assumed that international Chinese students may expect to strengthen their employability through education at least in the beginning of their international study.

In the Netherlands, with its relatively stable employment market, the aims of university master's programmes have been less affected by the labour market, allowing Dutch supervisors to use the master's thesis as a means to enrich both the personal and professional

lives of students. In addition, the European education system, stemming from the Humboldtian tradition, is concerned with the development of individuals and is essentially non-utilitarian (Pritchard, 2004). This may be difficult to sustain in the future in light of the influx of international students from countries like China with their own culture-specific aims for attaining a master's degree (i.e., to maximize the probability of employment), but probably also in light of the economic crisis in Europe. This is echoed by the Halliday and Clarke (2015) that 'Institutions should continue to develop new approaches to supporting doctoral candidates, and their supervisors, preparing candidates for future employment'. This will require supervisors to reconsider their current supervisory practices to cope with the *mismatch* between the individualistic and non-utilitarian aims and the need to enhance students' employability. The current research supervision might be expanded to include more work-related skills, especially with international Chinese students.

Teach without teaching; answer with questions

The Dutch supervisors paid more attention to providing emotional support and building a close relationship with students, while the Chinese supervisors paid much more attention to regulation and assessment. In the phrasing of Wright and colleagues (2007), the Chinese supervisors are likely to have prioritized the roles of Quality Assurer and Researcher Trainer, whereas the Dutch supervisors paid more attention to roles such as Supportive Guide, Mentor and Knowledge Enthusiast.

The Dutch supervisors reported using different types of questions more frequently and deliberately than the Chinese supervisors. This difference may have its roots in the underlying educational philosophies (i.e., Confucian versus Aristotelian underlying ideologies). Chinese education, under the influence of Confucius' teachings, has traditionally emphasized the use of modelling (Yang, 1993). Learning from examples (i.e., from the teacher's example) is thus often emphasized as an effective and essential way of learning, which is more than just simple imitation, but a learning process that involves in-depth reflections and analysis. In contrast, Western education, under the influence of the ancient Greek philosophers, emphasizes learning through the asking and answering of questions (i.e., the dialectical method) (cf. Hummel, 1994). Although the globalization of higher education may have resulted in substantial resemblance in the current teaching ideas between Chinese and Western teachers, Chinese teachers were still less inclined than their Western counterparts to teaching approaches that are oriented towards conceptual development of students (in contrast to information transmission).

Limitations and implications

It should be noted that we have chosen to report extensively on the differences between the Chinese and Dutch master's supervision processes. In doing this we hope to have captured and explored as many different learning outcomes and forms of supervisory support as possible, and therefore to have expanded our knowledge regarding research supervision. The observations and explanations provided here do not necessarily apply to all supervisors or teachers in the two countries and should certainly not be taken as stereotypes. Our study was conducted only in the language and culture departments of universities,

involving only 20 supervisors, and exceptions to the observed patterns were found in both the Chinese and Dutch samples. We have mainly discussed the cultural and educational influences, and therefore we must note that there are other potential influences, such as the goals of the institution and the way the thesis is assessed (Kiley, 2009) that have not been discussed in this paper but may also explain the differences between Chinese and Dutch supervisors.

Chinese and Dutch supervisors may nevertheless benefit from the cross-cultural insights provided here. Dutch supervisors might explore ways to supplement individual supervision with group supervision to draw upon the capacity of students to learn from each other, but also to facilitate the often time-consuming process of individual supervision. Conversely, Chinese supervisors might consider the way in which Dutch supervisors use questions to guide the student learning process and promote independent thinking.

We conclude with several implications for intercultural supervision. First of all, supervisors need to re-examine their beliefs about education, and become aware of their own cultural 'biases' and the consequences this has for their perceptions of students from other cultures (e.g., a Chinese student being silent does not necessarily mean that the student is non-critical or has no opinions, but possibly means, that the student feels insecure to share their ideas prematurely or publicly).

It is then important to become aware of not only the cultural differences and their influences as described in this paper, but also of the values and positive aspects of both backgrounds (e.g., explicit regulation can be more cost efficient concerning knowledge and skill development, thus may correspond better to the need to maximize students' employability, whereas systematic exchange of questions and answers can better promote student cognitive development).

A third step is to raise student awareness of their own implicit ideas about teaching and learning, also of the similarities and differences between students' new and home educational contexts. One option to do this is to explicitly explain these to students, especially when learning goals are concerned. For example, it can be assumed that Chinese students may expect to strengthen their employability rather than enrich their personal lives. Supervisors and students are thus encouraged to discuss about, for instance, how students envision themselves to become in comparison to the curricular goals, and also what the supervisors intend them to achieve.

An option to raise awareness of students' implicit learning style is to let students observe the supervision interactions of fellow students from other cultures, and then compare not only the observed supervision style with those of their teachers at home, but also the observed learning style with those of their own.

A fourth implication is to stress the value of confronting students with learning approaches that are relatively new to their culture while also considering adapting existing supervisory practices, at least in part, to students' cultural backgrounds. The former may help students to expand their current beliefs and ideas about education, and the latter those of the supervisors. The more employment-focused approach is certainly more responsive to the labour market, which is increasingly called upon in a time of mass education, whereas the approach that focuses more on personal development and especially critical thinking can better prepare students to function in the ever-changing and complex knowledge society we are rapidly entering. Recognizing such values of both approaches, notwithstanding curricular constraints, supervisors can then decide on the

adequate amount of attention to employment-related learning outcomes and attention to the development of critical thinking. Chinese students may prefer a stronger focus on preparation for employability relative to students from Western countries (Lai et al., 2012).

Finally, supervisors are encouraged to explore new ways of working with international students and embrace the cultural differences as potential areas for mutual learning. More support from the institutions should also be provided for the supervisors' endeavours to differentiate their supervisory practice.

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