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Conform, Transform, Resist: The Scandinavian Way of Master's Thesis Supervision and Its Contribution to Acquiring Research Literacy and Practice

Vibeke Ankersborg and Karl-Heinz Pogner COPENHAGEN BUSINESS SCHOOL

Our contribution explores the concept of supervision in the context of Scandinavian (Danish) Higher Education by investigating how student-centered supervision ("vejledning") can foster and advance students' research literacies when managing their master's thesis project and writing their master's thesis. The theoretical and analytical framework links three different pedagogical models of supervision with three types of supervisor roles. The models describe different kinds of relationships between supervisors and students; the nature of this relationship enables and/or constrains the students' chances to develop research literacy. Our findings show that the partnership model allows for the enactment of all three types of supervisor roles, gives a high degree of flexibility for the supervisor and assigns a high degree of responsibility, autonomy, and independence to the students. The qualitative analyses investigate how the combination of the perceived supervision model and supervisor role affects the students' opportunities to acquire and develop research literacies. In the partnership model, supervision can enhance students' research literacies by empowering the students to make well-informed choices concerning their knowledge production and text production. This shift in responsibility from supervisor to students shapes the meaning and content of student-centered supervision. The combination of the partnership model with student responsibility and autonomy, which is deeply rooted in the problem-oriented project learning approach, can be a fruitful and productive approach

in higher education aiming at fostering students' ability to identify, define, and research a relevant "problem." It further contributes to students' competencies to transform and produce knowledge as a contribution to the academic discourse community and community of practice. As legitimate peripheral members of the academic community, students can develop academic and research literacies, in order to become able to INTERPRET the discourse and to decide if they want to conform, transform or resist.

We offer an insight into the characteristics of Danish (and Scandinavian) student-centered supervision, which does not take charge of the students' projects, nor of their research and writing processes, but empowers students to learn to find their own way (in Danish: "vej") to develop academic literacy. We are aiming at unfolding the relationship between supervisor and student in order to show how and why this relationship enables and constrains students in acquiring research literacies that enables them "to 'read' the discourse and then to decide if they want to conform to, transform, or to resist" (Badenhorst & Guerin, 2016, p. 15) existing discourses, cultures and established perceptions. This leads to the following research question: *How can the Danish perception of the act of supervision foster master's students' research literacies in-cluding their chance to conform to, transform, or resist established expectations and norms of the academic community?*

We investigate this question by looking at the role of different pedagogical models of supervision (supervision models) and different approaches to supervision (supervisor roles) in student-centered master's thesis supervision in the tradition of problem-oriented project work. The students are enrolled at the Copenhagen Business School, a Danish (business) university offering a wide range of mono- and interdisciplinary study programs mostly with a focus on social science disciplines. We study the influence of the models and roles on the students' chances to acquire knowledge, capabilities, and skills in academic writing (AW) and research literacies (RL).

Lea and Street (1998) have identified three models of student writing in higher education: (1) study skill model: student writing as technical and instrumental skill; (2) academic socialization model: student writing as transparent medium of representation; and (3) academic literacies model: student writing as "meaning-making" and taking into account the "conflicting and contested nature of writing practices" (Lea & Street, 1998, p. 158). In the academic literacies model (3) the focus is on students' "negotiation(s) of literacy practices," literacies are seen as social practices including epistemology and identities; "institutions as sites of/constituted in discourses and power," and the curriculum has to deal with a "variety of communicative repertoire, e.g., genres, fields, disciplines" (Lea & Street, 1998, p 172). In accordance, we conceptualize academic writing as a situated social practice of master's thesis students. This practice is both a process of text production and knowledge production embedded in academic discourse communities and academic communities of practice where the main practice is producing research and discourse (Pogner, 1999, 2003, 2007, & 2012).

When it comes to academic literacies (AL) (Lillis & Scott, 2007a, 2007b), especially to research literacies (Badenhorst & Guerin, 2016) as an essential part of AL, the literacies model goes beyond the study skill approach and includes features of the academic socialization model:

Literacy is seen as acquiring the epistemologies necessary for participating in a particular discourse. For example, students need to learn what knowledge is valued, what questions can be asked and who is allowed to ask, while at the same time recognizing what they know and how they write what they know (Lea & Street, 2014). (Badenhorst & Guerin, 2016, p. 15)

Socialization is much more than conforming to the expectations and norms of the disciplinary domains and academic discourse communities and communities of practice (Pogner, 2007) in academic "Action and Discourse Spaces" (Knorr & Pogner, 2015, pp. 113-115):

An academic literacies approach suggests that students should not merely be socialized into academic contexts and taught how to conform to existing cultures; it conversely advocates that students should be able to "read" the discourse and then decide if they want to conform, transform or resist. (Badenhorst & Guerin, 2016, p. 15)

Our analyses focus on the question under which conditions supervision can enable or constrain this conforming, transforming, and resisting of master's thesis students and how supervision models and supervisor roles contribute to shaping learning spaces, which can support the awareness about and ultimately contribute to the acquisition of research literacies.

Lee (2010) interviewed successful (doctoral) supervisors in the UK and from the US. In her analysis a framework emerged which she tested with groups of supervisors at universities in the UK, Sweden, Denmark, South Africa, and Estonia (Lee, 2010). This framework consists of the interrelation of a wide range of different approaches to supervision on the continuum of professional to personal approaches. She conceptualized the approaches as the functional approach (accumulation of knowledge), the enculturation approach (professional and disciplinary practices), the critical thinking approach (cognitive skills), the emancipation approach (discovery) and relationship development approach (shared development) (Lee, 2010). She also reflects on the consequences for the supervisors' knowledge and skills as directing, project management and negotiating; diagnosing and coaching; reasoning and analyzing; facilitating and reflecting; emotional intelligence (Lee 2010).

We want to investigate how different *supervisor roles* and *supervision models* enacted in student-centered supervision embedded in problem-oriented project work can create and constrain a space for balancing or bridging the mentioned, different but interrelated, approaches in practice—according to context, situation, institutional frame, and learning culture. Our analyses complement the different expectations that students might have (certainty, belonging, ability to think in new ways, self-awareness, and friendship), which Lee derives from applying her framework to identifying (doctoral) students' needs (Lee, 2010), with an analysis of master's students' own perspectives and expectations. Within our theoretical and analytical framework of a matrix of supervising models and roles, we analyze 11 qualitative research interviews (Kvale & Brinkmann, 2014) which we have conducted with Danish master's thesis students at the Copenhagen Business School (CBS). In the interviews, the students open a door to their "supervision space" (see Nexø Jensen, 2010).

The remainder of our contribution introduces our methodological reflections about the qualitative data collection and hermeneutical analysis and our theoretical frame, which we operationalize as an analytical framework for our analysis. The framework introduces the educational-cultural background in which the supervision we investigate is embedded. It further introduces supervision models and supervisor roles. Models and roles serve as our preliminary analytical framework for the empirical analysis of qualitative research interviews with master's students in order to analyze supervision practice from the student's perspective. We discuss the results of our analysis by answering the question how the Danish or Scandinavian way of student-centered supervision can foster students' research literacies including the students' ability and capability to conform to, transform, or resist expectations and established norms of the academic research community, they are becoming temporary and peripheral members of. Finally, we conclude by reflecting on the implications of our findings for supervision in general, i.e., beyond master's thesis supervision, and suggest the adaptive extension of student-centered supervision (vejledning) to non-Scandinavian educational cultures.

Hermeneutics and Semi-Structured Qualitative Research Interviews

Our study is based on philosophical hermeneutics according to Hans-Georg Gadamer (2004) and thus uses abductive reasoning. In terms of research design, this means that the point of departure is the horizon of understanding of the social scientist. Our "horizon of understanding" is shaped by years of experience as supervisors at universities in Denmark. Therefore, we are thoroughly embedded in the Scandinavian tradition of supervision endorsed by the educational-cultural basis discussed in the section "Educational-cultural basis." We had, however, an assumption that educational reforms in Denmark in recent years had created a gap between the ideals inherent in the tradition and possible ways of conducting supervision in present day Denmark. Based on the hermeneutical concept "prejudice," which should be read and understood as a priori "pre-judice" (Gadamer, 2004, p. 289), we follow Gadamer (2004) and put our assumptions ("horizon of understanding," Gadamer, 2004, p. 143) at stake by selecting two theoretical frameworks embedded in the Scandinavian tradition (supervision models and supervisor roles) and by interviewing 13 students exposed to supervision. The interviews are then interpreted in accordance with the hermeneutical circle, which means that a circular movement is formed between the interpreter (us) and the texts to be interpreted. In this study, we first extended our horizon of understanding with the theoretical frameworks containing the supervision models and the supervisor roles. Then, based on the extended horizon of understanding we have created a first draft of understanding of the interviews. This first draft of understanding modifies our understanding of the supervision models and the supervisor roles, which in turn leads to a second draft of interpretation of the interviews and so on. The (iterative) hermeneutical circle of interpretation is in principle endless, but a valid interpretation, and thus a study's conclusion, is reached when it is no longer possible to find statements in the texts that contradict the interpretation. According to philosophical hermeneutics, each text should be interpreted in its own right. The number of texts supporting a given interpretation does therefore not in itself strengthen or weaken an interpretation. In the present study, the interpretation results in the supervision matrix (veiledning matrix) explained below in "The 'Veiledning' Matrix."

The students also have a horizon of understanding through which they perceive the supervision they receive, their own role as part of the relationship with the supervisor as well as their own learning process and learning outcome. The students are first-hand witnesses to the link between supervision and learning outcome. According to philosophical hermeneutics, the purpose of interpretation is to understand a text, in this case the interviews, on its own terms. Thus, we use the students' expectations toward and first-hand experience of supervision as a lens to investigate how different supervision models and supervisor roles enable and constrain the potential of supervision for students' acquisition of research literacies. To investigate this relation, we conducted interviews with master's thesis writers during or shortly after their master's thesis project and production process. We used the method of purposeful sampling by inviting all master's thesis students with primarily Danish educational backgrounds enrolled in one of the master's programs at the Copenhagen Business School in 2018. This approach allowed us to reach out to students not familiar to us before the interviews. The students were selected in the order they volunteered to participate in order to avoid any biases in the selection, and, thus, we have used a convenience random data collection technique.

The students represent a wide range of CBS' full-time programs most of which are cross- or interdisciplinary study programs in accordance with one of the principles in Illeris' pedagogy (see "Educational-Cultural Basis"). Together, the study programs involved in this study represent a wide range of academic disciplines within social science, the humanities, business administration, and mathematics. This eliminates a possible bias due to any perceived or real differences in supervision styles across study programs. The interviews were conducted in Danish to allow interviewers and interviewees to use the concepts inherent in the problem-oriented project work tradition laid out in the section "Educational-Cultural Basis," which in turn allows us to detect any changes in the perception of these concepts. These selection criteria lead to a group of interviewees who share the same cultural-educational background and at the same time represent variations across disciplines within that background. Given our hermeneutical approach, the aim is to understand each student's perception, reception, and perspective on supervision as well as on the learning and writing process. We use the students' individual experiences and sensemaking of thesis processes to get insights into the potentials of different combinations of supervision models and supervisor roles for students to acquire research literacies.

Through "analytical generalizability" (Kvale, 2007, pp. 121-122; Kvale & Brinkmann, 2014, pp. 260-266; see also Kvale, 1994, pp. 164-166, and Kvale, 1983, pp. 164-169) we expand the insights from the interviews to more general insights into the relationship between supervision models, supervisor roles, and students' possibility to acquire and develop research literacies. With the problem-oriented project work tradition as a point of departure, analytical

generalization allows us to suggest what might happen in (partially) similar situations and contexts. By combining the hermeneutical interpretation of the interviews with theories and models about supervision that originate from the same tradition, we are in principle able to falsify, verify, and/or modify these theories and models. This, in turn, results in a new conceptual model, the vejledning matrix, which provides the answer to our research question. The range of our analytical generalization is limited, however, by the focus on the students' perspective and study programs deeply embedded in social science, as well as our choices on epistemology, research design, and method of investigation. We follow Kvale and Brinkmann's seven stages for an interview investigation (2014) when designing, conducting, analyzing and reporting semi-structured qualitative research interviews. According to Kvale, the purpose of qualitative research interviews is to understand each interviewee's views on the topic of the interview from the perspective of the interviewee. Thus, interviewees should not be regarded as respondents representative of a given population, but as a unique source supplying insights into their "horizon of understanding." Thus, epistemologically the semi-structured qualitative research interview method is in accordance with hermeneutics (Kvale, p. 1997; see Kvale 1983). The students in the present study were interviewed in accordance with Kvale and Brinkmann's guidelines (2014, p. 123-142) (for our interview guide see Appendix A).

Our empirical qualitative data consist of 11 semi-structured research interviews with 13 master's thesis students about 11 master's theses projects (see Appendix B). Seven students wrote their master's thesis as a one person's project and were interviewed on their own. Of the remaining six students, two pairs of students wrote their master's thesis as a pair project. All four students participated in the interviews and were interviewed in pairs. The remaining two interviews were conducted with one student each. Both students wrote their master's thesis as a group/pair project, but their respective master's thesis partners did not participate in the interview. The interviews lasted between 45 and 90 minutes. The students were informed about the purpose and topic of the interview in the call for volunteer interviewees and again immediately before each interview began. All students agreed to have the interviews recorded and all students were promised anonymity, therefore the names of the students have been changed. The interviews' first part deals with the students' views on and experience with supervision and the second part deals with the students' writing habits and processes partially using the students' texts as boundary objects and basis for the interview questions. The interviews were transcribed, and the content was analyzed based on the hermeneutic paradigm as discussed above.

Theoretical and Analytical Framework

In this section, we explain the theoretical components of the hermeneutical circle. The two theoretical frameworks (typologies of supervisor models and supervisor roles) are presented in the section "Supervision Models and Supervisor Roles." However, in order to allow the reader to understand the teaching and learning tradition we come from, and in which the master's thesis supervision practice we investigate is embedded in, we start this section by presenting the educational-cultural basis of the Danish education system including the historical background.

Educational-Cultural Basis

A key feature of the Danish educational-cultural basis is problem orientation. Problem orientation is a way of thinking that runs through all levels of the Danish education system. In 1974, Knud Illeris published his seminal book *Problem orientation and participant control: Outline for an alternative didactics* (Illeris, 1974, authors' translation). In the following, we present the principles, which problem orientation is built on, including a number of related key concepts.

Some of the key principles of this pedagogical approach are that pupils and students should work with real societal and social problems, that the students' work has to be research based, and that the problem, not the syllabus, should determine how the problem should be researched. These principles together lead to a cross-disciplinary approach. Other important principles are participant control, which means that the students themselves identify the problem they wish to investigate within the frame of their educational institution, program and discipline/s, as well as the students' ultimate responsibility for designing, planning and conducting the research project. The supervisor neither sets nor states the problem to investigate, nor provides or determines research approach, design, or methodology, because supervisors act primarily as consultants. Participant control implies that students work autonomously, i.e., as independent from their supervisor as possible. Wirenfeldt Jensen (2018) has confirmed the rootedness of autonomy in the problem-orientation tradition in a recent study of the master's thesis genre in Denmark. Across 20 interviews conducted with master's thesis supervisors, the category *autonomy*/ independency was mentioned 89 times-even though the category was not part of the interview questions (Wirenfeldt Jensen 2018). Similarly, in our own interviews with thesis supervisors (Ankersborg & Pogner, in press) interviewees referred to autonomy repeatedly regardless of the questions asked.

The emphasis on student autonomy is closely linked to the Danish word for supervision: vejledning. In Danish, the concept vejledning means to enable someone to make their own decisions on an informed basis, and thus the concept vejledning emphasizes the person who receives vejledning, i.e., the student. In comparison, the English concept "supervision" connotes the action or function of overseeing, directing, or taking charge of a person, organization, activity, etc., and thus "supervision" emphasizes the person who supervises, i.e., the supervisor. In accordance, the Danish word for "supervisor" is "vejleder," which corresponds to supervisors acting as consultants. Thus, vejledning follows the logic of problem-oriented project work with its emphasis on participant (= student) control and opens up for empowerment, transformation, and the ability to acquire (academic) literacies (Lillies et al., 2015). Taken together, the essence of vejledning contributes to learners transforming, creating and producing their knowledge themselves.

The term vejledning translates poorly into English. However, in order to avoid confusion, we use the term supervision as the generic term in the remaining part of our contribution, as supervision is the most commonly used term in the English language literature. We reserve vejledning for instances where this term is needed in order to clarify points in the argument. The Danish concept of master's thesis also corresponds with the problem-oriented project work tradition. The Danish word for master's thesis is "speciale," which is an abbreviation for specialization. According to Danish legislation, this means that the student should specialize within a tightly delimited part of their study program's academic discipline/s, and that students must show that they are able to apply theory and methodology within that discipline (Danish Ministry for Education and Science, 2020, § 18). Thus, a speciale (master's thesis) is a problem-oriented comprehensive, but delimited research project, including literature reviewing and (primary) data collecting, conducted independently by (a group of) students. Mainhard et al. (2009) have shown that the term "master's thesis" itself is understood in very different ways across European countries (see also Nissen, 2019, and Wirenfeldt Jensen, 2018, pp. 66-71 for an international perspective). In this chapter, we use the term master's thesis in accordance with the Danish definition.

Problem-orientation is closely linked to time as students work on the same research project for at least several weeks and often up to a whole semester. Another originally crucial aspect of problem orientation is group work, where groups of students work (together) for a longer period and manage the process themselves. Problem-oriented group projects foster the students' collaborative skills and creates an environment for mutual inspiration and even provocation (Illeris, 1974). It also promotes creativity and flexibility, which in turn enables the students to transform and produce knowledge of and on their own, thereby acquiring skills and competencies that can be used across contexts (Illeris, 1974). These skills and competencies allow students to liberate themselves from established norms (Illeris, 1974), which, in the case of our investigation, can facilitate the students' ability to acquire research literacies, including being able to "decide if they want to conform to, transform or resist" (Badenhorst & Guerin, 2016, p. 15) established norms. Learning in the problem-oriented way, therefore, does not focus on small "cases" defined by the teacher, concrete problem-solving on the basis of predefined problem definitions, or students working for a short period of time on cases based on the syllabus as part of classroom teaching. Such learning context characteristics, in contrast, can be present in approaches under the Anglo-Saxon term "problem-based learning" (Krogh & Wiberg, 2015, p. 215).

Illeris' originally alternative didactics quickly became mainstream at all levels of the Danish educational system and has been in force ever since, although with adjustments. In the 1990s, emphasis was no longer on societal problems or challenges; a problem could instead deal with a gap in a discipline's knowledge (Keiding & Laursen, 2008, Olsen & Pedersen, 1997). Thus, the term "problem" should nowadays not be understood as something that went wrong and needs to be fixed, but rather as a question about a matter of a certain complexity, which the academic community in question has not yet answered and therefore needs to be researched-also by students as young members of the academic community. Furthermore, the cross-disciplinary aspect has not been adopted everywhere. However, at the business university Copenhagen Business School (CBS), where we conducted our interviews, cross-disciplinary programs and interdisciplinary specializations are a distinct part of the university's portfolio. The group aspect has also been disputed, which has left traces in Danish legislation. In 2005–2012, oral group exams, but not group projects themselves, were abolished by the Ministry of Education and Science based on a vote by the majority of the members of the Danish parliament. The students at all Danish colleges and universities were in 2018 granted the right to write their bachelor's thesis and master's thesis as a one-student project. At CBS, approximately 40% of the master's students who graduated in 2019 conducted the research project and wrote their master's thesis in groups (mostly of two students); 60% of the students conducted and wrote it individually.

To sum up, problem-oriented master's theses are the standard at Danish universities, and problem-oriented research projects and master's theses still imply student participant control, autonomy/independency, ownership, and responsibility. This means that the students themselves identify and select a problem relevant to their academic discipline. Furthermore, it means that the students plan their research process and conduct their own research over a period of approximately six months as independently as possible from their supervisor, and that the students are responsible for the quality of their research and the submission of the final master's thesis. This has consequences for the role of the supervisor, which will be discussed in the subsequent sections.

Supervision Models and Supervisor Roles

Our analytical framework is designed as a matrix composed of three supervision models and three supervisor types. It is inspired by models of supervisory management and supervisory styles (Boehe, 2016; Gatfield, 2005), different approaches to supervision (Lee, 2010) and the supervisor-student relationship (Mainhard et al., 2009), and on research about supervisors as learners and teachers (Maher & Say, 2016), primarily in doctoral supervision. Although, it is primarily informed by Scandinavian research on supervisor roles (Nexø Jensen, 2010), models of the relationship between supervisor and student/s (Dysthe, 2006; Wichmann-Hansen & Wirenfeldt Jensen, 2015) in master's thesis supervision and supervision in higher education in general. In accordance with the hermeneutical circle, the final matrix and research design has been developed and assessed in the course of our analysis of the interviews.

The central part of the framework for our analysis consists of three supervision models and three supervisor roles mainly originating from research at the University in Bergen, Norway (Dysthe, 2006, Dysthe, Brinkstein et al., 2006, Dysthe, Samara et al., 2006; Dysthe et al., 2007) and the University of Copenhagen, Denmark (Nexø Jensen, 2010). Models and roles will be combined in a supervision matrix (vejledning matrix), where we present the findings of our analysis of interviews with master's thesis students. The matrix and our analysis show how the different supervision models allow different supervisor roles and which influence the flexibility to shift supervisor roles has on the students' chance to acquire research literacies.

Supervision Models

Based on her empirical research in Norway, Olga Dysthe (Dysthe, 2006; Dysthe, Samara et al., 2006; Dysthe et al., 2007) has developed the following three models of supervision: (1) The partnership model, (2) the apprenticeship model, and (3) the teaching model. The models express distinct approaches to supervision, to the nature of the relationship between supervisor and student, and to the consequences of this relationship for the role, the students' texts play in supervision. Wichmann-Hansen and Wirenfeldt Jensen (2015) argue that all of Dysthe's three supervision models have their strengths and weaknesses; therefore, we include those as well in our interpretation of the supervision models.

The partnership model is characterized by a symmetrical relationship based on dialogue, from which students (and supervisors) acquire and produce knowledge, and especially the students develop their skills and competencies. Student and supervisor share complementary responsibilities for the master's thesis. Thus, the purpose of supervision is not to supply the student with ready answers, but to foster the student's identity as academic in their own right. From a text production perspective, explorative texts form the basis for a dialogue, where feedback on the text is meant as suggestions open for discussion and not as correction of errors and where the revision of text is seen as learning something new (Dysthe, 2006). The focus on dialogue calls for a certain view on supervision meetings, which frames the dialogue. In the words of the Norwegian scholars Lauvås & Handal (2015):

A conversation is a human activity that contributes to the development of our understanding of the world and strengthens our capability to reflect, or in other words, talk with ourselves. The conversation has the potential of knowledge development, which hardly can be replaced by anything else. (p. 231; authors' translation)

The strength of this model lies in allowing students to play an active part and have an impact on the supervision received and obtaining genuine responsibility for the master's thesis. The weakness in this supervision model lies in demanding much from students themselves and especially from university students without prior experience with the partnership model in their primary and secondary school career finding it difficult to meet the demands inherent to the model (Wichmann-Hansen & Wirenfeldt Jensen, 2015).

The apprenticeship model is characterized by a close work relationship between student and supervisor. The knowledge acquired by the student is in part tacit knowledge because it is acquired as the student observes and solves research tasks together with the supervisor as master. The apprenticeship model is thus mostly in play when student and supervisor are part of the same research team. The student-supervisor relationship is more hierarchical than in the partnership model, but less hierarchical than in the teaching model (see below), and the student learns to work both autonomously on their own and as part of a team. From a text-production perspective, the student shares work-in-progress with other members of the research group as part of an ongoing dialogue. The student thus receives feedback from many people, not only from the supervisor. The apprenticeship model is mainly used in natural sciences and technical programs, and to a lesser degree within social sciences and the humanities (Dysthe, 2006).

The strength of this model lies in students being socialized or enculturated into the community of practice within their discipline, which makes supervision highly efficient. The weakness is that this supervision model makes learning context-dependent and focuses on problem solving (Wichmann-Hansen & Wirenfeldt Jensen, 2015), which makes it difficult for students to transfer knowledge to other (types of) contexts.

The teaching model is characterized by the teacher-pupil relationship, where the teacher (= supervisor) knows best and the pupil mainly listens. Thus, the model emphasizes the hierarchical distance between supervisor and student, and asymmetric communication situations, where the student does not dare to question the supervisor's comments, making the student strongly dependent on the supervisor. From a text production perspective, the student treats the supervisor's feedback as errors to be corrected, and the student only shares almost finished text with the supervisor, neither preliminary drafts, nor work-in-progress reflections (Dysthe, 2006).

The strength of this model is that it ensures an efficient and systematic transfer of knowledge from the supervisor to the student—if the student adapts the assigned role. The weakness of the supervision model is that it assigns the student a submissive position without any right to take an initiative of their own and in which the supervisor speaks in a kind of monologue and thereby controls the communication encounter (Wichmann-Hansen & Wirenfeldt Jensen, 2015), which prevents the supervisor from (active) listening to the student.

Supervisor roles

Hanne Nexø Jensen (2010) has researched the triangle of supervision, supervisor, and master's thesis student at the University of Copenhagen. Based on her empirical research, she has identified three supervisor roles: (1) The role of an expert within the discipline/s, (2) a supervisor on methodology, and (3) a supervisor on the learning process. According to Nexø Jensen, a supervisor takes on all three roles at different stages of the students' thesis research and writing process, but how much each of the roles is enacted depends on the type of research project the student is conducting and how far the student has come in the research and learning process.

1. The expert on the discipline is the predominant supervisor role in any supervision as the thesis topic is at the core of the dialogue between

supervisor and student. According to Nexø Jensen, successful supervision supports the student's clarification and orientation process if the supervisor's comments foster the students' reflections on their own research. The supervisor approach as an expert on discipline should therefore mainly be understood as an expert on sound academic thinking, and to a lesser degree as an expert who knows best and supplies the student with the correct answer.

- 2. The supervisor on methodology deals with crucial considerations about methodology, such as data collection techniques, choice of case location or organization, and qualitative or quantitative data analysis methods. Like in the case of the supervisor as an expert on the discipline/s, dialogue fosters the students' reflection. However, students tend to be more insecure about methodology than about their thesis topic; therefore, the supervisor on methodology is more directing and guiding.
- 3. The supervisor on the learning process deals with the intersection of writing and research, and text and project, e.g., inadequate thesis structure or writer's block. In contrast to the other two roles, according to Nexø Jensen's (2010) findings, student-supervisor sessions about the learning process are not marked by dialogue; rather the student listens and the supervisor is expected to offer concrete advice.

Supervision Seen from the Student's Perspective: Models and Roles in Practice

In this section, we discuss the analysis of the interviews. In accordance with hermeneutics, we view each interview as one unit in its own right, but each interview is also a part of the entire collection of interviews. This collection is in turn part of a broader collection of texts (the research literature) included in this study. Thus, the iterative hermeneutic circle of understanding the individual parts and the whole is in play on three levels: the single interview, the sample of interviews, and research literature (especially on supervision models and supervisor roles) merged with the interview/s. The analysis is structured in accordance with the supervision models discussed in the section "Supervision Models." The statements from the students are fused with the characteristics of the supervision models as well as the characteristics of the supervisor roles ((from the section "Supervisor Roles"). This reveals how the different supervision models do or do not facilitate the enactment of the supervisor roles and how that influences the students' ability to learn and acquire research literacies

when exposed to the logic of supervision inherent in each supervision model. Based on these analyses we are able to assign the interviews to the different supervision models (see also Appendix C). Statements from eight of the interviews are analyzed across interviews and included in the following section, since the students' accounts in these interviews all paint a picture of supervision in accordance with the partnership model. The three remaining interviews match each one of the other supervision models discussed below with a new model, the laissez-faire model, extending Dysthe's typology of supervision models. The findings of the analysis developed below lead us to the supervision matrix (vejledningmatrix) shown in Figure 7.1.

Partnership Model

When the supervisor acts as an expert on the discipline within the partnership model, the purpose is to foster the student's reflections. There is clear evidence of this in all of the eight interviews, which we have categorized within the partnership model: To Natalie the supervisor made the biggest difference for her research when the supervisor challenged Natalie's own perceptions by asking questions without supplying the answers. Johan tells a similar story about his supervisor who asked critical questions but offered no answers; this led to new insights, which in turn led to momentum in his research project. None of the supervisors, who supervise within the partnership model, offer any concrete expert answer but initiate a dialogue about possible and adequate answers, which in the eyes of the students is the way it is supposed to be.

In the partnership model, students have responsibility for their own research, which is in accordance with participant control in the problem-oriented project work tradition. At CBS, students formally hold sole responsibility for the production, quality and submission of their own master's thesis; the interviewed students take this responsibility for granted. This contradicts Dysthe's (2006) definition of the partnership model where supervisor and student have a shared responsibility for the research process and product. Supervisors, on the other hand, hold responsibility for supervision itself, which is not covered by the interviews with the students. In comparison, our research on supervision seen from the supervisors' perspective (Ankersborg & Pogner, in press) shows that supervisors loyal to the partnership model do manage to combine their individual approaches to supervision with student autonomy. Student autonomy does not imply that supervisors do not offer any opinion about research methods. As Nexø Jensen (2010) notes, the dialogue between supervisor and student tends to be more concrete and thus more guiding, when they discuss methodology, rather than when they discuss the overall

thesis topic. Thor, for example, was introduced by his supervisor to a method hitherto unknown to him. Thor decided to apply that method as it seemed more promising than his own suggestion, but he did not feel any hidden pressure from his supervisor to do so. The supervisors' suggestions aid the students to make qualified choices on methodology, but since students themselves are expected to identify relevant problems to research within their discipline, it follows that they have to have the final say about how they should conduct that research. All the students participating in the eight interviews, which we assign to the partnership model, report that they have declined suggestions from their supervisor and that the supervisor was fine with that. As Katherina puts it: "the supervisor is of course not familiar with the evidence in my data." Rasmus adds another dimension: "You can do this, or you can do that' [said the supervisor], but it is the student's call." In hermeneutical terms, a fusion of horizons is established on the function of the supervisors' suggestions in the light of student autonomy. Thus, in the eyes of the students, their supervisors meet the goals and objectives of vejledning: they enable the students to make their own decisions on an informed basis.

In agreement with Nexø Jensen's definition of the supervisor on the learning process, the supervisors in our study are perceived as being even more specific, when the dialogue between supervisor and student is concerned with the student's learning process. Rasmus for instance lost sight of his own research as he drowned himself in research literature and reading whereupon the supervisor helped him select a relevant model. Natalie's supervisor did a reality check, when Natalie's research design seemed to be too ambitious, and Johan was advised to write an introduction, which helped him shape the research question. Students exposed to the partnership model thus seem to feel confident in sharing their work-in-progress and uncertainty about the process with their supervisor.

In contrast to the role of texts in the teaching model, where the supervisor is expected to approve final parts of the thesis before submission, both students and supervisors perceive the draft texts, which the students share with their supervisors, as work-in-progress. Given the students' horizon of understanding, they do not expect the supervisor to approve or proofread their text, as this would contradict the notion of student autonomy. Instead, the students display confidence in sharing work-in-progress, which underline that approval is not involved. The students regard supervisor comments as the right kind of input for their learning process, although this approach is a little frustrating at times. Katherina's supervisor shared knowledge about the academic genre by suggesting a structure for the analysis chapter before this part of the thesis even was written. To Katherina that advice proved to be a breakthrough. Katherina is split between knowing that she learns better without supervisor's interference and her wish for more direction. Katherina does not particularly like the text writing part of thesis work, and she expresses the frustration that sometimes comes with the partnership model. The supervisor offers concrete advice on work-in-progress, but Katherina does not expect the supervisor to read the final text before submission. Thor also felt a touch of frustration and insecurity when the supervisor chose not to comment in detail on the structure of the analysis thereby refraining from supplying the answers. However, in hindsight, Thor is pleased with the unobtrusiveness of the supervisor at the time, and in general, Thor's supervisor does not offer detailed comments on the text. This is reflected by Per's account that his supervisor only read the introduction, which was sufficient according to Per. Similarly, Simon managed to improve the quality of the chapter on theory by integrating the project's empirical case in the chapter. He did so on the advice of the supervisor after the supervisor had read a draft version of the chapter. Apart from this, Simon and his thesis partner wrote most of the thesis without text feedback from the supervisor. Finally, Laura and Line's supervisor made it clear from the beginning that he would only read draft versions of the introduction and the chapter on methodology. He did however glance through the theoretical part and added comments in the text, which Laura and Line still at the time of the interview had to decide if they would follow or not. To sum up, our data confirm Dysthe's (2006) typology in which the text is perceived to be a step on the way in the learning process and is therefore subject to revision. The supervisor does not read the final version of the whole master's thesis before the thesis is submitted for assessment as that would compromise participant control inherent in the problem-oriented project work tradition.

Wichmann-Hansen and Wirenfeldt Jensen (2015) stress that the partnership model is the most suitable model to facilitate students' critical thinking and reflection, active participation, responsibility and sense of ownership for their own research project. Adding to this, our study shows that the supervisor, based on dialogue with the student/s, acts both as an expert on sound academic thinking, as a supervisor on methodology, and as a supervisor on the (learning) process. In return, the supervisors do not oversee the student, nor do they take charge of the student's research project. Hence, supervision is actually enacted not as supervisor-centered "supervision," but as student-centered vejledning. The supervisor's task of making suggestions demands on the student's side that they possess or develop the skills and capabilities of assessing the suggestions before making a choice about what suggestions, if any, to include in the thesis. One student felt that he had to test every single suggestion before he could turn them down, which in hindsight led to a waste of time. The partnership model thus also demands that students know how to handle confusion and frustration as inherent parts of doing research, that they have sufficient self-confidence to make their own decisions without knowing the subsequent consequences for their research, and that they trust in the symmetrical relationship and communication with the supervisor. This symmetrical relationship allows them to decline suggestions from the supervisor. To be supervised according to the partnership model can thus both be rewarding, demanding, and frustrating for students, but it ultimately results in the students acquiring the skills to decide whether and when it makes sense to conform to, transform or resist existing norms.

Apprenticeship Model

As noted in section 3.2.1, the apprenticeship model is mainly used within natural sciences. This is supported by Fimreite and Hjertaker (2005, 2006) who, based on Dysthe's three supervision models, have compared supervision at a natural science department and at a social science department at the University in Bergen, Norway. They concluded that the science department mainly used the apprenticeship model, whereas the social science department mainly used the partnership model. One of our interviewees, Jonas, studies business administration and mathematics, which is a cross-disciplinary program that combines elements from both natural science and social science. In principle, this student could therefore be supervised within either the partnership model or the apprenticeship model. In practice, Jonas reports a supervision style that points towards the apprenticeship model.

Jonas has chosen to work with a mathematical model beyond master's level, which is more complex than he is supposed to master. Following Jonas' horizon of understanding, this decision was not to be discussed, and Jonas thus enacts student autonomy. The supervisor respects Jonas' choice, but he also requests that the student and the supervisor meet once a week. The supervisor thereby facilitates a close work relationship inherent in the apprenticeship model. This is also seen in a situation where the supervisor vetoed Jonas' attempt to change model assumptions too much. In this situation, the supervisor acts as an expert who knows best, but at the same time he agreed to help modify the model because the student insists on applying this particular model. Thus, the student assumes responsibility for the chosen methods, but applies the methods in a much closer work relationship than the students within the partnership model would have with their supervisors. Because supervisor and student work so closely together, the role of supervisor on the learning process is interwoven with the other two supervisor roles (expert within discipline/s and supervisor on methodology), but as in the partnership model the student feels free to decline suggestions from the supervisor.

Jonas' draft texts are perceived as work-in-progress, which corresponds with Dysthe's definition of the role of the text in the apprenticeship model, but in this case, the student does not discuss the text with other people than the supervisor. It is also in accordance with the apprenticeship model that the supervisor helps explain particularly challenging parts of the text. However, the student sets the agenda for the supervision meetings and adds questions intended to guide the dialogue between supervisor and student. In addition, the supervisor does not read the entire thesis manuscript before submission. Furthermore, the role of Jonas' draft texts illustrates that the horizons of understanding of both student and supervisor are marked by the problem-oriented project work tradition in the way the student takes in participant control of the research design and the agenda for supervision meetings. As in Dysthe's definition of the apprenticeship model, the supervisor in this case acts as master, but in contrast to the teacher-pupil relation, the supervisor creates space for the student's independent and autonomous contribution.

Teaching Model

The logic of the teaching model completely contradicts the Danish problem-oriented project work tradition, and we should therefore not expect to find accounts of this approach to supervision in our interviews. Nevertheless, one interview clearly falls within this supervision model. According to the student, the supervisor argues with reference to his position as professor, thereby establishing a strong hierarchical distance between supervisor and student. The supervisor directs the student's work and process in detail, making the student highly dependent on the supervisor; the student eventually gave up any attempt to start a dialogue. Concerning the text production and the interaction around it, the directing of the supervisor became visible in the supervisor's detailed remarks ordering the student to correct specific phrases in the text. According to Dysthe (2006), students exposed to the teaching model treat such remarks as errors to be corrected. In this case, the student attempted to discuss the supervisor's remarks at first, but eventually gave up and executed the corrections in order to avoid more trouble. The student finally submitted a master's thesis, which he describes as "supervisor's baby" (Peter), knowing that he had not learned what he had hoped to learn from this thesis project. The student expresses a horizon of understanding that is clearly marked by the problem-oriented project work tradition, as he expressed that

this is not how supervision is supposed to be, "It is just so wrong, has no place at a university" (Peter). In his opinion, supervision should follow the partnership model. Peter thus establishes a fusion of horizons with the tradition but not with his supervisor.

In the interview with Peter, we could only identify one supervisor role, the role as expert on the discipline. We are not referring here to the kind of expert that initiates student reflection, but rather an expert who knows best and pushes in an asymmetrical communication situation his version as the correct answer, e.g., when it comes to philosophy of science. This supervisor approach corresponds with the understanding of the concept of supervisor-centered supervision as the supervisor oversees, directs and takes charge of another person. It does not correspond with the student-centered concept vejledning, as the supervisor does not allow the student to make his own decisions. Although we only found one instance of the teaching model in our data, we assume that supervision in accordance with the logic of this model happens from time to time. Nexø Jensen (2010), who also found traces of this kind of supervision in her data, supports this assumption.

Laissez-faire Model

Our interview with Nadia and Michala falls outside Dysthe's description of the three supervision models. The supervision the students report points towards the existence of a fourth supervision model. In defining this model, we are inspired by Gatfield's (2005) "laissez-faire" style of supervision. Gatfield (2005) has identified different management styles of (doctoral) supervision at a metropolitan Australian university. He has shown that the "contractual" (high level of support and high level of structure) is the predominant style, whereas the "laissez-faire" (low support, low structure), pastoral (high support, high structure) and "directional styles" (low support, high structure) are hardly to be found in statements of experienced and successful supervisors, but exist (Gatfield, 2005, p. 319). Gatfield bases his typology partially on a conceptual model that results from his literature review, partially on interviews with 12 Ph.D. supervisors from social science disciplines at an Australian university. Nevertheless, our findings in one of the interviews about master's thesis supervision at Copenhagen Business School resemble Gatfield's definition of the laissez-faire management style to a high degree.

As mentioned above, the Danish problem-oriented project-work tradition emphasizes students' autonomy and independence from their supervisor. Taken to its extreme, this notion could lead to supervisors becoming afraid of influencing the student/s, and therefore they do not offer any kind of suggestion or opinion except from stressing the students' right to make their own choices. In terms of text production, they simply insist that the students should just write. Nadia and Michala, who are writing their master's thesis together, describe the resulting confusion with a touch of desperation in their voices:

Nevertheless, what we hear is that, no matter what you choose, it may be good, but it can also get really bad ... After all ... that we have been too insecure and felt that no matter what we chose ... in the beginning; that no matter what we chose, so, we were potentially doomed because we had, we were not good in coming to grips of the direction. (Nadia & Michala)

Following the doctrine of non-interference with students' work, neither of the three supervisor roles come into play with this type of supervision. The supervisor approach is thus neither student-centered vejledning nor supervisor-centered "supervision." In fact, there is not supervision at all. The result of this non-supervising is the opposite of vejledning, as the supervisor style constrains students by forcing them to make their own decisions on an uninformed basis. Following Nadia and Michala's horizons of understanding, they do not expect the supervisor to supply the answers, but at the same time, they struggle more than anticipated with their thesis project. As they are unable to pinpoint the intended role of the supervisor in this situation, a fusion of horizons between students and supervisor does not occur. Although only one of our interviews reports this approach to supervision, we choose to label it as a supervision model of its own. Outside the scope of our study, we have been reported this approach to supervision many times by students over the years, and thus we have an evidence-based assumption that Nadia and Michala are not the only students to have been exposed to this approach to supervision. We label this supervision model the laissez-faire model. It is characterized by a low degree of structure of the supervision and a low degree of support by the supervisor. The supervisor is non-directive and perceived by the student as not committed to high levels of personal interaction, which may make the supervisor appear as uncaring and uninvolved. This, in turn, risks demotivating the students.

The Vejledning Matrix

At the third level of the hermeneutical circle, we tie the three elements—the educational-cultural basis, the two theoretical frameworks, and the 11 inter-

views—together and create a vejledning matrix for our empirical material. In the interviews, we have identified the enacted supervisor roles and linked them to the corresponding supervisor models, as the chosen supervision model influences the roles of a supervisor. This in turn affects the students' research process and learning intake and outcome. As the interviews largely confirm the characteristics of Dysthe's typology of supervision models, we conclude based on analytical generalizability that the partnership model allows for enactment of all three supervisor roles as illustrated in the matrix (see Figure 7.1) in similar cases in the context of problem-oriented work and student-centered supervision.



Figure 7.1. The vejledning matrix: Enacted models and roles in the interviews.

The four models of vejledning in the vejledning matrix allow for different kinds of vejledning/supervision. Supervision according to the partnership model enables vejledning with its emphasis on student autonomy and responsibility. The logic of the partnership model draws heavily on the problem-oriented project work tradition. Our data show that also the students' perception of supervision and supervisor is aligned with this logic. Thus, a fusion of horizons of understanding is established between students and supervisors within the context of problem orientation. Supervision according to the apprenticeship model enables a student-centered form of vejledning in a moderated form with its closer contact and (co-)working relation between supervisor and student. In addition, in this case, a fusion of horizons is established between student and supervisor that pays respect to problem orientation, but in a slightly different form. Supervision according to the teaching model enables "supervision" in the sense of supervisor-centered directional "supervision" with its emphasis on hierarchy between supervisor and student. It does not enable student-driven vejledning and it is not connected to problem-orientation. Supervision according to the laissez-faire model is a kind of misunderstood student-driven vejledning. It is characterized by low levels of structure and support and high level of student frustration and limited level of management skills (Gatfield, 2005). It results in not suggesting any direction, and a lack of commitment to high levels of personal interaction. The supervisor may be perceived by the students as uncaring and uninvolved. Thus, the fusion of horizons between student/s and supervisor is not established, although its logic might be traced back to the problem-oriented project work tradition.

We call the matrix we have developed in our analysis vejledning matrix, not "supervision" matrix, in order to emphasize the student-centered perspective fostering autonomy/independence and responsibility of master's thesis writers and hereby the skills and competencies of research literacies that the students gain. As shown in figure 7.1, the partnership model allows supervisors to conduct student-driven supervision and simultaneously enact the roles of an expert on sound academic thinking, as an advisor on methodology, and as a guide on the learning and research process. These findings are confirmed in our previously mentioned study on thesis supervisors where nine out of 15 interviewed supervisors supervise according to the partnership model and report the flexibility of enacting different roles. They also emphasize that the ultimate goal of students should be becoming able to deliver independent work (see Ankersborg & Pogner, in press). Since both the mono-disciplinary and interdisciplinary master's study programs, which Copenhagen Business Schools offers, are all primarily embedded in social sciences/the humanities and business administration/economics (Appendix B), only one interview from an interdisciplinary program with a mathematical focus (business administration and mathematics) is included in the research. In this case, the apprenticeship model, often found in the natural sciences and engineering (as indicated by the work of Eriksson & Nordrum (2018) for Chemical Engineering) may also include all three types of vejleder roles but gives predominance to the role of the knowledge expert. In our matrix, the teaching model, which is most prominent in study programs of science, technology, engineering, and mathematics (see Filippou et al., 2021), is solely connected to the expert role (for STEM and subject knowledge, see Pelger & Sigrell, 2016). The laissez-faire model does not enact any vejleder roles in our matrix; actually, supervision in the laissez-faire model does not enact any form of supervision at all.

When we asked the student interviewees to describe their understanding of an ideal supervisor and they all described a vejleder that matches the partnership model when the expert role is enacted, regardless of the kind of supervision, they actually receive (see table 7.1).

Concerning expertise on knowledge and supervisor on method	Concerning supervisor on process
Discussion partner	Dedicated
Supportive, not controlling	Good chemistry
Respects that it is the student's thesis	Flexible
An expert in his/her field and research process	Available
Using that expertise • to initiate student's reflections • to challenge student's perceptions • to point in new directions • to help the student to explore Does not supply the answers him/herself	Does not control the process

Table 7.1. The Ideal Vejleder/Supervisor from the Students' Perspective

The words they use to describe the master's thesis itself (see table 7.2) contain many traces back to the problem-oriented project work tradition:

Table 7.2. Perception of a Master's Thesis from the Students' Perspective

A Master's thesis (speciale) is:	A Master's thesis (speciale) is about:
Genuine academic	Absorption/ immersion
• Complex	• Analytical skills
• The jewel in the crown	• Focus
Long term	• Intellectual, academic and personal
• A test of the skills to create a prod- uct that reflects the student's learning process.	competences
• The student's own specialization some- where between previous studies and future career	
• Research into a specific area, special- ization on Social Science terms within a specific area relevant to the student's academic profile	

The master's thesis is a long-term research project where the skills and insights the students acquire from writing the thesis play an important part. Illeris' pedagogy and didactics became mainstream in Denmark many years ago, and it is still thoroughly embedded in the horizons of understanding of present Danish students. So much so that unless proven otherwise by a supervisor it does not even occur to the students that vejledning could be something else, that vejledning could be supervisor-centered supervision.

Discussion

The predominant approach in our analysis is the partnership model. The partnership model grants a high degree of flexibility for *supervisor* (teacher and researcher) and *student* (write, learner and becoming or as-if-"researcher") because of its capacity of enacting and negotiating different supervisor roles and student roles, voices and identities. This flexibility to enact different roles enables the choice and negotiation of different roles, relations, and styles according to different phases in the supervision process (see Gatfield, 2005. pp. 322f. for the phases). It also fosters the ability to react to process-treated contingency factors (uncertainty, organizational complexity) and product-related contingency factors (power and expertise; goals and expectations) (Boehe, 2016).

The model allows supervisors to choose deliberately and shift between supervisor roles and enables the supervisor to cope with the duality of their role as expert of the academic (cross-, inter-) disciplinary knowledge at stake (Andersen & Wirenfeldt Jensen, 2007) and expert of the learning and research process. Furthermore, it permits them to shift between personal supervision and disciplinary-processual supervision (Andersen & Wirenfeldt Jensen, 2007). The partnership model's dynamics and flexibility also allow different goals to be set in different phases and beliefs and values to be enacted and negotiated such as practical applicability (functionalist), belonging (enculturation, socialization), rigor (critical thinking), autonomy (emancipation and empowerment), and sympathy (relational) (see Lee, 2010, p. 22). The model facilitates the choice and interactive negotiation of the situation-adequate roles with the students in the course of the supervision process: "A supervisor should be able to be coaching, motivating, insistent, criticizing, appreciatively controlling, appreciative, personal, authoritarian, friendly and determined" (Andersen & Wirenfeldt Jensen, 2007, p. 157). The partnership model allows supervisors to balance their interpersonal behavior related to the dominance and submission continuum (influence) and to the opposition and cooperation continuum (proximity) (Mainhard et al., 2009).

The partnership model gives main, if not full, responsibility for the research project and master's thesis to the *student*. We have analyzed supervision from the student's perception, their perspectives on and expectations towards the interactive enactment of supervision and of the ideal enactment as points of departure. In the analysis of the student's perspective, we found a lot of alignment of the students with the delegation of responsibility for the project and the thesis' academic rigor and relevance for business and society to the student.

A number of aspects come into play to form the complexity that enables students to conform to, transform or resist established discourses and norms. When exposed to supervision based on the partnership model, students feel both challenged and supported. The requirement of autonomy is central for both supervisors' and students' perceptions and enactments of student-centered vejledning. Supervisors' options of supervising both as an expert on sound academic thinking, on methodology and on the learning process at an abstract and a concrete level widens the scope of supporting students without taking charge of neither the person nor the project and without taking responsibility for the learning process at all. Supervisors' critical questions can provoke students to think in new ways. Supervisors' reluctance, restraint or caution to provide direct answers can force students via Socratic dialogue methods to make their own decisions and to argue for those. In the partnership model, students in turn feel comfortable with discussing and rejecting supervisor's suggestions and finding their own way. This is due to the symmetrical relationship, which creates an atmosphere of trust where the students' work-in-progress is seen as a step on the way in a learning process. Since the master's thesis is a long-term research project, it fosters the students' skills in managing complex and comprehensive projects with their inherent obstacles. Since master's thesis students conduct their research as independently and autonomously as possible, they carry the main or sole responsibility for the consequences of those decisions. Hereby, they learn to master blocks, barriers, insecurities, and frustrations. Taken together, students gain capabilities in critical, independent, and autonomous thinking in order to become able to decide whether or when to conform to, transform or resist existing discourses and norms of disciplinary and professional cultures. Problem-oriented master's theses can be seen as students' research projects contributing to an academic research conversation. It is a contribution of legitimate peripheral (still learning) members of academic communities conceptualized as discourse community (Swales, 1990) and community of practice (Lave & Wenger, 1991) in a space of action (here: research) and discourse (here: the master's thesis) (see Pogner, 2007, Knorr & Pogner, 2015). It gives the opportunity to create spaces for the development of the students' academic literacies in the students' zone of proximal development (Vygotsky, 1978).

The partnership model enables students to develop their research literacies and thereby their ability to understand the academic discourse and practice of the respective disciplinary domain and community. This does not only count for master's students but to a certain degree for bachelor's students and for sure for doctoral students. And this counts not only for the context of vejledning embedded in the Scandinavian tradition of problem-oriented project-based pedagogy, where it stems from and in which it has been transformed over time, but also for any form of student-centered supervision. It fosters both critical thinking, independence from the supervisor and students' responsibility for the project and thesis. It enables students to acquire technical and instrumental (writing) skills or being passively socialized/acculturated into academic discourse, but also to develop academic literacies, which give their text production a meaning-making and meaning negotiating perspective. Furthermore, it can offer students' independence and autonomy by fostering their ability to understand expectations and norms of the disciplinary domains and spaces of action and discourse (Knorr & Pogner, 2015). Based on this understanding, the partnership model can empower the students to decide independently whether and when to conform, transform or resist. These competencies open up for academic writing both as "knowledge telling," "knowledge transforming" and "knowledge building" (Bereiter & Scardamalia, 1989 and 2014).

Conclusions and Reflections

We have analyzed the Danish perception of the interaction of vejledning as student-centered supervision and shown its strong embeddedness in the pedagogical approach and ideology of problem-oriented project work. The Danish perception and problem-oriented project work stresses in theory and practice the independency of the students' problem-oriented research project, their main responsibility for the process and the quality of project and thesis demonstrated in the written report and in the oral discussion ("defense") of the report. The predominant partnership model can offer students' independence and autonomy by fostering their ability to understand expectations and norms of the disciplinary domains and spaces of action and discourse. Based on this understanding, the partnership model can empower the students to decide independently whether and when to conform, transform or resist. These competencies open up for academic writing as knowledge production. We propose to consider expanding the central role of the partnership model for the development of academic literacies from supervision of master's thesis students to supervision of students in general. We further propose to expand

it from the Danish/Scandinavian context to the context of higher education in general. In the following, we reflect on the implications of this proposal.

In the context of creating space for students' development of academic literacy/ies the partnership model and its flexibility can contribute to

empowering students to find ways of becoming more visible (to themselves, their lecturers and institutions) and thus less peripheral to the processes of knowledge telling, transformation and creation, getting their voices as writers heard, and their writer authority respected. (Gimenez & Thomas, 2015, p. 32)

At the same time, the partnership model allows both supervisors and students to become aware of and reflect on their own expectations, assumptions, and perceptions. This is "integral to the practice of teaching as informed by an Academic Literacies approach—and it is itself transformative, and empowering, for both teachers and students" (Lillis et al., 2015, p. 12).

Our findings have implications for the supervision practice aiming at supporting the development of academic literacies in order to strengthen students'/writers' independence, voice and identity (Wirenfeldt Jensen, 2019). Thereby, the model could contribute to the students' reflections on and awareness of their identity as learners. At the same time, it could support the students' temporal and peripheral—but legitimate—membership of the academic discourse community (Swales, 1990) and the academic community of practice (Lave & Wenger, 1991). Furthermore, it could and foster the students' ability to navigate and participate actively in the academic "space of action and discourse" (Knorr & Pogner 2015), which combines the concepts of discourse community and community of practice.

The partnership model in student-centered supervision could stimulate a nuanced understanding of the pedagogical techniques of instructional scaffolding and of the pedagogical concept of the learner's zone of proximal development. Scaffolding "refers to the steps taken to reduce the degrees of freedom in carrying out some task so that the child can concentrate on the difficult skill she is in the process of acquiring" (Bruner, 1978, p. 19). When it comes to (master's) students, these techniques can help students to develop greater independence and autonomy in and more responsibility for their learning processes. Vygotsky defines the zone of proximal development as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance, or in collaboration with more capable peers" (Vygotsky, 1978, p. 86). In the case of student-centered supervision following the partnership model, the scaffold is constructed and torn down in a joint effort of adult supervisor and adult student/s, and the students' learning processes are shaped by his joint effort. The zone of proximal development is determined in collaboration and dialogue of adult supervisor and adult student/s. Furthermore, in the case of group research projects, the students' zones of proximate development are enabled and constrained by collaborative knowledge and text production with not necessarily more capable peers. Student-centered supervision enables the students both to acquire academic literacies (learning) and at the same time to display the acquired literacies (competencies).

Academic writing as text and knowledge production takes place under specific conditions in academic discourse communities and academic communities of practice in the discourse and action space of academia. This counts also for master's thesis students, who simultaneously do research in a broad sense and learn how to create and communicate with and about research knowledge. Novices and peripheral members of these communities do neither know these conditions nor the norms, expectations, discourses and genres (Knorr & Pogner, 2015). Therefore, it is also vital to establish transparency about those and make tacit knowledge explicit both for students socialized in the local learning culture and those from other learning cultures.

This counts also for project supervision where international students sometimes are unsure about "what is, in the Danish system, a *learning moment*, with an *assessment moment* that would affect their grade" (Blasco, 2015, p. 96). However, even if a high degree of transparency and awareness about differing supervisor/student role expectations can be reached (Harwood & Petrić, 2019); there will still be doubt and uncertainty: "Mystery persists alongside notions of communication, objectivity and equality; hence, its presence needs to be recognized and accepted" (Knowles, 2016, p. 311). Research (knowledge production, subject knowledge) and writing processes (text production, writing skills) also have unique and idiosyncratic elements. Supervising process may also include doubt and uncertainty. Moreover, this calls for a feedback process in the supervision conversations that "needs to be flexible and open-ended and tolerant of ambiguity" (Knowles, 2016, p. 311).

Our conclusions and reflections are based on analytical generalizing of our findings in order to expand the insights from our qualitative studies of master's thesis supervision, which is deeply rooted in the problem-oriented project work tradition, to more general insight into the interrelation of supervision models, supervisor roles, and acquiring and developing academic literacies. The sampling, the quantity and quality of our empirical data (mainly social-science-based study programs and predominance of the partnership model), the scope of our study, and the focus on the students' perceptions and understanding limit the range of the analytical generalizability. Therefore, further research should look at how internal and external contingent factors (Boehe, 2016) and non-contingent factors have an influence on our vejledning matrix, such as the composition of the groups of students/writers, students doing the master's thesis alone versus doing it in a pair or small group, and face-to-face supervision vs. digital and remote supervision. Further research should also investigate different practices as aspects of solo and collaborative writing (Ede & Lunsford, 1990), new forms of supervision, e.g., collective academic supervision (Nordentoft et al., 2019). It should also consider multivoiced (and multi-lingual) supervision in a mix of discussion groups, group or cluster supervision and individual supervision (Dysthe et al., 2007), and the influence of different educational-cultural experiences of students and supervisors on supervising in a student-centered way.

In order to counterbalance the focus on the students' perspective and to open the door to the "closed room" (Nexø Jensen, 2010) of supervising and learning further, and to investigate the supervisors' contribution to shape problem-oriented project work, we have already started interviewing supervisors. We are looking at how supervisors understand and adapt to student-centered supervision in the Scandinavian way—both in cases where the supervisor has a Scandinavian educational socialization or another education-cultural background- and which supervision models supervisors and students enact.

In their case studies, Harwood and Petrić (2017) have investigated master's thesis supervision in international study programs at a UK university from the supervisor/advisor and student perspective in order to demystify supervision (Harwood & Petrić, 2017) and to help international students to navigate master's thesis supervision in this intercultural context (Harwood & Petrić, 2019). For the same reasons, we have started interviewing international students with non-Danish or non-Scandinavian educational backgrounds studying at the Copenhagen Business School, i.e., in the context and encounter of the local Scandinavian educational culture and ideology. In order to investigate the impact of these encounters on the acquisition and development of research literacy/ies are we exploring how novices (students and supervisors) in the Danish educational culture handle student-centered supervision (vejledning) when enacting or being exposed to different supervision models.

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Appendix A: Interview Guide (translated from Danish by the authors)

General questions

- What do you study? In which study program are you enrolled?
- What is the topic of your thesis?
- When did you submit your thesis/when do you expect to submit?
- What is a master's thesis?
- Do you see it as a process or a product (NB ownership, who is coming up with solutions, role of critical thinking)?
- Where in the process are you now?
- What has been the biggest challenge/difficulty until now?
- What has been the easiest part until now?

About supervision

Questions about vejledning (supervision)

- Conditions/media for vejledning (supervision), e.g., f2f, skype, email, etc., how often did you have meetings, is vejleder reading drafts, which types of drafts, feedback on drafts/texts?
- Who initiated the vejledning (supervision) meetings?
- How much did you make use of your vejleder (supervisor)?
- Who did most of the talking during meetings?

About the vejleder (supervisor)

- Vejleders (supervisor's) background (position) and nationality/language (L1) [NB external supervisors: without research; internal supervisors: with research]
- Did you know your vejleder (supervisor) in advance?
- Is there any relation between your topic and the vejleder's (supervisor's) research/profession?

Content of vejledningen (supervision)

- Did the vejleder (supervisor) recommend/suggest literature? To what extent?
- Did you discuss theories? On what level and how often?
- What did you talk about with your vejleder (supervisor) concerning methodology/methods? On which level and to which extent?
- Did you employ your vejleder (supervisor) when it comes to the process? (Process: any halt, doubt about academic issues, the structure of the thesis, writing "hurdles" and "barriers," organization of project work?)
- Were there any moments of "Now I really have learned something"?

The nature of vejledning (supervision)

- What kind of comments did you get from the vejleder (supervisor)?
- How did you react? What did you do with the comments?
- Which specific advice did the vejleder (supervisor) give? Did s/he give any at all?
- Did the vejleder (supervisor) suggest things that you have not followed?
- If yes, what was the reaction of the vejleder (supervisor)?
- If no, did you have the impression that you were forced to reach a compromise/agreement by giving up your initial position?

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- Was there anything the vejleder (supervisor) insisted on you should do?
- Did the vejleder (supervisor) frustrate you?
- Any doubts like "Should I do that?" Any reactions like "Well, the vejleder (supervisor) was right."
- Where did your vejleder (supervisor) make the biggest difference?
- In a positive way? In a negative way?
- Did the vejleder (supervisor) suggest things that did not make sense for you?
- How much autonomy/independence did you have in respect to your thesis?

The ideal vejleder (supervisor)

- What do you think should be the supervisor's contribution, your contribution?
- Could you please describe the perfect vejleder (supervisor)?

The vejledningsplan (supervision plan)

- In how much detail did you talk about and help you fill out the plan?
- About the writing process?
- What have you written so far?
- Which other actions have you done, e.g., literature search, method chapter, data collection, reading?
- What status has the text you have brought with you (loose notes, first draft, almost finished) text?
- What do you use writing for, in addition to manuscript writing?
- How many times did you add text/delete in the same part of the manuscript?
- Do you use writing in the idea phase?
- Do you write when you are reading?
- Take me into your "writing cell (writing space)." What is going on in there?
- How do you write? One sentence at a time, structured writing based on disposition/structure, loose writing in all directions, across manuscript, one chapter at a time?
- Can you put into words something you have learned until now?
- What courses and activities about master's thesis (writing) have you participated?
- What else do you use for help or as a source of inspiration?
- How do you feel about method and methodology? How do you cope with it?

Appendix B: Details on Data Collection

The empirical data distributed on students' study programs and supervisors' terms of employment and nationality.

The students' study programs	Supervisor (position and educational-cul- tural background)
Business Administration and Psychology	Researcher*, Danish
Business Administration and Philosophy	Researcher*, Danish
Business Administration and Mathematics	Researcher*, Danish
Business Administration and Political Science	Researcher*, Danish
Applied Economy and Finance	Researcher*, Danish
Economic Marketing (1 student from a pair)***	Researcher*, Danish
Intercultural Marketing	Researcher*, Danish
Intercultural Marketing (2 students)****	Researcher*, Danish
Human Resource Management (2 stu- dents)***	Researcher*, Danish
Business and Development studies	Researcher*, Austrian **
Multicultural Communication in Organi- zations	Non researcher*, Danish
(1 student from a pair)***	

*Researcher: internal (teachers/ supervisors) with research obligations, Non-researcher: external (teachers/ supervisors) without research obligations

** Austrian, but has adopted Danish educational culture/ideology

*** Student has conducted the project and written the thesis together with another student, but only one student was interviewed.

**** The two students have conducted the project and written the thesis together.

Appendix C: Distribution of Interviews across the Supervision Models

Supervision models	Empirical data
Partnership	Eight interviews with:
	Johan, Katherina. Laura and Line, Nathalie. Per, Rasmus, Simon, and Thor
Apprenticeship	One interview with Jonas
Teaching	One interview with Peter
Laissez-faire	One interview with Nadia and Michala