

Collective dimensions of academic supervision: How the acknowledgment of different actors in degree project supervision can contribute to scaffolding

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Abstract

Academic supervision involves several key actors in addition to supervisors and students, who share the same general objectives. Our aim here is to investigate and discuss collective dimensions of degree project supervision practice by examining how supervisors use the acknowledgment of such key actors within the degree project context, in their interaction with supervised students. In what ways do supervisors in their supervision practice acknowledge various actors within the degree project context? What functions may this have in the supervision interaction?

The empirical material consists of recorded supervision sessions with students within teacher education at two Swedish universities. The results show how supervisors used attribution and active voicing to acknowledge the various actors in the degree project context, and how this could be part of the scaffolding means giving instructions and modelling. Based on the analysis of our material, we argue that this can be seen as contributing to the scaffolding intention cognitive structuring, by a) helping students understand the different roles and responsibilities of the different actors, by b) helping them to assess the importance and relevance of the advice given by these actors, and by c) emphasising the students' own role as active participants in the process.

Keywords: academic supervision; degree projects; higher education; scaffolding

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Introduction

Research over the last decades has highlighted that academic supervision, in addition to being a pedagogical relationship between the supervisor and the supervised student(s), also comprises collective elements and dimensions on different levels. In the context of postgraduate education, Vehviläinen and Löfström

(2016) calls this a systemic culture, where the role of the academic community is emphasised and regarded as something that benefits the academic development of students. Dysthe et al. (2006) have argued in a discussion of supervision at the master level that an approach to supervision focusing on social and collective practices can improve its quality. The benefits of collective dimensions of academic supervision have been explored and discussed in research on group supervision and collective forms of supervision at the undergraduate level (e.g. Baker et al., 2014; Scholefield and Cox, 2016; Nordentoft et al., 2013; Vehviläinen & Löfström, 2016; Wichmann Hansen et al., 2015).

In this article, which concerns the supervision of degree projects¹, we will examine the collective dimensions of academic supervision from yet another angle. We start by recognizing how the broader degree project context involves a number of different actors (cf. agents, Vehviläinen & Löfström, 2016), in addition to supervisors and supervised students, such as seminar leaders, course coordinators and examiners, as well as student peers. These actors share a common goal—the academic development of students—adhere to common guidelines and governing documents of the degree project courses and cooperate through joint meetings or seminars. In this article, we do not examine the actual cooperation between these actors, but instead how they and their roles and competencies/knowledge are acknowledged and used by supervisors in their conversations with students.

Our aim in this article is, accordingly, to explore collective dimensions of degree project supervision practice by examining how supervisors acknowledge different actors within the degree project context in their interaction with supervised students. Our main questions are: *In what ways do supervisors in their supervision practice acknowledge various actors within the degree project context? What functions may this have in the supervision interaction?*

Theoretical framework

The analysis starts from a theoretical framework that focuses on *scaffolding*. Scaffolding is a theoretical concept that has been frequently used within educational research as a metaphor for the support that learners need in order to master a task they are not yet fully ready to accomplish on their own (cf. e.g., Castillo-Montoya, 2018; Eklund & Lennartson-Hokkanen, 2015; Korhonen et al., 2018; van de Pol et al., 2019; Zackariasson, 2020). However, as the concept has been so widely used,

¹ Degree projects may also be called student theses, bachelor/master theses or undergraduate projects, depending on the national and local academic context. In this text, we primarily use the term degree projects.

it sometimes tends to be watered down, so that more or less anything a teacher does to support a student could be defined as scaffolding. To avoid this, we start from the more specific definition and understanding of the concept presented by van de Pol et al. in a proposed framework for the analysis of scaffolding (van de Pol, 2012; van de Pol et al., 2010). In this framework van de Pol et al. make a distinction between *scaffolding intentions*, which are the goals one hopes to achieve through scaffolding, and *scaffolding means*, which can be described as tools that can be used to contribute to achieving these goals (van de Pol et al., 2010, pp. 276-277; van de Pol, 2012, pp. 35-37). Below, we will start by presenting van de Pol et al.'s definition of scaffolding intentions and scaffolding means, as well as the particular scaffolding intention and the two scaffolding means we will concentrate on in this article.

The framework for the analysis of scaffolding proposed by van de Pol et al. (2010; van de Pol 2012) distinguishes between five different types of *scaffolding intentions*: a) direction maintenance, which refers to keeping learning on target, b) cognitive structuring, which involves teachers providing explanatory structures that support the cognitive activities of the learner, c) reduction of degrees of freedom, which involves handling those parts of a task that students are not yet ready for, d) recruitment, which involves getting students interested in a task, and finally e) contingency management/frustration control, which concerns keeping students motivated. These potential scaffolding intentions can all, in various ways, be relevant in an academic supervision context.

Here we will focus specifically on the scaffolding intention *cognitive structuring*, which is relevant in relation to the supervision of degree projects since it involves supervisors supporting students in understanding how they should or could work and think in regard to a particular academic undertaking. To support students in this becomes important not least when they face new or unfamiliar academic tasks or contexts with which they are not yet comfortable. The writing of degree projects is one example of when students commonly find themselves in a new and unfamiliar academic context with partly different demands and expectations than they have encountered previously in their education (see e.g., Ekholm, 2012; Light et al., 2009, p. 154), for example connected to academic writing and academic literacy, increased expectations on student independence, or emotional aspects connected to the task of producing a larger academic work such as a degree project (cf. Light et al., 2009; Liu & Yu, 2022; Todd et al., 2006; Magnusson & Zackariasson, 2018; Zackariasson, 2018).

Subsequently, our starting point here is that supervisors' support to students in understanding the roles and responsibilities of these various actors should be seen

as a central aspect of the scaffolding intention cognitive structuring in a degree project context.

In the proposed framework for the analysis of scaffolding Van de Pol et al. also discern six potential *scaffolding means* that can be used to support students in achieving scaffolding intentions: a) giving feedback on students' performance, b) giving hints that can help students continue with their work, c) giving instructions to explain how students should continue, d) explaining to further clarify what has been said or what is unclear, e) modelling by giving students examples of how to think or act, and f) asking questions that encourage and demand an active cognitive and linguistic response (van de Pol, 2012, p. 36; van de Pol et al., 2010, p. 277).

In our material, two different types of scaffolding means emerged as particularly common in relation to the supervisors' acknowledgement of different actors in the supervision interaction: *giving instructions* and *modelling*. In our analysis, we will show how supervisors' use of these two scaffolding means in their supervision practice may contribute to supporting students in understanding the roles and responsibilities of the various actors present in the degree project process. We argue that this should be seen as an essential part of the scaffolding intention cognitive structuring in this context. We do, however, want to stress that what we are examining is not the supervisors' intentions as such, but what the supervisors express in the interaction, which we understand as scaffolding means and scaffolding intentions based on the function that emerges from what is being said.

Survey of the field

Both research concerned with scaffolding and research concerned with supervision interaction are relevant to this article.

A large part of the research on scaffolding has focused on the school context, but there are also studies discussing these issues in relation to higher education. Wass et al. (2011) have, for instance, examined scaffolding within higher education from the perspective of how conversations with lecturers and peers may allow students to extend their zone of proximal development when it comes to critical thinking. Further examples are Korhonen et al. (2018) who have looked at the role of online learning in the scaffolding process of student teachers, and Castillo-Montoya (2018) who has examined the use of lived experiences in scaffolding of college students. Collins (2021) has explored the role of scaffolding within doctoral education, more specifically in relation to identity work.

Of greatest significance for this article are the studies that discuss scaffolding in relation to academic supervision more specifically. Our own previous

research on scaffolding in relation to student independence and academic literacies in the degree project context, is significant here (e.g., Zackariasson & Magnusson, 2020; Zackariasson & Magnusson 2024), but also the works by Ekholm (2012), who has analysed governing documents from a higher education social work program and discussed the role of the supervisor in relation to scaffolding and student independence. The work by Zhang and Hyland (2022) is also relevant to this study, even though it concerns the supervision of master theses, as they, like us, focus on scaffolding in the actual interaction between supervisors and students. Their perspective, however, is centred on the positioning of the students in relation to the comments they receive from supervisors, while we focus on the role of the supervisors in the documented supervision interaction.

Within the broad research field of academic supervision, this study primarily relates to research that focuses on supervision interaction at the undergraduate level. Important contributions in this area include the work of Vehviläinen, Nelson and Henricson (e.g., Henricson & Nelson, 2017; Henricson et al., 2015; Vehviläinen, 2009). In their studies they have used recorded supervision sessions as an empirical basis for exploring and discussing interactional aspects of how supervisors give advice or feedback in supervision practice. In their findings, they have identified similarities with other institutional contexts regarding aspects such as the asymmetrical structure of interactions with an expert and how interaction can be managed through giving advice and asking questions. They see supervisors as experts in the supervision context since they set the framework for the interaction and act as authorities by taking initiatives, giving advice, and so on (cf. Henricson & Nelson, 2017).

A recent contribution to the scholarship on supervisor-student interaction is Thanh's (2023) book on conversational analysis of doctoral supervision. Her results are also relevant to undergraduate supervision in several ways, for example in terms of collaborative work in multi-party supervision sessions and the co-construction of feedback between two supervisors. Different perspectives on the supervisors' actions emerge in these studies, but how other academic actors are made relevant and visible is not a focus in any of these interaction studies, nor whether and how these actors may play a part in the scaffolding work. This article thus adds to the previous research by examining a different perspective on the collective dimensions of academic supervision at the undergraduate level and by examining scaffolding in supervision interaction.

Materials and methods

The empirical material analysed in this article consists of 27 recorded and transcribed supervision sessions from degree project courses from two universities in Sweden. The supervision meetings involved six different supervisors within primary school teacher education programmes in Sweden. The recordings are part of a larger material collected within a multidisciplinary research project which focused on supervision of degree projects within teacher education and journalism education.²

The degree project courses, which the recorded supervision sessions were a part of, lasted ten weeks (15 ECTS) and included several supervision meetings, as well as certain seminars or lectures related to the process of writing degree projects. In addition to a course coordinator who was responsible for each course, several seminar leaders, examiners and supervisors were involved in each course, attended meetings, discussed guidelines etcetera. Both male and female supervisors who were asked to participate in the research project were experienced supervisors working in higher education institutions with which we had previous contact, forming a convenience sample. In the article, the supervisors are pseudonymised as supervisors A-F. Typically, each supervisor met with the supervised students four or five times during the course, with each meeting lasting approximately 60-90 minutes. Supervisors were not examiners for the degree projects they supervised but could in some cases act as examiners for other students within the course and were routinely contacted during the examination process to give their views on the supervision process.

Each of the recorded supervision sessions included a supervisor and one or, in some cases, several students, as some sessions consisted of group supervision, and students sometimes wrote their degree projects in pairs. The supervision sessions were recorded by the supervisors themselves in order to minimise the influence on the interaction. Transcriptions of the recordings were made in Swedish, and extracts from the material used in this article were translated into English by the authors. The collection and handling of the empirical material adheres to the Swedish research ethical guidelines for research involving humans (Swedish Research Council, 2017).

In order to identify the relevant categories of actors for the analysis, we looked at how the supervisors in our empirical material talked about, referred to,

² The project, which was funded by the Foundation for Baltic and East European Studies, was called *Independence in higher education: A comparative study of Sweden and Russia*. The material as a whole included recorded supervision meetings, focus group interviews with supervisors as well as documentation of written supervision interaction (e-mail conversations and texts).

and gave voice to other actors relevant to the degree project process in their interaction with the students. In an initial analysis, we categorised all instances of acknowledgement of academic actors, by personal name or role category, in the 27 recorded supervision sessions. From this analysis we could see that the participating supervisors primarily acknowledged three main categories of actors: seminar leaders/course coordinators, examiners, and students.

Furthermore, the initial analysis disclosed that these acknowledgements were mainly done in two specific ways, by *attribution* and by *active voicing*. The concept of attribution comes from the appraisal framework (Martin & White, 2005), which aims to account for evaluations in language and how this evaluative language can be analysed from a linguistic perspective. The framework contains different levels of categories, and attribution is a category that concerns relationships and interpersonal positionings in which propositions are attributed to an external voice (Martin & White, 2005, p. 111). In the analysis of our material, we include references to persons and role categories in the category of attribution, not just propositions from persons. In other words, all instances in the material where an external voice or person was referred to are understood here as attribution, such as for example when a supervisor would tell a student that the course coordinator needed to decide something or would refer to something the seminar leader had said.

According to Hutchby and Wooffitt (1998, p. 225), active voicing means that individuals, in this case the supervisors, enact voices to express other people's ideas or positions more or less openly as a kind of quotation. Hutchby and Wooffitt (1998) emphasise that the words reported by speakers are unlikely to have been said in the way they are reproduced. Active voicing or hypothetical active voicing (cf. Simmons & LeCouteur, 2011) is in other words used not only to enact or reproduce what people have said, but also to enact what people might think or hypothetically say. Sequences of active voicing are usually constructed with some kind of introductory components or quotatives, such as a verb, pronoun, or name (cf. Holt & Clift, 2006, p. 50) that signals a change of footing or perspective. We looked at introductory components or quotatives in our material to identify sequences of active voicing (underlined in all examples). A supervisor could say, for example, 'so you can start the section with something like the next relevant concept for my analysis is action', thereby taking the student's voice through shifts in pronoun use (you to my). We have not coded hesitations, interrupted words, and so on in the transcriptions, as these were not crucial for the identification of attribution and active voicing.

By analysing interaction, we access a practice and communication patterns within it. These communication patterns of attribution and active voicing can be

understood as scaffolding means and intentions, based on the function they serve in the conversation and on knowledge of scaffolding and scaffolding strategies in other educational contexts. However, the intention of the supervisor cannot be known since communication patterns and strategies are often unconscious and unreflective (cf. Linell, 2011).

Results

In this section, we will give some examples from the recorded and transcribed material of how the participating supervisors acknowledged the different categories of actors in the degree project context: 1) course coordinators/seminar leaders,³ 2) examiners, and 3) students⁴ and discuss how such acknowledgements can contribute to achieving the scaffolding intention cognitive structuring (van de Pol et al. 2010, pp. 276-277; van de Pol, 2012, pp. 35-37).

Course coordinators and seminar leaders

The first category of actors within the degree project context that was frequently acknowledged by the supervisors in the recorded supervision sessions was course coordinators and seminar leaders. Our analysis of the material revealed that this was often the case when supervisors were giving instructions to students. For example, it was common for supervisors to attribute course coordinators or seminar leaders when instructing students on how to proceed with various practical or formal aspects of the degree project, such as the obligatory abstract in English or the best choice of methods, saying things like ‘Well, you have to ask the seminar leaders about that, it’s their responsibility’ (Supervisor C) or ‘Yes, well, that’s fine, we’ll let XX [the course coordinator] handle it. Let’s see what she says’ (Supervisor B). As the examples demonstrate, in these cases the supervisors often referred to actual persons, by attributing a specific course coordinator or seminar leader, with or without using their name. This can be seen in light of both supervisors and supervised students generally being aware of who the course coordinators and seminar leaders were and, in most cases, having interacted with them during the

³ We regard course coordinators and seminar leaders as one category of actors within the degree project contexts, since these positions/roles could often be held by the same individual(s) within a particular course, and the supervisors to a great extent referred to them in a similar way.

⁴ In addition to these three categories, supervisors mentioned actors that were not part of the specific supervision or degree project course context in their conversations with the students, such as individuals the students had interviewed for their study or researchers/scholars that students referred to in their text drafts.

degree project course.

By acknowledging course coordinators and seminar leaders in this way, supervisors could be said to be pointing out to supervised students that there were multiple actors in the degree project context, highlighting that they as supervisors and students were part of a larger collective, and clarifying the division of labour between these actors by delineating their responsibilities as supervisors in relation to the responsibilities of course coordinators and seminar leaders. As the examples above illustrate, this was often achieved by explicitly defining the boundaries between the different roles within the course. For instance, supervisors would describe how a particular task or aspect of the degree project process was the responsibility of the course coordinator or seminar leader, rather than themselves.

In the example below, where the supervisor informed the students what would happen if they failed to make the expected progress at a particular stage of the degree project process, this delineation of roles and responsibilities was done in a slightly different manner:

Supervisor: We have [talked] among the teachers and XX [the course coordinator] says that I should talk to you and to those students who are, so to speak, not quite where they should be at this point, you know, right before the last week of the course. And tell you that if you choose to present your degree project for defence, you will lose the right to any further supervision.

Student: Hm.

Supervisor: But if you don't present the degree project at this stage, you can keep the supervision you have left. But I'm just telling you what XX [the course coordinator] has said, so that you know.

(Supervisor A)

Here, the supervisor's attribution to the course coordinator at the beginning and end of the example delineates the division of roles and responsibilities between actors in the degree project context by communicating that it was not primarily the supervisor's idea or decision to tell the students that they risked losing the right to further supervision if they submitted unfinished work for defence. When doing this, the supervisor could be said to be emphasising that the rules governing the degree project course were not the responsibility of the supervisors and that they too had to abide by what had been decided for the course—decisions that had been discussed in joint meetings and formulated in common guidelines.

In addition to delineating the roles and division of labour between the actors in the degree project context, supervisors' acknowledgement of course coordinators

and seminar leaders often seemed aimed at helping students to evaluate what was more or less important among the various views, opinions, and recommendations expressed by these actors. This was commonly done by instructing students to check the supervisor's suggestions with the course coordinator before proceeding with their work. For example, in one supervision session, the supervisor commented on a suggestion about the choice of method by saying: 'Maybe we should check if XX [the course coordinator] thinks it's totally okay to supplement with a survey' (Supervisor F).

When doing this, supervisors could be said to be highlighting the role of the course coordinators and seminar leaders, and that their advice and recommendations should be seen as very important, indeed even more so than the advice of the supervisors, in the event of any conflict between them. In this sense, the recognition given by supervisors to course coordinators and seminar leaders in their discussions with students, could be seen as contributing to strengthening the authority and legitimacy of these categories of actors in the degree project context. From a perspective of cognitive structuring, this way of acknowledging course coordinators and seminar leaders could also be understood as supporting students in knowing who they should turn to in the first place concerning a specific query. This kind of supervision practice could in other words contribute to helping students understand what questions or choices a supervisor could help them decide and what questions they must direct at one of the other actors within the degree project context.

The acknowledgement of course coordinators or seminar leaders could also be used to communicate to students that the supervisors' advice or recommendations were in accordance with what had been said by other actors in the degree project context. Agreeing and responding to each other's views are examples of how supervisors in their practice highlighted the collective dimensions of the supervision interaction. There were several examples of this in the material, such as the following extract where the supervisor attributed the course coordinator, when reminding the students that the empirical investigation must be given sufficient space in the text:

Supervisor: But you already know, and XX [the course coordinator] has also emphasised, that there must be an empirical investigation. It can't be eighty, ninety percent previous research, theory, discussions and considerations of various kinds, and then the empirical part comes as a small speck somewhere.
(Supervisor A)

In addition to this being another example of how the supervisors, by frequently relating to other actors in the degree project context, contributed to making supervision a collective rather than an individual practice, this way of combining their own expertise and legitimacy with that of the course coordinator contributed to their recommendations carrying even more weight. In relation to cognitive structuring, this kind of supervision practice could thus support students in understanding when a particular piece of advice from the supervisor was not optional, but rather something they were more or less obliged to follow.

As the examples above have illustrated, the attribution of supervisors to course coordinators and seminar leaders was a common part of how the potential scaffolding mean giving instructions was carried out in practice by supervisors during supervision meetings. This could make it clear to students that there are several actors involved in the degree project context and clarify the division of labour, roles, and responsibilities among these actors. It could also strengthen the legitimacy of either the course coordinators or the supervisors, or both, and thereby help students to evaluate the advice and recommendations they received throughout the course. In both respects, the ways in which supervisors acknowledged course coordinators and seminar leaders in supervision conversations could be understood as contributing to the scaffolding intention of cognitive structuring (van de Pol et al., 2010, pp. 276-277; van de Pol, 2012, pp. 35-37) by helping students navigate the new and rather unfamiliar context of writing a degree project.

Examiners

The second category of actors in the degree project contexts that was frequently acknowledged by supervisors in the recorded supervision sessions was the examiners. As with course coordinators/seminar leaders, examiners were often mentioned when supervisors were giving instructions to students on how to proceed with their work. However, there were some differences in how supervisors acknowledged the category of examiners in their conversations with supervised students, compared to how they acknowledged the category of course coordinators and seminar leaders. For example, it was less common for supervisors to refer to specific, actual individuals when talking about examiners. Instead, they tended to refer to a potential, hypothetical examiner and quite often put themselves in this hypothetical position, saying things like ‘If I think as an examiner...’ or ‘If I were the examiner, I would...’ and so on. This can be understood in the context of each course having more than one examiner and neither the students nor the supervisors knowing exactly who would be examining a particular degree project once it had been completed.

A further difference in the way these two categories of actors were

acknowledged by the supervisors, was that the supervisors commonly used active voicing in addition to attribution. That is, they tended to “borrow” the voice of the examiners and “quote” what these might hypothetically think, say or do, when instructing students on how to proceed in their work. As in the following example, where the supervisor used attribution and active voicing (underlined) in relation to the examiner to stress the importance of saving any recorded interviews for the entire duration of the degree project course, and not erasing them in advance:

Supervisor: Because the examiner could come and ask: can I have a look at ... does this [material] really exist? It does happen that results are made up, very rarely. So just a reminder, so that you don't go and burn the material before [the defence/assessment of the degree project]. Otherwise it could get quite silly.
(Supervisor B)

When supervisors referred to examiners in this way, they, like in the previous examples of supervisors acknowledging course coordinators and seminar leaders, could be said to be reminding students of the collective dimensions of supervision. This included pointing out that there are several key actors in the degree project context and clarifying the division of labour and responsibilities between them. In addition, the acknowledgement of examiners in the supervision sessions added an element of what students could expect towards the very end of the degree project process, as the focus was on how degree projects might be assessed once they had been completed and were to be defended and discussed in the final seminar. This is further illustrated in the following example, where the supervisor took the position of a hypothetical examiner in order to point out potential problems with what was seen as excessive and complicated theoretical descriptions in the student's text:

Supervisor: Then it is a major challenge for you to make it very clear to the reader that you are going to use it. Because if I think as an examiner and I get a degree project in my hand that has a lot of really difficult theory in it, then I might get suspicious. And I'll think, like: is this a student who thinks he has to show off?
(Supervisor F)

In another example, the same supervisor used this strategy to warn students against making unsupported claims in their study:

Supervisor: If the author in the conclusion claims to say something about what it is like among all teachers in Sweden or what happens in all

classrooms in Sweden or even in the whole world, then it's a disaster. That's a huge problem. It's something that I, if I were the examiner, would come down on like a hawk. When you claim to be able to do something that you can't really do.
(Supervisor F)

As well as giving voice to a hypothetical examiner and thereby illustrating how this category of actors in the degree project context might think, the supervisor in this second example used quite strong language to get the point across to the students, choosing words and phrases such as 'disaster', 'huge problem' and 'come down on like a hawk.' Taken together, these choices emphasise that the instruction is not to be taken casually. They highlight that it is not only the supervisor who considers these issues important to amend, but that an examiner is also likely to find them significant in the future assessment of the degree project.

In all the above examples, then, the ways in which supervisors acknowledged examiners as actors in the degree project contexts could be seen as a way of enhancing their own authority and arguments by shifting the focus from what they might think as supervisors to how they predict an examiner would or might react. This strategy of using the potential scaffolding means of giving instructions to students could subsequently be said to contribute to the scaffolding intention cognitive structuring. It not only delineates roles and responsibilities, but also helps students evaluate what is more or less important or negotiable in the supervisors' advice. Additionally, it prepares students for what lies ahead in the degree project process by highlighting the upcoming defence and assessment (cf. van de Pol et al., 2010; van de Pol, 2012).

Students

The third category within the degree project context that supervisors frequently acknowledged in the supervision interaction was the students. In the recorded supervision sessions, supervisors referred to students both when giving supervised students instructions on how to proceed with their work and when modelling how they might think or work. Supervisors sometimes referred to supervised students or their peers within the ongoing course or programme, and sometimes to a generic, hypothetical student or groups of students, using both attribution and active voicing in relation to this category of actors.

Supervisors' acknowledgement of students within the course or programme to which the supervised student belonged could be done, for example, by asking supervised students what comments they had received from fellow students during a recent seminar on text drafts. This could also be done by identifying peer students

as significant readers during the degree project course when instructing a student on how to develop a text, as in the following example:

Supervisor: I think the main challenge for you is purely pedagogical. /.../ To present these thoughts to your fellow students in a way that makes it accessible for them. It will be a double gain, since it's a question of learning by teaching, when you are forced to present a piece of material in a way that makes it accessible.

(Supervisor F)

In another example from the material, a supervisor attributed a more general category of students when instructing a supervised student on how to proceed with text revision, in a way that gave student peers as recipients of the text a similar significance to, for example, examiners:

Supervisor: You should think that we are the recipients, other student teachers. /.../ You should think like this: Of course, you are not writing to someone who is not at all familiar with this, so you are not writing to a five-year-old or to people who have never heard of these concepts. But your text should of course be understandable to someone who is not a linguist or who doesn't know who XX [scholar] is, but still has some kind of... Yes, but like your classmates, and examiners who might be mathematicians or so.

(Supervisor D)

When referring to the category students in this way, supervisors could be said to be acknowledging them as key actors in the degree project context, alongside course coordinators/seminar leaders and examiners. Furthermore, when students are defined as valuable readers of the texts being produced, this category of actors, which also includes the supervised students, is presented as active participants in their own and their peers' learning process, not just passive recipients of advice and knowledge. In other words, in addition to acknowledging that students are actors within the degree project context, it could be said that supervisors in such cases elevate the student's position and role and make it more equivalent to the other actors within the degree project context.

Supervisors also used attribution and active voicing in relation to students they had previously supervised, and occasionally also in relation to the students they were currently supervising. This was done, for example, by referring to how a particular student had reasoned or acted in the past, or how they might or should

reason or act later in the degree project work. In the following example, the supervisor used active voicing (underlined) to enact two versions of the supervised student to illustrate both the perceived current approach and the future desired approach of the student towards reading theoretical literature:

Supervisor: Because there is a difference between finding like, and this is interesting, and this is interesting.

Student: Yeah, that's exactly what I do. (laughs)

Supervisor: You shouldn't do that. You should be able to separate, well, this is interesting but not relevant. Yes, this is interesting and relevant.

(Supervisor A)

The supervisor's use of active voicing to enact a future, hypothetical version of the supervised student could in other words be described here as being used to model how the student could or should be thinking when continuing to work on the degree project, which could be seen as contributing to the scaffolding intention cognitive structuring. It could furthermore serve as a warning that the student's current approach or way of working was not adequate.

When supervisors acknowledged students as significant actors in the degree project contexts, they communicated that the supervised students were expected to be active participants in both their own and their peer students' degree project process, highlighting that the collective dimensions of degree project supervision also include the category of students. Furthermore, this supervision practice was used to express concerns or warnings that a particular way of working was not adequate and to provide examples of what would be a better approach. Hence, it could be argued that supervisors' acknowledgement of the category students when giving instructions or modelling, contributed to the scaffolding intention cognitive structuring in at least two ways: by helping supervised students understand their own and their peer students' role in the degree project context, and by letting them know what was expected of them throughout the process (cf. van de Pol et al., 2010; van de Pol, 2012).

Concluding discussion

In the previous sections we have presented examples of how supervisors in our research material frequently acknowledged a number of actors within the degree project context—course coordinators/seminar leaders, examiners and students. Our findings demonstrate how this occurs in practice when supervisors give instructions

to students and model how they might work or think. In this concluding discussion, we will summarise some of our main findings and further discuss whether and how supervisors' acknowledgement of these other actors in supervision conversations can be understood as contributing to the scaffolding intention cognitive structuring (cf. van de Pol et al., 2010; van de Pol, 2012).

Our first main finding concerns how, as the examples above have illustrated, supervisors' acknowledgement of course coordinators/seminar leaders, examiners, and student peers in supervision conversations can be used as a way to communicate to supervised students the significance of these actors in the degree project context, as well as delineating the differences between them. Supervisors' acknowledgment of the different categories of actors in the degree project context could in this manner contribute to achieving the scaffolding intention of cognitive structuring, by clarifying to whom students should turn with particular problems or dilemmas in their degree project work that they could not resolve on their own.

Our second main finding concerns how, as illustrated by the given examples, supervisors in their acknowledgement of the different categories of actors within the degree project context, often emphasised the authority and legitimacy of these actors. On the one hand, this could be used to communicate to supervised students that it was not only the supervisors' opinion or advice that mattered in the degree project process, but also the opinions, decisions and assessments of course coordinators, seminar leaders or examiners. On the other hand, it could be used to emphasise the legitimacy of the supervisor in question, for example by pointing out that what he or she said was in line with what the course coordinator or seminar leader had said or decided, or by referring to how a potential examiner might reason. This way of acknowledging the different categories of actors in the degree project contexts could thus be said to contribute to achieving the scaffolding intention cognitive structuring by helping students evaluate the significance of the advice and recommendations they are given throughout the degree project course.

Our third main finding concerns how supervisors, by acknowledging the category of students as significant actors in the degree project context, alongside course coordinators, seminar leaders, and examiners, could be said to be elevating the role of students in the degree project process. This could contribute to achieving the scaffolding intention cognitive structuring by communicating to supervised students that they should see themselves as active participants in their own degree project process as well as in the broader degree project context, for example as readers of draft texts in seminars or during group supervision meetings. Supervisors could also acknowledge the category of students to communicate the more overarching, long-term goals of the degree project process and the supervision. This includes the idea that others, such as the students' peers, should ideally be able to

learn something from reading the completed degree projects.

The main findings we have presented here may be related to previous research on the field. As we discussed at the outset, previous studies have shown how collective forms of supervision, such as group supervision and peer feedback, can be beneficial to the degree project process and student learning in a number of ways (e.g., Boud & Lee, 2005; Nordentoft et al., 2013; Thanh, 2023; Vehviläinen, 2016; Wichmann-Hansen et al., 2015). Scholars, such as Dysthe et al., have also argued that the involvement of different actors or agents in supervision, in their case at the master's level, can contribute to writing development (cf. Dysthe et al., 2006). Our study contributes to this research by looking at how supervisors tend to involve such other actors, in our case course coordinators, seminar leaders, examiners and student peers, in the actual supervision interaction practice.

Previous research also forms the backdrop for our discussions of how the supervisors' acknowledgement of various actors in the degree project context may be understood as scaffolding. Even though our particular study does not aim at examining the effectiveness of the scaffolding taking place, as the rich research by van de Pol et al. on this aims to do (e.g., van de Pol, 2012; van de Pol et al., 2015; van de Pol et al., 2019), previous studies on scaffolding within higher education show that scaffolding may contribute to student learning also in this context (e.g., Castillo-Montoya, 2018; Korhonen et al., 2018; Wass et al. 2011). Eklund Heinonen and Lennartson-Hokkanen (2015) have, for instance, argued that scaffolding may contribute positively to undergraduate students' participation in academic text discussions, while Wass et al. (2011) have discussed how scaffolding may contribute to developed critical thinking among undergraduate students, both of which are central academic skills in relation to the degree project process and academic writing (cf. Zackariasson & Magnusson, 2024). Our study adds to this body of research by examining yet another way in which scaffolding may be beneficial in a higher education setting, focusing on cognitive structuring and how the supervisors in their practice may contribute to this.

Previous research has also discussed how courses with a collective course design, which include certain lectures and seminars with various forms of feedback, such as the degree project courses we have studied, also tend to enable collective learning by offering different voices and perspectives (cf. Nordentoft et al., 2013). Malfroy (2005) has argued that this kind of collaborative knowledge-sharing environments can create powerful pedagogical practices. In our examples, course coordinators, seminar leaders, examiners and student peers represented such a variety of voices and perspectives. On the basis of our findings, we would therefore like to raise the question of whether the collective design of degree project courses could potentially offer similar types of learning opportunities as collective forms of

supervision. However, further research is needed to explore this more fully.

Another aspect of the collective dimensions of academic supervision discussed in previous studies, concerns the role of the supervisors in relation to expertise. According to Vehviläinen and Löfström, for supervisors to be able to supervise and to use different actors or ‘agents of supervision’, they need not only research competence but also pedagogical awareness and expertise. They claim that supervision is always a matter of pedagogical choices, ‘best conceptualised simultaneously at individual, group and community levels’ (2014, p. 509) and we would argue that discerning the collective or systemic nature of supervision interaction and how this can be linked to scaffolding, as we have done in this article, can contribute to enabling pedagogical awareness and expertise in this manner. Moreover, although the supervisors in our material to a high degree do appear as experts in the supervision interaction, in line with previous research (e.g., Henricson & Nelson, 2017), who guide the interaction with initiatives and advice, their expertise could be said to become more relative and disaggregated through the collective dimensions. When supervisors acknowledge examiners and course coordinators as well as students, other roles and voices are made visible, that counter and complement the expert role of the supervisors. This makes the interaction more dialogical and thereby also the asymmetry between student and supervisor more relative.

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