1 Introduction

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Researchers increasingly point to the importance of metacognition in enhancing learning and teaching. Tarricone (2011) states, for instance, that metacognition is fundamental to learning, whereas Fairbanks et al. (2010) and Hattie (2012) hold that teachers involved in metacognition are better able to support their own and their students' development. Also, policy makers increasingly acknowledge the value of metacognition, which they classify as a key competency for meeting future individual and global challenges (Griffin, McGaw, and Care 2012; OECD 2005). So, what is metacognition? As will become clear from the discussion in Chapter 2 of this book, there is no general agreement on how to define this rather vague concept. In general terms, it is often described as “thinking about one's own thinking”; but in this book, it refers specifically to *an awareness of and reflections about one's knowledge, experiences, emotions and learning* in the contexts of language learning and teaching (see Haukås 2018, this volume).

Although metacognition is now regarded as an essential tool for lifelong learning and flexibility in ever-changing multilingual and multicultural societies, it can still be claimed that metacognition has not yet been recognised as an integral part of language learning and teaching by as many researchers and scholars as desired. The realisation of the importance of metacognition for language learning and teaching inspired a group of researchers from various institutions of higher education to gather in Cambridge, England, in 2015. The central aims of the seminar were to discuss existing research on metacognition in language learning and teaching and to identify important future directions in the field. Furthermore, even though a wealth of publications provide evidence of the growing recognition of the value of metacognition, it became clear that no edited books existed that focused specifically on metacognition in language learning *and* teaching. Thus, the idea for this anthology was born.

One way of accomplishing a stronger focus on metacognition in language learning and teaching would be to widen the range of voices writing about metacognition by stimulating contributions from representatives from various linguistic and educational backgrounds. For this reason, a mix of established scholars and newcomers to the field of metacognition were invited

to contribute to this book. Consequently, the book includes theoretical and empirical contributions by researchers who have written about metacognition in language learning and teaching from a great variety of perspectives. Moreover, the contributors represent a number of different countries, continents and languages. The result is a broad range of topics concerned with metacognition in learning and teaching in school and at the university level, and we firmly believe that insights from these studies are valuable across languages, contexts and cultures. The empirical chapters of the book also employ a wide variety of established as well as innovative methodological approaches to tap into learners' and teachers' metacognition. Examples of data that have been collected and analysed include language corpora, teacher trainees' blogs, learners' metalinguistic reflections about machine-translated texts, and data about language learning generated by using keystroke-logging software and screen-recording software combined with self-reports. Furthermore, a questionnaire for examining learners' metacognition when writing in digitised environments is presented for the first time in this volume. In this way, this book also contributes to the discussion of how researchers can best approach and investigate learners' and teachers' metacognition.

Who Is This Book Intended For?

The main audiences for this book are researchers in the field of applied linguistics, language teacher educators, teacher trainees and practising language teachers. Thus, the editors hope that this book will serve several purposes: (1) to provide readers with theoretical insights into the relevance of metacognition in researching, learning and teaching languages; (2) to familiarise readers with recent empirical research in metacognition in language learning and teaching in a variety of settings; (3) to introduce potential researchers to a variety of approaches for carrying out research in the field; and (4) to inform future and practising language teachers through theory and a wealth of empirical examples about central issues and approaches for becoming metacognitively oriented language teachers and fostering metacognition about language learning among their students.

The Organisation and Content of This Book

This book is divided into three parts. Part I consists of three papers (Chapters 2–4) discussing central theoretical issues about metacognition in language learning and teaching. Part II brings together six empirical chapters (5–11) which focus on metacognition in language learners. Part III contains two empirical papers, Chapters 12 and 13, on different aspects of metacognition in language teachers. However, theoretical discussions about metacognition in this field naturally include both teachers *and* learners. Fostering metacognition in learners typically involves teachers, while language

teachers would normally think about their learners when they are metacognitively active. In other words, there are no clear-cut boundaries between theory, learning and teaching. On the contrary, these fields are closely intertwined and will also be treated as such wherever it is relevant in the various chapters. Below, we provide a more detailed presentation of each chapter.

In the first part of Chapter 2, **Åsta Haukås** discusses the concept of metacognition. Just like many other concepts related to cognition and thinking, “metacognition” is understood and operationalised in different ways by researchers in the field. However, common to all definitions is the fact that people are consciously aware of their own thinking. In this context, Haukås refers to metacognition as “an awareness of and reflections about one’s knowledge, experiences, emotions and learning” in language learning and language teaching. Thus, this broad definition of metacognition includes all aspects of thinking about language learning and teaching. In the second part of the chapter, Haukås gives an outline of methodologies for doing research on metacognition in language learning and teaching, whereas in subsequent sections she discusses various pedagogical approaches that have the potential to foster metacognition in learners and teachers. Finally, Haukås discusses which competences are needed for teachers to enhance metacognition both in themselves and among their learners.

A central subcomponent of metacognition in this context is multilingual language learners’ metalinguistic and crosslinguistic awareness. In Chapter 3, **Ulrike Jessner** provides insights into cognitive and metacognitive differences between multilinguals and monolinguals, whereby she argues that multilinguals’ increased knowledge of languages and language learning potentially makes them more capable of reflecting on their own knowledge and experiences. Jessner takes the Dynamic Model of Multilingualism (DMM), which is based on Dynamic Systems and Complexity Theory (DSCT), as the framework for her discussion of multilinguals’ metacognition, stating that the languages in multilinguals’ repertoire should not be regarded as separate entities in the brain, but rather as belonging to one dynamic psycholinguistic system in which the languages influence each other in sometimes unpredictable ways. Even though multilingualism is associated with certain cognitive and metacognitive advantages, Jessner emphasises that it should not be regarded as an automatic asset. She goes on to present several studies from the Austrian and South Tyrolean contexts that demonstrate how multilingual pedagogical approaches with a focus on metacognition can foster multilingualism further. In Jessner’s final section, she argues that learners’ metacognition concerning self-assessment of their own language proficiencies should receive more emphasis in both teaching and research.

In Chapter 4, **Magne Dypedahl** explores principles for designing courses in language teacher education that can enhance a metacognitive approach to the development of intercultural competence. In the first section of the chapter, Dypedahl argues that a consistent metacognitive approach to

intercultural learning requires a coherent course design, i.e., consistency between how the concept of intercultural competence is understood, how knowledge about intercultural communication is presented to the students, and assessment. Then, he discusses how metacognition can be integrated with the concept of intercultural competence by focusing on the internal outcome (metacognition) as well as the external outcome (appropriate communication) of this learning process. This conceptual synthesis is also visualised in a model of intercultural competence presented for the first time in this volume. The next section introduces intercultural communication as a field of study. Dypedahl points out that there often seems to be a gap between this field of study and language studies, which there is good reason to avoid. Furthermore, he gives examples of teaching approaches for the development of metacognitive intercultural competence, such as using critical incidents and role play in a way which prevents stereotyping. Another example is how a seemingly traditional culture-specific approach to target cultures can be used for metacognitive learning. Finally, he discusses a metacognitive approach to the assessment of intercultural competence.

The first two empirical chapters in Part II focus on learners' metalinguistic awareness. In Chapter 5, **Eva Thue Vold** presents an innovative study which combines learners' critical reflections of automatically machine-translated texts with an analysis of learners' metalinguistic reflections of the same texts. Divided into groups based on proficiency levels, L1 Norwegian upper secondary learners of L3 French were given a text in L1 Norwegian and two automatically translated versions of the same text into L3 French. When analysing the recorded group work, Vold was mainly interested in investigating how the learners talked about the text and to what extent they used grammatical terminology when doing so. Furthermore, she examined which language errors the learners focused on and how and to what extent the learners' reflections differed between proficiency levels. The data analysis revealed that most learners discussed the text using an everyday language, typically without supporting their views with concrete examples. They were mainly occupied with easily detectable lexical errors; whereas syntactical and morphological errors, for instance, often remained uncommented. Only the most proficient students used grammatical terminology when talking about the texts. These learners also tended to spend more time on the task than less proficient learners. Whereas many teachers express scepticism towards machine translations, believing that they can prevent learners from investing time and effort in the language learning process, Vold argues that such texts can be valuable tools for enhancing learners' metalinguistic awareness when used in appropriate ways. This study thus gives interesting insights into what learners focus on when assessing automatically translated texts, many of which they likely use themselves, and how they talk about them. In addition, the study is an example of a pedagogical approach for enhancing learners' critical metacognition about languages and the use of automatic translation tools.

In Chapter 6, **Hilde Hasselgård** explores the potential of increasing learners' metacognition about languages using corpus data. In the first part of her study, she uses a parallel corpus of English and Norwegian to contrastively examine three lexico-grammatical constructions, namely the modals *skal/vil* vs. *shall/will*, the collocation of modal verbs with certain modal adverbs, and the use of so-called topic identifiers. The findings from this analysis are compared with data from two corpora containing written texts by L1 Norwegian advanced learners of L2 English and by L1 English students. The linguistic analysis reveals interesting differences between the languages and language users. For example, the Norwegian *skal* is used 20 times more often than the English counterpart *shall* and is also overused by the Norwegian L2 students of English. However, Hasselgård's data demonstrate that frequencies in the L1 are not automatically transferred to the L2. Norwegian *vil* is, for example, less frequently used than English *will*, but the L2 students overuse the construction. Similarly, even though topic identifiers, such as *when it comes to* and *in connection with*, are not grammatically incorrect in English, both professional translators and L2 students tend to overuse these expressions. By studying parallel corpora, language learners can become aware of the typical usage in the target language and in their own language, but they can also discover how learners from their own linguistic backgrounds deal with the various structures in the target language. This may in turn enhance the learners' awareness of their own language preferences and to what extent they need to change their language use. In the last section of her paper, Hasselgård presents and discusses students' reflections on the potential usefulness of being aware of similarities and differences between English and their first language. The learners generally agree that explicit knowledge of similarities and differences between languages is helpful when learning and teaching languages because it enhances positive transfer and also makes learners aware of which linguistic structures they should pay particular attention to. However, some learners reflect on the disadvantages of this knowledge as well, noting that it may result in the avoidance of certain structures.

When considering the typical means of communication a language learner needs to master, i.e. speaking, listening and writing, we would argue that writing is probably the most suitable tool for focusing on and developing metacognition. This is so because in contrast to speaking and listening, when writing, the learner normally has enough time to reflect on both the writing process and the product, at both the macro and micro level. Hacker, Bol, and Keener (2009) have even argued that writing as a whole can be called applied metacognition. Since writing is such a useful tool for developing metacognition, it is not surprising that three chapters in this book focus on learners' writing. In addition, Chapter 11 explores teacher trainees' metacognition in their practice experiences by using blogging.

In Chapter 7, **Yvonne Knospe** first gives an interesting overview of research on metacognition in writing. Based on previous research, she convincingly

summarises learners' metacognition concerning writing in a table that is useful not only to other researchers but also to teachers and students of languages. In the table, Knospe distinguishes between learners' *metacognitive knowledge about writing*, e.g. knowledge about their own strengths and weaknesses as language learners and writers as well as how to apply certain writing strategies, and learners' *metacognitive regulation of writing*, such as planning, drafting and revising. In her dissertation project, Knospe designed an intervention study to investigate secondary school foreign language learners' metacognition about writing and how their metacognition developed over time. The main aim of this part of Knospe's empirical study was to investigate one language learner's reflections about his own writing processes. Henry, a 16-year-old Swedish student, was taking part in a writing intervention together with his peers and had been learning German as a third language for four years when the intervention started. Keystroke-logging software and screen-recording software were applied during the writing processes and then used as a tool by the researcher for reflection with Henry in five interviews immediately following each writing session. In this contribution, Knospe is particularly interested in Henry's metacognitive knowledge about writing and to what extent his knowledge changes over time. When analysing the data, it became clear that when given the chance to reflect on his own writing process, Henry was well able to give detailed accounts of his metacognition concerning writing in a foreign language. From a methodological perspective, this gives evidence that the approach taken in this study can be useful to other researchers interested in tapping into learners' metacognition in writing. Interestingly, Henry was mainly occupied with his limitations—what he could not do, and much less so with what he could actually do—when reflecting on his learning processes. Knospe argues that these negative beliefs can result in the avoidance of challenging learning tasks and thereby be a hindrance to future learning. She therefore recommends that teachers give their students enough time to reflect on their learning processes and that they pay special attention to replacing learners' negative self-images with more positive ones based on what they actually can do and how they can improve themselves.

In another case study, this time from a school setting in the United Kingdom, **Karen Forbes** in Chapter 8 argues that the foreign language classroom is an ideal context for developing transferable metacognitive writing strategies. This is one of the very few studies which not only investigates the effect of a programme of strategy-based instruction on the foreign language itself, but also explores reverse transfer to the L1. Forbes reasons that foreign language teachers, compared with L1 teachers, typically tend to take a more structured, bottom-up approach to language learning and, as such, are particularly well positioned to contribute to developing metacognition and awareness about language more generally. This chapter reports on data from one learner of German who took part in a classroom-based intervention with an explicit focus on metacognitive strategy use in writing. Based

on analyses of the learner's written texts and retrospective interviews, the findings suggest that a foreign language classroom in which students are more aware of being consciously and actively engaged in thinking is highly conducive to the development of language-related metacognitive strategies, which can also positively affect writing in the L1. However, such transfer does not necessarily happen automatically and can be facilitated further when the links between strategy use in the foreign language and first language classrooms are made explicit.

Whereas Knospe and Forbes adopted a qualitative case study approach in their contributions and thus provided in-depth insights into individual learners' metacognition about language learning and writing, **Lawrence Jun Zhang** and **Tony Limin Qin** in Chapter 9 present a new quantitative tool, a questionnaire, for tapping into learners' metacognition about writing. Typically, language learners and users around the globe no longer write their texts on paper; instead, they write on computers. The use of digital devices when writing has an impact on students' learning in different ways. For example, automatic grammar and spelling programmes can help students write better texts. Furthermore, the possibilities of editing and reorganising texts are easier on computers than on paper. In addition, learners have rapid and effortless access to nearly unlimited online resources about the topics in question. However, being online may also pose many challenges to language learners, as they must evaluate and make choices between a seemingly unlimited array of alternatives. For the purpose of investigating EFL learners' metacognition in highly digitised societies, Zhang and Qin have developed the questionnaire, *Language Learners' Metacognitive Writing Strategies in Multimedia Environments (LLMWSIME)*. This chapter reports on the validation of the tool and discusses its usefulness both as a research instrument and a pedagogical tool for enhancing learners' metacognition about their online writing strategies. The questionnaire explores learners' strategies for planning their writing, monitoring strategies during the writing process, and evaluation strategies after writing. The questionnaire has been tested at a Chinese university by 400 students studying English in addition to various other subjects, and has been proven to be robust with good construct validity and reliability. To our knowledge, this is the first questionnaire to examine learners' metacognition when writing in online environments. Therefore, we expect this tool to be used in future research in different settings and await interesting comparisons of learners' metacognition when writing online.

As mentioned above, writing seems to lend itself particularly well to research on metacognition, but it also serves as a valuable pedagogical tool to enhance learners' metacognition. This does not mean, however, that a focus on metacognition in oral communication is not equally important. In Chapter 10, **Henrik Bøhn** and **Gro-Anita Myklevoid** investigate learners' use and awareness of communication strategies in their study from a Norwegian lower secondary school context. During an intervention, EFL

learners in the instruction group learned about and practised three different strategies that are useful in communication—namely circumlocution, superordination and the use of fillers/stalling strategies—whereas learners in the control group received no such instruction. Prior to the intervention, learners in both groups responded to a background questionnaire about their grades, their L2 English motivation and their awareness of communication strategies. After the intervention, an equal number of students from each group were tested in their use of oral communication strategies and thereafter interviewed about their performance on the test. The analysis of the data indicated that the intervention impacted the instruction group's use of communication strategies positively, as they used a higher number of communication strategies than the learners in the control group. They also seemed to be more aware than the control group learners of the strategies they had been using. Interestingly, the researchers found no correlation between the learners' proficiency levels and their use of strategies. Even though this study had a small-scale design and should be followed up by further research, it nevertheless demonstrates the learning potential of exposing language students to metacognitive teaching approaches concerning the oral use and learning of languages.

Chapter 11 takes a rather different perspective on students' metacognition in language learning than the other chapters in Part 2 of this book. Here, **Ragnar Arntzen** and **Odd Eriksen** emphasise how important it is that learners with immigrant backgrounds reflect on their educational experiences in order to better understand past choices, present beliefs and reaction patterns. Furthermore, the authors believe that, by telling their stories of overcoming previous educational challenges to emphatic teachers, learners may increase their feelings of self-efficacy. At the same time, teachers' understanding and knowledge of their students' educational backgrounds are essential for supporting their learning endeavours. Arntzen and Eriksen invited eight students with immigration backgrounds at a university college to tell and reflect on their educational stories, starting in their home countries and finishing in Norway, their new home country. In this chapter, the stories of Babet and Yasmin, two students who have approached their past and present educational challenges and opportunities in quite different ways, are presented. The analysis of these stories provides the readers with interesting and inspiring insights into reflections on educational struggles, as well as how to overcome them.

Part III of this book is dedicated to metacognition in language teaching. To be a teacher is an intellectually challenging enterprise whereby a multitude of competences and knowledge sources must be activated to support students in their learning processes. However, teachers typically also experience many different emotions before, during and after a hectic and unpredictable workday. Golombek and Johnson (2004) argue that emotions are important driving factors in a teacher's professional development, as they may promote self-analysis and self-inquiry. However, it is important to

actively become aware of and reflect on one's emotions. Taking the famous poet William Wordsworth's phrase about "emotion recollected in tranquillity" as her starting point, **Linda Fisher** in Chapter 12 presents a study of language teacher students at a British university who were given the opportunity to blog about their experiences during their one-year study to become qualified teachers. The students were encouraged to write a blog to be read only by the teacher educator, who is also the researcher in this study. Perhaps too often, students' writings are evaluated and given a pass or a fail. This blogging activity was quite different, however, since the students could write as many blog entries as they wanted and could expect to be read by a non-judging, supportive and understanding professional who only sporadically responded to the text, and always with positive regard. This chapter analyses the blogs of two teacher students, Nikhil and Daniela, whose writing for metacognition displays interesting insights into their emotions towards and experiences with becoming language teachers. Linda Fisher convincingly demonstrates through these two case studies how metacognition can support people in becoming aware of and finding meaning in negative as well as positive emotions and also support them in becoming confident professionals.

Whereas the teacher trainees in Fisher's study were preparing to become language teachers of French and Spanish in the United Kingdom, the participants in **Philip Hiver** and **George Whitehead's** study (Chapter 13) were experienced EFL teachers in secondary schools in South Korea. Similar to several contributors to other chapters in this book, Hiver and Whitehead argue that metacognition could be used by language teachers to obtain better insights into their own knowledge, emotions and experiences and to improve as professionals. In this study, data from 40 Korean EFL teachers taking part in a professional development programme were collected multiple times over 12 months. The amount of data is impressive and rich as it consists of multiple journal entries, observations via video recordings and in-depth interviews from each teacher. In the context of this study, the researchers wanted to investigate to what extent L2 teachers engage in metacognitive thought and action and what salient developmental mechanisms shape their capacity for L2 teacher metacognition. The researchers found that most participants were effective teachers capable of supporting their students in their learning processes. However, only around one-half of them seemed to be regularly involved in metacognition about their own teaching. Interestingly, and as a starting point for further research, Hiver and Whitehead hold that teacher metacognition should be regarded as a superordinate adaptive capacity, whereas reflection can be viewed as a component that can potentially foster metacognition and professional development. Reflection can also turn out to be counterproductive, however, if it results in endless negative thinking and is accompanied by self-doubt and confusion. The authors argue that language teacher metacognition can be triggered by several factors and contexts, such as teachers' cognitions about

themselves and their own instruction or when considering critical incidents that happened during language teaching.

Conclusion

As is evident from the overview above, the chapters of this book cover a great variety of contexts and perspectives on metacognition in language learning and teaching. Correspondingly, it is our hope that researchers, language teacher educators, teacher trainees and practising language teachers alike will be inspired by this contribution to start or continue their own research on and explorations of metacognition in language learning and teaching. There is a need for generating a stronger emphasis on metacognition in language teacher education, and for experienced and future teachers to become more interested in developing their own and their learners' metacognition. This requires shared knowledge. With the decision to make this book available as open access in addition to a printed version, our aim is to contribute to a more democratic sharing of knowledge by reaching as many readers as possible.

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