

Constructing Metalinguistic Knowledge about Past Tense Form in L2 French

By

Amy Lynette Clay

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The dissertation is approved by the following members of the Final Oral Committee:

Catherine Stafford, Associate Professor, Spanish

Rosemary Russ, Assistant Professor, Curriculum and Instruction

Heather Willis Allen, Associate Professor, French

Jacee Cho, Assistant Professor, English Applied Linguistics

ABSTRACT

This dissertation interrogates commonly held beliefs about the nature of metalinguistic knowledge and related practices regarding its operationalization and measurement in studies in second language research. Knowledge regarding how a second language (L2) works is a key part of the instructed second language learning experience given its role in the classroom (Ellis, N., 2005; Ellis, R., 2009; Roehr-Brackin, 2014) and potential link to better learning outcomes (Norris & Ortega, 2001; Spada & Tomita, 2010) and proficiency (Elder & Manwaring, 2004; Roehr, 2008). However, researching metalinguistic knowledge defined strictly as explicit and verbalizable and operationalized from a prescriptive perspective is not sufficient to facilitate a thorough understanding of the intricacies of how second language learners (L2ers) learn and use knowledge about language (KAL) in instructed settings.

The current study focuses on the construction and content of L2ers' KAL: how do learners think about language, whether or not their knowledge is explicit, verbalizable, and domain-specific? This case study depicts how three collegiate French L2ers (with L1 English) understand the morphosyntax of the composed past (*passé composé*) and imperfect (*imparfait*) through a cognitive constructivist lens and a learner-centered approach. Each learner participated in two open-ended, task-based, clinical interviews (Ginsburg, 1997) containing a series of 5 tasks (drawing and description of the past tenses in French, sentence interpretation, written production, cloze, and error correction and explanation) selected to encourage participants to display their knowledge about the French past tenses through verbalizations and observable behaviors. Utterances were coded and analyzed to (1) identify the content of knowledge used in constructions, (2) characterize the organization of participants' knowledge, and (3) ascertain whether or not and how the knowledge occurs with (non-)target-like language use.

The results reported show the complexity of metalinguistic thinking and present myriad ways in which using metalinguistic knowledge involves more than the application of pedagogical grammar rules. The relevance and completeness of knowledge are discussed in terms of how they can complement accuracy as useful descriptors of metalinguistic knowledge in use. Implications regarding the operationalization of metalinguistic knowledge and the incorporation of metalinguistic knowledge checks into foreign language teaching are discussed in detail.

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CHAPTER 1 INTRODUCTION

In the fall of 2013, in higher education in the United States alone, there were just over 1.5 million students formally studying a language other than English (Goldberg, Looney, & Lusin, 2015). If we add to that the number of second (and multiple) language learners (L2ers) across the globe, both in higher education and primary and secondary schools,¹ we quickly see that there are quite a large number of L2ers around the world receiving some type of language instruction, most likely a form of explicit instruction (R. Ellis & Shintani, 2014). Given the classroom learning environments and the ability of most of these second language learners to think explicitly and reason about language and language learning, it is safe to say that knowledge about language² is a factor of interest for research in Second Language Acquisition (SLA).

This dissertation begins with a brief explanation of research on knowledge about language and metalinguistic knowledge and how this study has expanded on that. Chapter 2 sets up a theoretical framework involving the use of cognitive constructivism (Crotty, 1998) and pieces of knowledge (diSessa, 2008) and places this study with respect to other recent studies on the role of metalinguistic knowledge in second language (L2) learning. Chapter 3 introduces the formal and meaning-related features used for talking about the past in French, focusing on morphosyntax, semantics, and discourse features of the *imparfait* (imperfect) and the *passé*

¹ As of 2012, at least 93% of secondary school students in the European Union were learning English as a second language and 50% were learning two or more foreign languages ("Foreign language learning statistics," 2015).

² Knowledge about language refers to knowledge constructions that are used to understand language and its learning and use (that may include a combination of metalinguistic knowledge and other types of knowledge). I use this term to differentiate knowledge constructions from the prior uses of the terms metalinguistic and explicit knowledge (often referring to knowledge of pedagogical rules) that is domain-specific (linguistic), verbalizable, and explicit. This distinction is explained in more detail in Section 2.

composé (composed past). Chapter 4 explains the clinical interviewing methods, proficiency evaluations, and participant selection. Chapter 5 presents the analyses of the participants' verbalizations and Chapter 6 includes a discussion linking the results and analyses to the research questions. Implications for research and teaching, study limitations, and final conclusions are found in Chapter 7.

1.1 Problem statement

What one knows about language is most commonly called *metalinguistic knowledge* or *explicit knowledge* and is defined as explicit, verbalizable knowledge (Dekeyser, 2009; N. Ellis, 2005; Roehr, 2008a, 2008b; Roehr-Brackin, 2014). Metalinguistic knowledge is a key interest for research on L2 learning for many reasons. First, there is overwhelming evidence that explicit instruction results in better outcomes than implicit instruction alone (Norris & Ortega, 2001; Spada & Tomita, 2010), which suggests that whatever knowledge results from that instruction plays a facilitative role in language learning/acquisition. Metalinguistic knowledge (often operationalized as the ability to correct and explain errors using pedagogical grammar rules) about the L2 has been correlated with proficiency in some studies (e.g., Elder & Manwaring, 2004; Roehr, 2008b) and second language learners can and do use metalinguistic knowledge (Hu, 2011; Suzuki & Itagaki, 2007).

This ability to accurately construct metalinguistic knowledge is related to several factors, like the complexity of the language feature and related rules, its centrality and salience, and the pedagogical emphasis, (Hu 2011) thus indicating that what L2ers know about language is more complex than being able to recite or explain grammatical rules. In L2 learning research, the current focus on knowledge that is explicit, verbalizable, and domain-specific (meta-linguistic) does not facilitate understanding the intricacies of how L2ers learn and use knowledge about language (KAL) throughout their L2 learning experience. First, if the goal is to study what one

knows about language, the first defining characteristic should be the content of the knowledge in question: what we know *about* language as opposed to what we know how to *do* with language. The current definition (explicit, verbalizable knowledge) is not based on content, but based on how the knowledge is accessed or used (with conscious awareness). This is problematic because knowledge that one is aware of may or may not be verbalizable and verbalized knowledge may not necessarily be used during performance on a measure, particularly knowledge verbalized after completing a measure (as in stimulated recall methodologies, for example) (Shanks & St. John, 1994 as cited by Rebuschat & Williams, 2012). Defining metalinguistic knowledge as explicit and verbalizable has led to the use of methods that focus on L2ers' *explicit and verbalizable* metalinguistic knowledge. The common use of written explanations (verbalizations) of correct or incorrect language examples, however, does not consider knowledge that is not verbalized or how verbalized knowledge may involve more complex understandings than that which a learner is able to verbalize in a short written explanation. The familiar verbalized metalinguistic knowledge may in fact be part of a more complex understanding.

In published research on metalinguistic knowledge and explicit instruction (e.g., Dekeyser, 2009; Ellis, N., 2005; Ellis, R., 2009), the metalinguistic (sometimes called explicit) knowledge in question is often not theoretically situated with respect to how knowledge about language is learned, what form it can take, how it is processed, or how its content can be organized. This is likely because the theoretical approaches to SLA used in explicit instruction and metalinguistic knowledge studies are often defined in terms of how researchers understand

implicit or underlying language knowledge—research uses implicit knowledge³ to define explicit knowledge as the opposite. Defining metalinguistic knowledge as explicit and measuring it via the accuracy of verbalizations has limited the potential for this area of research. In the past, it has aimed to quantify how much (metalinguistic) knowledge a learner has for the purpose of comparing that amount of knowledge with measures of proficiency or performance. While having value for some purposes, this approach to studying metalinguistic knowledge cannot describe the complex interplay between learning and using knowledge about language and the language itself.

Metalinguistic knowledge research has primarily focused on identifying the presence or absence of metalinguistic knowledge elements in a top-down manner, wherein researchers identify a set of concepts about the second language in question (often based on pedagogical grammars) and they test to see if learners know those concepts. While this way of approaching research has indicated the existence of a relationship between metalinguistic knowledge and successful language use or proficiency, such a top-down practice paired with existing methods of analysis lacks a means for exploring how L2ers learn and use metalinguistic knowledge or how that knowledge is related to their intuitions about and ability to use language. Since research suggests learnability and overall positive effects of metalinguistic knowledge for L2 learning (Elder & Manwaring, 2004; Hu, 2011; Norris & Ortega, 2001; Roehr, 2008b; Spada & Tomita,

³ Implicit knowledge refers to knowledge that is part of an underlying system of language knowledge or ability to produce and comprehend language, as in intuitions or language knowledge that does not require thinking. When referencing this kind of knowledge, I clarify that it is “language knowledge” by using the term *implicit language knowledge*. This is intended to differentiate from other possible knowledge content that is potentially implicit (below the level of consciousness) but that is not the ability to produce or comprehend language.

2010; Suzuki & Itagaki, 2007), there is a need to identify links between metalinguistic knowledge (and other related KAL) to practical applications for L2 instruction. Bottom-up, learner-centered research is a means to address questions about how to support learners as they learn and use metalinguistic knowledge (or KAL, more broadly) in conjunction with their intuitions about language use (i.e., implicit language knowledge).

1.2. Study purpose and goals

This study addresses the following issues brought up in the problem statement above: 1) the current framework for understanding metalinguistic knowledge has limitations for how metalinguistic knowledge is defined and investigated and 2) the top-down approach makes it difficult to identify what learners know at different points in their learning trajectories and the role that knowledge plays in their second language (L2) learning. To do this, I propose a theoretical framework based in constructivist theories of knowledge and learning, reframe the focus to KAL (including metalinguistic and non-linguistic knowledge), and employ an interview method favoring bottom-up understandings of knowledge-in-use.

The constructivist framework used in this study does not view or assess knowledge as either present or absent, but as constructed during use and complexly composed of knowledge elements including prior knowledge and experiences. In order to avoid restricting the focus of this dissertation to only *explicit knowledge*, the research focuses on *knowledge about language (KAL)*, which refers to any knowledge used to think about or understand (second⁴) language as

⁴ “Second” is in parentheses to indicate that this dissertation deals with L2 learning, but the terms could also be applied outside of the L2 context, for example to foreign language teachers teaching their first language (L1) or perhaps for learning about L1 writing (as in Myhill, Jones, Lines, & Watson, 2012).

opposed to only metalinguistic and explicit knowledge. In the same way, I use the term *intuitive language knowledge* (or *intuition*) to refer to knowledge of how to “do” language, currently considered “implicit” or part of the underlying language system⁵.

In addition to focusing on KAL, rather than only explicit verbalizable knowledge, I also take into consideration the methodological issues related to the previous definition and the common use of error correction and explanation as a measurement of KAL. The primary method used to investigate learners’ KAL in this study is a task-based clinical interview that facilitates an analysis of the participants’ thinking based on both verbalization and behavior. However, for comparative purposes, the clinical interviews include an oral error correction and explanation task.

In addition, I address the lack of detailed understanding of the content, organization, and acquisition of second language learners’ KAL that is a result of the top-down approach to KAL research. This study gives detailed descriptions of three instructed French learners’ KAL regarding the structure of the *imparfait* and the *passé composé* as it was used during three different tasks (a picture-description story-telling task, a cloze story-telling task, and an error correction and explanation task, all described in detail in Chapter 4). The qualitative interview method used for this study allowed participants to express individual understandings of language concepts and to use their own terminology. The goal is not to identify correct or incorrect KAL; rather, it is to understand how the participants understand the selected language features. This

⁵ The form and content of this intuitive or implicit knowledge depend on theoretical understandings of SLA. For the purpose of this study, I remain agnostic with regards to this question.

permits a link between the results of this study and their practical applications and moves away from a deficit view of what learners know or should know.

CHAPTER 2 THEORETICAL FRAMEWORK AND LITERATURE REVIEW

This study focuses on how learners understand how language functions and is couched in a theoretical understanding of knowledge as constructed in use and based on previous experiences with the world. That is to say that knowledge about language is viewed through a cognitive constructivist lens in this study. Existing research on metalinguistic knowledge and explicit instruction together suggests a need to further investigate the role played by the knowledge that learners use to think about language.

This chapter first presents the cognitive constructivist lens used to understand knowledge about language in this study and addresses three key issues: knowledge as constructed, differences in constructions across contexts, and a distinction between research interested in content or form (Section 1). This is followed by a review of the research that informed this study (Section 2), including information about research on explicit instruction, metalinguistic knowledge, and correlations between metalinguistic knowledge and proficiency. The definitions and measures that have been used (and the related issues) are covered in Section 3. Terminology used in this dissertation (Section 4) and the Research Questions (Section 5) wrap up the chapter.

2.1. A Cognitive Constructivist view on knowledge

It is crucial to begin by considering knowledge and learning in broader terms, if we think of knowledge about language as a domain of knowledge in the same way that knowledge about math or history are domains of knowledge. To better understand how language concepts are used and learned by second language learners, we must frame our study of knowledge about language by using an empirically-supported theoretical lens for metalinguistic understandings that remains compatible with theories of language acquisition. In this section, I discuss some constructs that will be used throughout this study, including knowledge construction, knowledge-in-use,

knowledge elements (e.g., pieces or nodes), and normative knowledge use, that form the understanding of knowledge used to frame this study.

Cognitive constructivism holds that knowledge is constructed (formed from parts) and that humans use their previous knowledge and experiences to understand or interpret concepts, tasks, situations, and, in the case of this study, the structural features of the *passé composé* and *imparfait* in French as a second language (L2 French). This means that an individual understands actively rather than passively; in an instance of understanding (or knowledge use), a learner constructs their understanding by using many different pieces of knowledge based on the task/situation and prior experiences and knowledge. (Crotty, 1998; Ginsburg, 1997; Smith, diSessa, & Roschelle, 1994). Moreover, the understandings or knowledge about a given topic change across instances, and prior experiences, including each new iteration of an understanding, impacting future knowledge use. Essentially, constructivism “characterizes the process of learning as the gradual recrafting of existing knowledge that, despite many intermediate difficulties, is eventually successful” (Smith et al., 1994, p. 123). Knowledge constructions change and evolve across instances of use, which implies that *knowledge-in-use* (i.e., a knowledge construction within a given context of thinking about a task or concept) should be a key focus for research interested in explaining what a learner knows and how they know it, rather than assuming that a learner either knows or does not know some concept or rule based on a single instance.

Research about knowledge and learning using a constructivist framework considers questions like, “What is it that L2ers know and how do they know it?” In asking this type of question in this study, the “what” portion of the question focuses on identifying the content of the knowledge constructions a learner uses when thinking about language and the characteristics

of that content and the “how” part focuses on the way it is used. This is markedly different from research, measurements, and other assessments (like those that quantify the amount of correct or partially correct metalinguistic/explicit knowledge of a learner by testing for a set of metalinguistic rules) that imply a focus on questions like, “Do you know the right answer?” or “How many right answers do you know?” These questions focus on seeing if a learner is able to verbalize a rule or to repeat some prescribed information back to the researcher. This focus on accuracy of knowledge leaves no room to look for the individual characteristics of the knowledge that a learner uses or how it differs across instances of use. To take a simplified example from learning mathematics, let’s say that you are asked the answer to $12 + 18$. Many different individuals may all indicate that the answer is 30, but they may have understood this in different manners. Perhaps, you used your knowledge that $2 + 8 = 10$ and then added three 10’s to get 30. Perhaps you added 12 and 8 to get 20 and then added 10 to get 30. In order to complete the task at hand (adding 12 and 18), individuals may rely on different strategies or processes and related pieces of knowledge. If research only asks whether or not you know the right answer or even how close your answer is to the correct one, it cannot explain how you understand and approach the task of adding two-digit numbers. This is, of course, a simplified example intended to highlight a type of question that focuses on how learners know what they know as opposed to focusing only on whether they know some prescribed thing. There are experimental methods (that intend to check for the presence or absence of preselected knowledge) that permit comparisons between types of items and in turn allow one to infer what knowledge and strategies are used. However, these inferences make it difficult to make strong claims about how knowledge in a particular domain is used in life-like situations and how it develops or changes.

If we apply this to understanding concepts from language, like understanding the formation of the French past tenses, we can imagine that each individual learner, in even slightly different contexts, may draw on very different pieces of knowledge and use different strategies to decide how to produce a given form to express their intended meaning. Even more complexly, their understandings of such concepts are interpreted via prior knowledge and experiences and with respect to the task at hand. Prior knowledge may be composed from many different sources, for example, experience with and reflection about the language or instruction and instructional materials. Understanding concepts associated with past tense structures likely also depends on characteristics of the task the learner is engaged in, like its complexity, its focus (e.g., form vs. content) and how it will be assessed.

Returning to our mathematical knowledge about $12 + 18$, if we situate this as part of an applied task, like taking a dime and 2 pennies (12 cents) and adding it to a dime, a nickel, and three pennies (18 cents), one might have an entirely different approach, like combining the two dimes and the nickel to get 25 cents and then adding the five pennies that are left to get the final answer of 30 (cents). This is an anecdotal example of drawing on a different composition of knowledge depending on the task type. As knowledge is related to the task it is being used for, it is necessary for research to account for knowledge-in-use and to avoid reducing knowledge to a static element that is either present or not present in the learners' mind.

Furthermore, it is not enough to know if a learner knows the correct answer or not when the goal is to understand *how* knowledge is used and learned. Investigating both accurate and inaccurate understandings is a key factor in considering how one understands a concept. It is important for research to describe and explain knowledge-in-use, whether or not it is applied correctly and whether or not it aligns with the accepted explanation. This is because many parts

of a construction of non-normative⁶ knowledge are used in later iterations and in the formation of a normative or accurate understanding (diSessa, 2008; Smith et al., 1994). Hence, in this dissertation, I approach the participants' knowledge as valid understandings (based on complex knowledge constructions and on their experiences learning and using French) whether or not the outcome of that construction aligns with the normative linguistic understanding.

In order to study the learners' knowledge as constructed, this study relies on an analysis of the whole constructions and the elements involved in those constructions. The constructions and constituting elements discussed in this dissertation are based on *nodes*, *modes*, and *dynamic mental constructs* (Sherin, et al., 2012). These constructs have proved useful for research about learners' knowledge and understanding of scientific concepts, because they provide a framework for identifying knowledge elements and identifying how they are used together to form in-the-moment understandings. In the knowledge content and knowledge-in-use analyses that follow, I rely primarily on the concepts of *node* and *dynamic mental construct* (DMC) to identify existing knowledge elements (*nodes*) and how they come together in a moment of use (*DMCs*). A *node* is any reduced knowledge element. A *node* can contain knowledge in multiple forms: lists or characteristics to describe the elements of a list, memorized chunks of language, pedagogical rules, and so forth. Although the concept of *mode* does not specifically support the analyses in this study, it does help to understand how a *dynamic mental construct* is unique. A *mode* is a collection of *nodes* that are interconnected and commonly triggered together when a learner is

⁶ I use the term *non-normative* to refer to knowledge that does not align with accepted linguistic descriptions (as in pedagogical and descriptive grammars). Other fields use the term *naïve* in juxtaposition to *expert* knowledge (diSessa, 2008, for example).

engaging with or thinking about a certain task/question and a *DMC* is a short-term and dynamic version of a mode. Both modes and nodes are stable and can be considered parts of long-term memory. However, DMCs are a dynamic combination of nodes (and their related modes) triggered by a task; DMCs, by definition, are likely to change and evolve as elements of a task shift or as a learner's focus moves to differing aspects of a task. In an effort to use accessible terminology, nodes will be referred to as *elements* or *pieces* of knowledge and DMCs will be referred to as knowledge *constructions* throughout the rest of this study.

In the aforementioned example about adding coins, the knowledge elements that might be involved include (but are not limited to) “a penny is worth 1 cent” and “a nickel is worth 5 cents.” However, adding or using that declarative knowledge contained in those elements also requires knowledge about what to do with that declarative knowledge, for example, “add the coins from largest to smallest.” This latter element is of a different nature in that it describes what to do (procedure) rather than identifying some needed information (declarative knowledge). Sherin, Sherin, and Madanes (2000) argue that there are two possible foci of research that studies knowledge constructions—content and form—and that productive comparisons of prior research should compare studies with a similar focus. Their paper focuses on best practices in research on teachers' knowledge about science, but this content–form distinction can be applied to research in the area of metalinguistic knowledge, specifically in thinking about which constructs are focused on the content of that knowledge (like knowledge of pedagogical rules) and which constructs deal more in knowledge form (e.g., language analytic ability or analyzed knowledge, respectively in Roehr, 2008b and Gutiérrez, 2016). In discussing the results from prior studies on metalinguistic and explicit knowledge and how they have informed the current study (Section 2.2), I will apply this distinction in focus on content or form and highlight areas that are in need

of clarification in the current and other future studies on metalinguistic knowledge (and more broadly, knowledge about language).

Knowledge about language in second language learning and use differs slightly from the knowledge learned about science or history and that difference informs the framework and methods used for this study. In other domains of knowledge, the goal is often to achieve expert-like understandings of concepts. However, knowledge about language is generally viewed as a means to support learners in using the language. A second language learner's goal is often fluency, the ability to use the second language at a certain level, or a passing grade in a foreign language course. It is not to have expert (linguistic) knowledge about the language. This way of understanding knowledge about language further moves the focus away from studying whether or not learners accurately know about language in the same way that a linguist does and towards investigating what knowledge about language is beneficial to learners and how learners acquire and use that knowledge. However, this requires changes in the theoretical framing (as discussed in this section) and related changes to the methods used to study metalinguistic knowledge or, more broadly, knowledge about language. In Chapter 4, I explain how the clinical interview method (Ginsburg, 1997) used for this study aligns with this framework and the need for a bottom-up, learner-centered approach to understanding learners' KAL.

2.2. Why study knowledge about language?

Second Language Acquisition (SLA), as a field, has been primarily interested in the underlying processes and knowledge related to learning and using languages other than the first language. Within the fields of SLA and Applied Linguistics, KAL research (studies of explicit/metalinguistic knowledge and related studies on explicit instruction) has also primarily focused on the role of metalinguistic knowledge and explicit instruction as they relate to implicit or underlying knowledge. As R. Ellis (2009) asserted,

SLA [...] is concerned with the role that instruction plays in L2 acquisition. [...] [It] is important to establish whether instruction results not just in metalinguistic knowledge, but also in implicit knowledge, and this can only be achieved by ensuring that the instruments used to measure learning outcomes provide a valid measure of implicit knowledge. (R. Ellis, 2009, pp. 33-34)

This focus on implicit language knowledge has been a natural outcome of the separation of learning and acquisition (Krashen, 1982), distinctions between competence and performance (as in the Generative tradition, Chomsky, 1965), and the presumed goal of achieving native speaker proficiency. Native speaker proficiency arguably also involves a large amount of thinking about language (i.e., knowledge about language). However, the focus on native-speaker proficiency has been on the ability to use language without awareness. As a result, there have been great advances in understanding implicit or underlying language knowledge; however, we have yet to account for the complexity and intricacies of the KAL involved in L2 learning, particularly for the great number of instructed learners across the world.

Research over the past 15 years does show a steady interest in studying metalinguistic knowledge (and the related explicit instruction), but studies focus mainly on how metalinguistic knowledge is related to learning and using implicit language knowledge (i.e., the ability to use language without awareness). Studies, however, rarely focus on understanding the learning and use of metalinguistic knowledge (or more broad constructions of knowledge about language). This section presents studies and findings that are representative in the body of research that has focused on second language learners' metalinguistic knowledge including 1) what research on explicit instruction can help us understand about metalinguistic knowledge, 2) characteristics of metalinguistic knowledge that learners are more easily able to verbalize in explaining errors, 3) and 4) research on the relationship between measures of metalinguistic knowledge (knowledge of pedagogical grammar rules) and proficiency or course outcomes. This is followed by a more

detailed look at the smaller body of research that has honed in on understanding and measuring metalinguistic (and explicit) knowledge.

2.2.1 Evidence from explicit instruction research

An extensive body of research on explicit instruction exists and, according to two meta-analyses that account for the explicit instruction studies from 1980 to 2006, research says that explicit language instruction is better than using only implicit instruction (Norris & Ortega, 2001; Spada & Tomita, 2010). Explicit instruction, in which there is some overt focus on language form and function, has been shown to have a positive effect on learning outcomes. In a meta-analysis of 77 studies from 1980 to 1998 that investigated the effect of different instructional types on second language learning outcome measures, Norris and Ortega (2001) found that explicit instruction overall resulted in larger effect sizes than implicit instruction. Explicit instruction, including both inductive and deductive, focus on form (primary focus on meaning with necessary attention to structure during instruction) and focus on forms (structure-focused instruction), led to higher gains on post-test measures ranging from metalinguistic judgments to free production. Of course, because outcome measures varied, and often tended to be controlled measures (as opposed to free production), they indicated that there may have been an advantage for explicit language knowledge over implicit knowledge.

When Spada and Tomita (2010) carried out their meta-analysis on the effects of implicit and explicit instruction on learning English as a L2, they found that researchers had indeed addressed the issue of measures favoring explicit knowledge by including free production more often as a measure of learning outcomes. 50% of the studies between 1990 and 2006 used free production outcome measures (often in conjunction with other measures) as opposed to only 16% between 1980 and 1998 (Norris & Ortega, 2001). Spada and Tomita's (2010) analysis

compared the effects of type of instruction (implicit or explicit) and the type of language feature (simple or complex) on the results of free production measures, as opposed to controlled interpretation and production measures, including metalinguistic judgments, selected responses, and constrained constructed responses. Complexity of language features was identified based on the number of transformations required to arrive at the intended form, making something like tense morphology a simple form and question formation complex.⁷ They reported that explicit instruction was more effective on both simple and complex language features, with medium and large effect sizes of explicit instruction on controlled and free production (the former being expected to elicit metalinguistic thinking and the latter being less likely to elicit the use of metalinguistic knowledge).

This research strongly suggests that explicit instruction, in comparison to implicit instruction, leads to higher accuracy on learning outcome measures overall. Evidently, we cannot assume that explicit instruction necessarily results in a specific set of metalinguistic knowledge that aligns to the content of the instruction. However, it is reasonable to argue that there is some resulting knowledge about language that the learners in these studies took away and that knowledge (along with the attention to the language feature in the instruction) may play a role in language learning and acquisition. Of course, this is conjecture that necessitates further study, particularly with a focus on the ways that learners think about language—what metalinguistic knowledge (or knowledge about language) learners use during and after explicit instruction. This study—which involves instructed learners of L2 French and focuses, in part, on the way that they

⁷ They acknowledge that there are many ways to identify the complexity of the form and that selecting only one was problematic but necessary for the analyses.

understand and use metalinguistic knowledge that they internalized at some point in their language learning careers—will be one step in that direction.

2.2.2 Learning and using metalinguistic knowledge

Second language learners in an instructed setting, especially at beginner and intermediate proficiency levels, encounter situations that require them to use language that is beyond their current underlying capacity. In these situations, learners can use their explicit knowledge and perform beyond the level of implicit language knowledge alone (N. Ellis, 2005; Long & Rothman, 2013). Similarly, explicit language knowledge can be used to monitor output and fix habits that lead to inaccuracies (Doughty, 2001; Kormos, 1999; Krashen, 1982). Some studies show that adults can acquire and use explicit knowledge and metalanguage at least somewhat accurately (R. Ellis, 2006; Hu, 2011). Gutiérrez (2013), on the contrary, argues that the early L2 Spanish learners in his study did not have adequate metalinguistic knowledge. To highlight these two viewpoints (that learners can and do use metalinguistic knowledge and that learners do not have enough metalinguistic knowledge), Hu's (2011) and Gutiérrez's (2013)⁸ results are discussed in more detail below.

In his study of Chinese-speaking upper-intermediate learners of English, Hu (2011) investigated these learners' metalinguistic knowledge about the use of three different English article structures and three different tense/aspect structures. He used a written rule-verbalization

⁸ The setting for Hu's study is a Chinese post-secondary school. Gutiérrez does not identify a location for the university where his study was completed, but it is likely a Western U.S. university. This implies a likely difference in instructional focus and methods, since language courses in China tend to be more grammar- and rule-focused in comparison to language courses in Western universities. Distinct instructional approaches may have played a role in the kinds of results that each found.

task to measure the participants' explicit or metalinguistic knowledge. In the tasks, the participants explained why the underlined structures in individual sentences were used. More than 70% of the time, the participants produced rules that expressed the concept (not necessarily using metalingual terminology) with an accuracy rate of 76% for article use rules and 63% for tense/aspect rules. He also found that there was a strong correlation between accurate metalinguistic explanations and the use of metalingual terms. Interestingly, the differing accuracy in the metalinguistic analyses was attributed to three factors: centrality (prototypical use of the structure), salience (frequency of the structure), and pedagogical emphasis (for Chinese speakers learning English in China). To give an example for centrality, 80% of the participants correctly provided rules corresponding to the prototypical uses of articles and of the tenses in the study, as compared to only 50% for secondary uses, which indicates that learning metalinguistic information is potentially affected by the quality and quantity of experience with that knowledge. Overall, this study confirms that learners can learn metalinguistic knowledge and can accurately use it to give written explanations of the functions of some language features (in this case, articles and tense/aspect differences), as evidenced by the written rule-verbalization task. Although he does not go into much detail about how the participants may have learned the metalinguistic knowledge they used in the explanations or how they used their knowledge during this type of task, Hu (2011) has begun to investigate the complex relationship between metalinguistic explanations, language structures, and past learning experiences, which suggests that there is far more to KAL than the presence or absence of knowledge about whole concepts.

Based on his study of two groups (approximately in their third and fifth semesters of study) of university-level L2 Spanish learners, Gutiérrez (2013) found that they “did not possess adequate metalinguistic knowledge of the structures included in the test,” (181) because less than

39% of the possible rule-verbalizations by the participants in his study were correct and over 40% were incorrect or absent. The assessment measure in his study included 16 sentences with an underlined error (morphological, form-meaning, and tense agreement errors) and participants were asked to provide a rule to explain the error (rule-verbalization). The verbalizations were scored for correctness on a 0-2 scale ranging from inaccurate/absent to accurate. For Gutiérrez, there are two possible interpretations of the (low)⁹ percentage of accurate rule-verbalizations in the findings: that explicit grammar instruction of target language rules at the university level is not very effective or that it requires multiple years of instruction for learners to learn how to accurately express grammar rules about their second language. This suggests a question regarding the ease of use of metalinguistic rules but it also highlights the need to expand the operationalization of metalinguistic knowledge beyond knowledge of pedagogical grammar rules and to use methods to permit more than one context for producing knowledge about a given language feature. The difficulty in defining and measuring metalinguistic knowledge foreshadowed here will be discussed in detail in Section 2.3 below.

2.2.3 Metalinguistic knowledge, proficiency, and course performance

Several studies have found links between metalinguistic/explicit knowledge and proficiency (e.g., Elder & Manwaring, 2004; Elder & Ellis, 2009; Gutiérrez, 2012; Hu, 2002; Roehr, 2008b, as cited by Gutiérrez, 2016). Studies that separate oral and written proficiency measures generally suggest that metalinguistic knowledge is more highly correlated to written proficiency than to oral proficiency (e.g., Elder & Ellis, 2009; Elder & Manwaring, 2004) and

⁹ Gutiérrez's (2013) interpretation, not mine.

those that separate out error correction from rule-verbalization tend to find that proficiency is more highly correlated with error correction scores than with rule-verbalization scores (Elder & Manwaring, 2004; Roehr, 2008b). Many of the studies rely on tests of correlation and thus do not report any causation (i.e., having more metalinguistic knowledge is related to, but does not necessarily help you in, being more proficient in a language), but there is (debatable) evidence of a relationship between what language learners know about language and their accuracy in language use.

Gutiérrez (2013), as discussed above, used an error-correction and rule-verbalization task scored on a 0-2 scale (0 indicating an absent/incorrect rule and 2 indicating a correct rule), as well as a measure of metalingual knowledge (i.e., the use of metalanguage in rule-verbalizations), and found that performance on both was correlated with written (but not oral) L2 Spanish proficiency. However, given that the proficiency measures were based on oral and written final tests that were a part of the learners' curriculum (and which were not originally intended to target proficiency) and that, for the lower-level participants, the written test targeted the structures included in the error-correction and rule-verbalization task but the oral test did not specifically target those structures, it is more plausible to conclude that the correlations found indicate that the knowledge of pedagogical grammar rules correlates with success in coursework (and related written tests) targeting those rules rather than with overall written proficiency. This interpretation is somewhat related to findings from explicit instruction research—instruction about particular forms for the lower-level learners occurred in class and those who retained and were able to verbalize the metalinguistic rules were also more successful on the written test targeting those rules. This study does not fully support the claim that metalinguistic knowledge and proficiency are correlated; it does, however, suggest that metalinguistic knowledge is useful

for instructed learners (who must perform beyond their implicit language abilities as a part of their learning).

In a study on native English speakers learning German as a second language, Roehr (2008b) found that language proficiency and metalinguistic knowledge (explicit knowledge) were highly correlated for her participants, 52 first- and fourth-year undergraduate students learning German in a course titled “Advanced German” at a British university. In addition to measuring proficiency with a specialized language test that targeted language structures commonly included in university-level instruction (in L1 English institutions), she tested the students’ metalinguistic knowledge and language analytic ability through two tasks. For the former, she asked them to complete a written error correction, description, and explanation task and, for the latter, she gave them a highlighted word in a first sentence and asked them to identify a word or phrase that has the same function in a second sentence (in multiple choice format). Proficiency, as measured by the specialized language test, was correlated most strongly with knowledge about communicatively redundant, high frequency items that are easily expressed by simple rules. This finding aligns with Hu’s (2011) finding that learners can articulate metalinguistic knowledge and that there is some interaction with the salience (understood as frequency) of the language feature. Moreover, Roehr’s study extends the results to include observations that 1) learners showed increased accuracy with knowledge that is easily represented by simple rules and 2) the number of years of experience in a language program (first-year vs. fourth-year students) also plays a role. Specifically, the first-year students’ metalinguistic knowledge correlated more weakly with their proficiency than the fourth-year students’. Correlations cannot give clear evidence that second language experience leads to increased metalinguistic knowledge or vice versa, but there is evidence of a relationship between

second language proficiency and metalinguistic knowledge, which implies a necessity to better understand the ways in which KAL is used during second language learning across different levels of proficiency, languages, language features, and types of tasks.

In a study similar to Roehr's (2008b), Elder and Manwaring (2004) found that explicit knowledge about the Chinese language system predicted course performance for L2ers, but that the predictive power of explicit language knowledge was mediated by the amount of time spent studying the L2. Participants at the same or similar proficiency level who had spent less time studying the L2 showed more grammatical knowledge than those with 3–5 years more time studying the language. The study included a total of 92 university-level Chinese learners. The researchers assessed participants' knowledge of grammatical terminology via identification of the correct term and identification of examples of metalingual terms in English) as well as their ability to correct and explain errors in Chinese sentences via a written explanation in English. The learners were in their first or second year of study at the university level; those in their second year of study had started their study of Chinese at the university, while those in their first year had studied the language between 4 and 6 years in secondary school prior to taking university courses. All participants were deemed to have approximately the same competencies in their L2 Chinese. The primary difference was in the amount of time they had spent learning the language. Alongside the terminology and metalinguistic explanations, this study took the learners' end-of-the-year written and oral/listening assessment scores into account. Since the participants were in 4 different courses and each group's assessment differed slightly in relation to the course they were currently taking, the reported results should be cautiously interpreted. The authors found that the error correction section of their metalinguistic test, which may use implicit and/or explicit language knowledge, was more strongly correlated with the participants'

performance on their oral/listening and written achievement tests (with correlation coefficients ranging from 0.70 to 0.86) than the results on the error explanation portion of the test (with correlation coefficients ranging from 0.52 to 0.64)¹⁰, although scores on both test sections were significantly related to course performance for the group that has only begun studying Chinese at the university). Scores on the oral/listening achievement test were not significantly correlated for the participants who had studied Chinese in secondary school and were in their first year of university. Significant correlations were identified for only one of the two groups of first-year students between scores on the written test and both error correction and error explanation. Given that error correction was more strongly associated with achievement test performance than rule-verbalization (at least for the second-year group), one might wonder what kind of knowledge is at play—perhaps some metalinguistic knowledge that does not take on the form of an easily verbalized rule or perhaps some implicit language knowledge? Or did the participants not have the appropriate language to speak about their knowledge?¹¹

Quantifying metalinguistic knowledge as the ability to correctly verbalize rules and looking for correlations is not enough to answer the burgeoning questions about the role of

¹⁰ For the first-year students in one course, their end-of-year oral/listening and written achievement test scores were correlated with error-correction (with correlation coefficients (r) of 0.81 and 0.86, respectively) and with rule explanation ($r = 0.54$ and 0.64, respectively). The second group of first-year students' correlations between error-correction and oral/listening achievement and between error-correction and written achievement were 0.79 and 0.82, while the correlations between rule explanation and the two achievement tests were 0.52 (oral/listening) and 0.53 (written). The results on the scores on the error-correction and rule explanation tests across groups were correlated at $r = 0.721$.

¹¹ Participants (first-year and second-year groups respectively) showed means of 19.84 (SD 7.86) and 34.97 (SD 13.17) out of 68 on the grammatical terms component, thus indicating at least some difficulty in correctly associating grammatical terms with elements in written Chinese.

metalinguistic knowledge in second language learning and use. To further understand how metalinguistic knowledge is used by learners, it is necessary to investigate what the components of that knowledge are and how they are constructed or used together. This type of work has begun, in part, with the qualitative analyses of the characteristics of metalinguistic knowledge that make it easier to recall and use (Hu, 2011) and the investigation of language analytic ability and knowledge of metalanguage as potential components of metalinguistic knowledge (e.g., Gutiérrez, 2013; Roehr, 2008a) and will continue with the current and future studies. The research presented here highlights the need for research to account for issues like centrality, salience, pedagogical emphasis, rule simplicity, communicative redundancy, language analytic ability, and proficiency level.

2.3 Defining and Measuring Knowledge about Language

2.3.1 (Re-)Defining metalinguistic knowledge

Metalinguistic knowledge is nearly always defined as explicit and potentially verbalizable (e.g., Ammar, Lightbown, & Spada, 2010; Bowles, 2011; Dekeyser, 2009; Ellis, N., 2005; Ellis, R., 2006, 2009; Roehr, 2008a,b; Roehr & Gutiérrez, 2009). The term “explicit” answers the question of how knowledge is accessed: the learner is consciously aware of it. Defining metalinguistic knowledge based on the way that it is processed (and in comparison to acquired or implicit language knowledge) is related to the traditional separation of learning and acquisition in SLA research. Acquisition is most often used to refer to changes in underlying or implicit L2 knowledge, while learning refers to changes in what you (consciously) know about your L2 (Krashen, 1981). However, the overlapping application of the implicit/explicit learning distinction onto the implicit/explicit access distinction (awareness) is dangerous if the intention is to look at how what is mostly explicitly learned during (self or classroom) instruction plays a role in implicit language learning. In fact, it seems that the field is using a processing and access

distinction to define what is intuitively a question of content: is it knowledge used to “do” (i.e., use) language or knowledge about doing (learning/using) language? There is, of course, a need to understand and consider processing for both types of knowledge, in particular for research considering how they co-exist in use and their respective roles during second language acquisition. The focus of this study is to explore the content of knowledge about language and its characteristics without paying extensive attention to the implicit/explicit or language/metalinguistic knowledge¹² distinctions. This study does not intend to diminish the need to separate the two in order to understand how they impact one another. Rather, by focusing on all knowledge (language, metalinguistic, and potentially other knowledge) that is used to reflect on and use language, it offers a detailed look at a space where the two become intertwined—contexts of use.

The second descriptor, “verbalizable,” has also resulted in choosing methods that require second language learners to describe (both accurate and inaccurate) language use either orally or in writing and sometimes in their first language, sometimes in their second language. The first issue here is that a majority of definitions of metalinguistic knowledge indicate that it is *potentially* verbalizable, as opposed to always verbalizable, thus requiring methods and measurements to account for non-verbalized metalinguistic knowledge, which is not the case with most studies using some form of rule-verbalization task. Some studies address this issue by using untimed grammaticality judgment tasks that require error-correction, but these tasks

¹² Language knowledge refers to an implicit system of knowledge that permits a person to use language without thinking; Knowledge about language refers to any knowledge used to think about language, some of which the learner has some—but not necessarily complete—awareness.

assume the use of metalinguistic knowledge without the capacity of identifying whether or not (accurate) metalinguistic knowledge was indeed used. The second issue with focusing on verbalizable knowledge, which is the source of the inclusion of “potential”, is that learners may not verbalize what they know or what they are thinking about. A learner may be consciously aware of knowledge without having the ability to verbalize it or they may, conversely, verbalize knowledge that they did not use during completion of a particular task (Shanks & St. John, 1994 as cited by Rebuschat & Williams, 2012). A learner may also focus on a different part of the task, thus leading her to not verbalize knowledge that she is in fact using, or choose not to verbalize some thinking because of her own intuition that it is not of interest to the researcher. It is also possible that a learner doesn’t verbalize information in order to be succinct or save time, particularly with written verbalizations. Given these reasons, there is a need to use caution when selecting methods and interpreting results based on learner verbalizations.

In light of the issues related to defining metalinguistic knowledge as explicit and verbalizable, this study steers away from what has traditionally been called metalinguistic knowledge. Instead, this study focuses on knowledge about language, as in metalinguistic knowledge constructions. Metalinguistic knowledge constructions (also called knowledge about language throughout this study) are a combination of some set of knowledge elements that are used to think about a language feature (and its meaning, use, production, or learning), those elements being possibly metalinguistic (meaning a knowledge element about language, like a pedagogical grammar rule or part of one), language-related (like knowledge of a familiar chunk of language or a feeling about what form sounds right) or possibly non-linguistic (knowledge about how to do a learning-focused task, like always choosing “C” on a multiple choice task when you don’t know the answer).

2.3.2 Methods, measurements, and the related assumptions

The way that metalinguistic and explicit knowledge have been equated and defined as explicit and potentially verbalizable has impacted how the construct (metalinguistic knowledge) is operationalized in studies. Research focusing primarily on metalinguistic knowledge (not explicit instruction) typically uses some form of rule-verbalization. For example, of the 15 studies cited by Gutiérrez (2016)—all studies focusing on comparing explicit knowledge and proficiency—seven use some form of rule-verbalization (written or verbal) and two others use multiple choice rule-identification. Other studies with a focus on metalinguistic knowledge follow suit in using rule-verbalization (e.g., Elder & Manwaring, 2004; Hu, 2011; Roehr, 2008b; Roehr & Gutiérrez, 2009). Other measures of explicit/metalinguistic knowledge include untimed grammaticality judgment tests and other types of “metalinguistic knowledge tests,” including tests of metalanguage, rule-identification tests, and tests of language analytic ability and analyzed language (Bowles, 2011; Ellis, 2005; Gutiérrez, 2016; Roehr, 2008b; Zhang, 2015). Verbalized explanations of both correct (Hu, 2011) and incorrect (e.g., Elder & Manwaring, 2004; Roehr, 2008b; Roehr & Gutiérrez, 2009; Gutiérrez, 2016) language uses are scored on a variety of scales. Specifically, Hu (2011) categorized explanations as acceptable (conceptually matching the expected information with some variation permitted and no requirement for technical language) or unacceptable¹³; Roehr (2006; 2008b) and Roehr and Gutiérrez (2009) similarly used a correct/incorrect system to look at both descriptions of forms (i.e., this is an ‘x’

¹³ Hu (2011) also used a 0–2 scale to measure the accurate use of metalanguage. Zero refers to absent or entirely incorrect information, 1 refers to a partially correct explanation, and 2 refers to a correct explanation.

that should be a ‘y’) and explanations of error corrections (i.e., it should be ‘y’ because ‘z’). Elder and Manwaring used a 0–4 scale to quantify accuracy in rule-formation (to explain grammatical corrections) where 4 refers to a “rules [with] a satisfactory explanation of the error and also [...] appropriate metalinguistic terminology”, 3 refers to “a good understanding of the rule but some flaws” in formulation, like non-technical terminology, 2 refers to “conceptually rather than technically flawed” explanations, 1 refers to “a vague idea about the rule” but a “mostly unsatisfactory” explanation, and 0 indicates a wrong response (2004: 150). The 0–6 ratings in Gutiérrez (2013; 2016) are reproduced *verbatim* (Gutiérrez, 2013: 180) in Table 2.1 below. In both the 0–4 and 0–6 ratings, there is a hierarchy in scoring that gives more value to correct rule-verbalizations that contain metalanguage compared to correct rule-verbalizations that do not use any of the appropriate metalinguistic terminology.

Table 2.1

Metalinguistic knowledge ratings (Gutiérrez, 2013: 180)

0	The learner does not verbalise the rule nor corrects the error.
1	The learner corrects the error, but does not verbalise the rule.
2	The learner verbalises a rule using some technical metalanguage, but the rule is incorrect.
3	The learner verbalises a rule using technical metalanguage, but the rule is imprecise, incomplete, or partially correct.
4	The learner verbalises the correct rule, but does not use any technical metalanguage.
5	The learner verbalises the correct rule using some technical metalanguage.
6	The learner verbalises the correct rule using appropriate technical metalanguage.

These systems of scoring imply that the all of the metalinguistic knowledge the participants used are present in the verbalizations. The latter two systems (0–4 and 0–6) give metalanguage or technical language a high value in measures of metalinguistic knowledge, which indicates an assumption that technical language is a necessary part of metalinguistic knowledge.

For example, Hu (2011), as reported above, studied the metalinguistic knowledge and knowledge of metalingual terminology of native speakers of Chinese learning English as a L2. He asked participants to use their native Chinese to explain the use of underlined words in English sentences in writing and found that over 70% of the explanations were accurate with respect to the underlying rules. Hu's study likely gives higher scores to verbalizations since the score is 1 or 0 and the characteristics of a 1 correspond loosely to a 3 or higher on Gutiérrez's 6-point scale and potentially as low as a 1 on Elder and Manwaring's 4-point scale. Using a percent or number of accurate explanations implies that explanations can be considered either correct or incorrect and that individual concepts (in this case, rules about article and tense/aspect use) exist in whole pieces. Either the participants know the rule (well enough) or they do not. On the other hand, the scales used in the other studies discussed above privilege certain kinds of knowledge over others—technical language, if-then rules, complete (vs. narrow) rules or descriptions. Although these methods of inquiry have allowed researchers to make claims about the learnability of pedagogical grammar rules and technical language and how accurate knowledge of the category of metalinguistic knowledge they test for correlates to proficiency and successful course performance (as in Elder & Manwaring, 2004 and Roehr, 2008b, among others), these studies do not give a complete view of how much metalinguistic (about-language) knowledge learners have (and/or are able to use). In short, the claims only refer to the elements tested for; they can only reflect how metalinguistic knowledge is operationalized and quantified. Moreover, the quantification of how correct or incorrect explanations are—for example, giving additional points for using technical language or for providing both a description of the form and a reason for the change—does not provide insight into how second language learners understand the concepts or how they use metalinguistic knowledge in conjunction with their intuitive or implicit

language knowledge, two types of information that are of utmost importance for evidence-based practical applications (language instruction and language learning) and theoretical understandings regarding knowledge about language, explicit instruction, and the implicit-explicit knowledge interface.

As discussed in Section 2.2.3 above, Roehr (2008b), like many other studies (e.g., Elder & Manwaring, 2004; Gutiérrez, 2012) used tests of correlation to investigate the link between the metalinguistic knowledge and proficiency of native English-speaking students learning advanced German in their first or fourth year of university study. She identified a correlation between metalinguistic knowledge (error-correction and rule-verbalization) and proficiency (based on a language test devised for the study). The description and explanation portion of the error-correction correlated strongly ($r=0.77$) with the results on the language test. This does not indicate that the two are necessarily used together, nor does it indicate that having metalinguistic knowledge supports second language proficiency or vice versa. As Roehr (2008b) herself said,

“the interesting question of whether metalinguistic knowledge about specific L2 features is constructed on the basis of L2 knowledge as measured by proficiency tests, whether it helps learners acquire such L2 knowledge, or whether both types of knowledge mutually reinforce one another is still waiting to be addressed.” (195)

Now that her study, alongside others, has established a potential relationship between metalinguistic knowledge and proficiency, it is necessary to empirically study how metalinguistic knowledge develops and how learners use it while using their second language both during everyday use and while completing instructional and research-related second language tasks.

In the same study, Roehr (2008b) also investigated the components of metalinguistic knowledge by comparing group results on a metalinguistic knowledge test (the error correction and explanation test described above) and a language analytic ability test in which participants were asked to identify the function of a word in a sentence and then to find a word with that same function in a second sentence. If considered through the content–form distinction lens (Sherin, Sherin, & Madanes, 2000), this might be a case of comparing apples to oranges. One test is focused on knowledge content (rules), while the other is focused on the ability to use knowledge about language structure (of which the learner may or may not be aware) in a particular format (to analyze use across contexts). However, the measures of language analytic ability are trying to identify or break down what metalinguistic knowledge is (by asking if the ability to use knowledge of grammatical categories to identify words with similar functions in different contexts is related to error-correction and rule-verbalization). Upon finding that both the language analytic ability test and the metalinguistic knowledge test (error correction and explanation), as well as proficiency, were all correlated and loaded on the same factor in a principal components test, Roehr concluded that her findings supported the hypothesis that identifying the function of words in the L2 and error correction and explanation were both parts of metalinguistic knowledge. This claim suggests that knowledge about categories (like parts of speech) and the relationship between those categories is a part of metalinguistic knowledge (which happens to be a content-focused distinction that is compatible with and comparable to the knowledge of metalinguistic rules as another type of content).

Also of interest is that the language analytic ability portion of the test does not assume that learners are able to verbalize their knowledge nor does it assume that this knowledge is entirely explicit or raised to the level of consciousness. The participants were given a highlighted

word in a first sentence and asked (in a multiple-choice format) to find a word with the same grammatical role in a second sentence. The participants may have explicitly considered the categories to complete this task, by identifying a direct object and looking for another direct object, or they may have completed the task by identifying the “do-er” (subject, for example) and looking for the “do-er” in the second sentence, thus using a combination of some intuitive semantic knowledge to inform their understanding of the sentence and then using that understanding to identify categories. The study, as reported above, did find that language analytic ability and the ability to correct and explain errors were components of the same construct. This supports the idea that metalinguistic knowledge is a complex construct that involves knowledge of rules and their application and knowledge of categories and the ability to recognize the relationships between categories. I would further argue that Roehr’s (2008b) study has highlighted the importance of finding new ways to investigate and describe metalinguistic knowledge constructions as they are used. If thinking about language involves identifying and understanding the relationships between categories, how do learners understand those categories and relationships? How does their understanding of one category relate to how they understand another category? Do they explicitly (with awareness) draw on this knowledge of categories or are they accessing this knowledge without awareness? What is it about their knowledge that leads them to accurate and inaccurate categorization or accurate and inaccurate error explanations? Again, these questions cannot be answered by using error explanation, multiple choice tests, statistical analyses of group means, and cross-sectional research alone (Roehr-Brackin, 2014) but it can be answered by taking a qualitative approach in which verbalizations and behaviors are analyzed for these and other details.

The researcher and learner positioning in much of the research on metalinguistic knowledge indicates a primarily top-down approach. This is evidenced by the fact that researchers select a subset of metalinguistic knowledge and test (through various means) to see if the participants in their studies can display that knowledge in a particular format. The knowledge selection is often based on pedagogical or descriptive grammars and may include some selection of a variety of linguistic topics (as in Roehr, 2008b) or a thorough list of factors related to a small number of language features (as in Hu, 2011). However, these selections are often not based on empirical research that indicates what kinds of knowledge learners benefit from apart from a key positive example when Roehr and Gutiérrez (2009) used previous research on language aptitude to inform a portion of their metalinguistic knowledge test. If KAL research intends to identify the role that knowledge about language plays in second language learning, then it must also investigate what knowledge and features are beneficial to learners at different proficiency levels and how those learners construct and use that knowledge.

This dissertation study builds on the current body of research on metalinguistic knowledge by taking into account the factors that may impact how learners acquire metalinguistic knowledge (for example, centrality, salience, pedagogical emphasis, rule simplicity, communicative redundancy and form complexity) and by addressing the issues and assumptions related to how knowledge about language is defined and measured. The following subsection describes how knowledge about language is defined in this study; Chapter 4 includes an explanation of how the methods and measurements used in this study avoid *a priori* assumptions about what learners should know.

2.4. Terminology

There are many terms used to talk about knowledge related to second language learning and use, including the most commonly used terms *implicit*, *explicit*, and *metalinguistic*

knowledge, awareness, and knowledge about language. I use the term *knowledge about language* to refer to any knowledge or combination of knowledge elements used to understand (e.g., interpret meaning, produce form/meaning, or explain use) language, including metalinguistic (about language) elements (e.g., grammar rules and metalanguage), language/linguistic elements (e.g., intuitive knowledge, like knowing how to express something without thinking about it), and non-linguistic knowledge (e.g., knowledge or beliefs about language learning). I have intentionally selected *knowledge about language* (KAL) and the equivalent (*metalinguistic knowledge construction*) in order to avoid restricting the focus of this dissertation to only *explicit* (i.e., processed with awareness) *knowledge*. Thus, this dissertation study does not assume that knowledge about language is necessarily explicit or domain-specific and considers how explanations and behaviors during the task-based interviews (described in Chapter 4) indicate that learners are using knowledge that is about language but not explicit (like relying on a default “rule” or understanding as a basis for adding other metalinguistic information). I use the term (*implicit or intuitive*) *language knowledge* to refer to knowledge of how to “do” language, which aligns with what is most often called “implicit” knowledge (i.e., knowledge that is part of the underlying language system) or underlying language proficiency (i.e., what one can do under time pressure and without overt thinking).

2.5. Research questions

The overarching goal of this study is to better know how instructed learners of a L2 think about the features of their second language in order to inform theoretical and practical understandings of KAL. This study looks specifically at how native English-speaking learners of L2 French understand the structure of two French past tenses—*passé composé* and *imparfait*.

RQ: How do the French second language learners in this study understand the structure of the *imparfait* (imperfect) and the *passé composé* (composed past)?

The research aims to identify, describe, and analyze the participants' knowledge (content, form, organization, and learning) used to understand morphosyntactic features (e.g., word order, auxiliary use, subject–verb agreement, past participle agreement, and stem-formation) of the *imparfait* and the *passé composé* during cognitive clinical interviews (task-based interviews, explained in detail in Chapter 4). The main research question is broken down into sub-questions that emerged based on previous research and through the data-collection and analysis processes:

- What knowledge elements and combinations of knowledge elements do participants use to understand the *imparfait* and *passé composé* in their L2 French?
- In what ways do the participants' metalinguistic knowledge constructions align (or not) with target-like descriptions?
- What knowledge elements and combinations of knowledge elements are involved in uses that can be characterized as language analysis or the use of language analytic ability?

CHAPTER 3 THE IMPARFAIT AND PASSÉ COMPOSÉ

This chapter presents the characteristics of the *imparfait* (imperfect) and *passé composé* (composed past) as they are used for expressing past time and addresses why studying L2ers' knowledge about these two tenses can provide information about ways that they understand morphosyntactic, semantic, and discourse-related language features.

The *passé composé* and the *imparfait* are the first two past tenses¹⁴ introduced during formal language instruction. In the program where data collection for this dissertation study took place, the *passé composé* is first introduced during the first semester in the French language sequence and is expanded on during the second-semester course; the *imparfait* is first introduced in the second-semester course. In this section, I begin by introducing the key uses and structural components of these two language features. Then, I discuss how the *passé composé* and *imparfait* can provide insight into a variety of facets of learner knowledge about language in this study.

3.1 Passé composé

The *passé composé*, or composed past, in French has two primary values – completion/accomplishment and anteriority. As shown in examples 1 and 2 below, it marks that the event or state is achieved or completed and that the event or state occurred prior to the time of utterance or potentially prior to another time introduced in the context, as in examples 3 and 4. (Arrivé, 2006; Goose & Grevisse, n.d.; Grevisse & Lits, 2009)

- 1) *Il est venu chez moi hier.* ‘He came to my place yesterday.’

¹⁴ I use the term “tense” as it is commonly used in language textbooks, by language teachers, and by language learners to identify a paradigm of verb conjugations including those composed using auxiliary verbs, like the *passé composé*.

- 2) *Nous avons joué aux cartes pendant des heures.* ‘We played cards for hours.’
- 3) *J’ai fini dans cinq minutes.* ‘I will have finished in five minutes.’
- 4) *Dès que je suis arrivé, je t’appelle.* ‘As soon as I arrive, I’ll call you.’

The current study focuses on how learners understand using the French language to express the past and thus focuses on the uses of the *passé composé* represented in examples 1 and 2 and not those expressing anteriority with respect to a different time indicated by context, like in examples 3 and 4.

The *passé composé* is formed by using a present tense auxiliary verb, *avoir* ‘have’ or *être* ‘be’ and the past participle of the main verb (see underlined verbs in examples 1-4). Most verbs use the auxiliary *avoir*. *Être* is used with a list of 17 verbs, most of which are intransitive), including *venir* ‘come’ (examples 1 and 5), *arriver* ‘arrive’ (examples 4 and 6), *devenir* ‘become’ (example 7), and *monter* ‘go up’ (example 8). All of these verbs take the *être* auxiliary and require the past participle to agree in gender (-e suffix for feminine) and number (-s suffix for plural) with the subject (see underlined agreement in examples 5-8).

- 5) *Elle est venue chez moi.* ‘She came to my place.’
- 6) *Guillaume et Antoine sont arrivés en retard.* ‘Guillaume and Antoine arrived late.’
- 7) *Sarah et Mélissa sont devenues enseignantes.* ‘Sarah and Melissa became teachers.’
- 8) *Mon père et moi, nous sommes montés dans le bus.* ‘My father and I, we got on the bus.’
- 9) *J’ai monté ma valise à l’étage.* ‘I took my bag upstairs.’
- 10) *Sarah a sorti la poubelle ce matin.* ‘Sarah took out the trash this morning.’

Six of these verbs (*monter* ‘go up/take up’, *descendre* ‘go down/take down’, *sortir* ‘go out/take out’, *passer* ‘pass by/take’, *rentrer* ‘reenter/take in’, and *retourner* ‘return’) may also express a

transitive meaning and take a direct object. When they do so, they use the *avoir* auxiliary and the past participle is not marked for subject–verb agreement (see examples 9 and 10 above).

Être is also used as an auxiliary with pronominal verbs. Pronominal verbs are always used with a reflexive pronoun (*me, te, se, nous, vous*) that reflects the same grammatical person as the subject of the verb. For example, *'je me + verb'* is approximately 'I VERB-ed myself' in contexts using analyzable reflexive pronouns (example 11). Analyzable reflexive pronouns are one of two categories of reflexive pronouns used with pronominal verbs, the other being unanalyzable reflexive pronouns. Analyzable reflexive pronouns are found in reflexives (examples 11-13 and 16) and reciprocals (examples 14 and 15). For analyzable pronouns, the verb agrees with the subject (11, 15) unless the pronoun refers to an indirect object (12-14) or unless there is a direct object following the verb (16). Unanalyzable reflexive pronouns, meaning pronouns whose function is not analyzed as the (direct or indirect) object of the verb, may be passive (18-19) or subjective (17, 20, and 21). The past participle always agrees in gender and number with the subject when the reflexive pronoun is unanalyzable. (Goose & Grevisse, n.d.)

11) *Jennifer s'est couchée très tôt.* 'Jennifer went to bed (put herself to bed) very early.'

12) *Sarah et Mélissa se sont achetée des sandwichs.* 'Sarah and Melissa bought themselves sandwiches.'

13) *Jennifer s'est écrit.* 'Jennifer wrote to herself.'

14) *Sarah et Mélissa se sont parlé.* 'Sarah and Melissa spoke to each other.'

15) *Sarah et Mélissa se sont vues.* 'Sarah and Melissa saw each other.'

16) *Sarah s'est cassé le bras.* 'Sarah broke her arm.'

17) *Sarah et Mélissa se sont souvenues de leurs vacances.* 'Sarah and Melissa remembered (about) their vacation.'

- 18) *La lettre s'est écrite sans difficulté.* 'The letter was written without difficulty.'
- 19) *La fenêtre s'est fermée toute seule.* 'The window closed all by itself.'
- 20) *Il s'est agit d'une nouvelle information.* 'It was about a new piece of information.'
- 21) *Sarah et Mélissa s'en sont allées.* 'Sarah and Melissa left.'

As explained above, past participles (in *passé composé*) always agree with the subject when *être* is used as the auxiliary unless there is a direct object that follows the verb or unless the analyzable reflexive pronoun or reciprocal pronoun refers to an indirect object. The past participle also agrees with any direct object or direct object pronoun that occurs before the verb no matter the auxiliary verb, as with all direct object (clitic) pronouns (examples 22 and 23) and in the case of object relative clauses (examples 24 and 25).

- 22) *Je l'ai écrite.* (*l' = la lettre*) 'I wrote it. (it = the letter)'
- 23) *Sarah et Mélissa les ont vus.* (*les = les garçons*) 'Sarah and Melissa saw them. (them = the boys)'
- 24) *J'ai envoyé la lettre que tu as écrite.* 'I sent the letter (fem.) that you wrote.'
- 25) *Marion parlait aux étudiantes que nous avons vues hier.* 'Marion was speaking to the students (fem.) that we saw yesterday.'

An additional and particularly interesting factor arises with past participle agreement in the *passé composé*: written agreement is not always reflected in pronunciation. For example, *vu* (seen, with no agreement), *vue* (with a feminine singular agreement), *vus* (with masculine plural agreement), and *vues* (with feminine plural agreement) are all pronounced [vy]. However, in other circumstances, a change in pronunciation does occur. In *écrit* 'written' (no agreement) and *écrites* (feminine plural agreement), the former is pronounced [ekʁi], while the final [t] sound is heard in the latter [ekʁit]. Likewise, in *pris* (taken) and *prise* (with feminine singular agreement),

the first is pronounced [pʁi] while the latter is [pʁiz]. While I will not address the specific pronunciation rules here, the key takeaway is that unpronounced final consonants are pronounced when followed by an ‘e’ or ‘es’, as in the case of feminine gender agreement. Because of these pronunciation rules, you often do not hear agreement even though it is always written. This, combined with the complex system of past participle agreement rules explained earlier, makes learning and using past participle agreement difficult not only for French learners, but also for educated French speakers who occasionally leave off the necessary agreement on written words where you would not hear any difference.

3.2 Imparfait

The *imparfait* primarily marks an event or state that is ongoing in a part of the past without identifying an endpoint and possibly not identifying a beginning, thus making it partially accomplished but not necessarily completed, as in examples 26 and 27. It is also used to express a habitual or repeated event, as in examples 28 and 29.

26) *La pluie tombait.* ‘Rain was falling.’

27) *Le professeur n’était pas content.* ‘The teacher was not happy.’

28) *Le professeur arrivait en retard tous les jours.* ‘The professor arrived late every day.’

29) *Samuel allait à l’école à huit heures du matin.* ‘Samuel went (habitually) to school at 8 o’clock in the morning.’

Unlike the *passé composé*, the *imparfait* does not require an auxiliary or any agreement beyond subject-verb agreement. In addition, it is a highly regular tense, with a limited number of irregular stems (e.g., *ét-* for *être* as in 27) and consistent endings across all regular and irregular verbs (*-ais, -ais, -ait, -ions, -iez, -aient*). Regular stems are identified by taking the *nous* form of the present tense (e.g. *nous tombons* from the verb *tomber* or *nous allons* from the verb *aller*) and dropping the present tense suffix (*-ons*). The *imparfait* endings can then be added, as in

tombait (26) and *allait* (28). Note that verbs that have an irregular present tense, like *aller*, are often not irregular in the *imparfait*. Also, the fact that the *imparfait* endings are identical to those of the conditional (which uses a different stem), may play a role in learners' knowledge regarding this structure.

As for pronunciation, the first-, second-, and third-person singular and third-person plural conjugations' standard pronunciation [3] closely resembles that of the infinitive form for *-er* verbs [e], making it a potential challenge for learners to accurately perceive this tense in speech and differentiate the associated spellings in writing.

3.3 *Imparfait* and *Passé Composé* Together

The *imparfait* and *passé composé* can be found together at a sentence level or at a textual level. Often, when the two tenses are found in a single sentence, the verb in *passé composé* expresses an event or process that interrupts the verb expressed in *imparfait* (30). This is one function of the *passé composé* and *imparfait* that resembles the English uses of V-ing and the preterite.

30) *Sarah préparait son examen quand Mélissa est arrivée.* 'Sarah was preparing her exam when Melissa arrived.'

On a larger scale, when *passé composé* and *imparfait* are used together in a same text (e.g., a story that occurred in the past), and possibly in the same sentence, the *imparfait* is used to describe the setting, provide background information, and mark events/states during which another event or change of state occurs and the *passé composé* is used for foreground events. Two full-text examples of the use of *imparfait* and *passé composé* used together in narrating a past event are available in the interview materials in the Appendices (Cloze task and paragraph section of Error-Correction task).

3.4 Affordances of Studying L2ers' Knowledge about using the Past in French

The current study focuses on how learners understand the past in French for four main reasons. First, there is not a one-to-one semantic (aspectual, e.g., imperfective or not indicating an endpoint for the *imparfait* and accomplished/completed for the *passé composé*) or morpho-syntactic (auxiliary verbs and verbal inflection) correspondence to means of expressing the past in English, which differentiates between continuous/progressive (as in ‘I was eating’) and not progressive (as in, ‘I ate’). Successfully associating form and function cannot be accomplished by directly associating *imparfait* and *passé composé* to specific English structures like the past progressive (*was + V-ing*) and preterit (*V-ed* and irregulars). Moreover, English is less inflected in comparison to French. English progressive forms are all regular and most non-progressive forms use only the –ed suffix, thus making it a challenge to learn the complex agreement system, both for French verb tense paradigms and for past participle agreement.

Passé composé is of particular interest for form-focused knowledge since it is composed of an auxiliary that shows present tense subject–verb agreement and a past participle that may show agreement with the subject or direct object depending on the category of verb and location of the direct object. In addition to the complexity of the form, the written form contains elements (e.g., gender and number agreement on past participles ending in “-é”) that are not reflected in speech. This disconnect between what one hears/says and what one reads/writes means that learners’ (and, more generally, French users’) intuitions about what “sounds” correct still requires some additional knowledge for how to write the appropriate form. Second, learners’ knowledge about language may be in relation to a variety of levels – the phonological, morpho-syntactic, semantic, or discourse levels—thus allowing for current and future analyses that focus on a wide variety of knowledge elements and potential complexity in the way that learners construct their knowledge.

The third and fourth reasons are specific to instruction and instructional materials. Learners are exposed to and use these forms and functions early on in language courses (almost always starting in the first semester of study in the university setting), thus permitting this study to look at learners across a broad range of proficiency levels and course experiences. Finally, these forms are a focus of (most often explicit) instruction at introductory, intermediate, and advanced levels of French language courses. Flipping through any French language textbook or French course syllabus, one will likely find at least one section focused on the structure and/or use of *passé composé* and *imparfait*.

CHAPTER 4 METHODS

This dissertation study used qualitative case study research methods (Creswell, 2013; Maxwell, 2013; Yin, 2008) in order to examine the knowledge that participants used in relation to producing past tense morphosyntax in French and how they constructed their understandings during different types of tasks. The cases presented in this dissertation study were selected from a larger study of French second language learners' knowledge of a variety of aspects of the past tenses in French, including morphosyntax, sentence-level form-meaning connections, and tense coordination in narration. The cognitive clinical interview (Ginsburg, 1997) was the primary method of data collection. Additional biographical, language experience, and proficiency information was collected through a background questionnaire and the French elicited imitation proficiency measure devised by Tracy-Ventura and colleagues (Tracy-Ventura, McManus, Norris, & Ortega, 2014).

A case study approach was adopted as a means to respond to the overarching research question targeting *how* one thinks about language. The case study approach was used to provide a detailed description of a phenomenon and to show complex relationships among elements—to be able to respond to “how” questions (Creswell, 2013; Yin, 2008). Case studies provide a means to take theories or assertions from prior researcher findings and to look at the nature of the relationship between the elements involved. This dissertation study considers previous research findings (presented in Chapter 2) that indicate a likely relationship between metalinguistic knowledge and the capacity to use a second language along with the theory that knowledge (in use) consists of elements constructed in a given moment. The multiple cases, thus, provide examples of the complex relationship between the elements involved in constructing knowledge about language and how that knowledge is deployed in varying contexts of use (interpretation and production) of French as a second language. This study will include detailed descriptions of

knowledge in use and analyses of how that knowledge is used within and across the three cases presented herein.

In this chapter, the data collection procedures for the overarching data-collection are first described in detail. Details on the selection of the three participants (i.e., three cases) are described in the second section. The subsequent sections describe the coding and analysis procedures (4.3) and address researcher subjectivities, validity, and generalizability (4.4.).

4.1 Procedures

Participants attended two sessions during the second half of the semester during which the data were collected. During the first session, participants received information about the study, provided informed consent, completed the background questionnaire, and participated in the first of two clinical interviews. The second session occurred within two weeks of the first and consisted of the second clinical interview followed by the elicited imitation measure. Both sessions lasted approximately 45–60 minutes and were video-recorded for analyses. All materials, drawings, and writing samples produced by the participants were included in the analyses.

4.1.1 Background Questionnaire

Each participant completed a background questionnaire about their current and past experiences with second language or other language related studies. The interviewer followed up orally, asking participants to expand on any information about previous language and linguistic study reported on the questionnaire. This information provides for a detailed description of participants and their prior experiences with language and language learning.

4.1.2 Elicited Imitation Proficiency Measure

Research suggests that both proficiency and course performance are correlated with metalinguistic knowledge (Elder & Manwaring, 2004; Roehr, 2008b). Hence, the overarching

study identified potential volunteers based on current course enrollment and used an elicited imitation task to measure participants' proficiency levels. The French elicited imitation task described in Tracy-Ventura et al. (2014) measures oral language proficiency, while imposing time constraints that prevent participants from extensive use of metalinguistic knowledge. For this study, it was important to use a proficiency measure that does not permit a great deal of time for thinking about language. The proficiency information, then, provides an independent data point that can be used to help explain participants' verbalizations and behaviors that occurred during the interviews. A proficiency measure that allows participants to draw on their knowledge about language (*e.g.*, an untimed multiple-choice task) would have too much overlap with information collected during the interviews. Instead, this independent measure of proficiency offers supplementary information about the participants that can be used to better explain aspects of participants' thinking, particularly when intuitive knowledge (proficiency) plays a key role in constructing knowledge about language. Considering the relationship between metalinguistic knowledge and language proficiency is important because, as discussed in more detail in Chapter 2, metalinguistic knowledge and language proficiency are correlated (Roehr, 2008b). Moreover, equivalent measures for the elicited imitation task exist for several languages (for Spanish see Bowden, 2016; Ortega, Iwashita, Rable, & Norris, 1999), thus permitting future comparisons across studies involving learners of similar proficiency levels in a range of languages.

The elicited imitation task includes a set of thirty sentences (see Appendix A) that were presented in order based on the length in number of syllables (ranging from 7 to 19). Participants listened to the sentences using audio software (QuickTime Player) over high quality headphones attached to a computer. Participants heard a sentence, followed by a two-second pause and a beep indicating that they should repeat the sentence that they had just heard. The participants'

repetitions were recorded using Audacity. Before the target items, instructions and practice sentences were given in English. The total task time was approximately 10 minutes. The data were coded and analyzed based on the scoring table proposed by Tracy-Ventura et al. (2014). A reproduction of this table is provided in Appendix B.

4.1.3 Interviews

Task-based, semi-structured, cognitive clinical interviews (Ginsburg, 1997) were used to explore how the participants understand the *imparfait* and *passé composé*. During the two interview sessions, participants completed a series of tasks intended to make their knowledge constructions observable via their behaviors and speech. The majority of these tasks reflect what instructed second language learners of French would typically do as a part of their class or when using the language for communicative purposes. An error correction and explanation task was also included to analyze participant thinking during this type of task, which has commonly been used to investigate metalinguistic knowledge. During a clinical interview, the interviewer's role is to identify and follow up on knowledge evident in the participants' words and actions by asking questions to verify or reframe how participants construct and use their knowledge.

The cognitive clinical interview served as a means to investigate the content of participants' knowledge about past time expression in French and how that knowledge is organized. These interviews are cognitive in that they are addressing thinking; clinical refers to their diagnostic nature. The goal of a cognitive clinical interview, then, is to diagnose thinking: What thinking is occurring, under what circumstances is it occurring, and what elements are involved in or associated with an instance of thinking? Given the constructivist understanding (Crotty, 1998) that knowledge is formed using previous knowledge and experiences, and that knowledge is constructed in use with respect to the task or situation, the clinical interview is an

innovative and thorough way to investigate how an individual understands a concept. It uses multiple tasks to explore knowledge-in-use with respect to each task. Moreover, it allows participants to express the knowledge that they are drawing upon, no matter the origin or relation to the topic at hand, without requiring them to use a specific pre-established format or vocabulary.

The two semi-structured interviews included a total of five tasks, three of which were completed during the first session and two during the second session. The first interview combined form-focused and function-focused tasks. Participants were first asked to describe and draw how one uses the past in French (Task 1: Describe and draw). During this task, the interviewer asked the participants to provide their own examples. When necessary, the interviewer also asked participants how they might describe and draw sentences that exemplified functions the participant had not yet addressed. This line of questioning often included asking learners how they represent the use of the *imparfait* via examples where its use implies an imperfective reading and others when the *imparfait* describes repetition or habit.

In the second task (Task 2: Sentence interpretation), participants were given a set of 12 sentences and were asked to explain how each sentence related to their description and depiction of the past in the first task. Two sentences were examples of the *imparfait* that can be interpreted as either imperfective or iterative; two were examples of the imperfective function of the *imparfait*; two were examples of the *imparfait* and *passé composé* used together to identify one action interrupting some other extended action or description. Two were examples of two verbs in the *imparfait* used to indicate simultaneous events; two more examples included the use of the *passé composé* to describe past events that have an implied end point; the final two included non-prototypical uses of the *passé composé* to indicate a feeling or description in the past that is

limited in time. See Table 4.1 for a complete list. This task provided information about how the participants understood the relationship between the different forms and functions, particularly given the non-prototypical uses of the *passé composé* and the two different functions of the *imparfait*. This task was added after analysis of pilot data¹⁵ revealed that two pilot study participants with advanced French proficiency represented the two prototypical functions (iterative and imperfective) of the *imparfait* as overlapping or the same during the describe and draw task. Considering this result, it was of interest to introduce a task that provided opportunities for participants to explain as many meanings of the past tenses as possible and that allowed the interviewer to engage with the participant about form-meaning mappings within and across sentential contexts. Participants were also asked to compare their explanations on this task to their explanations and related drawings on the previous task, thus creating opportunities for extending thinking and to expand the drawings to include non-prototypical uses (e.g., *passé composé* used to express instantaneous feelings) and multiple possible meanings of a form (e.g., *imparfait* interpreted as either iterative or imperfective depending on context) that may not have come up without prompting.

The written production task (Task 3) also focused on the form-function relationship while permitting a look at a textual level and expressing meaning through changes in tense within the context of storytelling. During this task, participants were asked to write a story referring to a series of six black and white images. These images (Figure 4.1) depicted a squirrel who came in

¹⁵ The pilot study focused on teaching assistants' knowledge about form-meaning connections. Given its difference in topic from the current study, it is not further addressed in this dissertation.

through an apartment window, making a loud noise that frightened the occupant. The occupant then found the squirrel in the kitchen. It was eating some bread on the kitchen table. When the occupant came into the kitchen, the squirrel got scared, stopped eating, and ran back out through the window. Each image was accompanied with suggestions for vocabulary (infinitive forms of verbs and nouns) to facilitate the task for participants at all proficiency levels. Participants were asked to verbalize their thoughts while writing and were asked to explain how their writing corresponded to their previous description and drawings, particularly if the knowledge or behaviors differed across tasks. Relating the writing task back to previous verbalizations and behaviors facilitated an understanding of what knowledge is central or peripheral in how each individual understands the *imparfait* and *passé composé*.

The second clinical interview session began with a cloze task (Task 4). This task was a primarily form-focused task in which participants were given a set of verbs and asked to fill in the blanks in a short story about a girl who was having a bad day (see Appendix C). This story required the participants to use both the *imparfait* and *passé composé*. The *passé composé* use required a variety of subject–verb, subject–past participle, and object pronoun–past participle agreements. During this task, participants explained why and how they selected the form (*imparfait* or *passé composé*; *être* or *avoir* auxiliaries) and how they knew what to write (e.g., spelling, conjugation, agreement).

The final task (Task 5: Error correction and explanation) was included to better understand how participants construct understandings during this type of task, as a means to relate the results of this research to other metalinguistic/explicit knowledge studies using this type of methodology. It was composed of ten sentences and one short paragraph. Five of the ten sentences included a formal error (conjugation, agreement, spelling) and the other five involved

using the *passé composé* or *imparfait* inappropriately in the context, *i.e.*, matching a tense to an inappropriate function/meaning. The paragraph included three form-based errors and three function-based errors and provided a context for the discourse functions of the two tenses addressed in this study. Participants were told that each sentence included at least one error and that the paragraph contained more than one error. They were then asked to identify and correct them and explain their decisions.

Table 4.1

Task 2 Sentence prompts

Uses	Sentence 1	Sentence 2
<i>Imparfait</i> (imperfective)	Pierre avait peur du serpent. <i>Pierre was afraid of the snake.</i>	Nous aimions beaucoup ce restaurant. <i>We really liked that restaurant.</i>
<i>Imparfait</i> (imperfective or iterative)	Il pleuvait. <i>It rained/was raining.</i>	Claire allait au marché. <i>Claire went/was going to the market.</i>
<i>Imparfait</i> and <i>passé composé</i> (interruptions)	Marion dînait quand son portable a sonné. <i>Marion was eating dinner when her cell phone rang.</i>	Paul et Bernadette regardaient un film quand Jules est arrivé. <i>Paul and Bernadette were watching a movie when Jules arrived.</i>
<i>Imparfait</i> (x2) (simultaneous events)	Harold attendait pendant que Sarah se préparait. <i>Harold waited/was waiting while Sarah got ready/was getting ready.</i>	Jean courait pendant que Sylvie faisait du vélo. <i>Jean ran/was running while Sylve biked/was biking.</i>
<i>Passé composé</i> (prototypical, implied completion)	Caroline a fait ses devoirs. <i>Caroline did her homework.</i>	Mathieu est monté dans le bus. <i>Mathieu got on the bus.</i>
<i>Passé composé</i> (non-prototypical, instantaneous feeling/description)	Marie a eu peur. <i>Marie got scared.</i>	Frank a été désagréable. <i>Frank was (being) unpleasant.</i>

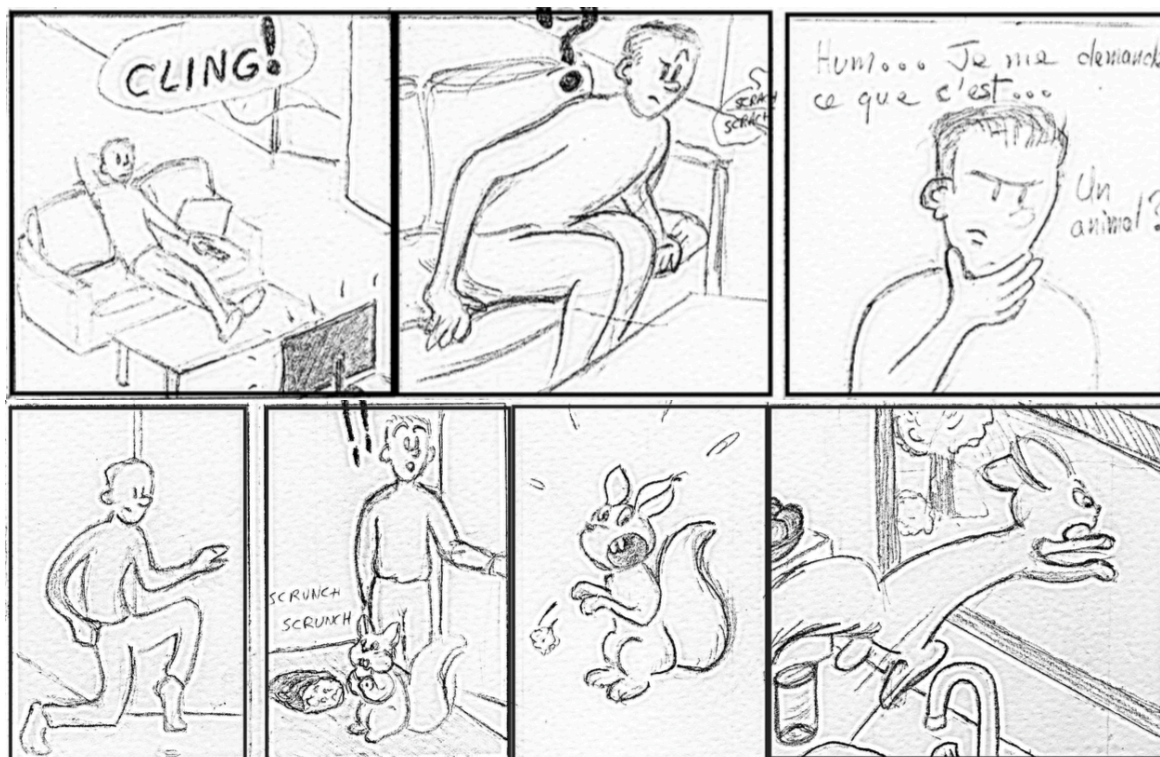


Figure 4.1: Images for written production task

4.2 Participants

This dissertation study involves the analysis of three cases taken from a larger set of interview data. The larger data set included 20 university students who were enrolled in a French language course in a large university at the time of the study. Given that previous research has indicated that course performance and proficiency level are correlated with metalinguistic knowledge, the participants (for the larger data set) were recruited from five different course levels with the aim of having a range of French proficiency levels and years of classroom experience in French. At the time of the study, four participants were enrolled in a second semester-course, three in third- semester, and four in fourth-semester. Two participants were enrolled in bridge courses focused on language skills integrated with literary or cultural analysis (third-year sequence). Three participants were undergraduate students enrolled in other courses (business/culture or literature focus) beyond the language sequence. Finally, three participants

were enrolled in graduate-level language or culture courses. First-semester students were not solicited because the participants at the university in question would not yet have been exposed to the language features of interest for this study.

These participants were recruited during class visits and via e-mail. Participant recruitment and selection for the overall data collection was informed by maximum variation sampling (Creswell, 2013), in which participants with key differences in course enrollment, proficiency, years of experience, and language backgrounds were selected in order to maximally reflect differences in thinking in the data set.

For the current study, three cases were selected from the larger data set in order to maintain the variation (language background and years of experience learning French), while still allowing for meaningful connections across the participants' experiences. The three participants share a single first language (English) but one of the three has experience learning Spanish. All three learned French at the university-level, although they had differing numbers of years/semesters of experience including some high school experience for two of the participants. All three were pursuing degrees in the Liberal Arts and Social Sciences, and two of the participants were invested in French via a prior or current major. Detailed background information about each of the three participants whose case is included in this study are provided below.

4.2.1 Participant Background Information

Sam¹⁶ was taking a third-semester undergraduate French course at the time of her participation in the study and was majoring in French and another non-language-focused area¹⁷ of the Liberal Arts. She was in her second year of her undergraduate studies and had taken the first- and second-semester French courses prior to enrolling in the third-semester course. Sam, like the two other participants, used English primarily in her personal life and did not grow up with any home/primary languages other than English. She also had extensive experience with coursework in Spanish (from second grade through 1 semester of collegiate-level Spanish) but indicated having a lower level of overall proficiency than French but being comfortable with reading simple texts in Spanish.

Taylor was in the first year of her undergraduate studies and was taking a fourth-semester undergraduate French course at the time of the study. She was in her second semester of her collegiate career and had plans to declare a major in a non-language-focused area of the Liberal Arts and to pursue coursework in Psychology. Before her current course, Taylor had taken 3 years of high school French and the third-semester course in her collegiate program. She had not studied any languages other than French.

Grace was a graduate student taking content-focused courses taught in the French language; the courses were intended to help her gain knowledge of a content area and improve her language skills for professional purposes. Grace was in her first year of that program and had completed her undergraduate degree in French at another institution the prior year. She had also

¹⁶ All names are pseudonyms.

¹⁷ Details are limited to help protect the identity of the participants.

spent one month in France completing a language course and had studied Japanese for two semesters during her undergraduate studies.

Table 4.2

Participant Information

	Course enrollment	French learning (prior to interview)	Other languages	Major area of study
Sam	3 rd -semester French	1 st and 2 nd -semester college courses; 3-month au pair experience in France with American family	Spanish (10 years, low proficiency)	French & Liberal Arts field
Taylor	Fourth-semester French	3 years high school French; One 3 rd -semester collegiate course	n/a	Liberal Arts field & Psychology
Grace	Several graduate-level courses taught in French	French undergraduate degree; 1 month in language program in France	Japanese (2 college semesters)	French & International Development

A summary of the information regarding the three participants language backgrounds and areas of study is included in Table 4.2.

4.2.2 Elicited Imitation Proficiency Measure Scores

Each of the 30 items from the French elicited imitation measure was scored on a scale of 0–4, with 4 describing perfect repetition and 0 describing no repetition, repetition of only one word, or entirely incomprehensible repetition. The maximum possible score on the French elicited imitation proficiency measure was 120. Sam and Taylor’s scores were relatively close (47 and 39 respectively), while Grace’s score (83) was nearly double theirs. Table 4.3 presents the results in more detail. The elicited imitation scores for the 3 participants serve descriptively

to confirm that Sam and Taylor, who were taking third- and fourth-semester courses were of a different (lower) proficiency level from Grace, the first-year graduate student. Sam's total score, as well as her mean score and the mode, were slightly higher than those of Taylor. Note that Taylor's most common score was a 1 (repetition of half or less of the stimulus) whereas Sam's most common score was split between 1 and 2 (changes in content or changes in form that affect content), indicating some qualitative differences in oral proficiency between the two, where Sam is slightly more orally proficient than Taylor.

Table 4.3

French Elicited Imitation Proficiency Measure Scores

	Sam	Taylor	Grace
Total score:	47	39	82
Mean:	1.6	1.3	2.7
Mode:	1.5	1	3
Score breakdown:			
0's	6	4	0
1's	9	18	4
2's	9	4	6
3's	4	3	14
4's	2	1	6

4.3 Coding & Analyses

The selected interviews were transcribed *verbatim* using qualitative coding and transcription software (Transana). Coding and analysis were iterative in nature and took place by using the key-word coding in the Transana software, analytic memos, and recoding of the data in paper and pen format.

The first round of coding in Transana was used to identify when participant speech referred to *passé composé*, *imparfait*, or both, and whether the reference was to form, function,

or both. The participants' speech was broken up into sections in which the participants referred to a) *passé composé*, b) *imparfait*, or c) both simultaneously and these sections were coded as referencing form, function, or both form and function together. From there, all references to form and both form and function were retained for an analysis of the content of the knowledge constructions. These are numbered as verbalizations 1 to 36 (V1 to V36, based on order of appearance in the study) and are each analyzed in detail in Chapter 6. Three morphosyntactic themes emerged as a way to further break down the data for analysis: word placement, *imparfait* structure (including stem-formation and conjugations), and auxiliary selection and past participle agreement for the *passé composé*. Each of these themes was the focus of verbalizations of at least two of the three participants.

For each of the morphosyntactic themes, the verbalizations were analyzed and coded to identify the content of the knowledge constructions. These codes included language analysis (language analytic ability), various versions of pedagogical and structural grammar rules expressed by the participants, and other content as it emerged from the data (e.g., knowledge of memory aids like images and songs, knowledge of familiar words or phrases, and knowledge about learning). The content was based in the participants' verbalizations and behaviors, with some behaviors indicating some knowledge of a 'default' form or category that is not necessarily verbalizable. That content was categorized as metalinguistic (about language), linguistic (knowledge of uses of language), and extra-linguistic (knowledge related to language but not about language, like knowledge or beliefs about language learning). Moreover, the content (i.e., knowledge elements) and the overall constructions were further analyzed for accuracy (alignment with accepted metalinguistic descriptions), completeness (containing all the necessary information to produce the form in the context), and relevance (description of the form or

characteristics of the intended form) and were compared to the participants' related language production (whether the knowledge used led to accurate production of the intended form). Analytic memos were used as a means to further develop the analysis. These memos revolved around the research questions and links between the participants' understandings and previous research findings. This led to additional coding of episodes that involved language analytic ability to specify the content of the knowledge involved in analyzing or comparing language elements and the eventual suppression (explained in detail in Chapter 7) of language analysis as a type of content. Chapter 6 presents each verbalization thematically (word placement, *imparfait*, and *passé composé*) and describes the participants' constructions and content involved in those constructions. It also includes descriptions of the accuracy, completeness, and relevance of the pieces and the overall constructions and relates that back to whether the participant was able to accurately produce the intended form.

4.4 Researcher Subjectivities, Validity, and Generalizability

As described by Maxwell (2013), I use a straightforward approach to validity by considering it in terms of correctness and credibility. The two primary threats to validity are potential researcher bias (subjectivity) and reactivity (influence). For the sake of clarity, I briefly discuss my own subjectivities and positioning in relation to the study. I follow this by addressing potential threats to validity and how the research design and process reasonably reduced these threats.

I approach this study from a variety of roles: French learner, French teacher, SLA researcher, and language teacher-trainer. Through acting in these different roles, I have encountered a number of people, in many of these different roles, who criticize themselves or other learners or teachers for not knowing something that they "should" know. This discourse, at least from my perspective, is not productive in encouraging and supporting learning, be it

learning about language to become a more proficient speaker (or writer) or to teach or study language in an academic setting. I approached this issue by considering how my research can counter these criticisms by highlighting the complexity of what it means to know or learn something that may seem simple. This orientation is supported by research and, of course, is reflected in the conceptual framework and methodology selected for this dissertation study.

This study has been designed in a way to reasonably avoid any undue bias and reactivity through various means. However, it is difficult and not always necessary to avoid researcher influence in a qualitative interview study of this type (Maxwell, 2013). Both the selected tasks and the researcher/interviewer's exchanges with the participants undoubtedly had an impact on participant thinking. The aim of this study is to describe and analyze how individual learners construct understandings of the *passé composé* and *imparfait* in French, and the researcher/interviewer worked to minimize her impact on the constructions and avoid undue influence at the time of data collection via several means: 1) using the participants' own words during the interviews (and in the coding and analysis), 2) ordering the tasks from more to less open-ended, thus giving participants the most control of what they say from the beginning of the interviews, 3) regularly checking for clarification from the participant during interviews. During clinical interviews, the interviewer did introduce other knowledge elements or understandings to better understand how the participants would accommodate differing understandings. In order to maintain a more neutral presentation of any new information and to avoid undue interviewer influence, the interviewer presented this information as coming from another source with a similar positioning to the participant (*e.g.*, I heard another student say 'x'.) (Ginsburg, 1997) The transcribing, coding, and analysis processes also included measures to maintain the validity of the study. First, transcriptions were *verbatim*. Any knowledge or information that the

researcher/interviewer introduced into the situation via the tasks and exchanges (*i.e.*, participant-produced vs. researcher or task-produced knowledge elements) were coded and analyzed as such. Also, as themes emerged, the data were searched for conflicting evidence and when conflicting elements were identified, they were described and incorporated into the analyses. Moreover, descriptive statistics were used to validate any claims related to the frequency or predominance of particular knowledge elements or constructions. Given the aforementioned steps taken, validity has been reasonably assured in this study.

CHAPTER 5 KNOWLEDGE ABOUT STRUCTURE: DESCRIPTION AND ANALYSES OF CASES

This chapter explores the participants' verbalizations regarding the structure (morphosyntax) of the *passé composé* and *imparfait*. Associating the appropriate form to the intended meaning (and *vice versa*) can be much more fluid and depend on the intended or multiple possible meanings, making accuracy and knowledge about form–meaning associations complex. However, morphosyntax can usually be qualified as either target-like or non-target-like, accurate or inaccurate. The morphosyntax or structure of the *imparfait* and *passé composé* includes morphological changes to verbs, like conjugation (i.e., subject–verb agreement for a given tense) or past participle agreement, and the placement of grammatical words (like reflexive pronouns or the negative *ne...pas*) with respect to auxiliary or main verbs. Despite the straightforward accurate/inaccurate categorization of language structure, describing a learner's knowledge about any given structure is more complex; it goes beyond simply stating that it is an accurate or inaccurate depiction of a pedagogical grammar rule and must include information about how knowledge of a morphosyntactic element is formed and used (i.e., what are its component parts and how do they function together to support the accurate production of a structure?).

In trying to answer the overarching question about how participants understand the past in French, this chapter addresses what repertoire of knowledge participants draw from and how that relates to common pedagogical and structural grammar rules and formal accuracy in their

production.¹⁸ I present the participants' performance and knowledge about form (evidenced by their behaviors and verbalizations) in relation to three structure-focused topics that came up in the data: word placement, *imparfait* form (stem-formation and subject–verb agreement), and *passé composé* form (auxiliary choice and past participle agreement). Each section includes a brief description of the target form, a report of each participant's accuracy in producing the form, a detailed description of the participants' related knowledge constructions, and an analysis highlighting emergent themes.

Throughout these analyses, the participants' knowledge is discussed in terms of constructions, the content of those constructions (i.e., content of the knowledge elements involved in the constructions), characteristics of the constructions and knowledge elements (accurate, complete, and relevant), and characteristics and uses of intuitive knowledge (comparison, feeling, rule-deduction). Constructions were considered to be the combination of elements evidenced in verbalizations and behavior that were used in order to complete a single item on a task (e.g., one blank on the Cloze Task or one correction on the Error Correction and Explanation task). The content included in those constructions was described using the participants' terms and was reduced into the smallest describable elements evidenced in the verbalizations and behaviors of the participants. For example, the description of the content reflects if a participant used the term auxiliary or helping verb when discussing the *passé*

¹⁸ Knowledge about form used during any production of language is considered here, including Tasks 3 (Picture-Description Story-Telling Task) and 4 (Cloze Story) as well as any language produced and evaluated as a part of the error-correction and explanation task (Task 5).

composé.¹⁹ The characteristics of the constructions and elements reflect themes that emerged in the data analysis. Accuracy, completeness, and relevance of the knowledge elements and constructions emerged as factors associated with the accuracy in production or correction during the language tasks. Additionally, in looking at possible instances of language analytic ability or evidence of the use of implicit knowledge (e.g., a participant noting that they “feel” like one response is better), three different situations emerged: 1) the participants indicated no reason or comparison to another language element and identified what sounds better (i.e., intuition), 2) the participants used a language element (e.g., a phrase or sentence) they knew to be correct and deduced a new language element based on the known element, and 3) the participants used an existing language element that they knew to be correct and deduced a rule from that element (that could be applied in a new situation). The latter two were separated because some comparisons could involve an explicit case of rule-deduction as an intermediary step, while others did not involve any clear connection to a description of the form or related rule. All of the aforementioned themes reoccur throughout the descriptions in each structure-based section, given that the use of knowledge elements is complexly interwoven during elements of each task and with respect to the different language features discussed.

Note that the term *metalinguistic knowledge*— as it was used in the prior studies reported upon in Chapter 2—was defined and operationalized in variations of a similar theme: verbalizations (in speech or, more commonly writing) of knowledge of pedagogical grammar rules and descriptions, the ability to correct errors, and the use of technical language

¹⁹ The use of the participants’ terminology better reflects how they understand—in pedagogical grammar terms (e.g., helping verb) or linguistic terminology (e.g., auxiliary).

(metalinguage). Given that *metalinguistic* (about language) and *explicit* (verbalized) have been equated in much of the research, this term is difficult to disentangle from its prior uses. It was, however, unavoidable when trying to describe how the participants in the current study think about language. In the upcoming descriptions, analyses, and following discussion, the term does not imply that the knowledge is necessarily verbalized or explicit. Rather, it is used to refer to knowledge elements that are specifically about language (i.e., *meta-*), including but not limited to knowledge of rules, categories, and other language-specific knowledge (i.e., it describes the content of knowledge without implying anything about the awareness of the learner). It is differentiated from knowledge of chunks of language, which may be *implicit language knowledge*, and is also differentiated (again, based on content) from other non-linguistic knowledge used in metalinguistic constructions (e.g., knowledge about learning practices or beliefs about teaching).

5.1 Word Placement

To quickly recap target-like word placement for negation and reflexive/reciprocal pronouns in French, negation is placed around the first finite verb form (when there is no infinitive²⁰), meaning the auxiliary in *passé composé* (e.g., *Sarah n'a pas trouvé ses clés* 'Sarah

²⁰ The “*ne...pas*” negation may be placed before an infinitive if there is no finite verb in the verb phrase. For example, in *Ce serait mieux de ne pas manger trop de sucres* ‘It would be better not to eat too much sugar’, “*ne pas*” is placed before the infinitive “*manger*” ‘to eat’. However, when a finite verb is present in the same verb phrase, “*ne pas*” goes immediately around the first finite verb, as in *Je ne vais pas manger trop de sucres* ‘I am not going to eat too much sugar’. In this example, “*vais*” is the finite form of “*aller*” ‘to go’ and the “*ne pas*” is placed immediately around it. No contexts requiring “*ne pas*” to precede an infinitive were provided to participants during the study. However, when negation is elicited in Task 4 (Cloze Task), the negation is presented with the infinitive form of the verb (e.g., *ne pas se sentir bien* ‘to not feel well’). This presentation is adopted in many pedagogical materials and should be familiar to the participants.

did not find her keys’) or the main verb in the *imparfait* (e.g., *Sarah ne trouvait pas ses clés* ‘Sarah could/did not find her keys’). Reflexive and reciprocal pronouns are placed immediately before the first finite verb inside of the negation (e.g., *Sarah se n’est pas réveillée* ‘Sarah did not wake up’ or *Sarah et Jean ne se parlaient pas* ‘Sarah and Jean were not talking to each other’).

Twelve items²¹ in Task 4 were designed to elicit participants’ thoughts about and instances of production of negation, reflexive or reciprocal pronouns, or a combination of the two, thus requiring production of potentially complex word order. Table 5.1 presents the participants’ accuracy in producing the appropriate word order and is organized by tense (i.e., *passé composé* or *imparfait*) and form (i.e., negation, the reflexive/reciprocal pronoun “*se*,” or both). It shows that the only difficulty with the *imparfait* was for Sam, who wrote, “*se ne sentait pas*,” instead of “*ne se sentait pas*” ‘did not feel well’ in Item 3 of Task 4. For *passé composé*, combining negation and a reflexive pronoun posed a problem for both Sam and Grace. Sam inaccurately places the *se* outside of the negation, like with the *imparfait*. Grace dropped the reflexive pronoun entirely. Note that both Sam and Grace’s inaccuracies occurred when combining the two grammatical forms (*ne pas* and *se*), a more complex task than using them separately.

In their verbalized thinking about structure, both Sam and Taylor verbalized knowledge about the placement of negation (*ne...pas*) and the reflexive or reciprocal pronouns *se*. Taylor shows 100% accuracy with the placement of the forms and verbalizes at least some of what she knows. Sam verbalizes her knowledge and identifies her uncertainty about the form. Grace, by

²¹ Items 2, 3, 5, 7–9, 14, 15, 17, 19, 24, 25 from Task 4 elicited negation, reflexive/reciprocal pronouns or both. See Appendix D for the complete task.

contrast, makes a mistake with two of the forms, but does not verbalize knowledge about word placement at any point during her interviews. There is evidence that Grace knows where to place the pronoun with respect to negation and the auxiliary in *passé composé*. She accurately places the combined negation and reflexive pronoun with the *imparfait* in Item 3 (*ne se sentait pas bien* ‘did not feel well’), evidence that she is able to accurately place the “*ne*” and “*se*” in some instances. Her omission of the reflexive pronoun in Items 8 and 9 (*passé composé*, reflexive, and negative) may be explained by limits in cognitive resources, (i.e., she did not notice the missing *se* due to her extensive attention to past participle agreement and a lack of cognitive resources available to focus on other elements).

Table 5.1

Word Placement Accuracy According to Tense (Task 4)

Form	Sam	Taylor	Grace
Imparfait:			
Reflexive or Reciprocal IMP	2/2	3/3	2/2
Negative IMP	2/2	3/3	2/2
Reflexive or Reciprocal & Negative IMP	0/1	1/1	1/1
Passé Composé:			
Reflexive or Reciprocal PC	4/4	3/3	4/4
Negative PC	1/1	n/a	1/1
Negative & Reflexive or Reciprocal PC	0/2	2/2	0/2

Several knowledge elements are at play in Taylor and Sam’s verbalizations. Taylor verbalized her knowledge about word placement one time and Sam three times. Table 5.2 includes every instance of participant talk about word placement (in relation to the verb phrase),

all of which are from Task 4. This is likely because Task 4 (Cloze Task) elicited attention to form (e.g., the placement of negation and reflexive/reciprocal pronouns in production). The first column indicates the written language produced by the participant. The second includes a representative excerpt from the participants' oral explanation and the final column indicates the knowledge elements related to word placement that were expressed.

Note that, despite there being ten reflexive or reciprocal verbs, four of which were negated, there is only one instance in which Taylor mentions word placement (regarding *se* and *ne*), three in which Sam overtly expresses thinking about it, and none for Grace. Again, this does not indicate a lack of knowledge on the part of Taylor or Grace. In fact, there is evidence that Taylor does know and is able to put into words that negation is placed around the helping verb in *passé composé* and the main verb when there is no helping verb, although she does not state it every time word placement is a possible issue.

Regarding word placement in the *imparfait*, Taylor expresses her knowledge of the placement of *se* as based on a comparison to a familiar form—*ne se sont*—combined with her knowledge about the placement of negation regarding helping verbs in *passé composé*. She then accurately identifies the proper placement of negation and the reflexive pronoun with the imperfect verb as “*ne se sentait pas*” ‘didn’t feel.’ (See 1 in Table 6.2.) She constructs knowledge about the main verb by combining a known chunk (*ne se sont*) and her knowledge about its form. Taylor also uses some knowledge that she does not explicitly express—the order of negation and reflexive pronouns remains the same with auxiliary verbs in the *passé composé* and the main verb in *imparfait*—thus making it possible for her to apply her knowledge of one familiar context to another less familiar context. Taylor’s single verbalization (and construction of knowledge about word placement) included the following knowledge elements.

Table 5.2

Knowledge About Grammatical Word Placement (Negation and Reflexive Pronouns)

Written form	Participant Explanation	Verbalized Knowledge
<p>(1) “elle <u>ne se sentait pas</u> bien”</p> <p>(Taylor, Task 4, Item 3)</p> <p><u>Target form:</u> <i>elle se ne sentait pas bien</i></p>	<p>(V1) “So, I’m thinking of where to put the <i>ne pas</i>, like the structure. <i>Ne se sont</i>. I think it would be like that, but I’m not sure. <i>Ne se sentait pas</i>. [Interviewer: What made you decide that?] Because I think if it was <i>passé composé</i>, it would be around the helping verb. So, it would be <i>n’est pas sortir</i> or <i>se sentir</i>. So, this is around the actual verb instead of the helping verb.”</p>	<ul style="list-style-type: none"> • Comparison to the known chunk <i>ne se sont</i> in <i>passé composé</i> • <i>Ne pas</i> appears around the helping verb in <i>passé composé</i> • <i>Ne pas</i> appears around the main verb in <i>imparfait</i>
<p>(2) “elle *<u>se ne sentait pas</u> bien”</p> <p>(Sam, Task 4, Item 3)</p> <p><u>Target form:</u> <i>elle se ne sentait pas bien</i></p>	<p>(V2) “I can’t remember if it goes <i>ne se</i> or <i>se ne</i> for– I don’t remember what it’s called. [discussion of meaning and <i>imparfait</i> formation] For this [<i>ne, se</i>], I mean, I know we have [learned a rule], but I feel like [the rule] hasn’t been explicitly given. I feel like it’s <i>se ne</i>, because that sounds better to me. [...] <i>Se ne sentait pas, ne se, ne se</i>. Yeah, I’m just going to go with that.”</p>	<ul style="list-style-type: none"> • <i>Ne</i> and <i>se</i> both go before the verb • Placement/Order of the <i>ne</i> and <i>se</i> is governed by a rule • I don’t know the rule • <i>Pas</i> goes after the verb • Intuition says <i>se ne</i> is correct
<p>(3) “elle <u>s’a douché</u>,” later changed to “elle <u>s’est douché</u>”</p> <p>(Sam, Task 4, Item 5)</p> <p><u>Target form:</u> <i>elle s’est douchée</i></p>	<p>(V3) “I know that would be before the auxiliary verb of <i>avoir</i> and then, I put it in the <i>passé composé</i> because [...]”</p>	<ul style="list-style-type: none"> • <i>Se</i> goes before the (auxiliary) verb
<p>(4) “elle <u>se n’a pas brossé</u> les dents,” later changed to “<u>se n’est pas brossé</u> les dents”</p> <p>(Sam, Task 4, Item 8)</p> <p><u>Target form:</u> <i>elle ne s’est pas brossé les dents</i></p>	<p>(V4) “<i>Se ne, se n’est, se n’a pas brossé</i>. It goes in the wrong– I put the <i>pas</i>. It goes around the auxiliary. This is <i>avoir</i> not <i>être</i>.”</p>	<ul style="list-style-type: none"> • <i>Ne pas</i> goes around the auxiliary

- *ne se sont* is a correct form;
- (*sont* in *ne se sont* is the helping verb in *passé composé*);²²
- negation and the reflexive pronoun appear around the helping verb in *passé composé*;
- (word placement for the helping verb in *passé composé* is similar to main verb word placement in *imparfait*).

Those elements result in her understanding—that *ne se sentait pas* is the appropriate order in *imparfait*.

Sam’s knowledge about word placement was evidenced over three different constructions, two of which were in regard to combining negation and the pronoun *se*. In both of those instances, she used knowledge that *se* and *ne* are placed before the (helping) verb and *pas* is placed after. With the reflexive, negated *imparfait*, she used the following knowledge elements:

- *se* and *ne* occur before the verb;
- a rule exists;
- *se ne* sounds better.

However, her combination of these elements does not provide her with enough information to accurately identify the placement of *ne* and *se* together. She places *se* before the negated verb (an inaccurate placement of the reflexive pronoun with respect to negation) based on her intuition: “I feel like it’s *se ne*.” These accurate knowledge elements do work well for her in all other circumstances, as she accurately places negation and reflexive/reciprocal pronouns with both

²² Parentheses indicate a knowledge element that is observable based on participants’ other verbalizations and behaviors but that was not explicitly verbalized by the participant.

passé composé and *imparfait*—just not when negation and the reflexive/reciprocal pronoun are used together. Sam recognizes the existence of some governing explanation or rule that she does not know or cannot access during the interview and then focuses on what “sounds better.”

To recap, Taylor and Sam both verbalized knowledge regarding the placement of negation (*ne...pas*) and reflexive or reciprocal pronouns (*se*, in the context of this study). While both Sam and Taylor accurately place negation and reflexive/reciprocal pronouns separately, only Taylor produces the accurate word order when the two co-occur. One difference in the constructions that Taylor and Sam use is that the pieces Taylor uses add up to a whole (i.e., evidence of a complete construction) while Sam’s pieces do not. Taylor is able to draw a conclusion about how to use the form in the context; Sam recognizes that she is missing something (which is, for her, a rule) and is forced to make a best guess, going with what “sounds better.” Both also constructed knowledge with accurate and relevant (i.e., appropriate to the context and necessary to explain the situation) knowledge elements, but Sam’s overall knowledge construction remained incomplete.

The related metalinguistic “rule” that neither Sam nor Taylor use is that the negation is outside of (i.e., left of, for *ne*) all pronouns that are moved before the verb (e.g., reflexive or reciprocals like *se*, direct object pronouns like *le, la, les*, pronouns of place like *y*, and so on). In this way, Taylor’s overall knowledge construction in this instance includes all elements needed for accurate production or interpretation (i.e., it is complete) but it is unclear if she is aware of the more general metalinguistic rule or if knowing a more general rule would even be helpful. It is clear that, in this situation, she supplemented her metalinguistic knowledge by applying

information garnered from a familiar language chunk (implicit language knowledge²³). In this way, she uses rule-deduction to start from a known form, identify and describe a pattern, and apply it in a new situation.

It is worth noting that Sam's and Taylor's knowledge cannot always be described as explicit in the way the term is commonly used in second language research (as in Dekeyser, 2009 and Ellis, 2005). Sam and Taylor both use what some might call implicit knowledge (i.e., knowledge that is automatic in nature, generally referring to the underlying capacity to use language, also as in Dekeyser, 2009 and Ellis, 2005). Taylor relies on her knowledge of the chunk *ne se sont* and Sam relies on feeling, orally testing two options to see which seems better. These are similar knowledge elements in that they are both rooted in intuition, not reasoning or a metalinguistic understanding. The difference, though, is that Taylor considers a chunk (different from the form she is trying to produce) that she knows to exist and be accurate and she extracts information from that chunk. Sam compares two options (of the form she is trying to produce) to see if one feels better. Both could lead to accurate language use (likely depending on proficiency) but they differ in nature. The content, in the case of Taylor, is the knowledge chunk *ne se sont*. In the case of Sam, the content is not so clearly explained. It might be that her knowledge is about how to compare the sound of two phrases, but it is not a known or familiar chunk of language. Overall, Taylor used her knowledge of another phrase she knew to be correct to inform her understanding and combined that with other metalinguistic knowledge, while Sam relied on a feeling that was combined with other metalinguistic knowledge elements in the

²³ Implicit language knowledge refers to underlying knowledge of the language system, what you can say without reflection.

construction but was not based on a related comparison or any evidence of reasoning. This is a first piece of evidence that there are different ways to use intuition or intuitive knowledge and that different types of knowledge may be involved depending on the nature of the intuition.

5.2 Imparfait formation

During Tasks 3–5, Grace, Sam, and Taylor all verbalize some knowledge about *imparfait* formation. This knowledge contains information about identifying or forming the appropriate stem (e.g., *sent-* in *sentait*), the “conjugations” (i.e., subject–verb agreement as in, *-ait* in *sentait*), and knowing or not knowing the whole form or its parts.

Recall that the *imparfait* is a highly regular tense, with only one irregular stem (*ét-* for *être* ‘to be’). All regular stems are formed by taking the first-person plural form in the present and dropping the *-ons* ending (e.g., for *aller* ‘to go’, drop the *-ons* from *nous allons* ‘we go’ to obtain the *imparfait* stem *all-*). There are two partial irregular stem spellings—adding an ‘e’ to a stem ending in ‘g’ or changing a ‘c’ to a ‘ç’—is necessary for the first-, second-, and third-person singular and third-person plural forms for verbs whose stem ends in ‘g’ or ‘c’ (e.g., *mange-* for *manger*, *je mangeais* ‘I ate/I was eating’; *commenç-* for *commencer*, *il commençait* ‘he started/he was starting’). This is done to maintain the soft ‘g’ /ʒ/ or ‘c’ /s/ pronunciations before the vowel. All participants encountered two of the irregular forms: *être* and *manger*. During Task 4, participants were also exposed to *commencer* which has an irregular “c→ç” stem in *imparfait*. Participants could select either *passé composé* or *imparfait* in the item and, although *imparfait* was the target-like form, both Sam and Grace avoided using this irregular form (seemingly unintentionally) by using the *passé composé*.

Table 5.3 gives an overview of the structural accuracy of the three participants any time they produced an imperfect verb form. Grace shows 100% accuracy with *imparfait* formation across all tasks. Taylor uses three inaccurate stems and Sam uses five inaccurate stems (3 of

which are all forms of *manger* missing the added ‘e’). In the one instance of *commencer* (Task 4, Item 20), Taylor did not use the appropriate spelling with ‘ç’ (*commençait*) and wrote “*commencaït*.”

Table 5.3

Imparfait Formation Accuracy (Tasks 3, 4, and 5)

	Sam	Taylor	Grace
Task 3: Picture-Description Story-Telling Task			
Correct subject–verb agreement	4/4	5/5	4/4
Correct stem	3/4*	4/5*	4/4
Task 4: Cloze Story Task			
Correct subject–verb agreement	10/10	13/13	12/12
Correct stem	8/10	11/13	12/12
Task 5: Error-Correction and Explanation Task			
Correct subject–verb agreement	7/7	7/7	6/6
Correct stem	5/7*	7/7	6/6

Note: *Incorrect stem of same irregular stem spelling three times: **il mangait vs. il mangeait*

In the case of regular stems, both Grace and Sam mention using the “*nous*-form” to identify the stem when they do not know it. In the two examples below, Grace and Sam both successfully use their knowledge about forming the stem from the *nous*-form.

(V5) “Actually, first, I was thinking of the *nous*-form of *sentir*. Hold on a second. *Sentir*, *sent*– Yeah. I don’t think it’s one of those weird ones where it, it’s not the– I-S-I-S-I-T and it’s the conjugation [...] It isn’t. Yeah, I don’t think it’s like that. It looks weird. It definitely looks weird. So, it doesn’t follow the rule.” (Grace, Task 4, Item 3)

(V6) “I don’t remember how to conjugate *sentir* in the imperfect. [...] I felt like maybe it was *sentons* or *sentent* [unclear pronunciation]. I don’t remember how to conjugate the

imperfect. *Sentons*?²⁴ Like the third, like the *ils* and *elles* and then you take off– It’s either that or it’s the *–ons*. I feel like it would be the same anyways. Like *sentons* or *sentent*, like S-E-N-T-E-N-T. So, I just drop [the ending]. [...] And then, just add it. Oh, I conjugated as if it was me, so this would be a ‘t’ instead.” (Sam, Task 4, Item 3)

Grace, in her explanation above, uses knowledge of the rule for forming the stem from the “*nous*-form” and also uses knowledge elements regarding the present tense conjugations (that *–ir* verbs fall into two groups). She notes that the “*–is, –is, –it*” endings seem “weird” and decides that *sentir* falls into the other group of *–ir* verbs²⁵. With this combination of knowledge, she is able to identify the appropriate stem (*sent–*). Sam uses a different (less specific) version of the rule, that the stem is formed either from “*sentent*” or “*sentons*,” respectively the third-person plural and first-person plural forms. Since both would give the same stem, she does not need to be more precise or decide which is correct. She states, “I feel like it would be the same anyways.” In two later contexts, Sam reuses and reconsiders this knowledge in trying to identify the stems of *vouloir* ‘to want’ and *devoir* ‘to have to’. In the following excerpt, she needs to use the formation rule to identify the stem of *vouloir* ‘to want’.

(V7) “*Elle ne–* I’m going to use the imperfect and I’m trying to think of how to conjugate *vouloir* in the imperfect. For all of those o-i-r, I feel like, I want to conjugate them in the conditional. Because that’s what I feel like I use. *Vouloir. Voudrait*. But I feel like they have the same endings as the imperfect, and those are the ones that have been in my head more. [Interviewer: The conditional ones?] Yeah. Not because I just learned them more recently, but just because I feel like when we learned the conditional, we went more over the endings than when we learned the imperfect. Because the imperfect, it’s kind of just expected that you know the present conjugations, so you don’t really go over the

²⁴ In this instance, Sam pronounces the verb as *sentons* (first-person plural). However, she may be attempting to pronounce *sentent* (third-person plural).

²⁵ There are two subject-verb agreement patterns for *–ir* verbs. Verbs like *choisir* ‘to choose’ follow one pattern (i.e., *choisi-* base form and the following agreement: *–is, –is, –it, –issons, –issez, –issent*) and verbs like *sentir* ‘to feel’ follow a different pattern (i.e., *sen-* base form for the singular forms and *sent-* base for the plural forms and the following agreement: *–s, –s, –t, –ons, –ez, –ent*).

beginning conjugations, but sometimes they throw new verbs in after you learned the imperfect, but you're still using them for the imperfect, so you don't really know how to conjugate those verbs. It's like you never learned them in the present really. And even if you do, you're not going to remember them, because you're not tested on the present when you're learning the imperfect. [Interviewer: So, do you know *vouloir* in the present?] Yeah. For, would it be- [writes: *veux*] That would be 'I want'. That just must be that. [Writes: *voulons*] So, *elle ne voulait pas rester toute seule.*" (Sam, Task 4, Item 17)

After writing "*veux*" (first-or second-person singular present) and "*voulons*" (first-person plural present) in the margins, she uses the *nous*-form stem from *voulons* to form the *imparfait*. Sam does not indicate why she selects the *nous*-form. It is possible that she is triggered to recall *voulait* (third-person singular *imparfait*) from seeing the *nous*-form. It is also plausible that she recognizes that there is no stem to easily extract from *veux*. Earlier in Task 4, Sam also had some difficulty identifying the *imparfait* stem of *devoir*. The above explanation about the present tense forms— "It's like you never learned them in the present really"—parallels her statement below that she doesn't "remember how to conjugate *devoir*."

(V8) "*Elle*— I just want to say *devrait*, because she should, but that's the conditional. Is it? *Devrait, devoir*. I want to do the imperfect. But I don't remember how to conjugate *devoir*, because it's always weird for me when it's like *devu*. Oh, but that's the *passé composé*. It's confusing for me when it's O-I-R because I've never had, in my classes, going over the conjugations of words." (Sam, Task 4, Item 10)

Sam expresses some general frustration during extended talk about what she did not learn in class: "the conjugation of words" and specifically not those ending in "O-I-R" like *devoir* and *vouloir*. Sam hits a kind of impasse with *devoir*. She has knowledge of the stem-formation rule but she cannot (according to her) accurately produce this form because she needs knowledge that she does not have access to during the interview (the present tense form(s) of *devoir*).

In yet another situation, Sam does not use the *nous*-form stem-formation rule and instead posits two (incorrect) possible *imparfait* forms for *faire froid* 'to be cold (out)' and decides on

one. She mentions that she recently studied the subjunctive in class and that that might be influencing her decisions.

(V9) “*En plus, il fassait très froid dehors. [...] Um, I’m just remembering what I felt like we– We just went over the subjunctive so, now, I’m confused. Because that might be the subjunctive now that I think about it. Because [pause] Either the imperfect is *fer* or *fassait*. Hmm, let’s think. The subjunctive endings are not A-I-T. I don’t think so. I’m just going to go with that [*fassait*].” (Sam, Task 4, Item 4)*

Sam’s knowledge expressed here includes that this makes her think of the subjunctive, which she recently studied, and that the “-ait” is not a subjunctive ending. She does not draw on her knowledge about forming the stem or her knowledge that the *imparfait* is regular, and thus does not consider that neither “*fer*” nor “*fass-*” could be accurate stems.

Sam’s knowledge constructions regarding how to form the *imparfait* vary across all of these instances (e.g., with *sentir*, *vouloir*, *devoir*, and *faire*). In fact, the knowledge any one participant uses (and has potential access to) is not necessarily all called upon together each time the participants are using the *imparfait*. Instead, the elements of knowledge used differ across instances of use. For example, Sam draws on her knowledge about the stem-formation using the *nous*-form from the present tense with the verbs *sentir*, *devoir*, and *vouloir* during Task 4, but she cannot apply the stem-formation rule with *devoir* because she does not know the present tense forms. Then, she does not draw upon that knowledge at all when she considers “*fer*” and “*fassait*” as possibilities for the *imparfait* of *faire*, despite having used the knowledge about stem-formation before. The reason that her intuition is that it must be either “*fer*” (the conditional or future stem) or “*fassait*” (which combines the subjunctive stem and the imperfect ending) may be her knowledge that *faire* is irregular in the present and might also be irregular in the *imparfait*, or that she had recently learned the subjunctive tense, thus making it easier to recall the stem. This is all speculative, of course. What is of importance is that, no matter the reason, Sam’s

knowledge use is different across contexts and her non-use of a knowledge element (e.g., the stem-formation rule) in a single circumstance does not indicate that she does not have that knowledge at all. It does, however, leave an unanswered question: why doesn't Sam access that knowledge and does Sam (or anyone else) know a piece of knowledge if they do not access and use it when appropriate and necessary?

Unlike Sam and Grace, Taylor does not mention any knowledge of the stem-change rule. This does not necessarily mean that she does not have any knowledge of it, but, in the circumstances of the interview, including situations in which she was unsure of the stem (e.g., for *vouloir* 'to want'), she does not use this knowledge if she does have it. She does mention that her usual strategy is memorizing.

(V10) "When I think about it, I just memorize or try to memorize all the irregular tenses or the irregular verbs in one tense vs. if it— like how it's spelled or what the past participle is in a different tense. I don't know. I guess a lot of it is for me is memorization, which I guess is probably not the best." (Taylor, Task 4)

Taylor does verbalize knowledge about irregular stem spellings (i.e., *mangeait* 'ate/was eating' with an 'e' added to the stem). In her production during Tasks 3-5, Taylor uses the correct stem for *manger* 'to eat', as she explains in the following:

(V11) "Because I know it's something that's like— As opposed to *mangeait mangait* [gives soft and hard pronunciations of 'g']. It's the pronunciation of the 'g', so I think you keep the 'e' but I'm really not sure. I don't remember." (Taylor, Task 5, Item 8)

She has some knowledge of the need for a change in spelling with *manger* and its relationship to the pronunciation but does not indicate any details beyond writing what is necessary for the third-person singular forms she needed to use (i.e., she does not mention that the stem for the first-and second-person plural forms do not require the 'e'). The knowledge Taylor uses is relevant, accurate, and complete enough for the context of use. However, we cannot assume from

this that she would think or perform accurately if the subject were *nous* or *vous*, where the spelling change does not apply.

There is one other case of verbalizing knowledge about stem-formation that stands out as different from the others. In Task 3, Taylor wrote, “*Samuel était regarder la télé*” instead of the target-like “*Samuel regardait la télé*” ‘Samuel was watching tv’. In this instance, she indicates her intention to use the *imparfait* but wrote the *être* auxiliary in *imparfait* (*était*) followed by the infinitive “*regarder*” ‘to watch’.

(V12) “Yeah. So, *samedi dernier, Samuel était regarder la télévision*. And then I put *était* in the *imparfait* because it started in the past and we don’t know how long he’s been watching it for. [Interviewer: Ok. And so what is *regarder*?] And then, *regarder* is in the infinitive, because if you have two— Ok. I think this is correct, but— If you have a conjugated verb already, the next one is in the infinitive form So, he was watching tv.” (Taylor, Task 3)

In the above context, Taylor draws on some accurate knowledge—that an infinitive follows a finite verb. She states, “If you have a conjugated verb already, the next one is in the infinitive form.” That knowledge, however, was not appropriate (relevant) in this situation. It describes the use of an infinitive after a finite form of a verb in specific situations, like the near future or immediate past expressions like *aller* + INF ‘to be going to + V’ in *je vais manger* ‘I am going to eat’ or *venir de* + INF ‘to have just V-ed’ in *je viens de manger* ‘I just ate’.

Also with respect to the *imparfait*, participants expressed knowledge regarding subject–verb agreement (“conjugations” or “endings”). When the interviewer asks about how she knows what to write, Taylor mentions that she “write[s] it because [she] just know[s] that’s what the ending would be.” Sam and Grace also mention this same “just knowing” or ability to easily recall the morphology at different points. Grace additionally mentions another way that she thinks about the endings. Below she mentions a song she uses (and later on clarifies that it is to the tune of “The Mickey Mouse Song”).

(V13) “I was thinking about the endings for the *imparfait*. Because there was a stupid song that I learned in middle school. So, I was going through– [...]” (Grace, Task 3)

In addition to just knowing the “endings,” Taylor and Sam refer to number and person agreement using both linguistic and lay terminology.

(V14) “This [*Jean et Marco pleurait*] is not the correct past participle. That’s why. Because this [*Jean et Marco*] is plural, this [*pleurait*] is not. So, since it’s two, since we’re talking about more than one person, it should be in the third-person plural.” (Taylor, Task 5, Item #)

(V15) “*Jean et Marco pleurait*. That would not be *pleurait* because there was two people. That would be *pleuraient*. It would have to be a different conjugation. Because this was just like *Marco pleurait*.” (Sam, Task 5, Item #)

Taylor uses the term “third-person plural” to refer to the appropriate morphology and Sam mentions that it was “two people” and not just “Marco.” These instances show that subject–verb agreement (“conjugations”) may be recalled without being easily verbalizable and possibly without awareness (i.e., just knowing), they may involve explicit verbalizable knowledge (i.e., description of number and person agreement), and they may also be supported with knowledge memorized in the form of a song.

The various knowledge constructions discussed in this section highlight how knowledge constructions and their parts vary across instances of use for an individual and how a similar context and topic can elicit content that is similar across participants in some contexts and that differs across participants in other cases. A single person can—as in the case of Sam’s three reflections about producing an *imparfait* stem—use different knowledge during different moments that seemingly elicit the same application. Three of her constructions involved elements including knowing a stem-formation rule and the present tense of the verb (with *sentir*, *vouloir*, and *devoir*), although she was unable to produce one of these due to the inability to recall one part of the information she needed (present tense of *devoir*). While there are

similarities across these three instances of use, the difficulty encountered with *devoir* highlights that the construction of knowledge depends on the context of use and what related prior experiences (e.g., a learning experience) are available for recall. Her construction regarding the verb *faire* differed in that, although the context elicited similar information as the item immediately prior (*sentir*), she did not rely on the same combination of pieces of knowledge. She guessed some possible forms (all non-existent and likely related to recent learning of other tenses) and judged them using her knowledge regarding other elements of the structure (the subject-verb agreement). This latter construction further highlights that different contexts, for example the lexical item or the surrounding sentence, can elicit different combinations of knowledge elements. This does not indicate that Sam knows or does not know how to form the *imparfait* but rather that she is able to recall and use the most applicable information in some contexts and not in others. The other information that distracts her with *faire* is potentially related to the fact that *faire* is irregular in the present indicative, present subjunctive, and conditional moods, the latter two of which she had recently learned in class.

The similar contexts regarding the form of the *imparfait* discussed in this section also involve a variety of both similar and differing constructions across the three participants: Taylor does not indicate any particular reflection about form and recalls stems and agreement as individual elements, Grace similarly recalls stems and agreement as individual elements and uses a stem-formation rule and related knowledge elements or a song to recall the subject-verb agreements at other times, and Sam uses a stem-formation rule and related knowledge elements in some instances and not others. Grace and Taylor showed similar accuracy in producing the correct form, while relying on differing amounts of metalinguistic knowledge (Taylor's knowledge was primarily recall of language chunks and not metalinguistic in nature). Sam

showed lower overall accuracy while still using quantitatively more (accurate) metalinguistic knowledge use than Taylor. This difference occurred even though all three were given unlimited time to reflect and explain anything they used to help them produce the form.

It is additionally of interest that one participant did not access and use all of the relevant knowledge that they had used at other times (Sam with the *imparfait* of *faire*) and that one participant accessed and used irrelevant (i.e., not applicable to the situation) but accurate knowledge (Taylor and the infinitive verb form). The knowledge Taylor used would be considered accurate in some circumstances, thus suggesting that it is qualitatively different from something completely inaccurate (never true). Note that knowledge-in-use does not involve the simple knowing (or not knowing) of correct pedagogical rules. Rather, it is a more complex question of being able to recall and use accurate knowledge elements when they are relevant to the context of use.

5.3 Passé Composé

The French *passé composé* is composed of an auxiliary verb (*avoir* or *être*) in the present tense form and a past participle that may show no agreement, agreement (in gender and number) with the subject, or agreement (in gender and number) with the direct object. Negation (*ne...pas*) and reflexive/reciprocal pronoun (e.g., *se*) placement were addressed in the “Word Placement” section above and are not included in this section.²⁶ Table 5.4 reviews the structure of the *passé*

²⁶ The separation of analyses is not to imply that word placement is not a part of understanding the *passé composé*; rather, the sections were separated to present the analysis of grammatical word placement for both the *imparfait* and *passé composé*, since there was overlapping knowledge used.

composé, providing contexts and illustrations for auxiliary selection and past participle agreement.

A more detailed description of the *passé composé* can be found in Chapter 3. To facilitate discussion of knowledge about the structure of the *passé composé*, this section is divided into two sub-sections: knowledge regarding auxiliary choices and past participle agreement.

5.3.1 Auxiliary Verbs

The *passé composé* uses either the auxiliary *avoir* ‘to have’ or *être* ‘to be’ followed by a past participle. *Avoir* is generally thought of as the default auxiliary because it is used with a wide variety of verbs. The use of *être* is limited to a finite set of intransitive verbs (3 in Table 5.4 above) and when a clitic pronoun (e.g., *se*) is used—with pronominal verbs (5 and 6 in Table 5.4) and reciprocal uses of verbs (7 in Table 5.4). Some of the verbs that use *être* in the intransitive sense also have a transitive meaning, in which case the auxiliary reverts to *avoir* (e.g., *elle est sortie* ‘she went out’ and *elle a sorti la poubelle* ‘she took out the garbage’).

Table 5.5 shows that the participants showed a high level of accuracy in producing the appropriate auxiliary. In Tasks 3 and 4, the participant could use either the *passé composé* or the *imparfait*, thus leading to different numbers of possible uses of the auxiliary. Task 5 is separated into all possible productions of an auxiliary verb, since each item differed in the possible error-correction. The dashes indicate that the participant did not use the *passé composé* and thus did not have an opportunity to produce an auxiliary. Grace showed 100% accuracy. Taylor produced one incorrect auxiliary (*être* instead of *avoir* with the verb *échanger* ‘to exchange’ on Task 4) and used the third-person plural **elle se sont douchée* instead of the third-person singular *elle s’est douché* ‘she showered’ once. Sam produced one incorrect use of *avoir* where *être* considered correct (*il s’a demandé* instead of *il s’est demandé* ‘he wondered’).

Table 5.4

Past Participle Agreement and Auxiliary in Passé Composé

Context	Past Participle Agreement	Subject or Direct Object Agreement	Avoir or Être
(1) Transitive verb (“normal” subject-verb-object) <i>J’ai mangé une pomme.</i> ‘I ate an apple.’	No	-	<i>avoir</i>
(2) Transitive verb (direct object precedes verb) <i>Je l’ai mangée.</i> ‘I ate it.’ & <i>J’ai trouvé la pomme que j’ai mangée sur la table.</i> ‘I found the apple that I ate on the table.’	Yes	Direct object	<i>avoir</i>
(3) Verbs that use <i>être</i> (finite list ²⁷) (intransitive uses only) <i>Sarah est sortie.</i> ‘Sarah went out.’	Yes	Subject	<i>être</i>
(4) Transitive uses of verbs that use <i>être</i> in their intransitive form (<i>descendre, entrer, monter, passer, rentrer, repasser, retourner, and sortir</i>) <i>Sarah a sorti la poubelle.</i> ‘Sarah took out the trash.’	No	-	<i>avoir</i>
(5) Reflexive verbs <i>Sarah s’est lavée.</i> ‘Sarah woke up.’	Yes	Subject	<i>être</i>
(6) Reflexive verbs that have a direct object ²⁸ <i>Sarah s’est lavé les cheveux.</i> ‘Sarah washed her hair.’	No	-	<i>être</i>
(7) Reciprocals (direct object) <i>Sarah et Michelle se sont vues</i> ‘Sarah and Michelle saw each other.’	Yes	Subject	<i>être</i>
(8) Reciprocals (indirect object) <i>Sarah et Michelle se sont parlé.</i> ‘Sarah and Michelle talked to each other.’	No	-	<i>être</i>

²⁷ The complete list is available in Appendix E.

²⁸ When a direct object is placed before the verb, the past participle agrees with the direct object as in, “Sarah se les est lavés” (Sarah washed it [her hair]) in which *lavés* ‘washed’ agrees with the masculine plural *les cheveux* ‘hair’ represented by the direct object pronoun “les” in this sentence. This follows the same logic as direct objects placed before the transitive verb (See (2) in Table 5.4). This (uncommon) case did not come up during the interviews.

Table 5.5

Auxiliary Accuracy in Production

	Sam	Taylor	Grace
Task 3			
<i>avoir</i>	3/3	4/4	4/4
<i>être</i>	1/2*	1/1	3/3
Task 4			
<i>avoir</i>	8/8	6/7	7/7
<i>être</i>	9/9	6/6**	8/8
Task 5			
Change person of <i>avoir</i> (as→a) (Item 1)	--	1/1	1/1
Produce <i>avoir</i> (Items 5, f, & g)	2/2	2/2	3/3
Produce <i>être</i> (Items i & j)	2/2	1/2	2/2
Change from <i>avoir</i> to <i>être</i> aux. (Item 6)	1/1	1/1	1/1

Note: **avoir* used with reflexive; **all correct auxiliary, but one use of *sont* (3rd-person plural) where *est* (3rd-person singular) is required

In forming the *passé composé*, the three participants rely on some (accurate) basic knowledge that *avoir* and *être* are the only two possible auxiliary verbs.²⁹ Moreover, there is evidence that *avoir* serves the role of “default auxiliary,” while the use of *être* is confined to some describable contexts. The participants regularly volunteered explanations for the use of *être* as an auxiliary, but they did not do so for the “normal” uses of *avoir* with transitive verbs (see (1) in Table 5.4 above). In fact, when the interviewer asked Taylor to explain why she used *avoir* for the verb *demander* ‘ask’ in *son patron lui a demandé de partir* ‘her boss asked her to leave’, Taylor struggled to clarify her reasoning. *Demander* is a prototypical verb in that it uses the

²⁹ This is implied by questions or statements regarding only *avoir* or *être* and is not based on explicit verbalizations.

avoir auxiliary and the past participle does not show agreement with the subject (see (1) in Table 5.4 above).

The exchange about the use of *avoir* with *demander* is rather lengthy and is broken up into 4 sections for explanation and analysis below. Taylor questions what she wrote first, something likely influenced by the interviewer asking her to explain. The interviewer asked the participants to expand on their understandings with this type of question both when the participant had accurate language and explanations and non-target like or inaccurate language and explanations, but given the difference in proficiency and status of the interviewer and participants, it is possible that the participants took up requests for additional information as questioning the accuracy of their responses. In this situation, the interviewer's question seems to elicit some new reflection and use of a piece of knowledge she had not considered—*être* is also an auxiliary. From this, Taylor considers the indirect object pronoun *lui*, saying, "I guess, since *lui* is the direct object, that it could be *être*," evidence that she is drawing on knowledge that there is a link between using direct objects and selecting the appropriate auxiliary. This changes, however, when she corrects her identification of *lui* (an indirect object pronoun) at the end of the first excerpt below.

(V16.1)

Interviewer: Ok, so I want to ask you some more about these before we go on. So, here, *après cela, son patron lui a demandé de partir*. How do you know this one doesn't take *être*?

Taylor: Hmm. Um, *demander*, because he demanded of her or of them to leave. So, I think because- Oh, I guess, I guess since *lui* is the direct object, that it could be *être*. But I don't think that *demander* is- So, I know there is a list of verbs that could take either, and I don't think that *demander* is on there but I could be wrong.

Interviewer: And you say *lui* is a direct object?

Taylor: No, that's indirect object because you demand something of them.

(Task 4, Item 23, continued below)

She connects the knowledge of a link between auxiliary selection and the presence of a direct object to the verb in the context (*demander*). She considers whether *demander* belongs to the category of verbs to which this piece of knowledge is applicable. Note that she says, “So, I know there is a list of verbs that could take either, and I don't think that *demander* is on there but I could be wrong.” Although she is leaning towards saying that *demander* does not belong to this category (which is accurate), she nevertheless tries to apply this description or knowledge.

In the following excerpt (continued from above), Taylor provides a first version of her understanding of the link between auxiliary choice and the presence of a direct object.

(V16.2)

Interviewer: OK. And how would that relate to the *être* or *avoir* question?"

Taylor: Oh. Ok. So, then. So, I think, ok I could be wrong, but I think that if there is a direct object it's *être* and if it's indirect it's *avoir*, but–

(Task 4, Item 23, continued from above & continued below)

She constructs her understanding from the knowledge elements she has available in the context:

- She is semi-confident that *avoir* is the auxiliary with *demander*;
- there is a connection between the presence of a direct object and auxiliary choice for some category of verbs;
- *lui* is present in this context; and
- *lui* is an indirect object.

From this, she devises a description (that is inaccurately reversed) that a certain category of verbs take *être* if there is a direct object and *avoir* if there is not one and applies that to *demander*.

Using knowledge that deals with this category of verbs (that take either *avoir* or *être* depending on their use) is irrelevant, because *demander* does not belong to this group; using this irrelevant knowledge seems to be the main reason for the ensuing rule-reversal and confusion. With *demander*, Taylor shows confidence in her use of *avoir*, never changing it and she aligns her

verbalized knowledge construction to the context (where *avoir* is used and no direct object is present) since *lui*, as she explains, is an indirect object.

Her knowledge construction changes when she brings in a new knowledge element, as is shown in the continuation of this excerpt below. The interviewer asks Taylor to provide more details and Taylor draws on knowledge of a verb that she is more confident belongs to the category of verbs that may take either *être* or *avoir* as an auxiliary: *monter* ‘to go up/to take up’. In the following, she accurately explains that *monter* uses *être* when there is no direct object and *avoir* when there is a direct object.

(V16.3)

Interviewer: What makes you think that?

Taylor: Um, because, I think that- Well, I know that there's all the rules of if it's *être* or *avoir*, what is that, *monter* for example. How I learned it in high school and there was this picture of a guy going up the stairs and there was a picture of a guy carrying a bag up the stairs. So, if it was him doing it, so there was no direct object, then it was *être*, so that means this would be *être*, I think and then if he was carrying the bag up the stairs, then it was *avoir*.

(Task 4, Item 23, continued from above & continued below)

This knowledge, as she explains, is based on a memory of an image of a man going up the stairs (intransitive use, with *être*) and an image of a man taking a bag up the stairs (transitive use, with *avoir*) from her high school textbook. This new explanation of the link conflicts with her previous statement about why *demander* (which she identifies as having an indirect object pronoun *lui* and no direct object) uses *avoir* as the auxiliary.

With the support of the interviewer, Taylor recognizes the conflict between her first explanation that *avoir* is used when there is no direct object (based on *demander*) and her more recent explanation that *avoir* is used when the verb is followed by a direct object (based on *monter*). She is not able to resolve the conflict, however, ending with, “Because, now, I’m

confused.”

(V16.4)

Interviewer: Ok. So that was for *monter*.

Taylor: Yeah. I don't know if that's the same case with this or not.

Interviewer: But we have *demander* here.

Interviewer: Ok. So, what do you know about verbs that take *être* or even the ones that might take both?

Taylor: I know that it has to do with if there's a direct object or indirect object, but I'm not sure now which is which. Because now, I'm confused.

(Task 4, Item 23, continued from above)

Taylor is not able to explain why she used *avoir* in this context. This seems to be related to how she (through interacting with the interviewer) constructed her knowledge—in relying on a link between the presence of a direct object and auxiliary choice, a link that is true in some circumstances but that was not relevant to the situation. Also, the knowledge regarding the link between auxiliaries and types of objects present is easily reversed (as we saw Taylor do) and potentially confused with other related descriptions of use, like that subject–past participle agreement also depends on the presence or absence of a direct object for reflexive verbs. It is worth noting that the interviewer asks the same question on the following item (Item 24), *il a pris la place à côté d'elle* ‘he took the seat next to her’ and Taylor immediately states that she doesn’t “think it’s one of those verbs that can take either.” She does not expand or consider other explanations and quickly settles (accurately) on *avoir* as the default auxiliary.

The above excerpt from Taylor also shows evidence that Taylor has some knowledge that verbs belong to categories (or “lists”) and that belonging to one category or another informs auxiliary choice. In fact, each of the participants identified ways that they categorized verbs and how those categories differed in the auxiliary required (and also in past participle agreement, as explained later on in this section). Beginning with Taylor, she explicitly states that 1) there is a list of verbs that take either *être* or *avoir* depending on the context (as discussed above) and 2)

reflexive verbs use the *être* auxiliary. The knowledge regarding auxiliary choice with reflexive verbs is evidenced in statements like the two that follow.

(V17) “Because it’s reflexive, so you have to use *être*.” (Taylor, Task 4, Item 5)

(V18) “This is reflexive [...] and you’re using *être* as well and it agrees with the subject.” (Taylor, Task 4, Item 8)

There is one common category that Taylor does not mention: the finite list of intransitive verbs that use the *être* auxiliary (often called “*être* verbs” or “verbs that take *être*”). When she encounters these verbs, she relies on her knowledge about the category of verbs that can take either *être* or *avoir* and the link she has established between the lack of a direct object and the use of *être* (and *vice versa*). *Partir* ‘to leave’ is an example of a verb that requires the *être* auxiliary at all times—it can only be used intransitively. In writing her story in Task 3, Taylor considers whether or not to use *avoir* or *être* as the auxiliary verb with *partir*.

(V19) “Because he is leaving, as opposed to— I guess there’s some verbs that take *être* or *avoir passé composé* and *partir* is one of them, because if it does or does not have a direct object. Ok. Yeah. So, he is doing it to himself, but, even though it’s not really reflexive, there’s no direct object. So, *il est parti par la fenêtre. Oui.*” (Taylor, Task 3)

In this excerpt, Taylor uses two key knowledge elements for selecting an auxiliary. First, she (inaccurately) considers *partir* as a part of the category of verbs that can take either *être* or *avoir* as auxiliaries. She identifies that there is no direct object in the context and (accurately) decides to use *être*. This accurate but irrelevant knowledge (that *avoir* is used if there is no direct object) functions for verbs that use *être* because they are intransitive (i.e., they do not take a direct object), but does not function for the prototypical *avoir* verbs that may or may not be transitive (as shown previously). She, moreover, compares this use of *partir* to a reflexive meaning: “So, he is doing it to himself, but, even though it’s not really reflexive, there’s no direct object.” This reasoning tells us that there is also some attention to meaning as influencing the categorization of the verbs as those that take the auxiliary *être*. She essentially links intransitivity and reflexivity

by noting that the action is happening to the subject (hence, the lack of a direct object). This latter link between intransitivity and reflexivity is interesting because instructors of French might describe the intransitive characteristic of *être*-verbs as something that is being done by and happening to the subject (e.g., *aller* ‘go’, *venir* ‘come’, *tomber* ‘fall’, and *entrer* ‘enter’, for example). It seems like Taylor has made a link between that and the similar description often given regarding some of the reflexive verbs that students tend to learn early on in coursework (e.g., *se réveiller* ‘wake up’, *se lever* ‘get up’, and *s’endormir* ‘fall asleep’).

In addition to using the above knowledge elements, in other contexts, Taylor uses known chunks of language to check her intuitions. For example, when she is unsure of whether or not to use *être* or *avoir* for the verb *arriver* ‘to arrive’ (another verb that always requires the *être* auxiliary), she uses the first-person singular (*je* ‘I’) form to help her decide.

(V20) “With verbs that either take *être* or *avoir*, for some reason, I always say it in *je*, in the first-person, in *je* form first. And then, I, like it’s more commonly— I always or mostly use it in *je suis arrivée*. So, then, yeah. I think that’s right.” (Taylor, Task 4, Item 12)

She explains that she has more commonly used the first-person form—an astute observation that is likely true, since beginning language classes tend to elicit expressions about the learners’ selves and personal experiences and thus more first-person forms. She then connects her use of *suis* ‘be-1S’ to the appropriate form for the third-person singular (*est*) and writes “*elle est arrivée*” ‘she arrived’. This is similar to her earlier use of a known chunk for a new or different context (like using *ne se sont* in *passé composé* to inform her choice for the *imparfait* form, also in the above section). In this case, Taylor uses a different and more familiar person (first-person singular) of the same verb in the same tense to settle on the correct auxiliary (*être*).

Sam’s verbalizations regarding auxiliary choice include knowledge about how to identify what category a verb belongs to, somewhat similar to Taylor. Like Taylor, Sam uses *avoir* most

of the time and does not explain its use, giving *avoir* the status of default form. Unlike Taylor, Sam does not verbalize any knowledge about verbs that take either *avoir* or *être* in *passé composé* and only verbalizes knowledge about which verbs take the *être* auxiliary.³⁰

To identify when to use the *être* auxiliary, Sam focuses on two categories: reflexive verbs and verbs that use *être* as the auxiliary (meaning the finite list of intransitive verbs mentioned above). Also, like Taylor, she identifies reflexive verbs visually, noting the *se*, and associates reflexive verbs with the *être* auxiliary. The first example below is the moment when Sam remembers this link between reflexive verbs and *être* and, as a result, goes back to verify her previous responses on Task 4 and changes the auxiliary to *être* for any prior reflexive *passé composé* verbs. She continues to use this knowledge throughout this task and into the final task.

(V21) “When it’s, when it has the— Whatever this is called. [...] The *se*, then it’s reflexive. When it’s a reflexive verb, then it has *être* as the auxiliary verb.” (Sam, Task 4, Item 8)

(V22) “*Ils*, this I’m going to use— *Se sont*— [...] And then *être* because it’s a reflexive. *Réfléchi*.” (Sam, Task 4, Item 15)

In addition to using knowledge about the association of reflexive verbs with the use of the *être* auxiliary, Sam uses several different means to explain how to identify an *être*-verb. In the following, she first recalls, without needing to reflect, that *partir* ‘to leave’ is “a verb that uses *être*.” She follows that with additional information she can use to confirm (in this or other situations).

(V23) “*Il est parti par la fenêtre*. [...] Because *partir* is a verb that uses *être*. [...] I don’t even really know. I just know that we learned that— It didn’t actually really help me. I just

³⁰ The interviewer did not ask Sam to expand on her selection of the *avoir* auxiliary in the same way as she did with Taylor, thus offering different information about Sam and Taylor’s knowledge.

kind of remember, more movement, I guess. A lot of those verbs, except for maybe to be born and to die are all like moving verbs. And the thing that helped me was, in my textbook, they had a house and it showed the people moving through the house. They entered the house, they walked through the house, they waited in the house, and they left the house. And then there was like other things in it and that helped. It was nice to see because it helped me to link it to movement. I guess. *Versus* like anagrams. Are they called anagrams? No, probably not. Because there's like the Mr. and Mrs. Vandertramp. That doesn't help me so much because then you just have to memorize all those verbs and there's no reason. Like what's the reason? It's hard if you're just like, this is what you're going to know, that all these verbs are together. It was nice to have the description of all of these are really moving verbs except for *naître* and *mourir*. Or whatever. So, that's how I know and I guess I didn't look at them for the others. I didn't really even think about that for the other ones.” (Sam, Task 3)

Sam describes three ways she learned how to be sure that a verb belongs to the group that takes *être*. She first notes movement as a characteristic of most verbs in the category, with two exceptions, and then connects this to the house image from instructional materials, like the one mentioned by Taylor above. She adds that she learned a mnemonic device, which she calls “Mr. & Mrs. Vandertramp” but which is generally taught as “Dr. & Mrs. Vandertramp”, noting that this kind of memorization does not help her.

Sam again recalls the image from a textbook in a later task:

(V24) “I’m trying to think about if it’s between the *être* and or *avoir* for the auxiliary verb. Because I remember in the picture that’s in my one grammar book, I think. It has a house and the people move into the house and I think it has someone falling off the house, because that’s what *tomber* is. So, I feel like that’s— We’re going to use *être* for this one. *Sont tombés*.” (Sam, Task 4, Item 27)

She visualizes the relevant piece of the image, “someone falling off the house,” to decide that *tomber* ‘to fall’ belongs to the group of verbs that use *être*.

The above excerpts from Sam show evidence of three possible ways that she can identify the category of a verb (primarily for auxiliary selection): shared meaning (e.g., movement) or based on two different memory aids, a mnemonic device (with no associated meaning) or an image (reflecting at least some meaning). The knowledge content differs across these three ways

to identify the verb: a list of verbs (pneumonic device), a visual image (“*maison d’être*”), and a shared meaning and descriptive metalinguistic knowledge (i.e., movement and the exceptions). Sam’s preference for the image and shared meaning does not depict that of all students or even all participants in this study. However, she makes an interesting observation that meaning is missing from the pneumonic device and that meaning is important for her own ability to remember the elements in the list.

5.3.2 Past Participle Agreement

Past participle agreement in French can be quite difficult for many users of French, not only those learning it as a second language. It is highly grammatical in nature and redundant in meaning at the sentence level. However, (in-)accurate use of past participle agreement does convey meaning beyond that of the sentence. While leaving off agreement in personal conversations or text messages may be socially acceptable, inaccurate agreement in academic and professional genres can, for example, unintentionally convey meaning about the education or attention to detail of the speaker or writer. This is all to say that, although past participle agreement may seem unimportant in conveying a “past” meaning, it is an important piece of learning to use the past in French in a contextually appropriate manner.

For a complete description of the prescribed past participle agreement “rules,” see Chapter 3. Table 5.4 (above) outlined the appropriate use of past participle agreement. In brief, the past participle agrees with the subject when the auxiliary *être* is used (i.e., with reflexive verbs, with verbs that take *être*, and with uses of direct object reciprocal pronouns). Two exceptions exist—when a direct object follows a reflexive verb or when the reciprocal pronoun refers to an indirect object, the past participle does not agree with the subject. The past participle agrees (no matter the auxiliary) with a direct object that is placed before the verb (e.g., when the

past participle is part of an embedded clause and when direct object pronouns³¹ are used).

Among the verbs that take *être*, there are a few that also use *avoir* for their transitive sense (e.g., *retourner* ‘to return’ something vs. somewhere). The past participle agrees with the subject when the auxiliary is *être* but does not with *avoir*.

Sam, Taylor, and Grace had presumably all learned the complete description of past participle agreement over the course of their French study before participating in the current study. Sam would have been introduced to all of the information regarding agreement during her second semester of studying French (one semester prior to the study) and reviewed the concepts in the following course (during her third semester of study, which she was completing at the time of her interview). Taylor was in her first year of college and was completing a fourth-semester course and would have reviewed agreement in both her third- and fourth-semester university courses, in addition to having some experience learning it while studying French for three years in high school. Grace mentioned reviewing agreement in one of her graduate-level classes during the school year in which she participated in this study and also presumably had experience learning about agreement in her undergraduate program, as she majored in French.

As reported in Table 5.6 below, in production, Grace correctly produced agreement in all contexts but did not notice and correct one error during Task 5. Taylor used past participle agreement correctly in only two instances of ten and overused it when it was not required. Sam correctly used agreement three of eleven times when it was required and correctly left off the agreement all three times when it was not required with a reflexive verb (i.e., a reflexive verb

³¹ Recall that French direct object pronouns (*le*, *la*, and *les*) are placed before the auxiliary in *passé composé*.

followed by a direct object). Note also that none of the participants inaccurately added past participle agreement when the *passé composé* was formed with *avoir* nor did they verbalize any thinking related to doing so. Thus, the numbers presented in the table below exclude the “default” *avoir* + past participle form that does not require any agreement with two exceptions—the required past participle agreement when a direct object precedes the verb (as in Task 5, Items 5 & 7).

Table 5.6

Accuracy in past participle agreement on Tasks 4 and 5

	<i>Sam</i>	<i>Taylor</i>	<i>Grace</i>
Task 4 (Cloze)			
Correct use of agreement when required (with <i>être</i> auxiliary & reflexives)	2/7	1/4	6/6
Correct (non-)use of agreement when not required (with reflexive verbs followed by a direct object)	2/2	0/2	2/2
Task 5 (Error-correction)			
Correct use of agreement when required (with <i>être</i> auxiliary & reflexives)	1/2	0/2	3/3
Correct use of agreement when required (with <i>avoir</i> auxiliary & verb preceded by direct object)	0/2	1/2	2/2
Correct (non-)use of agreement when not required (with reflexive verbs followed by a direct object)	1/1	0/1	0/1
Totals			
Correct uses of agreement when required	3/11	2/10	11/11
Correct (non-)uses of agreement when not required	3/3	0/3	2/3

Based on these numbers alone, one might assume that Sam’s understanding of past participle agreement is more accurate than that of Taylor, particularly regarding exceptions

where agreement is not applied. That is, however, not the case, as Sam's understanding is based on the use of inaccurate knowledge that still leads her to accurate production.

Sam does not verbalize any knowledge about past participle agreement until the last item of Task 4: *ils (tomber) amoureux* 'they (to fall) in love'. While completing the last item of Task 4, Sam remembers to use past participle agreement with the *être* auxiliary.

(V25) "We're going to use *être* for this one. *Sont tombés*. And then I'm going to go through, because I just realized this, and make sure that all of my— [scanning task] If I have *être* as the auxiliary that I, like *elle est arrivée*, add an 'e'." (Sam, Task 4, Item 27)

There is not a clear reason why she is triggered to think about past participle agreement at this moment and not earlier when using the *être* auxiliary, but she is and she goes back through the entire task adding subject–past participle agreement to all *être*-verbs in *passé composé*. She does not, however, add past participle agreement to reflexive verbs in the *passé composé*. Instructed learners usually learn that reflexive verbs use *être* and show subject–past participle agreement sometime after learning how *être*-verbs function in *passé composé*. As Sam scans the text looking for and correcting the agreement with verbs that have the *être* auxiliary, she encounters *être* used with reflexive verbs and mentions the opposite description—that past participles of reflexive verbs do not agree with the subject in *passé composé*.

(V26) "I'm confused very much by that because, last semester, I remember my teacher said that, if it's reflexive, it doesn't agree with the subject. But now, this semester, my teacher gave me some weird rule that doesn't make sense to me, something about direct objects and stuff. [...] ³² I'm really confused by that rule. So, I'm still always confused by it. I've asked her a lot of times. So, I know that, *elle est arrivée*, I know that that would have an 'e'. [Interviewer: Ok. Are there any others like that?] *Sont tombés*. [pronounces a final /z/] There would be an 's' there. Just going off of if I used *être*. *S'est brossé*. I don't know there because there's- Like to me, from what I feel like I learned last semester, there

³² Irrelevant details Sam gives about her teacher have been removed here and again later in this excerpt.

wouldn't be an agreement, but my teacher this semester told me there is sometimes [...] I'm confused and it's been this whole semester and I asked her more than once and I'm still confused. She said something, like if it has a direct object, but then, also, that's all she says, but I don't always understand what the English- Because I don't know all the names of the parts of a sentence in English, because I just know how to form the sentences. So, it's very confusing sometimes, if I'm taught how to do French using [...] 'Oh. Only do agreement if there's an indirect object pronoun.' I don't know what that is. That's hard if it's put that way without a lot of- I like examples to see. But she, it was just on one little aside and I was like, 'You just messed up my whole idea of how this works.'" (Sam, Task 5, Item 27)

She notes her “confusion” at the discord between this understanding and new information presented in the course she was taking at the time of the study, noting that, “[her] teacher gave [her] some weird rule about direct objects and stuff,”—likely that reflexive verbs followed by a direct object do not have subject–past participle agreement. She attributes her inability to integrate this new information to not being able to accurately identify direct or indirect objects (or object pronouns) and does not call into question her knowledge of how agreement functions, thus suggesting the existence of knowledge elements (below) specific to her individual understanding. These are not metalinguistic or pedagogical grammar rules in nature, but rather knowledge referring to her own learning and understanding of what she needs to learn.

- I (or a person using French) need to be able to identify parts of a sentence (e.g., a direct object or an indirect object pronoun) to do agreement;
- I (Sam) cannot identify the necessary parts of a sentence;

We might also add that she has some knowledge regarding the necessity to (and even an affinity for) learn clear rules, something that was confirmed in other conversations with Sam

A key piece of Sam's knowledge is that there is a conflict between what she “knows” and what she has most recently learned in class. However, she is not able to resolve this conflict during the interview, which is likely due to the fact that she needs to know the “rule” before she can understand and integrate the exception into her thinking.

Sam's system for understanding agreement explains the results presented in Table 5.6 above. During both Tasks 4 and 5, Sam inaccurately drops the agreement with reflexive verbs, as in "*elle s'est réveillé*" 'she woke up' (Task 4, Item 2, and Task 5, Item 6) and she does not include the agreement in reflexives followed by a direct object, as in her correction from "*elle s'est cassée le bras*" to "*elle s'est cassé le bras*" 'she broke her arm' (Task 5, Item 10)—which is an accurate correction informed by an inaccurate metalinguistic description.

Grace's verbalizations and knowledge constructions regarding past participle agreement differed from Sam's, which is expected given Grace's more extensive experience studying and using French. As explained above, Grace accurately used agreement all but one time—she did not notice the need to remove agreement from the past participle in Task 5, Item 10 *Christine s'est cassé(e) le bras quand elle était petite* 'Christine broke her arm when she was little' (where *s'est cassé* 'broke' is an example of a reflexive verb in *passé composé* followed by a direct object). Grace's verbalizations focused on meaning during the early parts of Task 4 and she did not mention knowledge related to the agreement she was using. Her first mention of agreement occurred with Task 4, Item 7 *Elle (ne pas arriver) à trouver son dentifrice* 'She (not manage) to find her toothpaste.'

(V27) "Because I know sometimes when something is followed by a direct object, it changes how if we put *accord*³³ or not. I think. There's *à*, so it's not a direct object. I'm going to be ok with that. I'm going to let it slide. [Interviewer: So, you're not sure?] I'm not sure, but I think it's fine. And then, speaking-wise, no one would know if there's an extra 'e' on it or not, so I'm going to let it slide." (Grace, Task 4, Item 7)

³³ *Accord* 'agreement'

In her verbalized thinking about past participle agreement, Grace notes the link between the kind of object (direct or indirect) and agreement (“*accord*”). This thinking occurs in conjunction with her pointing out the preposition *à* and noting that what follows is not a direct object. Since she writes “*Elle n’est pas arrivée*” with feminine singular agreement, we know that she associates a direct object with no agreement and the lack of a direct object with agreement. It is also clear but unstated, like with Sam and Taylor, that the agreement is with the subject in gender and number.

Note also that, in the above verbalization, Grace uses vague language in her description of what she knows— “sometimes when something is followed by a direct object, it changes how we put *accord* or not.” The interviewer later asks Grace to clarify what this means, but first Grace moves on to the next item and expands on the above explanation.

(V28) “*Elle n’est pas*— Ok. Here, I don’t think— I can’t put the ‘e’ on. Now, I’m doubting it. I’m going to leave it. [meaning without the ‘e’] I think that’s the rule. [...] It’s one of those rules— I’m confused, more like uncertain, because it’s a rule that I learned recently, which is also kind of sad.” (Grace, Task 4, Items 8-9)

Although she still is still expressing uncertainty, Grace indicates that she should not “put the ‘e’ on” a past participle of a reflexive verb followed by a direct object. She remains vague, though, when asked about her understanding of the three items (7-9) she had just completed. In the following exchange, you see the interviewer attempt to untangle the pieces of knowledge that Grace is using.

(V29)

- Interviewer: Basically, you think that what happens is you don’t use the, you said *accord*—
- Grace: You don’t. See, it sounds crazy. I might be wrong, but I feel like—
- Interviewer: When?
- Grace: When it’s directly followed by a direct object.
- Interviewer: A direct object?
- Grace: Yes.
- Interviewer: And what is followed by a direct object?
- Grace: The verb is followed by a direct object.
- Interviewer: And just any verb?

- Grace: Yeah. Well. I mean– *Accord* only happens with *être* and then there’s a separate case when it happens with *avoir* in the *passé composé*. In the *passé composé*, when it has *accord* with *être*, and it’s followed by a direct object.
- Interviewer: So with verbs that use *être*–
- Grace: Yes.
- Interviewer: And that have a direct object?
- Grace: Yes.
- Interviewer: You don’t use the *accord*?
- Grace: Potentially. I think.
- (Task 4, Items 7-9)

In the three above excerpts from consecutive items on Task 4, Grace uses knowledge that:

- subject–past participle agreement occurs when the *être* auxiliary is used,
- no agreement occurs when a direct object is present (after a *passé composé* verb that is conjugated with the *être* auxiliary),
- *à* introduces an indirect object, and
- you look for a direct object immediately after a verb.

Grace talks about her understanding in terms of a traditional metalinguistic or grammatical “rule” for when to use (or not use) subject–past participle agreement in *passé composé*. She also brings up, without giving any details about her understanding, the special case of agreement with *avoir* (likely in reference to direct object–past participle agreement when the direct object precedes the verb).

She also takes her time later on to make sure that the past participle in *elle s’est posée* ‘she sat down’ (Task 4, Item 19) agrees with the subject. To do so, she checks “to see with *se poser* if there was anything after”, again highlighting her focus on looking for a direct object after the verb. In fact, all of Grace’s overt verbalizations about agreement involve a focus on identifying a direct object in some form or another. The above instances include a focus on the location of the direct object (after the verb) and the presence or lack of a preposition (e.g., *à*). In

the two following situations (Task 5, Item 7 and Task 5, Item J), Grace also reorganizes the words in the same statement to clarify how she knows that a particular noun is serving as a direct object.

(V30) “So, I put the “e-s” because, even though the *que* is there, it would’ve been— It is a direct object. It’s just inverted. Because *nous avons vu les actrices. Nous les avons vues*. And because actresses is plural and feminine, it has to make *accord*. [...] What do they call that? Like when it becomes the *le* or *la* and it’s inserted in front of the verb. I can’t think of what it’s called. But when it does that, that’s when it has to do it. [...] It’s also with *que*. *Les actrices que nous avons vues*. There’s probably a technical term. I’m sure there’s a technical term for it, but I’m not sure what it is.” (Grace, Task 5, Item 7)

Notice that in changing the sentences, she is able to integrate or connect to her understanding of the direct object as following the verb. In Task 5, Item 7 above, Grace begins with the *les actrices que nous avons vu(es)* ‘the actresses we saw’ where the object precedes the subject and verb (which are in an embedded clause, introduced by *que*). From there, she offers the canonical subject-verb-object (SVO) order *nous avons vu les actrices* ‘we saw the actresses’ and also gives *nous les avons vues* ‘we saw them’ which changes to subject-object-verb (SOV) order (*les* is the pronoun referring to *actrices* and immediately precedes the verb). She uses this series of alternate structures (SVO and SOV with a pronoun) to explain that *les actrices* is the direct object of the embedded clause *que nous avons vues* that follows. As such, Grace explains that the past participle must agree with the preceding direct object in gender and number (“feminine and plural”), noting that with (the relative pronoun) *que*, (the direct object pronouns) “*le* or the *la*” are both examples of the direct object preceding the verb.

In the paragraph portion of Task 5, Grace encounters the verb *retourner* ‘to return’ immediately followed by a noun phrase (*la semaine d’après* ‘the next week’). This is similar in form to the SVO structures above, where the (direct) object was in the form of a definite noun phrase (i.e., *le/la/les* + noun) following the verb, but *la semaine d’après* is a time adverbial and

not a direct object. Grace is aware that she needs to know if *la semaine d'après* is a direct object in order to settle on an auxiliary verb and past participle agreement (or not). After pausing for a moment, Grace reflects aloud on how she figures this out.

(V31)

Grace: *La semaine* wouldn't be a direct object, so it's fine.

Interviewer: You're thinking about—

Grace: The direct objecty thing I was talking about.

Interviewer: With the 'e' on the end of *retournée*?

Grace: Yeah, yeah. But I'm going to leave it because, technically, it's not. So, we're good.

Interviewer: Alright, technically, it's not a direct object, *la semaine d'après*?

Grace: I don't think that dates can be direct objects. I don't know if that's right but I feel like it, it would seem weird for it. I don't think it can be.

[...]

Interviewer: What's a direct object then?

Grace: I feel like a direct object, it could be like *elle l'a retourné(e)*. But then it would make it seem like she's returning an object.

Interviewer: Ok. And *la semaine d'après* is not an object?

Grace: No.

(Task 5, Item J)

Due in part to some prompting from the interviewer, Grace addresses how to identify a direct object. Like earlier, she compares two forms: *elle est/a retourné(e) la semaine d'après* 'she returned the week after' and *elle l'a retourné(e)* 'she returned it' (with the direct object pronoun preceding the verb). Her intuition is that these two sentences do not have equivalent meanings, thus making it impossible for the direct object pronoun *l'* and *la semaine d'après* to be referring to the same thing. Based on this reasoning, she (accurately) writes "*elle est retournée*" using the *être* auxiliary and agreement.

The way that Grace uses her language skills (i.e., in terms of intuitions, knowledge of accurate language, and proficiency, all often under the umbrella of implicit language knowledge) is interesting because it differs somewhat from the previously discussed uses of intuitive knowledge or knowledge of chunks of accurate language (as discussed in the Word Placement

and Auxiliary Selection sections above). In the two cases above (with *voir les actrices* and *retourner la semaine d'après*), she takes a sentence, reorganizes it grammatically (adding in pronouns or moving around elements of the sentence to SVO order) and compares those sentences/phrases to check for equivalence in meaning. In one case, she uses her knowledge of sentence structure (like going from *les actrices que nous avons vues* 'the actresses that we saw' to *nous avons vu les actrices* 'we saw the actresses' and to *nous les avons vues* 'we saw them') to clarify that *les actrices* is in fact the direct object of the verb it precedes in the context. In the other case (*retourner la semaine d'après*), she uses her knowledge of structure to move around the elements and then explains that changing *la semaine d'après* to a direct object pronoun (and moving it before the verb) would give a sentence whose meaning is not equivalent to the first sentence. She does not compare similar structures to clarify the structure. Instead, she changes the structure and checks to see if the meaning has changed, something that would require a certain level of proficiency and experience with French. This ability to manipulate elements across the multiple versions of the same sentence also implies a great amount of non-verbalized knowledge—for example, knowledge about how parts of speech function in a sentence and the relationship between referents and antecedents (i.e., the link between the object pronoun *la* and *la semaine d'après*, if *la semaine d'après* were in fact a direct object). The knowledge that she uses to analyze and make connections across sentences is not entirely explicit in nature. She relies on knowledge connecting the meaning that she interprets from the two versions of the sentence in addition to the knowledge about comparing meaning across similar sentences—knowledge that is evidenced from her behavior and seemingly not explicit verbalizable knowledge, but that is metalinguistic in nature. This may be something she has learned to do

outside of the classroom or it may be something she learned through instruction or instructional practices.

Taylor drew on knowledge that past participles of reflexive verbs agree with the subject. In the first two cases, she accurately added gender agreement (no addition of number agreement was necessary for the singular subjects) and stated the following:

(V32) “So, this would have an ‘e’ because it’s describing *elle*. [...] If it’s reflexive and uses *être*, it has to agree with the subject.” (Taylor, Task 4, Item 5)

(V33) “This is reflexive, so *avec un ‘e’*. [...] And you’re using *être* as well and it agrees with the subject.” (Taylor, Task 4, Item 8)

In both cases, she also noted that “it” (the past participle) agrees with the subject, noting both that the verb is reflexive and that it uses *être* as the auxiliary. For non-reflexives that use *être*, she also points out that subject–past participle agreement is necessary. The following excerpt is in reference to the verb *arriver* ‘arrive/manage’, which is a verb that requires the *être* auxiliary.

(V34) “I think that if you use *être*, it has to agree.” (Taylor, Task 4, Item 7)

For “*être* verbs,” Taylor expresses a single knowledge element—if *être* is the auxiliary, then the past participle agrees with the subject. For reflexive verbs, she combines the aforementioned piece of knowledge with knowledge that reflexive verbs show subject–past participle agreement (as shown above). She does, however, over apply this knowledge and does not verbalize any knowledge regarding the lack of agreement for reflexives (or other verbs that normally take *être*) when they are followed by a direct object. This is shown in the following example from Task 5 (*Christine s’est cassé(e) le bras* ‘Christine broke her arm’).

(V35)

Interviewer: Yeah. Instead of thinking about changing between *passé composé* and *imparfait*, what else could there be?

Taylor: I don't know, I would say agreeing with the past participle and the subject, but it already is.

Interviewer: Ok. Well, if there's nothing else, that's fine.

(Task 5, Item 10)

In this context, the reflexive verb *se casser* 'break' is followed by a direct object, but either she does not notice the direct object or she does not have access to the knowledge needed to realize that the agreement should be removed because of the presence of a direct object after the reflexive verb. The above example shows a case in which accurate but incomplete metalinguistic knowledge is applied. The knowledge used is arguably relevant, because the context includes a reflexive verb, but the missing piece of knowledge leads to an inaccurate evaluation of the structure. At face value, then, Taylor is wrong but in her verbalization there is evidence of accurate and relevant metalinguistic knowledge (elements). Her understanding is just missing the connection to the exception to the rule.

Also on Task 5, Taylor mentions that the presence of a direct object before the verb causes the past participle to agree (presumably with the direct object, based on her correction).

(V36)

- Taylor: Yeah. I think so. So, I think this is correct, *que nous avons vu*. Maybe put this (referring to 'sont') in the past. So, I guess you could say, *les actrices que nous avons vu étaient très jolies*. Like they were. *Les actrices que nous avons vu sont très jolies*.
- Interviewer: Could you also say, they are? Like the ones we saw are? |
- Taylor: Oh yeah. I guess. The ones we saw are. Yeah. If they're still– I'm assuming if they're still *très jolies*. I guess. Ok. So, I think since this is referring to *les actrices*. This is– Ok. Ok. So, I think that, since *que* is referring to *les actrices* which is the object of *que nous avons vu*, the past participle would have to agree. Because, even though it's *avoir*, it's coming before the verb. So, I think this would be with an '-es' because it's feminine plural. I think that's what's wrong with it.
- Interviewer: Because *les actrices* is before the verb.
- Taylor: Yeah, well, yeah. I think because *que* comes before the verb, because *que* is referring to the object of what you saw. Since, even though it's *avoir*, because I think if it came after it wouldn't agree, but since, it's coming before it would have to agree.
- Interviewer: Ok. And before you said there's direct objects and indirect objects. And this one is?
- Taylor: So, they, this is the direct object because you saw the actresses. Yeah.
- (Task 5, Item 7)

In this exchange that Taylor had with the interviewer, she focused on two elements: 1) that the (direct) object occurred before the verb and 2) despite the *avoir* auxiliary, the past participle still agrees. This repetition that agreement happens despite the use of *avoir* echoes her earlier focus on linking the auxiliary *être* with subject–past participle agreement. She does note that if the direct object (*les actrices* ‘the actresses’) “came after, it wouldn’t agree.” In a way, this is similar to Grace’s comparison of two forms. What differs is the purpose of comparison. Grace states the same sentence in the SVO form to clarify or build up her understanding while Taylor offers an explanation of how it would be different but there is no evidence that she uses the alternative structure as an argument in support of making a production decision.

5.4 Chapter Conclusion

In this chapter, I have presented detailed descriptions and analyses of the three participants’ verbalizations of knowledge related to the structure of the *passé composé* and *imparfait*, including word placement, stem-formation, subject–verb agreement patterns, auxiliary selection, and past participle agreement (with the subject or direct object). In the verbalizations, the participants used a variety of knowledge elements to construct understandings in each context including metalinguistic information (rules, descriptions, lists, and other types of knowledge like songs, images, and mnemonic devices), language knowledge (intuitions and familiar language chunks), and other pieces of knowledge (like knowledge about language learning). The analyses revealed that examining the verbalizations for accuracy of metalinguistic knowledge (i.e., pedagogical rules) does not provide information that might be key to understanding the ways in which the learners think about and use their knowledge for language production. Rather than focus on identifying (in-)accurate knowledge of pedagogical rules, the analyses were expanded to look at all the knowledge elements evidenced and used together in the

verbalizations – knowledge constructions. Those constructions and their parts were described and analyzed with the following themes emerging:

- a variety of elements are involved in the construction of knowledge about past tense morphosyntax in French, including metalinguistic (rules, descriptions, memory aids), linguistic (language chunks), and non-linguistic (learning processes) knowledge elements;
- those elements are used differently across contexts of use both within and across participants;
- accuracy (correct vs. incorrect) is not a comprehensive descriptor and its explanatory ability can be supplemented by characterizing the relevance of elements/constructions and the completeness of constructions (as based on the needs of the context);
- and intuitions and familiar language chunks can be used in a variety of ways (e.g., focus on comparing sound/feeling or meaning vs. deducing and re-applying metalinguistic information).

These analyses are taken up again and discussed with respect to the research questions in the following chapter.

CHAPTER 6 DISCUSSION

In this chapter, I interpret the descriptions and analyses with respect to previous research. The chapter is divided into 3 sections, each represented by one of the study's research questions.

6.1 RQ1: What knowledge elements and combinations of knowledge elements do participants use to understand the *imparfait* and *passé composé*?

Recall that the previous research reported on in Chapter 2 of this dissertation primarily used measures of metalinguistic knowledge that focused on 1) the ability to correct errors, 2) the ability to verbalize pedagogical grammar rules that explain those errors, and 3) the use of technical metalinguistic terminology in those verbalizations. Given the constructivist understanding of knowledge—that knowledge is constructed in the moment, is based on prior experiences, and is potentially different at each iteration (Crotty, 1998; Smith, et al., 1994)—it was expected that any instance of knowledge construction or use (including the use of pedagogical grammar rules) to explain both target-like and non-target-like language use would involve these and potentially other elements. Also considering the understanding that knowledge is based in all prior experiences, additional elements could include things learned (intentionally or incidentally) in classroom learning experiences, experience using first or other languages outside of the classroom, and information triggered by a given task or context of use. This research question, thus, deals with the content of knowledge constructions—including but not limited to the commonly studied metalinguistic knowledge elements (e.g., whole or partial rules and metalanguage)—used in learners' constructions of knowledge about language.

The detailed descriptions of each case and the thematic analyses in Chapter 5 highlighted a variety of examples of knowledge content, including metalinguistic (about language) knowledge, linguistic or language knowledge, and other knowledge in the participants' verbalizations. The metalinguistic knowledge included 1) knowledge about pedagogical

grammar rules, 2) knowledge of categories (as suggested in Roehr 2008b), characteristics for belonging to a category, and descriptions of how those categories function (e.g., knowledge of what rules apply to a given category), 3) knowledge of metalanguage, and 4) knowledge of memorization tools like pneumatic devices, songs, and images used to recall metalinguistic knowledge and/or pedagogical grammar rules. The (implicit) language knowledge includes intuitions or feelings (i.e., what sounds right) and knowledge of familiar language chunks. Other knowledge evidenced included beliefs about how to (best) learn a language, which remains related to language, but is not specifically about language use or features (metalinguistic), nor is it language knowledge. Each of the aforementioned content-types are discussed in additional detail in the following sub-sections. This is followed by a final section addressing the construction of knowledge-in-use (i.e., the combination of knowledge elements in the various contexts).

6.1.1 Metalinguistic knowledge elements

6.1.1.1 Pedagogical grammar rules.

The prior research reported on in Chapter 2 involved second language learners' use of metalinguistic knowledge, generally in terms of verbalized whole or partial pedagogical grammar rules, thus providing ample evidence that second language learners can and do use metalinguistic knowledge in the form of pedagogical grammar rules³⁴. Given these findings, it

³⁴ Some disagreement across studies indicates that learners' knowledge may adhere more or less to the expected linguistic descriptions or that the proportion of correct verbalizations may more or less strongly correlate to proficiency or course performance. However, the studies still do show that all participants are using at least some accurate or partially accurate verbalized pedagogical grammar rules or descriptions.

was expected that the participants would use some whole or partial pedagogical grammar rules. Grace, Sam, and Taylor all relied in part on metalinguistic knowledge that can indeed be described in terms of pedagogical grammar rules. Numerous examples of knowledge of pedagogical grammar rules or portions of those rules were present in the three cases described in Chapter 5. Generally, the results of this study align with previous research in that the learners did verbalize whole or partial pedagogical grammar rules at numerous points throughout their interviews. However, some of the verbalizations cannot be easily described as whole or partial rules and merit some additional exploration.

In some cases, learners' pedagogical grammar rules were reduced in such a way that they only applied in the context of use. For example, Sam and Taylor both verbalized knowledge regarding the order of *ne...pas* related to the auxiliary verb in *passé composé* (V1 and V4), saying "it goes around the auxiliary" (Sam) and "it would be around the helping verb" (Taylor). This is reflective of the pedagogical grammar rule that negation is placed around the auxiliary verb in the *passé composé*. This, of course, is a specific instantiation of a more complex pedagogical grammar rule that the varying forms of negation (*ne...pas* 'not', *ne...jamais* 'never', *ne...plus* 'not anymore', and so on) are placed around the first finite verb in the verb phrase (if there is one) and are placed together before a non-finite verb if there is no finite verb. There was no evidence, in this case, that Sam used the more generalizable rule to understand in this situation. In fact, one could speculate that, for Sam, this specific application (i.e., word order for negation of *passé composé*) of the more general rule is disconnected from other specific applications (e.g., word order for negation of a near future using the *aller*+INF structure), thus suggesting an order of acquisition of sorts. Taylor's comparison between negation in two different tenses suggests an alternative interpretation—that she can use a description that is

specific to the context and that she also has access to information about how that is related to similar descriptions (potentially via a global rule, potentially via connecting applications of similar rules across differing contexts). In yet another example, Taylor's statement, "It's the pronunciation of the 'g', so I think you keep the 'e'," (V11) illustrates the use of a partial pedagogical grammar rule—that *manger* and other verbs that end in *-ger* have two *imparfait* stems, the irregular *mange-* for the first-, second-, and third-person singular and third-person plural forms and *mang-* for the first- and second-person plural forms to maintain the [z] pronunciation of the 'g'. In this case, the verbalization included the portion of the rule that is appropriate for the context—that you "keep the 'e'" with the third-person singular subject for pronunciation. Pedagogical grammar rules are, at least sometimes, accessed as specific instantiations of more complex rules and those specific versions of the rule include enough information to accurately produce or evaluate the language in question.

Research that quantifies metalinguistic descriptions/explanations according to how correct an explanation is (as well as how much technical language is involved in some cases) (e.g., Gutiérrez, 2012; Roehr 2008a,b; Hu, 2011) does not address the contextualized use of pedagogical grammar rules. If a learner accurately verbalizes the applicable portion of a rule in a given context, she may or may not apply other portions or a more global understanding of that rule in a different context. This brings up the questions of a) what can be considered a pedagogical grammar rule (in the way that it is operationalized in previous research) and b) if it is even feasible to quantify differences in complexity for different contexts and related grammatical rules. Does one person have the same amount of knowledge about spelling change verbs as another if they explain, like Taylor, the minimal rule specific to the context *versus* if they explain a more global rule that gives all the cases in which the rule applies (i.e., you add

the ‘e’ to a root ending in ‘g’ before the vowels ‘o’ and ‘a’ or you add the ‘e’ to the root for the *nous*-form in the present and for the 1st person singular, 2nd person singular, and 3rd person singular and plural in the *imparfait*)? Given that knowledge is used according to the context, it would seem that quantifying correct instances does not really describe how much the learner knows. The kind of quantification used problematically assumes a certain set of grammatical rules tested for are all equivalent in their value and can represent how much metalinguistic knowledge a given learner possesses.

It was also possible for the use of a rule to involve knowledge of an existing rule that was not applied in the appropriate context. Taylor indicated that, “If you have a conjugated verb already, the next one is in the infinitive form.” (V12) This is an accurate reformulation of a pedagogical grammar rule that applies in circumstances other than the one in which she used it. She is likely to have learned the rule in at least one of the French courses she took and she over-applied it, somewhat perplexingly, to explain her use of the *imparfait*—thus creating a form that combined an *imparfait* version of *être* (which would have been the accurate auxiliary in *passé composé* or *plus-que-parfait*) and followed that with the infinitive form (which would be a past participle in either of the composed past tenses). This misapplication of knowledge likely differs from the findings in previous research because of the use of production in the current study. Since prior studies primarily rely on error correction and explanation (of underlined errors) or on the explanation of correct (also underlined) grammatical forms, they are not likely to elicit the same wide variety of knowledge about language that can occur with the increased cognitive load of producing language that fits ones intended meaning.

The use of abbreviated versions of rules rather than more general metalinguistic rules—that is to say, use of knowledge specific to a given context and the use of accurate information

that was misapplied (or irrelevant) suggests that knowledge of pedagogical grammar rules may need to be accompanied by or include knowledge of how or when to use the rule for it to be useful. Irrelevant or misapplied knowledge is discussed alongside the question of accuracy in more detail below in Section 6.3.

6.1.1.2 Categorization.

Roehr (2008b) put forward that knowledge about categories and relationships between those categories plays a role in metalinguistic knowledge:

“At the most general level, the processes of identification, labelling, linking, and comparative matching all involve the deployment of knowledge about categories and relations between categories.” (194)

Roehr’s findings were based on identifying a part of speech completing the same function across two separate sentences without the need to verbalize (in writing or speaking) a category name or description. She found that this ability to identify similar parts of speech in different contexts (what she called language analytic ability) was a component of metalinguistic knowledge. In a similar vein to Roehr’s findings, the participants in this study used knowledge related to categories and categorization. One particular difference from Roehr’s (2008b) study, however, is that the learners in the current study needed to name or describe the category in some form in their verbalizations (something they might not do if not trying to explain their thinking to another person). In her study, Roehr used a separate multiple-choice task in which participants circled a word or phrase in one sentence that completed the same function as an underlined word or phrase in a different sentence, thus showing how participants perform when categorizing forms in two correct sentences. In the current study, the participants were producing and evaluating forms and

used categorization of words or phrases and of types of verbs to inform or describe their choice of structure.

When thinking about the formation of the past tenses, the participants relied on categorization in two key ways: 1) they divided verbs into categories with specific characteristics used in *passé composé* (e.g., verbs that take either *être* or *avoir*) and 2) they categorized words or phrases into parts of speech (e.g., subject, verb, direct object). To do this, they used knowledge that certain categories of verbs exist (e.g., reflexive verbs and *être*-verbs), knowledge of characteristics of the items in a given category (e.g., most *être*-verbs express some kind of movement of the subject), and knowledge about rules that apply to a given category (e.g., reflexive verbs show subject–past participle agreement). Roehr’s (2008b) findings regarding knowledge of categorization were based on her participants’ ability to identify words or phrases of the same category across sentences or contexts. The current findings suggest that knowledge of categories is not just an ability to identify parts of speech within a sentence—it includes, in the context of language production, being able to identify lexical groups (e.g., *être* verbs in the *passé composé*) and associate that category with the appropriate set of grammatical rules.

6.1.1.3 Instruction-informed, non-rule-based metalinguistic knowledge.

The previous research reported in Chapter 2 primarily seeks to understand the role of explicit metalinguistic knowledge for instructed learners. The methods for measuring and quantifying metalinguistic knowledge required researchers to assume that participants could know a certain element—a pedagogical grammar rule or description—and to provide a sentence or context that would elicit that specific element from the participant. The current study also created a series of contexts that would elicit knowledge regarding specific language structures (in addition to other form-meaning elements, not treated herein), but the current study did not test

for knowledge of specific rules. Since the learners in the current study had experience in multiple French courses (as well as other language courses), it was expected that they had prior experiences with information about language that did not strictly fit within a list of possible pedagogical grammar rules. Indeed, the learners expressed knowledge about the French language that included memory aids (a mnemonic device, an image, and a song)³⁵ that helped them to produce accurate forms. The image of the house (sometimes called the “Maison d’être”) and the mnemonic device “Dr. & Mrs. Vandertrampp” aided in recalling which verbs belong to the category of “être-verbs”. The song, used by Grace (V13), aided in recalling the spellings for the *imparfait* conjugations. What each of these pieces (and their related verbalizations) share in common is that they were learned via instruction. Each participant mentioned learning them from a textbook or an instructor.

Classroom instruction involves a variety of descriptions of language use that cannot be described as rules and that do not necessarily fit the traditional definition of metalinguistic knowledge. These knowledge elements are not generally included in studies that measure metalinguistic knowledge, but they were a part of the metalinguistic knowledge constructions at some point during each case presented here. There is a potential wealth of metalinguistic knowledge and ways that learners think about language that is not captured when studies test

³⁵ Memory aids are including in the category of metalinguistic knowledge because they are used in constructions about language (i.e., they are meta-). They remain specific to thinking about language, in that they generally function in conjunction with other metalinguistic knowledge (like knowledge of categories or pedagogical grammar rules) to describe language use or structure. They are not linguistic or language knowledge, nor are they about the task or learning in more general terms.

only metalanguage and knowledge of metalinguistic rules (i.e., prescribed knowledge based primarily in pedagogical grammar).

6.1.1.4 Other metalinguistic knowledge.

The participants also relied on knowledge content that was metalinguistic (about language) in nature but that was not necessarily related to a traditional (pedagogical) grammar rule or description nor to elements commonly taught. For example, Taylor's association of reflexivity to the finite list of *être*-verbs (V19) and Sam's association of movement with *être* verbs (V23). These may come from learning experiences (i.e., something an instructor said or information in instructional materials), likely the case for the connection of *être*-verbs to movement, or they may be ways that a learner has built their own individual understanding that helps them, possibly the case for connecting reflexivity and *être*-verbs. These kinds of knowledge elements are not easily captured when testing for knowledge of specific rules, but they can play a role in how a learner decides what form to use. In this way, the knowledge, while not necessarily right or wrong, reflects the ways that learners try to make meaning of similarities across language structures. For Taylor, both categories of verbs (reflexives and *être* verbs) use *être* and she, or possibly someone who taught her this, found her own meaning in this similarity. Similarly, Sam, potentially having heard this from a past instructor, notices that many of the (non-reflexive) verbs that take the *être* auxiliary show movement of the subject and this knowledge element combined with other pieces (like the image of the "*maison d'être*") helps her to produce the accurate form.

6.1.1.5 Conclusion on metalinguistic knowledge elements.

Many of the above-mentioned ways to recall and retain knowledge are taught in language courses and are intended to support students' accurate use of structures. A typical metalinguistic

rule (or description) that one might test for is that verbs that take the *être* auxiliary show subject–past participle agreement (and, by contrast, that verbs that use *avoir* do not). In use, this knowledge requires a learner to categorize a given verb (e.g., this is an *être*-verb because it is in the “Maison d’être” image) and to know the characteristics of that category (e.g., the past participle should agree with the subject in gender and number). So, in the case of applying a rule like, “verbs that take *être* show agreement,” a learner must have knowledge that supports categorization and knowledge about the category (in addition to other knowledge)

The variety in types of metalinguistic knowledge discussed above may explain in part why studies comparing metalinguistic knowledge and proficiency do not all find consistent results (as described in Gutiérrez, 2016), while studies on explicit instruction (which do not test what “explicit” knowledge is learned, but rather test if the learners are able to use what they learned in performance) do find consistent results showing that explicit instruction leads to better learning outcomes.

6.1.2 (Implicit) Language knowledge elements

Metalinguistic knowledge is often described as explicit knowledge, whereas implicit knowledge refers to proficiency or underlying ability to use language without explicit reflection. Implicit language knowledge is then treated as another category (or the opposite end of the spectrum) from knowledge about language and its role in constructions of metalinguistic knowledge has not been considered. Several of the verbalizations described in Chapter 5 involved a combination of some language knowledge (i.e., underlying knowledge of language that is used automatically and does not involve reflection about how to use it) with other knowledge about language. In the same way that metalinguistic knowledge elements identified in this study do not all conform exactly to verbalizable pedagogical grammar rules, the content of

the language knowledge (as reported by the participants) varied. There are three different ways that implicit language knowledge occurs in the participants' interviews: intuition based on "sound" (i.e., what sounds better or correct), a familiar language chunk (i.e., a sentence or phrase known to be correct by the learner), and meaning-comparisons across two sentences/phrases with the same context and lexical items but differing morphosyntax.

Sam (inaccurately) used what sounded better when comparing two possible placements of the *ne* (negative clitic) regarding the reflexive pronoun *se* (V2). Taylor indicated that she thinks about a more familiar form that she has used more often (usually the first-person form) to decide which auxiliary verb sounds better, thus combining some knowledge about what she is more likely to know with some language knowledge and analyzing that form (i.e., identifying the appropriate auxiliary) and applying the information gained in the new context (as in V20). Grace also used a combination of language and metalinguistic knowledge when she was trying to identify whether *la semaine d'après* 'the week after' is a direct object—she used her ability to interpret the meaning of two sentences and compared the meanings to see if the direct object pronoun in *je l'ai retournée* 'I returned it' could refer to *la semaine d'après* in *je suis/j'ai retourné(e) la semaine d'après* 'I returned the week after' (V31).

These and other examples from the cases analyzed in this dissertation show that implicit language knowledge and metalinguistic knowledge (be it explicit or not) may not be clearly divided in such a way that one causes the other. The use of both in the cases presented here show that the two are mutually supporting one another—language knowledge helps to fill in gaps in metalinguistic knowledge and vice versa. A particularly clear instantiation of this is Taylor's series of reflections regarding auxiliary selection for a verb that she thought could take either *être* or *avoir* (V16). She used her own version of the related metalinguistic rule but it was the

opposite of the accurate description. Then, by considering some language (a phrase or sentence) that she knew to be correct (i.e., implicit language knowledge), she was able to backtrack and correct the metalinguistic rule. Although she was not able to come to a final description that fit the circumstance, she very clearly used language knowledge to inform her metalinguistic understanding.

6.1.3 Other knowledge elements

Some knowledge elements that can neither be classified as linguistic nor metalinguistic came up during the interviews with Sam, Grace, and Taylor. These kinds of elements are not generally addressed in research about metalinguistic knowledge, but some of them appeared to play a role in how the participants were thinking about language. For example, Taylor stated that she does not use any rule for the imperfect formation and that she just memorizes the forms and also that she tries to use associations to help her, rather than just memorizing lists. Sam, on the other hand, discussed how memorizing lists with no clear connection among elements did not help her to learn. This information helps to understand why Sam relied on information about how elements in categories were related to one another (e.g., *être* verbs as often indicating movement). While these knowledge elements do not necessarily reveal what all learners think, they are briefly discussed here because they do provide some background information about why an individual learner might be more or less likely to use specific knowledge elements.

6.1.4 Combining knowledge elements: Knowledge-in-use and variations in knowledge use across contexts

This study is framed using a cognitive constructivist lens that considers that knowledge is used (in context) in such a way that a variety of knowledge elements are used together to understand a concept or complete a task. The above three sections addressed the content of the

elements involved in those constructions and this final section focuses on how those elements are combined in the context of use. Research within a cognitive constructivist framework assumes that constructions are context-dependent, or that the exact combination of knowledge elements at one instant is dependent on the task and the learner (and other people or elements) involved in completing the task. The analyses revealed examples of how individual participants combined multiple elements of knowledge for a single context and also that an individual participant might use a different construction (i.e., combination of knowledge elements) for a similar topic or grammatical description or explanation. That is to say that a single person's metalinguistic knowledge constructions regarding one phenomenon may differ across contexts.

Taylor's explanation of how she knows when to use the *avoir* (or *être*) auxiliary (V16.1) is a clear illustration of knowledge elements being constructed in use. In explaining the use of *avoir* as the auxiliary with the verb *demander* in *passé composé*, she began by drawing on knowledge about a category of verbs (e.g., verbs that take either *être* or *avoir*) and their relationship to direct and indirect objects (likely influenced by the presence of the indirect object *lui* in the item, *il lui a demandé de partir* 'he asked her to leave'). She (vaguely) recalled a rule about these verbs regarding the use of *être* or *avoir* and the presence of a direct object, which she connects to the item (which has an indirect object and for which she is explaining her use of the *avoir* auxiliary). In combining the fuzzy knowledge of that rule with the context in which she used it, she comes to a first conclusion that *avoir* is used if there is not a direct object. However, she brought in another piece of knowledge that she was sure about—*monter* belongs to the group of verbs that take either *être* or *avoir*. Using that, she also recalls an image (the "*maison d'être*") from previous instruction that helps her to clarify that *monter* 'to go up/to take up' takes *être* when there is no direct object and *avoir* when there is one. She reconstructed her understanding

of the aforementioned “rule” to follow this familiar example and then had two conflicting understandings, one associated with *demander* in the way she had just used it and one associated with *monter*, a familiar context she was using to support her understanding. She did not come to a conclusion about which one was accurate and moved on after stating that she was “confused”. There are two key takeaways here. First, this example illustrates a knowledge construction that includes a variety of elements of previously learned knowledge (e.g., category of verbs that take either *être* or *avoir*, relationship between auxiliary choice and direct objects, and *raison d’être* image from instruction) in addition to knowledge that is related directly to the context of use (*demander* uses *avoir* and has no direct object). The way these elements, particularly the grammar rule she recalls, change over the course of this verbalization (with *demander* and *monter*) highlights how a learner’s metalinguistic knowledge construction is related to the context. With AVOIR + *demander* + INDIRECT OBJECT, she thinks the rule is that *avoir* is used when there is no direct object and, with ÊTRE + *monter* and no object, she thinks the rule is that *être* is used when there is no direct object. Second, the outcome before the interviewer asked for more information (*avoir* is used when there is no direct object) would be classified as incorrect or mostly incorrect³⁶. However, the full verbalization shows that Taylor has access to and can use myriad knowledge elements that are “correct” in the sense of grammatical rules/descriptions. In written verbalization studies, Taylor might only provide her first explanation and then be classified as not having this knowledge (and potentially not having much

³⁶ This earns a zero out of two, up to a one out of four, or a two out of six, depending on the scale selected by the researcher. The 0–4 (Elder & Manwaring, 2004) and 0–6 (Gutiérrez 2013; 2016) scales give credit for the use of technical language (e.g., direct object) even if the verbalization contains an incorrect rule.

metalinguistic knowledge, as some of the studies concluded about their participants) in this situation, whereas there is clear evidence that there is much more going on than what her first surface description suggests.

A single learner may also use different knowledge elements and thus invoke different understandings of the same concept across contexts. Taylor's above inversion of elements to fit the context is one example of that. Another example involves a participant's knowledge changing across multiple instantiations of the same context, rather than in the same verbalization. Sam, when trying to produce the imperfect form and identify the base, uses slightly different knowledge elements each time. With the imperfect form of *sentir* 'to feel' (V6), she uses knowledge that either the *nous*-form or *ils/elles*-form provides the base and knowledge of the ending (i.e., conjugation or subject–verb agreement) to get *sentait* (which is accurate). With *vouloir* (V7), she writes the *nous*-form and the *je/tu*-form and (correctly) uses the former as the base. With *devoir* (V8), she identifies that she does not know the present tense forms and thus cannot identify the base. And finally, with *faire* (V9), she offers two possibilities *fer* and *fassait* (neither of which resemble the correct *fais-*) and uses knowledge that *-ait* is an imperfect ending to inaccurately select *fassait*. In the last instance, she does not make any mention of using the *nous*-form to identify the base for the *imparfait*. The differences highlight how the context—in this case it is seemingly the base verb that triggers differing understandings—can impact how a learner uses the knowledge potentially available to them. On a written verbalization measure that only looks for evidence of a specific rule (and perhaps in only one instance or item), Sam might be evaluated as (partially) knowing some metalinguistic rule if given one context while being evaluated as knowing the same rule if given a different context.

The participants' means of understanding the French past tense structures included knowledge constructed from a variety of elements (not just pedagogical grammar rules using technical language) and some of those understandings (i.e., constructions) varied across contexts. The verbalizations discussed above reflect the way that a context might trigger a certain set of elements (and not trigger other elements) for a single learner, as well as a different use or set of elements for another learner, which is expected if knowledge is constructed in the moment rather than existing as a whole concept. This also aligns with the node/mode/DMC framework (Sherin, et al., 2012), in which a set of elements/nodes always or almost always occur together (mode) or a set of elements (and their related modes) are activated together in a particular context (DMC). Consider Taylor's explanation of the use of *avoir* in V16 (discussed above) in the context of her entire interview—when explaining or verbalizing her knowledge about which auxiliary to use (except in the case of reflexive verbs which are easily identified by the *se*), she activates her knowledge about the category of verbs that take either *être* or *avoir*, either to say that a verb does not belong to that category or to activate and apply the rules related to that category to the verb in the context. Since this knowledge of this category seems to regularly co-occur with thinking about the auxiliary, this likely reflects the existence of a mode containing at least two regular co-occurring knowledge elements (choose between the *être* and *avoir* auxiliary and category of verbs that take either *être* or *avoir*). Sam's knowledge, on the other hand, varies depending on the context of use, suggesting that it is (or at least was at the time of the interview) a series of activated elements that are highly dependent on context and are not necessarily always coactivated (i.e., a DMC).

6.1.5 Section Conclusion

To briefly summarize the details regarding the first research question, the participants in this study used a variety of knowledge elements in their metalinguistic knowledge constructions. Those elements ranged from metalinguistic, to language, to related non-linguistic knowledge. The elements were combined in use in such ways that the same participant's knowledge constructions could change over a single item or across multiple similar items, thus aligning with the idea that knowledge constructions can involve modes (knowledge elements or nodes that commonly co-occur) or DMCs (knowledge elements constructed together for a given situation, but that do not necessarily regularly co-occur).

6.2 RQ2: In what ways do the participants' metalinguistic knowledge constructions align (or not) with target-like descriptions?

The second research question asks about the characteristics of the knowledge elements and metalinguistic knowledge constructions, particularly those characteristics that impact whether or not the construction can be described as "accurate." In previous studies, accuracy of metalinguistic knowledge evidenced by verbalizations was primarily measured according to whether or not a written verbalization corresponded to a pedagogical grammar rule (e.g., Hu, 2011; Roehr, 2008b) and sometimes with some additional nuance, including whether the verbalization included the appropriate metalanguage (e.g., Elder & Manwaring, 2004; Gutiérrez 2013, 2016).

In attempting to reconcile the need to evaluate accuracy of metalinguistic knowledge constructions with the fact that a given verbalization (i.e., metalinguistic knowledge construction) could contain myriad elements that may themselves be accurate or inaccurate independent of the accuracy of the overall construction, accuracy, relevance, and completeness emerged as descriptors of both knowledge elements and overall constructions. Accuracy was

applied to both elements and constructions; it was used to describe whether or not an individual element or an overall construction reflected something true about the language. Relevance was primarily applied to elements; it emerged as a means to differentiate between knowledge elements reflecting a truth about the language but that was not applicable in the context.

Completeness was used to describe constructions (but not elements) and served to describe situations in which accurate (and relevant) elements were complete enough for the context of application (i.e., leading to an accurate use of language) or not complete enough (i.e., missing a necessary additional knowledge element) and thus leading to an inaccurate overall construction or application of that knowledge. Completeness and relevance differ in that incompleteness refers to an instance where two highly related descriptions of language use must be combined to understand in the context (i.e., exceptions to rules, as in the following: 1) past participles of reflexive verbs agree with the subject; 2) past participles of reflexive verbs do not agree with the subject when there is a direct object following the verb). Relevance refers to using knowledge elements that are applicable to the given context, meaning that irrelevant knowledge elements in one context could be accurate (and relevant) when used to describe a different category of verbs or an entirely different phenomenon.

What is key here nevertheless is that a whole knowledge construction (i.e., a participant's verbalization regarding a phenomenon in a single context) was broken down into parts in order to understand its accuracy. Simply coding irrelevant (but accurate) knowledge as "inaccurate" misses the complexity of what it means to know something about language, including knowing pedagogical grammar rules. Using an accurate formulation of a non-relevant pedagogical grammar rule implies more than just not being able to recall the appropriate rule (or other

knowledge to supplement) in the context; it also suggests that a learner does not have the knowledge necessary for knowing when to apply the irrelevant piece, either.

6.2.1 Accuracy of knowledge elements

Considering the accuracy of elements of knowledge-in-use in addition to overall accuracy in verbalizing grammatical descriptions or rules can help to clarify why some findings seem to imply that learners do not have much metalinguistic knowledge (e.g., Gutiérrez, 2016).

Inaccurate knowledge elements can interfere with an individual's overall understanding of how to produce (or evaluate) a particular form (e.g., the *imparfait*). For example, a form more recently learned in class may come to mind more readily or a similar form (e.g., the similarity in conditional and imperfect endings in French) may be easily triggered. In at least one instance, Sam was aware that she was potentially thinking of the conditional or subjunctive forms that she had recently learned, but was unable to elucidate the *imparfait* form. In V9, she invented a new form of *faire* 'to do' in the *imparfait*: "*fassait*" (a combination of the subjunctive stem *fass-* and the *imparfait* ending *-ait*) and compared it to "*fer*" (the conditional/future stem). The inaccurate elements here are the word forms that she considers as options. These are similar to some recently learned forms and seem to distract Sam from correct knowledge that she had previously used (that the present *nous*-form is used to identify the stem). In the overall construction of knowledge regarding how to form the *imparfait*, she does use accurate knowledge that *-ait* is an *imparfait* ending. However, because she is combining that accurate knowledge with inaccurate knowledge, she cannot identify the full correct form and instead settles on *fassait*.

6.2.2 Relevance of knowledge elements

The results from this study show evidence that, in addition to accuracy, the relevance of the knowledge elements involved in a metalinguistic knowledge construction can play a role in

whether a learner can construct knowledge that supports accurate language production. For example, why does Taylor, who is generally able to accurately produce (structurally-speaking) the *imparfait*, write *Samuel était regarder la télé* instead of *Samuel regardait la télé* ‘Samuel was watching tv’ (V12) In this case, Taylor used the imperfect of *être* ‘be’ and created a form that resembles the English use of ‘be’ to form the continuous past (e.g., Samuel was watching tv) with *être* in the *imparfait* (*était*) and *regarder* ‘to watch’ in the infinitive form. When asked to explain why she wrote what she did, she justified her use of the infinitive by explaining that you must use an infinitive after a conjugated verb. This rule-based explanation is an accurate piece of metalinguistic knowledge in some circumstances but it is not relevant to the instance in which she used it. It may have led her to produce the inaccurate form and did not support her in making any corrections when more information was solicited by the interviewer.

In another verbalization, Taylor used some irrelevant—but at least partially accurate—knowledge to explain the use of the *avoir* auxiliary with *demander* (V16). She drew on her (accurate) knowledge that there is a group of verbs that take either *être* or *avoir* as an auxiliary in *passé composé*. This knowledge was, however, irrelevant, as *demander* is not a verb that belongs to that group. The irrelevant knowledge led her to use additional knowledge about how when to use *avoir* and *être* with those verbs, which she tried to explain by looking at the context in which she had used *demander* (i.e., *il lui a demandé de partir* ‘he asked her to leave’, with the indirect object pronoun *lui* preceding the verb). This, then, led her to a reversed understanding of the association between the presence of direct objects and the use of *avoir*, an inaccurate metalinguistic construction that contains some accurate but crucially irrelevant elements.

The above contexts illustrate how an irrelevant piece of knowledge can derail how a learner understands a concept and lead to an inaccurate use of language (the first of the two

cases) or an inaccurate explanation of an accurate use of language (the latter case). They also serve to illustrate the discussion in the following section regarding the completeness of an overall construction: given these two instances of use of irrelevant pedagogical grammar rules or descriptions of forms, it seems that knowledge of pedagogical grammar rules may be incomplete or not useable if the learner does not have a means to identify when the particular rule is applicable or relevant. There may be additional knowledge needed, like knowledge about categorization to aid in accurately applying rules related to auxiliary choice or perhaps some kind of knowledge of exceptions (maybe a metalinguistic rule/description, prototypical language examples, or some combination of both) that indicate when not to use a given rule (e.g., the infinitive form following a finite verb in the same verb phrase does not apply to composed tenses, which require the use of a past participle).

6.2.3 Completeness of metalinguistic knowledge constructions

It is possible for a learner's knowledge to be true or accurate but lacking some necessary piece for the context, something that is intuitively more likely to happen with a complex rule or complex structure. In the following, we recall several examples where the (in-)completeness of a knowledge construction can explain how a combination of accurate (or mostly accurate) knowledge elements ended in an inability to accurately produce or describe a language form.

Recall Sam's knowledge about word order for the negation and the reflexive/reciprocal pronouns *se*. Independently, Sam showed accurate knowledge (and accurate production) regarding the placement of *ne...pas* either around the auxiliary in *passé composé* or the main verb in *imparfait* in multiple instances in Tasks 4 and 5. She also accurately placed the *se* before the auxiliary or main verb as needed. Although she has some knowledge of where these elements go with respect to the verb, when Sam encountered the *ne...pas* and *se* together with the same

verb, she drew on her accurate knowledge about each individual piece. However, she was missing a piece that would allow her to accurately order the *se* and *ne* before the verb. In the same situation, Taylor had similar difficulty with this metalinguistic knowledge element (describing the order) but was able to extrapolate from a known chunk of language and to recreate the same word order (*ne se*) in the new context. In these two cases, both Taylor and Sam show similar accurate knowledge of word order, but Sam's construction is missing something, whereas Taylor is able to use some familiar language in her construction. Both begin with "partially accurate" metalinguistic knowledge elements regarding where to place negation and the pronoun, but Sam's understanding remains incomplete, while Taylor's understanding is completed with knowledge of a known language chunk.

In a similar situation (also discussed in the above explanation of how knowledge constructions differ across instantiations), Sam had previously shown accurate knowledge of the *nous*-form stem-formation rule for *imparfait* but was not able to use that rule in a new context because she lacked knowledge of the present tense *nous*-form of *devoir*. In that case, her metalinguistic knowledge about stem formation and subject–verb agreement for the *imparfait* was accurate and relevant, but she was missing knowledge of the present tense forms.

Yet another example of incomplete knowledge is Taylor's overgeneralization of subject–past participle agreement for reflexive verbs in the *passé composé*. She regularly used and verbalized her knowledge that the past participle of a reflexive verb agrees with the subject. In most cases, this is accurate knowledge that can be used on its own, but when there is a direct object that follows the verb, the past participle no longer agrees. However, Taylor stated that reflexives agree—which is accurate most of the time—in all cases of a reflexive verb in *passé composé*. In applying accurate but incomplete metalinguistic knowledge, she produced non-

target-like agreement two times in Task 4 and misevaluated the agreement in in Task 5, Item 10 (accepting the incorrect agreement in *Christine s'est cassée le bras*).

Considering a knowledge construction incomplete implies that there is something missing that would allow the participant to accurately perform or evaluate language, but note that, in each case, the construction might be supplanted with some implicit language knowledge (like Taylor's knowledge of a similar form in the first section) or with some other knowledge element or elements, perhaps metalinguistic in nature.

6.2.4 Accurate production with inaccurate or irrelevant metalinguistic knowledge constructions

The above discussion has focused on ways in which accurate knowledge elements were involved in constructions that led to both accurate and inaccurate overall metalinguistic knowledge constructions and language production. There was also one example of an inaccurate metalinguistic knowledge element—Sam's use of the knowledge that reflexive verbs do not show subject–past participle agreement—that led to both accurate and inaccurate language production and evaluation. Sam used knowledge that reflexive verbs do not agree for inaccurate production (i.e., leaving off necessary agreement) in most cases. However, in three cases, this inaccurate metalinguistic description led her to produce an accurate form (Task 4, Items 8 & 9), and Task 5, Item 10).

In yet another context, similar to the one with *demander* described above, Taylor (over-) applied her knowledge about verbs that may take either the *avoir* or *être* auxiliary depending on their transitivity to the verb *partir* 'to leave'. Like with *demander*, *partir* does not belong to that category. Since *partir* is only used intransitively and requires the *être* auxiliary, her use of

irrelevant knowledge aligned with (but did not accurately explain) the auxiliary choice that she had made.

An accurately produced form in this study did not necessarily indicate that the learner could explain why it was as it was. While it is not necessary for a language learner/user to be able to describe all their language choices (and might even hint at some underlying or implicit language knowledge), this could be a confounding factor in studies that indicate that error correction or accurate judgments (on untimed tests) are evidence of explicit metalinguistic knowledge. It would be difficult to tell to what extent those tests capture inaccurate knowledge and/or implicit language knowledge.

6.2.5 Section conclusion

The accuracy of a metalinguistic knowledge construction can be described by looking at the accuracy and relevance of its component parts, as well as whether or not it includes all necessary information, rather than judging the accuracy of the whole verbalization (i.e., metalinguistic knowledge construction). By considering the component parts, one can avoid some of the issues with quantifying and giving number scores to certain types of knowledge—a practice that privileges rule-based knowledge that uses technical language. When looking at the component parts, it becomes clear that learners do know a lot about language. Much of their knowledge is indeed accurate, but issues seem to arise with knowing when to apply that knowledge (relevance) or not having additional necessary pieces of knowledge to accurately understand a concept (completeness).

6.3 RQ3: What knowledge does language analysis (i.e., language analytic ability) involve?

Recall the distinction between the study of knowledge content and knowledge form (Sherin, Sherin, & Madanes, 2000) and the related discussion regarding the comparability of studies that focus on knowledge content with one another and those that focus on knowledge

form with one another. This dissertation has primarily focused on the content of the participants' metalinguistic knowledge constructions (e.g., metalinguistic descriptions or rules, knowledge of categories, memorized elements, known chunks of language) and characteristics that can be used to describe constructions and their content (e.g., (in-)accurate, (ir-)relevant, and/or (in-)complete).

Language analytic ability, defined as “a learner’s capacity to infer rules of language and make linguistic generalizations or extrapolations” (Roehr, 2008b: 175, referring to Ranta, 2002 and Skehan, 1998), falls somewhat between content and form. Language analytic ability refers to the ability to manipulate or use knowledge (about language) in a specific way (i.e., generalize or extrapolate), thus combining knowledge content (e.g., knowledge about grammatical rules, knowledge of categories, and knowledge of accurate language chunks) with knowledge form (i.e., procedure(s) for applying that content, like analysis, rule-deduction and extrapolation to new contexts).

Given Roehr’s (2008b) conclusions (that language analytic ability is a component of metalinguistic knowledge), the third research question targeted understanding what kind of knowledge elements participants manipulated for language analytic uses (i.e., situations in which participants inferred rules of language, made generalizations, or applied information garnered from one context to another). This section expands upon the analyses laid out in Chapter 5 by highlighting several constructions that involve language analytic ability, focusing on the knowledge elements involved in those constructions, and illustrating the different ways in which the participants in this study performed language analysis.

Let us begin with two examples of language analysis wherein Grace addressed direct objects and past participle agreement in the *passé composé* (V30 & V31). In the first case, she

explained why she added agreement to the past participle in “*Les actrices que nous avons vu(es) sont très jolies*” ‘The actresses we saw are very pretty.’

(V30) “So, I put the “-es” because, even though the *que* is there, it would’ve been— It is a direct object. It’s just inverted. Because *nous avons vu les actrices. Nous les avons vues*. And because actresses is plural and feminine, it has to make *accord*. [...] What do they call that? Like when it becomes the *le* or *la* and it’s inserted in front of the verb. I can’t think of what it’s called. But when it does that, that’s when it has to do it. [...] It’s also with *que*. *Les actrices que nous avons vues*. There’s probably a technical term. I’m sure there’s a technical term for it, but I’m not sure what it is.” (Grace, Task 5, Item 7)

The beginning of her verbalization focused on some knowledge elements like identifying a category (direct object) and knowledge of a related rule regarding agreement and direct object placement. In her explanation, she says that “it’s just inverted,” meaning that the direct object occurs before the verb. The elements and overall metalinguistic knowledge construction align with the grammatical rule that the past participle (in a composed tense like *passé composé*) agrees with the direct object if the direct object is placed before the verb. At this point in her verbalization, there is an implicit question that she attempts to respond to: is the noun phrase “les actrices” in fact a direct object? To confirm, she referred to two possible alternative sentence structures to illustrate that *les actrices* ‘the actresses’ is the direct object of the verb in *passé composé* (*avons vu* ‘saw’): *nous avons vu les actrices* ‘we saw the actresses’ and *nous les avons vues* ‘we saw them’. She uses her knowledge of the ‘default’ SVO structure first (“*nous avons vu les actrices*”) and then her knowledge of SOV structure (“*nous les avons vues*”) in which the direct object pronoun is placed before the verb to clarify that “les actrices” is the direct object. She can confirm this because she interprets the meaning across all three versions of the sentence as the same—that is to say that she uses some implicit language knowledge in which she automatically (without explicit reflection) interprets the meaning.

The knowledge content involved in this construction includes:

- knowledge of a metalinguistic rule: in *passé composé*, a past participle agrees with the direct object if the direct object precedes the verb;
- knowledge regarding categories or parts of speech: 1) a direct object (usually) comes after the verb, 2) a direct object can be represented by a direct object pronoun (i.e., *le*, *la*, or *les*), and 3) a direct object can precede the verb in some structures;
- implicit language knowledge: automatically recognizing meaning of sentences.

She combines the elements in such a way that she can confirm *les actrices* in the item from the task (*les actrices que nous avons vu(es)...*) is the direct object of the verb *voir* ‘to see’, thus requiring direct object–past participle agreement due to its location. Note that Grace does not infer a rule from the context, but rather uses multiple versions of one sentence to clarify whether a given rule applies to the specific context.

The second example from Grace (V31) also revolves around identifying whether or not a noun phrase (“*la semaine d’après*”) should be categorized as a direct object. For convenience of reference, it is repeated here:

(V31)

Grace: *La semaine* wouldn’t be a direct object, so it’s fine.

Interviewer: You’re thinking about–

Grace: The direct objecty thing I was talking about.

Interviewer: With the ‘e’ on the end of *retournée*?

Grace: Yeah, yeah. But I’m going to leave it because, technically, it’s not. So, we’re good.

Interviewer: Alright, technically, it’s not a direct object, *la semaine d’après*?

Grace: I don’t think that dates can be direct objects. I don’t know if that’s right but I feel like it, it would seem weird for it. I don’t think it can be.

[...]

Interviewer: What’s a direct object then?

Grace: I feel like a direct object, it could be like *elle l’a retourné(e)*. But then it would make it seem like she’s returning an object.

Interviewer: Ok. And *la semaine d’après* is not an object?

Grace: No.

In this case, Grace accurately concludes that the noun phrase in question is not a direct object despite its placement directly after the verb. Similar to the first situation, she produces an alternative sentence with a direct object pronoun, “elle l’a retourné(e)” and compares its meaning with the first sentence, finding that they do not match. From this, she concludes that “la semaine d’après” is not a direct object and is then able to apply her metalinguistic rule knowledge regarding the appropriate auxiliary and agreement in *passé composé*.

In addition to evidence regarding the knowledge elements involved, Grace uses a specific procedure³⁷ involving similar knowledge elements in both situations. Grace constructs her analysis using similar procedures in both of the above examples. To verify the category of a word or phrase, she starts with a sentence in the common SVO order and transforms it to SOV replacing the possible direct object with a direct object pronoun. She compares the meaning of the first and second sentence and considers the category to be the same if the meaning is the same or to be different if the meaning is different.

Taylor also shows evidence of language analytic ability in her verbalizations. In one situation (V20), she recalled the first-person singular form of the *passé composé* of the verb *arriver* ‘to arrive’ (i.e., *je suis arrivé(e)*) in order to identify the appropriate auxiliary verb for the third-person singular form that she needed to produce. Thus, she thought of a similar structural context that was familiar and applied the same structure in a new context. She also did this in V1 where she thought of the placement of negation in *passé composé* in order to inform where to put it in the *imparfait*: “So, I’m thinking of where to put the *ne pas*, like the structure. *Ne se sont*. I

³⁷ This procedure describes a way in which Grace regularly combines similar knowledge elements in the same way (i.e., a schema, as described in Rumelhart, 1980, for example).

think it would be like that, but I'm not sure. *Ne se sentait pas.*” In this way, Taylor uses implicit language knowledge (a known chunk of language) to infer what to do in a new context. She does not explicitly verbalize the metalinguistic information (e.g., regarding auxiliary selection or word placement), but it is evidenced in her application of that knowledge in the new context. Like Grace, Taylor relied on some implicit language knowledge. Unlike Grace, she was not categorizing parts of speech and did not need to interpret meaning. Instead, she inferred and reapplied information regarding formal accuracy, a different procedure that includes thinking of a similar sentence and extracting information from it to apply in a new context.

In one case in this study, a participant's use of language analytic ability did not support the learner's ability to explain a context, although her language production remained accurate. Taylor used language analysis regarding auxiliary selection with *demander* in the *passé composé* (V16) but she drew on inaccurate or incomplete metalinguistic information regarding which categories of verbs require which auxiliaries. Like in the earlier situations, she drew on a sentence whose structure she knew to be correct, but it conflicted with the knowledge she had been using to explain the auxiliary. Her deduction of a metalinguistic description/rule based on the new sentence led her to realize that something was wrong with her original understanding but she was unable to figure out where the issue was.

The last case presented highlights how generalizations, inferences, and extrapolations (i.e., language analytic ability broadly defined) requires a great deal of metalinguistic knowledge (knowledge of accurate rules or descriptions) in addition to implicit language knowledge for it to function in a way that supports accurate language use and accurate descriptions or explanations. In fact, this and the other cases that show evidence of language analytic ability require an expanded understanding of what is involved when compared to the way it was tested in Roehr's

(2008b) study. As previously discussed, Roehr found that language analytic ability was a component of metalinguistic knowledge. In her study, language analytic ability was measured by providing a sentence (in the L2) with a highlighted word or phrase and measuring the participants' as the ability to identify a word or phrase of the same category in another sentence (also in the L2) and metalinguistic knowledge included measures of metalanguage, error correction, description, and explanation (as well as the language analytic portion of her study). In that way, language analytic ability was reduced to the application of knowledge of categories. The evidence herein suggests that knowledge of categories and the ability to compare categories across sentences can play a role when learners infer rules, make generalizations, or extrapolate information, but it also highlights the complexity involved in language analysis. There are few instances of language analytic ability in participants' verbalizations regarding morphosyntax, but those reported minimally involved some implicit language knowledge (as in the underlying knowledge or proficiency Grace showed in creating and interpreting new sentences without explicit reflection, or the chunks of known language Taylor accessed) and some (metalinguistic) knowledge regarding the categorization of elements (identifying, but not necessarily naming, similar categories across the new context and the known contexts). To respond to the research question, language analytic ability—in its broad definition, rather than the way it has been operationalized for quantification—can involve implicit language knowledge, knowledge of categories, and other metalinguistic knowledge elements (like knowledge of rules), all of which may or may not be accurate or relevant to the situation. Further investigation focusing on this form or procedure for thinking about language merits additional investigation focusing on ways that it is used and the knowledge needed for its use.

CHAPTER 7 CONCLUSION

This study set out to understand how L2 learners think about language, including what knowledge elements they use and how those elements are combined when used to produce and evaluate language. It was expected that using a learner-centered framework that records and analyzes real-time knowledge construction would reveal a variety of knowledge elements—including but not limited to the traditionally studied pedagogical grammar rules—that occur together in different ways across individuals and contexts. In line with these expectations, the results indicated that metalinguistic knowledge (i.e., metalinguistic knowledge constructions in the broad sense) is a complex concept that goes beyond metalanguage and pedagogical grammar rules, thus implying the need to approach its operationalization from new perspectives. The ambiguities lie in what metalinguistic knowledge is (in terms of its explicitness and in terms of how to define and operationalize it in research), how to adequately describe its accuracy, and how (or if) research can feasibly assess how much accurate metalinguistic knowledge a learner has. This chapter includes conclusions regarding knowledge constructions and their composition followed by the related limitations and implications. This is followed by other implications, other limitations, and future directions for research in this area.

7. 1 Conclusions regarding knowledge elements and their constructions

This study has demonstrated a great many complex connections between a variety of knowledge elements used by L2 French learners when asked to provide metalinguistic descriptions. Focusing on elements of knowledge as parts of complex constructions resulted in added explanatory ability. Instead of being taken always as whole concepts, complex constructions can be broken down into component parts. The parts can then be characterized according to their accuracy and relevance, thus providing an alternative way (that handles

differences in conceptual complexity across contexts) to describe and evaluate how a learner understands a concept.

Through the use of a bottom-up, learner-centered approach to understanding how learners think about language (i.e., construct metalinguistic knowledge, in the broad sense of term), the current study also revealed that the knowledge involved in thinking about language—more specifically, formal features of language—is not limited to grammar rules. In addition to knowledge of pedagogical grammar rules, the learners in the three cases presented here used knowledge of categories and category features, memory aids, knowledge about how to best learn, chunks of known language, and general proficiency. Much like the ability to look at knowledge elements in addition to overall understandings, this has implications for the testing and measurement of metalinguistic knowledge that are discussed in more detail below.

7.1.2 Implications

If learners do construct knowledge from elements, evaluating metalinguistic knowledge constructions requires rethinking approaches for measuring it. For one, studies currently measure how often a person is correct on a researcher-selected set of questions (as a means to identify how much knowledge they have) and that information is ranked according to scales that render scores of how close the learner's characterization of a particular concept is to some accepted linguistic description articulated with technical language. It is thus quantified without information regarding how complex or simple the learners' descriptions or explanations may be or how complex the minimal required description is. The first methodological recommendation is for researchers to look at knowledge from a learner perspective in order to see what elements are involved in their understandings and what kinds of knowledge elements they use during different types of language tasks (e.g., controlled production, free production, comprehension,

form-focused tasks). From there, researchers can break down knowledge constructions into their possible component parts, thus making the complexity of any given construction (from the viewpoint of the learner) evident. This kind of evidence can inform how complex an overall understanding is for a given learner or, for a quantitative approach, across many learners.

The second implication from this study pertains to how researchers evaluate the accuracy of (metalinguistic) knowledge about language. Taking as the unit of analysis knowledge elements involved in any given construction (rather than overall constructions or whole descriptions/explanations) and judging each element as accurate/inaccurate (minimally and including relevance or other factors that emerge), research may arrive at a more exact understanding of how learners know what they know and how much of what they express is aligned with accurate metalinguistic descriptions. Current measures, particularly those that evaluate metalinguistic knowledge as accurate/inaccurate might indicate that a learner does not know a given concept, even though that learner may know a great deal regarding that concept but just not a certain piece. A constructivist approach, as outlined in this dissertation, aligns well with the way that many second language researchers think about language learning—as involving the learning of a variety of elements (e.g., words, morphology, textual cues, genre), not just knowing or not knowing how to produce or evaluate a whole phrase or a whole text.

7.1.3 Limitations

The use of a constructivist framework assumes that knowledge can be broken down into component parts that are assembled in different ways depending on the context. On the one hand, the constructivist framework was a good fit for describing the participants' knowledge and did further explain in cases where participants' overall knowledge and their language productions were mismatched; on the other, the framework informed the choice of study tasks and the type of

analyses, meaning that the way that the participants interacted with the researcher-interviewer and the analyses were likely impacted by the study's framing.

Note also that this study offers information on what kinds of knowledge elements can be involved in constructing knowledge about language and how those elements can interact with one another, but it does not offer insight into the types of knowledge that learners typically use or the ways that learners typically combine knowledge elements, if indeed there is a typical way to combine elements. Further research is needed to refine the categories of knowledge content in such a way that they can account for knowledge used across learners and across contexts (e.g., other languages, other forms, form-meaning or meaning-focused knowledge).

7.2 Other Limitations

7.2.1 Case Study Methods and Generalizability of Findings

The current study, like many case studies, involves a deep description and analyses of a small number of cases. Case studies are particularly useful for identifying the nature of relationships found in other studies or demonstrating how a theoretical concept functions in a particular situation, like the unclear relationship between metalinguistic knowledge and proficiency or course performance that appears in some studies or the application of constructivist theories to metalinguistic knowledge constructions. However, studies like the current one (qualitative case studies presenting a small number of cases) do not allow for generating new generalizable theories. Thus, findings like the explanatory power of relevance and completeness should be tested in other situations. In the cases presented here, the new concepts elucidate the relationship between proficiency and metalinguistic knowledge, but it cannot be generalized as a means to always describe why the strength of correlations between metalinguistic knowledge and proficiency vary across studies. The case study descriptions and

analyses herein remain exploratory in nature and further study is required regarding the nature of metalinguistic knowledge and its role in gaining L2 proficiency.

7.2.2 Reactivity

In the current study, explanations and metalinguistic descriptions occurred both in situations where the participants were trying to produce a new form and in situations where the participants were confirming their suspicions. In the second case, the participants' verbalizations may have been in reaction to the task and may not reflect how they think in other contexts.³⁸ It was expected that, despite the tasks reflecting possible coursework, the task of verbalizing and explaining one's thinking would impact the way that the learners in the study thought about the language elements. This is not problematic in the sense that the verbal reports still reflect the kinds of knowledge available to the participants and in a way that they can use it. However, in clinical interviews the learner certainly reflects for a longer amount of time than she might in low-stakes situations, in addition to the process of thinking being slowed down by verbalizing and responding to interviewer inquiries, both of which could have an impact on how much information a learner would typically think about.

7.3 Other Implications

In terms of general teaching implications, this study advocates for 1) teachers recognizing the importance of evaluating and engaging with what learners do know about language and 2) training teachers about how students learn language form and function—including but not

³⁸ For a discussion on the question of reactivity in verbal reports, see Sanz, C., Lin, H., Lado, B., Bowden, H. W., & Stafford, C. A. (2009).

limited to understanding grammatical, lexical, and discourse features of a language and how students can engage with those features.

Concerning individual student questions during one-on-one meetings, the teacher's role is to identify what information the student is using to settle on a given language use (e.g., grammatical choices, textual format, vocabulary choices, arguments presented) rather than to simply re-explain instruction. That is to say that when a student (for example, Sam) is confused about a language feature, it may require verifying whether she has access to knowledge that one might assume she has already learned. By asking Sam, or a similarly confused student, a series of questions about how they understand what they are doing, the language teacher can devise an appropriate response that engages with how the student understands as opposed to trying to replace what they know in a specific with a set of different (and in some cases conflicting) information (see Smith, diSessa, & Rochelle, 1994 for an indepth discussion about replacing knowledge *versus* re-constructing knowledge).

In terms of a whole class, when an instructor expects students to apply some metalinguistic information on a task, instructors (I, myself, am guilty of this as well) tend to check only the language production as a means to verify that the student can apply their knowledge. Students are, especially in the age of the flipped language classroom, expected to read, prepare, and practice simple applications at home before coming to class and instructors may not systematically verify that students have appropriately understood the metalinguistic information before checking its application. This study suggests that it is indeed advisable to regularly check students' metalinguistic understandings alongside their language production. Some instructors already do this is by asking students to indicate why they used a certain form or by asking students to mark a context as "S" for subjunctive or "I" for indicative. However, the

step further is to include this regularly when doing formative evaluations, homework or preparation checks, and short quizzes, to name a few activities, as a means to support the learning of metalinguistic knowledge in conjunction with increasing proficiency. Although this study is primarily focused on form, this is true for other metalinguistic information regarding textual organization, form-meaning connections, and so on.

Indeed, for teachers to be able to apply these recommendations, they need to be trained to think differently about learners, learning, and the content of a language classroom. If a teacher makes the common assumption that “either you know it or you don’t,” she will encounter difficulty in engaging with a method of teacher-student communication that encourages teachers to question and understand how students think. On the other hand, including in teacher training and professional development reflections about what students know and how they know it can guide teachers towards this type of thinking about students as having access to a great deal of knowledge and experiences that can be harnessed and adapted for application in new contexts. In a classroom or training setting, language teachers can be encouraged to think through every minute thing that a student needs to know to be able to complete a simple activity. Regularly reflecting on the complexity of knowledge needed for the simplest of grammatical tasks, followed by considering how that expands in the case of realistic applications of that knowledge (e.g., extended speaking or writing) would likely encourage a more realistic understanding of the intricacies involved in accommodating new information (e.g., a new grammatical rule) into an already complex web of knowledge.

7.4 Future Directions

The next step in this study is to expand the analyses of the existing data in two primary directions. First, I will use the currently identified knowledge elements and themes to analyze the seventeen participants remaining in the larger study, to see if the themes presented here can

account for all situations encountered or if there is a need to add or adjust the themes. I will also analyze how the learners in this study and in the larger data set understand form-meaning connections, again looking at the characteristics of the knowledge elements and constructions involved. Some glimpses into this indicate a variety of metalinguistic knowledge elements that do not conform to traditional pedagogical grammar rules. Moreover, during the first iteration of the analyses, it became clear that language analytic ability could be investigated with respect to the kinds of knowledge content involved as well as by analyzing the form of the knowledge. Another future analysis of the existing data set includes thinking in terms of scripts or schemata into which other categories of knowledge elements (e.g., knowledge of a language chunk and knowledge of similarities/differences across categories) are entered in order to use language in an unfamiliar context.

By approaching the topic of metalinguistic knowledge from a learner-centered, constructivist perspective, my current and future research interrogates commonly held assumptions regarding how to define and operationalize metalinguistic knowledge for research in SLA and related fields. This framework combined with task-based, clinical methods avoids *a priori* prescriptions of what knowledge should exist, thus creating a conversation regarding how knowledge occurs in realistic contexts. Not only does this study engage with the aforementioned concerns, it also offers an alternative perspective on the relationship between implicit and so-called explicit knowledge—it questions how they function cooperatively as opposed to focusing on counting each separately. Reframing metalinguistic knowledge as constructed redirects research from quantifying metalinguistic knowledge to understanding how it occurs in realistic contexts, thus creating new opportunities to make connections between second language research and instructed language learning.

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Appendix A. Elicited Imitation Items

The following is a replica of the task items on the Elicited Imitation Task (Tracy-Ventura et al., 2014).

1. Je dois aller au coiffeur. (“I have to go to the hairdresser’s”)
2. Le livre rouge est sur la table. (“The red book is on the table”)
3. Les rues sont larges dans cette ville. (“The streets are wide in this city”)
4. Il prend une longue douche tous les matins. (“He has a long shower every morning”)
5. Qu’as-tu dit que tu vas faire aujourd’hui? (“What did you say that you are going to do today?”)
6. Je ne sais pas s’il sait très bien conduire. (“I don’t know if he can drive all that well”)
7. Après le repas, j’ai fait une paisible sieste. (“After dinner I had a peaceful nap”)
8. Il est possible qu’il se mette à pleuvoir demain. (“It is possible that it might rain tomorrow”)
9. J’adore les films, surtout ceux qui finissent bien. (“I love films, especially those that have happy endings”)
10. Les maisons sont très jolies mais inaccessibles. (“The houses are very nice, but inaccessible”)
11. Le petit garçon, dont le chaton est mort, est triste. (“The little boy whose kitten died is sad”)
12. Le restaurant est censé servir de très bons plats. (“The restaurant is supposed to serve very good food”)
13. Je veux une maison où mes animaux peuvent habiter. (“I want a home where my pets can live”)
14. Tu aimes bien écouter de la musique country, n’est-ce pas? (“You like listening to country music, don’t you?”)
15. Elle a fini de peindre les murs de son appartement. (“She finished painting the walls in her flat”)
16. Traverse la rue au feu rouge et puis continue juste tout droit. (“Cross the street at the red light and then just continue straight on”)
17. La personne que je vois a un sens de l’humour fabuleux. (“The person I’m dating has a great sense of humour”)
18. Elle ne commande que de la viande et ne mange aucun légume. (“She only orders meat and never eats vegetables”)
19. J’aimerais que le prix des maisons de ville soit accessible. (“I would like town houses to be more accessible”)
20. J’espère que le printemps arrivera plus tôt que l’an dernier. (“I hope spring arrives sooner than last year”)
21. Un de mes meilleurs amis s’occupe des enfants de mon voisin. (“One of my best friends looks after my neighbour’s children”)

22. Le chat noir que tu as nourri a été chassé par le chien. (“The black cat that you fed was chased by the dog”)
23. Avant de pouvoir sortir, il doit finir de ranger sa chambre. (“Before going out, he has to finish tidying his room”)
24. Je me suis bien amusé lors de notre sortie à l’opéra (“I had a great time when we went to the opera”)
25. Le voleur que la police a arrêté était très grand et mince. (“The thief that the police arrested was very tall and thin”)
26. Pourriez-vous s’il vous plaît me passer le livre qui est sur la table? (“Would you please pass me the book that is on the table?”)
27. Le nombre de fumeurs de cigares augmente chaque année. (“The number of cigar smokers goes up each year”)
28. Je ne sais pas si le train de 11h30 a déjà quitté la gare. (“I don’t know if the 11:30 train has already left the station”)
29. L’examen n’était pas aussi difficile que ce que vous m’avez dit. (“The exam was not as difficult as you had said”)
30. Il y a énormément d’individus qui ne mangent rien du tout le matin. (“There are a lot of people who do not eat anything in the mornings”)

Appendix B. Elicited Imitation Scoring (Tracy-Ventura et al., 2014)

The elicited imitation task was scored according to the scoring table from Tracy-Ventura et al. (2014: 151) reproduced here.

Score of 4: Perfect repetition

Score of 3: Accurate content repetition with some (un-)grammatical changes

Score of 2: Changes in content or changes in form that affect content

Score of 1: Repetition of half or less of the stimulus

Score of 0: Silence, only one word repeated, or unintelligible repetition

Appendix C. Written Production Task

Participants were presented with the images (Figure 4.1, Chapter 4) that depict the following story in cartoon format. Vocabulary aids were added to the images. They contained nouns with no article but did contain a masculine or feminine indicator (i.e., “écureuil (m),” and “télévision (f)”) and verbs or verb phrases in the infinitive form (i.e., “avoir peur,” and “partir”).

Samedi soir, je regardais la télévision quand j’ai entendu un bruit bizarre. J’avais l’impression que c’était un animal. Le bruit venait de la cuisine. J’ai ouvert la porte (de la cuisine) très lentement. Sur la table, il y avait un écureuil ! Il mangeait mon pain, mais quand il m’a vu, il a eu peur et il est parti par la fenêtre.

‘Saturday evening, I was watching television when I heard a strange noise. I had the impression that it was an animal. The noise seemed to be coming from the kitchen. I opened the (kitchen) door very slowly. On the table, there was a squirrel! It was eating my bread, but when it saw me, it got scared and ran out the window.’

Appendix D. Cloze Task

The following is the text presented to participants, with blanks removed and item numbers added for ease of reference. Target responses and an approximate English translation follow.

Sarah (1 *rencontrer*) Paul le 13 décembre, 2014. C'était une très mauvaise journée. Elle (2 *se réveiller*) en retard et elle (3 *ne pas se sentir*) bien. En plus, il (4 *faire*) très froid dehors.

Dans un premier temps, elle (5 *se doucher*) rapidement, mais l'eau (6 *être*) froide. Après, elle (7 *ne pas arriver*) à trouver son dentifrice. Alors, elle (8 *ne pas se brosser*) les dents. Comme elle ne trouvait pas son sèche cheveux, elle (9 *ne pas se sécher*) les cheveux.

Elle (10 *devoir*) prendre le bus à 8h30, mais elle (11 *être*) toujours dans son appartement à 8h45. Elle (12 *arriver*) en retard à son travail et son patron (13 *être*) gravement en colère. Sarah aussi, elle (14 *se fâcher*). Ils (15 *se disputer*) devant tout le monde. Après cela, son patron lui (16 *demander*) de partir.

Elle (17 *ne pas vouloir*) rester toute seule et elle (18 *décider*) d'aller dans un café où elle (19 *se poser*) et (20 *commencer*) à pleurer.

Pendant qu'elle (21 *pleurer*), un jeune homme (22 *prendre*) la place à côté d'elle. C'était Paul. Il lui (23 *demander*) ce qui (24 *ne pas aller*). Ils (25 *se parler*) pendant des heures. Ils (26 *échanger*) leurs numéros de téléphones avant de quitter le café.

Finalement, ce n'était pas vraiment une mauvaise journée, puisque Sarah et Paul (27 *tomber*) amoureux l'un de l'autre !

TARGET RESPONSES AND ENGLISH TRANSLATION:

Sarah a rencontré Paul le 13 décembre, 2014. C'était une très mauvaise journée. Elle s'est réveillée en retard et elle ne se sentait pas bien. En plus, il faisait très froid dehors.

Sarah met Paul on December 13, 2014. It was a very bad day. She woke up late and she didn't feel well. What's more, it was very cold outside.

Dans un premier temps, elle s'est douchée rapidement, mais l'eau était froide. Après, elle n'arrivait pas à trouver son dentifrice. Alors, elle ne s'est pas brossé les dents. Comme elle ne trouvait pas son sèche cheveux. Donc, elle ne s'est pas séché les cheveux.

First, she very quickly took a shower, but the water was cold. She couldn't/didn't manage to find her toothbrush. So, she didn't brush her teeth. Since she didn't find her blowdryer. So, she didn't dry her hair.

Elle devait prendre le bus à 8h30, mais elle était toujours dans son appartement à 8h45. Elle est arrivée en retard à son travail et son patron était gravement en colère. Sarah aussi, elle s'est fâchée. Ils se sont disputés devant tout le monde. Après cela, son patron lui a demandé de partir.

She was supposed to take the bus at 8:30, but she was still in her apartment at 8:45. She arrived late to work and her boss was seriously angry. Sarah got upset too. They fought in front of everyone. After that, her boss asked her to leave.

Elle ne voulait pas rester toute seule et elle a décidé d'aller dans un café où elle s'est posée et a commencé à pleurer.

She didn't want to be alone and she decided to go to a coffee shop. She sat down and started to cry.

Pendant qu'elle pleurait, un jeune homme a pris la place à côté d'elle. C'était Paul. Il lui a demandé ce qui n'allait pas. Ils se sont parlés pendant des heures. Ils ont échangé leurs numéros de téléphones avant de quitter le café.

While she was crying, a young man took the place next to her. It was Paul. He asked her what was wrong. They talked to each other for hours. The exchanged their telephone numbers before leaving the coffee shop.

Finalement, ce n'était pas vraiment une mauvaise journée, puisque Sarah et Paul sont tombés amoureux l'un de l'autre !

It wasn't really a bad afterall, because Sarah and Paul fell in love with each other!

Appendix E. Verbs that take the *être* auxiliary

aller

arriver

descender

devenir

entrer

monter

mourir

naître

partir

passer

rentrer

rester

retourner

revenir

sortir

tomber

venir

Appendix F. Participant Verbalizations

(V1) “So, I’m thinking of where to put the *ne pas*, like the structure. *Ne se sont*. I think it would be like that, but I’m not sure. *Ne se sentait pas*. [Interviewer: What made you decide that?] Because I think if it was *passé composé*, it would be around the helping verb. So, it would be *n’est pas sortir* or *se sentir*. So, this is around the actual verb instead of the helping verb.” (Taylor, Task 4, Item 3)

(V2) “I can’t remember if it goes *ne se* or *se ne* for– I don’t remember what it’s called. [discussion of meaning and *imparfait* formation] For this [*ne, se*], I mean, I know we have [learned a rule], but I feel like [the rule] hasn’t been explicitly given. I feel like it’s *se ne*, because that sounds better to me. [...] *Se ne sentait pas, ne se, ne se*. Yeah, I’m just going to go with that.” (Sam, Task 4, Item 3)

(V3) “I know that would be before the auxiliary verb of *avoir* and then, I put it in the *passé composé* because [...]” (Sam, Task 4, Item 5)

(V4) “*Se ne, se n’est, se n’a pas brosse*. It goes in the wrong– I put the *pas*. It goes around the auxiliary. This is *avoir* not *être*.” (Sam, Task 4, Item 8)

(V5) “Actually, first, I was thinking of the *nous*-form of *sentir*. Hold on a second. *Sentir, sent*– Yeah. I don’t think it’s one of those weird ones where it, it’s not the– I-S-I-S-I-T and it’s the conjugation [...] It isn’t. Yeah, I don’t think it’s like that. It looks weird. It definitely looks weird. So, it doesn’t follow the rule.” (Grace, Task 4, Item 3)

(V6) “I don’t remember how to conjugate *sentir* in the imperfect. [...] I felt like maybe it was *sentons* or *sentent* [unclear pronunciation]. I don’t remember how to conjugate the imperfect. *Sentons*?³⁹ Like the third, like the *ils* and *elles* and then you take off– It’s either that or it’s the – *ons*. I feel like it would be the same anyways. Like *sentons* or *sentent*, like S-E-N-T-E-N-T. So, I just drop [the ending]. [...] And then, just add it. Oh, I conjugated as if it was me, so this would be a ‘t’ instead.” (Sam, Task 4, Item 3)

(V7) “*Elle ne*– I’m going to use the imperfect and I’m trying to think of how to conjugate *vouloir* in the imperfect. For all of those o-i-r, I feel like, I want to conjugate them in the conditional. Because that’s what I feel like I use. *Vouloir. Voudrait*. But I feel like they have the same endings as the imperfect, and those are the ones that have been in my head more. [Interviewer: The conditional ones?] Yeah. Not because I just learned them more recently, but just because I feel like when we learned the conditional, we went more over the endings than when we learned the imperfect. Because the imperfect, it’s kind of just expected that you know the present conjugations, so you don’t really go over the beginning conjugations, but sometimes they throw

³⁹ In this instance, Sam pronounces the verb as *sentons* (first-person plural). However, she may be attempting to pronounce *sentent* (third-person plural).

new verbs in after you learned the imperfect, but you're still using them for the imperfect, so you don't really know how to conjugate those verbs. It's like you never learned them in the present really. And even if you do, you're not going to remember them, because you're not tested on the present when you're learning the imperfect. [Interviewer: So, do you know *vouloir* in the present?] Yeah. For, would it be- [writes: *veux*] That would be 'I want'. That just must be that. [Writes: *voulons*] So, *elle ne voulait pas rester toute seule.*" (Sam, Task 4, Item 17)

(V8) "*Elle*– I just want to say *devrait*, because she should, but that's the conditional. Is it? *Devrait, devoir*. I want to do the imperfect. But I don't remember how to conjugate *devoir*, because it's always weird for me when it's like *devu*. Oh, but that's the *passé composé*. It's confusing for me when it's O-I-R because I've never had, in my classes, going over the conjugations of words." (Sam, Task 4, Item 10)

(V9) "*En plus, il faisait très froid dehors.* [...] Um, I'm just remembering what I felt like we– We just went over the subjunctive so, now, I'm confused. Because that might be the subjunctive now that I think about it. Because [pause] Either the imperfect is *fer* or *fassait*. Hmm, let's think. The subjunctive endings are not A-I-T. I don't think so. I'm just going to go with that [*fassait*]." (Sam, Task 4, Item 4)

(V10) "When I think about it, I just memorize or try to memorize all the irregular tenses or the irregular verbs in one tense vs. if it– like how it's spelled or what the past participle is in a different tense. I don't know. I guess a lot of it is for me is memorization, which I guess is probably not the best." (Taylor, Task 4)

(V11) "Because I know it's something that's like– As opposed to *mangeait mangait* [gives soft and hard pronunciations of 'g']. It's the pronunciation of the 'g', so I think you keep the 'e' but I'm really not sure. I don't remember." (Taylor, Task 5, Item 8)

(V12) "Yeah. So, *samedi dernier, Samuel était regarder la télévision*. And then I put *était* in the *imparfait* because it started in the past and we don't know how long he's been watching it for. [Interviewer: Ok. And so what is *regarder*?] And then, *regarder* is in the infinitive, because if you have two– Ok. I think this is correct, but– If you have a conjugated verb already, the next one is in the infinitive form So, he was watching tv." (Taylor, Task 3)

(V13) "I was thinking about the endings for the *imparfait*. Because there was a stupid song that I learned in middle school. So, I was going through– [...]" (Grace, Task 3)

(V14) "This [*Jean et Marco pleurait*] is not the correct past participle. That's why. Because this [*Jean et Marco*] is plural, this [*pleurait*] is not. So, since it's two, since we're talking about more than one person, it should be in the third-person plural." (Taylor, Task 5, Item #)

(V15) "*Jean et Marco pleurait*. That would not be *pleurait* because there was two people. That would be *pleuraient*. It would have to be a different conjugation. Because this was just like *Marco pleurait*." (Sam, Task 5, Item #)

(V16)

- Interviewer: Ok, so I want to ask you some more about these before we go on. So, here, *après cela, son patron lui a demandé de partir*. How do you know this one doesn't take *être*?
- Taylor: Hmm. Um, *demander*, because he demanded of her or of them to leave. So, I think because- Oh, I guess, I guess since *lui* is the direct object, that it could be *être*. But I don't think that *demander* is- So, I know there is a list of verbs that could take either, and I don't think that *demander* is on there but I could be wrong.
- Interviewer: And you say *lui* is a direct object?
- Taylor: No, that's indirect object because you demand something of them.
- Interviewer: OK. And how would that relate to the *être* or *avoir* question?"
- Taylor: Oh. Ok. So, then. So, I think, ok I could be wrong, but I think that if there is a direct object it's *être* and if it's indirect it's *avoir*, but—
- Interviewer: What makes you think that?
- Taylor: Um, because, I think that- Well, I know that there's all the rules of if it's *être* or *avoir*, what is that, *monter* for example. How I learned it in high school and there was this picture of a guy going up the stairs and there was a picture of a guy carrying a bag up the stairs. So, if it was him doing it, so there was no direct object, then it was *être*, so that means this would be *être*, I think and then if he was carrying the bag up the stairs, then it was *avoir*.
- Interviewer: Ok. So that was for *monter*.
- Taylor: Yeah. I don't know if that's the same case with this or not.
- Interviewer: But we have *demander* here.
- Interviewer: Ok. So, what do you know about verbs that take *être* or even the ones that might take both?
- Taylor: I know that it has to do with if there's a direct object or indirect object, but I'm not sure now which is which. Because now, I'm confused.

(Task 4, Item 23)

(V17) “Because it’s reflexive, so you have to use *être*.” (Taylor, Task 4, Item 5)

(V18) “This is reflexive [...] and you’re using *être* as well and it agrees with the subject.” (Taylor, Task 4, Item 8)

(V19) “Because he is leaving, as opposed to— I guess there’s some verbs that take *être* or *avoir passé composé* and *partir* is one of them, because if it does or does not have a direct object. Ok. Yeah. So, he is doing it to himself, but, even though it’s not really reflexive, there’s no direct object. So, *il est parti par la fenêtre. Oui.*” (Taylor, Task 3)

(V20) “With verbs that either take *être* or *avoir*, for some reason, I always say it in *je*, in the first-person, in *je* form first. And then, I, like it’s more commonly— I always or mostly use it in *je suis arrivée*. So, then, yeah. I think that’s right.” (Taylor, Task 4, Item 12)

(V21) “When it’s, when it has the– Whatever this is called. [...] The *se*, then it’s reflexive. When it’s a reflexive verb, then it has *être* as the auxiliary verb.” (Sam, Task 4, Item 8)

(V22) “*Ils*, this I’m going to use– *Se sont*– [...] And then *être* because it’s a reflexive. *Réfléchi*.” (Sam, Task 4, Item 15)

(V23) “*Il est parti par la fenêtre*. [...] Because *partir* is a verb that uses *être*. [...] I don't even really know. I just know that we learned that– It didn't actually really help me. I just kind of remember, more movement, I guess. A lot of those verbs, except for maybe to be born and to die are all like moving verbs. And the thing that helped me was, in my textbook, they had a house and it showed the people moving through the house. They entered the house, they walked through the house, they waited in the house, and they left the house. And then there was like other things in it and that helped. It was nice to see because it helped me to link it to movement. I guess. *Versus* like anagrams. Are they called anagrams? No, probably not. Because there's like the Mr. and Mrs. Vandertramp. That doesn't help me so much because then you just have to memorize all those verbs and there's no reason. Like what's the reason? It's hard if you're just like, this is what you're going to know, that all these verbs are together. It was nice to have the description of all of these are really moving verbs except for *naître* and *mourir*. Or whatever. So, that's how I know and I guess I didn't look at them for the others. I didn't really even think about that for the other ones.” (Sam, Task 3)

(V24) “I’m trying to think about if it’s between the *être* and or *avoir* for the auxiliary verb. Because I remember in the picture that’s in my one grammar book, I think. It has a house and the people move into the house and I think it has someone falling off the house, because that’s what *tomber* is. So, I feel like that’s– We’re going to use *être* for this one. *Sont tombés*.” (Sam, Task 4, Item 27)

(V25) “We’re going to use *être* for this one. *Sont tombés*. And then I’m going to go through, because I just realized this, and make sure that all of my– [scanning task] If I have *être* as the auxiliary that I, like *elle est arrivée*, add an ‘e’.” (Sam, Task 4, Item 27)

(V26) “I’m confused very much by that because, last semester, I remember my teacher said that, if it’s reflexive, it doesn’t agree with the subject. But now, this semester, my teacher gave me some weird rule that doesn’t make sense to me, something about direct objects and stuff. [...]”⁴⁰ I’m really confused by that rule. So, I’m still always confused by it. I’ve asked her a lot of times. So, I know that, *elle est arrivée*, I know that that would have an ‘e’. [Interviewer: Ok. Are there any others like that?] *Sont tombés*. [pronounces a final /z/] There would be an ‘s’ there. Just going off of if I used *être*. *S’est brossé*. I don’t know there because there’s– Like to me, from what I feel like I learned last semester, there wouldn’t be an agreement, but my teacher this semester told me there is sometimes [...] I’m confused and it’s been this whole semester and I asked her

⁴⁰ Irrelevant details Sam gives about her teacher have been removed here and again later in this excerpt.

more than once and I'm still confused. She said something, like if it has a direct object, but then, also, that's all she says, but I don't always understand what the English- Because I don't know all the names of the parts of a sentence in English, because I just know how to form the sentences. So, it's very confusing sometimes, if I'm taught how to do French using [...] 'Oh. Only do agreement if there's an indirect object pronoun.' I don't know what that is. That's hard if it's put that way without a lot of- I like examples to see. But she, it was just on one little aside and I was like, 'You just messed up my whole idea of how this works.'" (Sam, Task 5, Item 27)

(V27) "Because I know sometimes when something is followed by a direct object, it changes how if we put *accord*⁴¹ or not. I think. There's *à*, so it's not a direct object. I'm going to be ok with that. I'm going to let it slide. [Interviewer: So, you're not sure?] I'm not sure, but I think it's fine. And then, speaking-wise, no one would know if there's an extra 'e' on it or not, so I'm going to let it slide." (Grace, Task 4, Item 7)

(V28) "*Elle n'est pas*— Ok. Here, I don't think— I can't put the 'e' on. Now, I'm doubting it. I'm going to leave it. [meaning without the 'e'] I think that's the rule. [...] It's one of those rules— I'm confused, more like uncertain, because it's a rule that I learned recently, which is also kind of sad." (Grace, Task 4, Items 8-9)

(V29)

Interviewer: Basically, you think that what happens is you don't use the, you said *accord*—

Grace: You don't. See, it sounds crazy. I might be wrong, but I feel like—

Interviewer: When?

Grace: When it's directly followed by a direct object.

Interviewer: A direct object?

Grace: Yes.

Interviewer: And what is followed by a direct object?

Grace: The verb is followed by a direct object.

Interviewer: And just any verb?

Grace: Yeah. Well. I mean— *Accord* only happens with *être* and then there's a separate case when it happens with *avoir* in the *passé composé*. In the *passé composé*, when it has *accord* with *être*, and it's followed by a direct object.

Interviewer: So with verbs that use *être*—

Grace: Yes.

Interviewer: And that have a direct object?

Grace: Yes.

Interviewer: You don't use the *accord*?

⁴¹ *Accord* 'agreement'

Grace: Potentially. I think.

(Task 4, Items 7-9)

(V30) “So, I put the “e-s” because, even though the *que* is there, it would’ve been— It is a direct object. It’s just inverted. Because *nous avons vu les actrices. Nous les avons vues*. And because actresses is plural and feminine, it has to make *accord*. [...] What do they call that? Like when it becomes the *le* or *la* and it’s inserted in front of the verb. I can’t think of what it’s called. But when it does that, that’s when it has to do it. [...] It’s also with *que. Les actrices que nous avons vues*. There’s probably a technical term. I’m sure there’s a technical term for it, but I’m not sure what it is.” (Grace, Task 5, Item 7)

(V31)

Grace: *La semaine* wouldn’t be a direct object, so it’s fine.

Interviewer: You’re thinking about—

Grace: The direct objecty thing I was talking about.

Interviewer: With the ‘e’ on the end of *retournée*?

Grace: Yeah, yeah. But I’m going to leave it because, technically, it’s not. So, we’re good.

Interviewer: Alright, technically, it’s not a direct object, *la semaine d’après*?

Grace: I don’t think that dates can be direct objects. I don’t know if that’s right but I feel like it, it would seem weird for it. I don’t think it can be.

[...]

Interviewer: What’s a direct object then?

Grace: I feel like a direct object, it could be like *elle l’a retourné(e)*. But then it would make it seem like she’s returning an object.

Interviewer: Ok. And *la semaine d’après* is not an object?

Grace: No.

(Task 5, Item J)

(V32) “So, this would have an ‘e’ because it’s describing *elle*. [...] If it’s reflexive and uses *être*, it has to agree with the subject.” (Taylor, Task 4, Item 5)

(V33) “This is reflexive, so *avec un ‘e’*. [...] And you’re using *être* as well and it agrees with the subject.” (Taylor, Task 4, Item 8)

(V34) “I think that if you use *être*, it has to agree.” (Taylor, Task 4, Item 7)

(V35)

Interviewer: Yeah. Instead of thinking about changing between *passé composé* and *imparfait*, what else could there be?

Taylor: I don’t know, I would say agreeing with the past participle and the subject, but it already is.

Interviewer: Ok. Well, if there’s nothing else, that’s fine.

(Task 5, Item 10)

(V36)

Taylor: Yeah. I think so. So, I think this is correct, *que nous avons vu*. Maybe put this

(referring to '*sont*') in the past. So, I guess you could say, *les actrices que nous avons vu étaient très jolies*. Like they were. *Les actrices que nous avons vu sont très jolies*.

Interviewer: Could you also say, they are? Like the ones we saw are? |

Taylor: Oh yeah. I guess. The ones we saw are. Yeah. If they're still— I'm assuming if they're still *très jolies*. I guess. Ok. So, I think since this is referring to *les actrices*. This is— Ok. Ok. So, I think that, since *que* is referring to *les actrices* which is the object of *que nous avons vu*, the past participle would have to agree. Because, even though it's *avoir*, it's coming before the verb. So, I think this would be with an '-es' because it's feminine plural. I think that's what's wrong with it.

Interviewer: Because *les actrices* is before the verb.

Taylor: Yeah, well, yeah. I think because *que* comes before the verb, because *que* is referring to the object of what you saw. Since, even though it's *avoir*, because I think if it came after it wouldn't agree, but since, it's coming before it would have to agree.

Interviewer: Ok. And before you said there's direct objects and indirect objects. And this one is?

Taylor: So, they, this is the direct object because you saw the actresses. Yeah.

(Task 5, Item 7)