

What type of noticing occurs in the first 6 months of learning a foreign language? A case of an absolute beginner of Turkish 🇹🇷

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The Challenge

What type of noticing occurs as a beginner tries to learn a foreign language? How can teachers conceptualize the way noticing may manifest in their classrooms without having ecologically valid models of noticing? We present one model of noticing that has applicability to the authentic foreign language classroom.

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Abstract

The concept of noticing, which emphasizes the role of attention and awareness in language learning, has exerted a strong influence on second language acquisition (SLA) theory and practice. The current research analyzes instances of noticing evident across a 26-week period as the first author, an absolute beginner, was taught Turkish by the second author, a native speaker. All 52 video-conferenced one-to-one lessons were recorded and subsequently thematically analyzed for the learner's noticing of the accusative, dative, locative, and ablative cases at two levels of complexity (single or multiple affix). Six noticing themes were evident and are defined and exemplified with multimodal vignettes and presented as a generalized model. Trends in the occurrence of these noticing themes over the first 6 months of learning are also presented. Discussion

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focusses on the practical relevance of the types of noticing observed and concludes with directions for future research.

KEYWORDS

attention, awareness, foreign language learning, noticing, Turkish as an additional language

1 | INTRODUCTION

Since the 1960s, the role of cognition in language learning has become a foundation of second language acquisition (SLA) theory and practice. Research in cognitivist SLA has focussed on teasing apart key aspects of human cognition that best describe the processes of language learning. Central to this research agenda has been to understand the role of awareness in language acquisition. For example, debate on the relative importance of implicit and explicit knowledge in second language learning is evidence of this (e.g., Lichtman & VanPatten, 2021; Norris & Ortega, 2000; Schmidt, 1990). Although contentious, Ellis (1995) has long since articulated a generally accepted position on the matter, namely “that although much of the acquisition of language form comes as a result of implicit learning, there are demonstrable roles for explicit learning ... particularly that which involves grammatical consciousness raising” (p. 123). Although, pedagogical approaches to raising consciousness (attention and awareness) are diverse, the heuristic of *noticing* (Schmidt & Frota, 1986) is applicable to many of them (e.g., peer interaction, corrective feedback, recasts, output, enhanced forms, etc.) (Ellis & Loewen, & Erlam, 2006; Ellis & Sheen, 2006; Sato & Lyster, 2012). Fundamentally, the noticing hypothesis asserts that a learner must notice features of linguistic input for language learning to take place. As Hulstijn (2005) makes clear, the noticing hypothesis, “which asserts that at least some attention to and awareness of elements of the surface structure of an utterance in the input is necessary for learning to take place” is a well-accepted fixture in the foreign language learning theoretical landscape (p. 134).

The origin of the noticing hypothesis is strongly associated with seminal work by Schmidt and Frota (1986), which centered on Schmidt's own personal experiences learning Portuguese in Brazil. Over a 5-month period, Schmidt kept semi-systematic diary entries of his experiences learning the language. Schmidt and Frota (1986) determined that there was a strong connection between that which Schmidt noticed in the diaries and the grammatical forms that Schmidt used in subsequently recorded verbal interactions with native speakers of Brazilian Portuguese. Arguably a key strength of the data presented in Schmidt and Frota (1986) relates to its authenticity. The instances of noticing that were recorded in the study were often contextualized against specific socio-cultural factors of direct relevance to the individual learner. Along with Schmidt's reflections on grappling with the semantic, morphosyntactic, and phonological attributes of Brazilian Portuguese, the diary entries also recounted Schmidt's frustrations around teaching methodology, trips to the samba club, hopes to get to São Paulo, plans with his son, and so on. In some contrast to a number of subsequent studies that have interrogated noticing under highly controlled research conditions (e.g., Godfroid et al., 2013; Hama & Leow, 2010; Leow, 1997, 2000; Rosa & Leow, 2004), Schmidt and Frota's (1986) research was longitudinal (spanning months), richly qualitative and singularly directed toward

an individual's language learning experience. Although highly controlled experimental and quasi-experimental studies play a crucial role in refining our understanding of the mechanisms of foreign language learning, as Storch (2018) asserts “such studies bear little resemblance to what happens in real language classrooms” (p. 263) and may lack ecological validity. Schmidt and Frota's (1986) research catalyzed a broad and enduring research agenda around noticing in SLA. This impact makes clear that similar longitudinal, qualitative investigations of an individual's efforts to acquire a foreign language can be extremely informative and as Schmidt and Frota (1986) assert “could fruitfully be used by other researchers” (p. 307).

1.1 | Refining the scope of noticing

Although noticing in SLA continues to be influential (Russell, 2014; Ünlü, 2015), it is also controversial (Hama & Leow, 2010; Truscott, 1998; Williams, 2005), and is associated with challenges around definitional scope and construct operationalization (Uggen, 2012). Fundamental to the noticing hypothesis are the tightly associated constructs of awareness and attention. To clear the ground for awareness here, we put the term *consciousness* to one side. We follow Bialystok's (1994) position that most references to consciousness in cognitivist SLA are centrally concerned with awareness. Tomlin and Villa (1994) define awareness as the “state of mind in which an individual has undergone a specific subjective experience of some cognitive content or external stimulus” (p. 193). Answering questions on the degree to which awareness is necessary for language learning to occur (e.g., Lichtman & VanPatten, 2021; Schmidt, 1990) is beyond the scope of the current research. Suffice it to say, discrete language learning opportunities that can be subject to explicit knowledge—declarative knowledge accessed through controlled processes (Ellis, 2005)—are those likely to be promoted with enhanced awareness (Ellis, 1995). As for attention, it can be viewed as a process that brings content or stimuli into a learner's awareness (Bialystok, 1994). A useful metaphor for attention is that of a spotlight that makes salient to the learner a given subjective experience (Schmidt, 2001). The constructs of attention and awareness directly underpin conceptions of noticing.

It is important to note that the construct of noticing has been variously defined over time and therefore it is necessary to make clear the position on noticing that will be adopted in the current work. Our conception of noticing will align with the intuitive notion articulated in Schmidt and Frota (1986). In terms of the overall mechanism of noticing in the SLA process Schmidt and Frota (1986) assert that acquisition of a target form can only take place “if and only if it is present in comprehended input and ‘noticed’ in the normal sense of the word, that is, consciously” (p. 311). Here we take the term *consciously* to mean that the language learner has become aware of specific attributes of the target form (e.g., meaning, morphology) through the focused allocation of attentional resources. We conceive of noticing as particular moments in the acquisition process where learners attend to and become aware of differences between a nontarget-like form within their interlanguage and a target-like form evident in linguistic input. Drawing from Schmidt and Frota (1986), instances of noticing the gap between nontarget-like and target-like forms may occur in relation to the morphosyntactic, semantic, or phonological aspects of a target form (see Figure 1). Subsequent to the work of Schmidt and Frota (1986), noticing has been defined in various ways (e.g., Schmidt, 1990, 2001) that do not align precisely with the position on noticing that will be adopted in the current research.

1. "... M said that his bookcase *é feito pelo* Y. Ah-hah, a passive" (p. 282).
2. "... and I notice that when we are doing our drills, L keeps saying something that sounds like ee-yes-u, sort of like a Japanese saying "yes" It obviously means "right" (p. 275).
3. "... L corrected my pronunciation to *setenta* ["70"]. I realized that I have been saying [sittenta]" (p. 255).

FIGURE 1 Examples of noticing from Schmidt and Frota (1986). Examples of noticing the morphosyntactic¹, semantic², and phonological³ aspects of the target form.

Definitions that encapsulate the key psycholinguistic attributes of noticing are important in refining the construct at a theoretical level. However, such definitions may have less to offer foreign language teaching professionals in terms of modeling what noticing might actually *look like* in an authentic language learning context. Models of noticing drawn from authentic experience, such as that of Schmidt and Frota (1986), fill this gap as they encapsulate the interpersonal and socio-cultural elements of language learning and thus possess better ecological validity (Kunitz, 2018; Storch, 2008). Such models of noticing are important as they offer foreign language teachers contextualized snapshots of how noticing may (or may not) occur within actual classrooms.

1.2 | Operationalizing and analyzing noticing

Here noticing will be operationalized as a reportable subjective experience of the linguistic norms of a language resultant from the learner's attention (cognitive resources) being focussed upon a given linguistic component (e.g., meaning or form and so on) of that target language. As this definition encapsulates the awareness of linguistic norms and the capacity to verbally recount these, noticing necessarily entails the application of explicit knowledge (Ellis, 2005). Thus, one way that noticing can be operationalized is with think-aloud protocols, during which a language learner verbalizes their thought processes in relation to the completion of a particular task (Hama & Leow, 2010; Leow, 2001; Rosa & Leow, 2004; Rosa & O'Neill, 1999). Think-aloud protocols cast light on the specific target forms to which learners attend while undertaking a task (Storch, 2018). Further, think-aloud protocols help researchers draw conclusions on qualitative aspects of any noticing that occurs; for example, insight can be drawn about the level of awareness that is evident or the accuracy of a given noticing event in question (Leow et al., 2014). As a learner's levels of awareness and attention naturally fluctuate over time, it is important to gather data on any given learning event as immediately as possible. For this reason, so called *concurrent think-aloud protocols* where data is recorded at the same time that the task is undertaken have strong utility for research on noticing (cf. retrospective learner diaries) (Leow et al., 2014; Schmidt & Frota, 1986).

Few previous studies have applied concurrent think-aloud protocols to analyze noticing of target grammatical forms. Leow (2001) investigated the impact of enhanced forms on learner noticing of the formal imperative of Spanish among tertiary level learners. Noticing was operationalized as any translation of the targeted verb (either correct or incorrect) observed during the protocols as learners undertook three language learning tasks. The think-aloud data

that was gathered from each of the 38 participants was undertaken in a single approximately 25-min period. Rosa and Leow (2004) applied think-aloud protocols to examine different levels of awareness of Spanish conditional sentences among adult language learners. Think-aloud data was gathered from 100 participants as they completed a computer-based problem solving task over a period of 28 min. Three categories of awareness were used following previous research (Rosa & O'Neill, 1999): “noticing,” “understanding,” and “no report” (p. 280). Rosa and Leow (2004) defined *noticing* as a verbal report that referenced the target structures without any reference to metalinguistic rules. *Understanding* was defined as an “an explicit formulation of the rule underlying the target structure” (Rosa & O'Neill, 1999, p. 530). A third category of *no report* indicated no direct reference to the target form in question. Hama and Leow (2010) also applied concurrent think-aloud protocols to interrogate levels of learner awareness of grammatical forms signaling animacy in Spanish among 34 participants. Think-aloud data were gathered while learners engaged with a multiple-choice assessment and a production task that required learners to identify a missing determiner in a spoken stimulus sentence. The same three categories of awareness as those from Rosa and O'Neill (1999) were coded from the think-aloud protocol data.

The few aforementioned studies that have applied think-aloud protocols to investigate noticing have targeted a relatively limited range of morphological forms, have focussed on only a few target languages and have been short in duration. Further, the tasks that were required of the participants were relatively discrete, representing just a small part of the patchwork of tasks that are likely to be used across the duration of an authentic instructional period. Although these previous studies have provided a useful cross-sectional snapshot of noticing, the degree to which these investigations encapsulate the noticing that occurs in longer durations of language learning is unclear. A lack of research mapping the types of noticing that typically occur in sustained language learning contexts, especially from the absolute beginner level, represents a significant knowledge gap.

1.3 | The current study

The current study aims to contribute to filling this gap by defining and providing a generalized model of the noticing that occurs in the first 6 months of learning a foreign language. To do so, a fine-grained qualitative study focused on a single language learner—“J” (the first author)—is presented, with the primary source of data being video recordings of 52 video-conferenced one-to-one lessons. The current study provides a novel perspective as the learner is an absolute beginner of Turkish, a language with grammatical attributes distinct from English (J's first language) and also distinct from those of the romance languages (e.g., Spanish and Portuguese) that have been addressed in the previous related studies. The use of audio-visual media to capture all instances of noticing will not only provide a means by which to systematically analyze noticing, but will also enable exemplars of the various types of noticing that occur to be presented as multimodal vignettes (see Supporting Information S1: Video, which can be freely downloaded on the IRIS Database; iris-database.org).

The following research questions will be addressed:

1. What types of noticing (themes) occur in the first 6 months of the instructional period?
2. What trends in the occurrence of these types of noticing (themes) are evident in the first 6 months of language learning?

2 | METHODS AND MATERIALS

2.1 | Participants and subjectivity

The current research was granted ethical clearance (#HE21-194) from the Human Research Ethics Committee of the authors' institution and thus met the requirements of the National Statement on Ethical Conduct in Human Research. The participants were the first (J) and second author (D) of the current research. Arguably, reporting on linguistic phenomena based on personal experience presents a methodological vulnerability in terms of the objectivity of the research. However, as Schmidt (1990) and others (e.g., Gass, 1988) emphasize, noticing occurs at the “level at which stimuli are subjectively experienced” (p. 132). With this assumption, it stands to reason that a subjective personal case is a valid way to describe and analyze noticing. The work of Schmidt and Frota (1986) shares many similarities with the current research, including the reporting of the author's own experiences in foreign language learning. Of note is that the subjective account of language learning presented in Schmidt and Frota (1986), which involved just one language learner, was instrumental in developing the concept of noticing and initiating an enduring related research agenda.

2.1.1 | The learner

The first author (J) is a middle-aged native speaker of the English language, whose only home language growing up was English. English was used as the medium of instruction through all levels of his education through to the postgraduate level. He is an academic working in Australia in the area of language teaching and teacher education. Before the current study he has had experience in learning a number of languages to differing levels of success including Thai, Arabic, Hindi, and others. Before the commencement of the study, he had never learnt Turkish, and was an absolute beginner, at the time only being aware of knowing two Turkish words: *gözleme* (stuffed flatbread) and *lütfen* (please).

2.1.2 | The teacher

The second author (D) was born and raised in Türkiye (i.e., previously Turkey) and his home language was Turkish. Being schooled in Türkiye, he learnt the standard variety of Turkish (i.e., Istanbul dialect). Following the completion of high school, he started a degree in applied linguistics at an international American university within Türkiye. During his undergraduate degree, he taught Turkish and English as an additional language. After he completed his MA in applied linguistics, he moved to Australia to complete his PhD in linguistics. He works as an academic in the area of language teaching and education.

2.2 | The text used in the lessons

As J was an absolute beginner at the commencement of the study, a graded reader series was used as stimulus for reception (e.g., reading and listening), production (e.g., reading, speaking, writing), interaction, and mediation (verbal interaction in English and Turkish). The Cin Ali

reader series is well known in Türkiye as a classic school resource for entry level development of Turkish literacy. The series was written by Rasim Kaygusuz in 1968 and became a part of the school curriculum in Türkiye (Apaydin, 2019). There are 10 books in the series each of which were used throughout the instructional period (see Video S1). Each book has approximately 16 pages and each was scaffolded with simple diagrams. The Cin Ali readers have been written to cover key language structures in a sequential manner.

2.3 | Lessons

All 52 lessons were between 30 and 40 min in duration and were undertaken remotely via video-conferencing, which enabled the faces of both J and D to be recorded simultaneously. The learner undertook all lessons while in Australia, thus within a Turkish as a foreign language context. In the first week of lessons, the pronunciation of letters of the Turkish alphabet were explicitly taught with flashcards and modeling by the teacher. Particular attention was paid to letters and pronunciation of vowels and consonants less salient, rendered differently in orthography or not present in English (e.g., ç, c, ı, j, ö, r, ş, ü). All lessons began with basic Turkish greetings and typically began by D reading to J from the graded reader text. The teacher would read each page twice slowly, after which J would read the page once, or sometimes twice if pronunciation difficulties were encountered. After reading a single page, typically D would ask J the question *Ne oldu?* (i.e., What happened?), at which time J attempted to recount (in English) an accurate interpretation of the Turkish text. This procedure was a concurrent think-aloud of J's interpretation of the Turkish language from the text (Bowles & Leow, 2005). As was deemed appropriate by D, guidance was provided in instances of erroneous interpretation of the substance of the text. For example, D would typically explain new lexical and syntactic features present in the text.

Various other pedagogical approaches were adopted throughout the lessons on a needs basis. For example, numbers and other basic vocabulary were addressed by way of D using a sketch pad to write and explain various language teaching points. The desired context of this investigation was authentic language learning. It is estimated that across the duration of the learning period, J went from absolute beginner to approximately basic user (A1) on the Common European Framework of Reference for Languages (CEFR).

2.4 | General morphological and syntactic features of Turkish

To provide a broad context for the current study, a general and very succinct overview of the morphological and syntactic features of Turkish is offered in Table 1 (synthesized from Göksel & Kerslake, 2011).

2.5 | Target grammatical forms

As overviewed above, Turkish is an agglutinative language with inflectional affixes that can be used to form words with progressively more complex structures. This feature of Turkish morphology enabled the selection of target grammatical forms at two levels of complexity: level one targets (single affix: case marker) and level two targets (two affixes: compound marker and

TABLE 1 Morphological and syntactic features of Turkish.

<i>Morphological features</i>	
Agglutination	Words are formed through adding suffixes to root words and can become relatively complex (e.g., gör ~ üş~tür ~ ül~me~miş~ti~k, we hadn't been allowed to see each other) (p. 23).
Vowel harmony	Vowels in suffixes must harmonize with the vowels in the root word according to the class of vowel, which makes the vowels of many suffixes variable (c.f., deniz/deniz~ler, sea/seas and orman/orman~lar, forest/forests) (p. 27).
Case marking	Case suffixes indicate syntactical roles of nouns and pronouns in sentences. Cases requiring suffixes include the accusative (e.g., kapı, the door), dative (e.g., kapiya, to the door), locative (e.g., kapıda, at the door), ablative (e.g., kapıdan, from the door) genitive (e.g., kapının, of the door).
<i>Syntactic features</i>	
Nongendered pronouns	The pronoun, O is used regardless of gender (e.g., O dersi seviyor, She/He likes the class).
Word order	Subject-Object-Verb (SOV) word order is typical (e.g., O denizi seviyor, She/He likes the sea), however, word order is relatively flexible.
Postpositions	Postpositions (cf. English prepositions) are attached to the end of the nouns they modify indicating relationships in space and time (e.g., Ormanın içinde, inside the forest, Dersten sonra, after the class).

Note. Selected information quoted from Göksel and Kerslake (2011).

case marker) (Ketrez, 2012). At this point it is important to note that the target forms described below were selected by the teacher, before the commencement of the lessons and were not explicitly revealed to the learner as the focus of research until after the conclusion of the instructional period. Facilitating J's comprehension of these target forms was just one of the learning outcomes of the instructional period (e.g., pronunciation, vocabulary, reading, listening, basic writing, Turkish cultural knowledge).

Level one targets were the accusative, dative, locative and ablative cases, which are also known as *ismin halleri* (states of the noun). To briefly elaborate, the accusative case (*ismin -i hali*) marker is *-i* and its function is comparable to that of the definite article of English (e.g., *evi* = the house). The dative case (*ismin -e hali*) marker is *-e* and indicates directionality in a way similar to the English preposition *to* (e.g., *eve* = to the house). The locative case (*ismin -de hali*) marker is *-de* and signifies location, and can be aligned with the English prepositions *in*, *on* or *at* (e.g., *evde* = at the house). Finally, the ablative case (*ismin -den hali*) marker is *-den* and indicates directionality *from* or *through* something (e.g., *evden* = from the house). Level one targets were useful as they occur very frequently in Turkish and are necessary for expressing basic meaning in the language. As J was an absolute beginner, the selection of these targets ensured a strong likelihood that they would be noticed during the instructional period.

Level two targets were the accusative, dative, locative and ablative cases agglutinated with a compound marker (e.g., *-ini*, *-ine*, *-inde*, *-inden*) (Ketrez, 2012, p. 50). In Turkish, the compound marker (*tamlanan eki*) indicates a genitive type or possessive relationship with the noun (e.g., *evini*= his/her house, *evine* = to his/her house, *evinde* = at his/her house,

evinden = from his/her house). Agglutinated compound markers with case markers were useful targets as they are morphologically more complex than those of level one, but are still fundamental in conveying basic meaning in Turkish. As a final point of elaboration, as introduced in Table 1, the morphological structure of affixes in Turkish is variable based on the principle of vowel harmony (Göksel & Kerslake, 2011; Ketrez, 2012). The vowels in affixes (i.e., front/back vowel) must be phonologically congruent with the last vowel of the word to which they are attached. For this reason, as an example, although the generic accusative case is referred to as *-i hali* the vowel that will be used to render this case may be either -i, -ı, -u, or -ü depending on the rules of vowel harmony. Table 2 presents examples from target forms from each of the two levels of complexity.

3 | ANALYSIS

Approximately 30 h of lessons were recorded onto MP4 digital file format and were the primary source of data. Analysis of the lessons took place after the cessation of the 26-week instructional period. All 52 lessons were analyzed to identify instances of noticing. Specifically, the sections of the lessons where D asked J after reading a page, *Ne oldu?* (What happened?) were used. Thematic analysis was undertaken on the relevant sections of the audio-visual files (Braun & Clarke, 2006). As a starting point for an iterative, thematic analysis of the data procured from the think-aloud protocol, Leow's (1997) framework of noticing was applied:

a) a show of some behavioral or cognitive change (e.g., verbal ... production of the ... targeted form) due to the experience; and either (b) a report of being aware of the experience or (c) some form of metalinguistic description of the underlying rule. (p. 474)

Noticing was operationalized as the verbal production of language that demonstrated some level of understanding of the target form's meaning or grammatical structure. Lessons were coded according to the prescriptions of Braun and Clarke (2006) which include the following phases: data familiarization, generation of initial codes, searching for and reviewing themes, and defining and naming themes (p. 86). The data were analyzed in an iterative manner until all instances of noticing identified by the researchers could be categorized into clearly defined themes. Through the development of definitions of each of the themes, the researchers were able to establish 100 percent agreement on the categorization of instances of noticing. There were 500 individual target forms within the 10 books used in the study: 350 at level one (one affix) and 150 at level two (two affixes).

4 | RESULTS

4.1 | Research Question 1: What types of noticing (themes) occur in the first 6 months of the instructional period?

After analysis of the verbal responses to the question *Ne oldu?* (What happened?) across the entirety of the instructional period, six noticing themes were identified. A schematic

TABLE 2 An overview of the morphological structure of level one and level two targets.

Level of target form	Category description	Affixes	Turkish example	English interpretation
Level One (a single affix)	Accusative (-i hali)	- i	Ali'yi, Kaya gördü.	Kaya saw Ali.
		-ı	Topaca kırba cı iyi vur!	Hit the top with the whip well!
		-u	Suyu da içti.	He also drank the water.
		-ü	Günü hatırla.	Remember the day.
	Dative (-e hali)	-e	Ali bahçeye girdi.	Ali entered the garden.
		-a	Ali ağaca çıktı.	Ali climbed the tree.
	Locative (-de hali)	-de	Bahçede bir ağaç gördü.	He/she saw a tree in the garden.
		-da	Uçak havada uçmaya başladı.	The plane began to fly in the air.
		-te	Derste gerekli olan eşyalarını aldı.	He/she took items needed in class.
		-ta	Ağaçta kırmızı elma gördü.	He/she saw a red apple on the tree.
Level Two (two affixes)	Compound marker + Accusative (-i hali)	-den	Yerden topu aldı.	He/she picked up the ball from the ground.
		-dan	Ali arabadan indi.	Ali got down from the wagon.
		-ten	İşten eve geldi	He/she came home from work.
		-tan	Ali ağaçtan indi.	Ali got down from the tree.
	Compound marker + Dative (-e hali)	-ini	Ali gemisini getirdi.	Ali brought his ship.
		-ını	Ablasını kaldırdı.	He woke his sister.
		-unu	Okulunu çok sevdi.	He loved his school.
		-ünü	Adamın yüzünü sabunladı.	It soaped the man's face.
	Compound marker + Locative (-de hali)	-üne	Yüzüne usturayı sürüttü.	Shaved his face with a razor
		-ına	Suna koşup babasına sarıldı.	Suna ran to her father and hugged him
		-inde	Bahçesinde küçük bir havuz vardı.	There was a small pond in the garden.
		-ında	Oturma odasında otururlar.	They sit in the living room.
Note: The examples provided are based on those found in the Cin Ali readers.	Compound marker + Ablative (-den hali)	-inden	Sonra ipinden tuttu.	Then he grabbed its rope.
		-ından	Ali topacı dayısından aldı.	Ali took the top from his uncle.

overviewing the relationship between these six themes of noticing is provided below (see Figure 2).

An initial binary distinction was made for each target form to determine if evidence of noticing was apparent or not. *No evidence of noticing of the target form* (e.g., no noticing) is noted as the first theme of six. When noticing was evident, it could be manifested in two ways: through *the interpretation of meaning* and through *morphological analysis*. For any given target form, it was possible for these two themes to occur in isolation or in combination. They were not mutually exclusive, but often did occur in isolation.

The unifying feature of noticing coded as *interpretation of meaning* was learner discourse that addressed the meaning of the word within which the target case marker occurred, without an analysis of word morphology. Discourse coded as *interpretation of meaning* was often associated with the application of top-down strategies such as applying background knowledge, knowledge of co-text, strategic guessing, and so on. Instances of interpretation of the meaning of the target forms could be further categorized into two themes: *partial interpretation of meaning* (theme two) or *full interpretation of meaning* (theme three). For any given target form, theme two and theme three were mutually exclusive.

The unifying feature of noticing coded as *morphological analysis* was learner discourse that explicitly referred to the morphology of the Turkish word within which the target case markers (affixes) were present. Morphological analysis was associated with discursal moves focussed at the lexical and sub-lexical level that explicitly linked the target case marker to its function within the sentence. Instances of morphological analysis of the target forms could also be further categorized into the themes of *partial morphological analysis* (theme four) or *full morphological analysis* (theme five). Again, for any given target form, themes four and five were mutually exclusive.

Theme six was that of *teacher-mediated noticing*, which entailed a noticing event that occurred after teacher guided interaction with the learner. Theme six could occur in

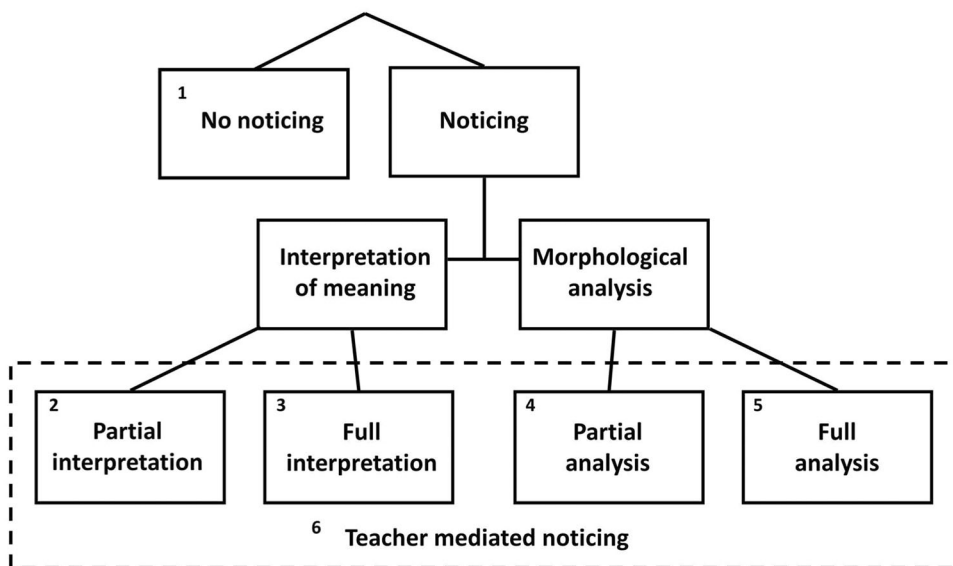


FIGURE 2 A thematic map modeling the noticing evident in the data set.

combination with themes two, three, four, and five. Each theme is described below and is accompanied with multimodal vignettes (see Video S1).

4.1.1 | Theme one: No evidence of noticing of the target form

Theme one occurred when the learner did not verbally interpret the meaning or analyze the morphology of the target grammatical form/s within the text. In its simplest form, theme one was evident when J did not verbalize an interpretation of the target form and its associated root word; in other words, verbal reference to the target was omitted altogether in the interpretation process. However, think-aloud data was also coded as theme one when J only interpreted the root word without also providing any interpretation of the target form, specifically the case markers and/or the compound marker.

Example 1 from week 6, book 3, page 15 (see Video S1)

Text: ‘Çetin’in halası pencereden başını çıkardı’ (target – ‘-ını’)

J: I think that ‘pencer’, ‘pen ... pencere’ is window

D: Pencere, yeah, pencere is window

J: From the window, ‘başını’ head and, ah, I learnt that ‘çıkardı’ is to poke out, past ten
poked or put

In example 1, the word *başını* is simply interpreted as *head* (e.g., baş). There is no interpretation or analysis reflecting the meaning or function of the compound marker. Compare an alternative interpretation, *her head*, which does encapsulate the meaning of the compound marker. Further, there is no interpretation or analysis reflecting the noun as being the object of the verb (e.g., ... *put her head* ...), thus there is no evidence of noticing of the case marker in this example either.

4.1.2 | Theme two: Noticing through partial interpretation of meaning of the target form

Theme two was evident when J only partially interpreted the meaning of target forms. All instances of theme two were evident in relation to level two targets (compound marker and case marker). A typical instance of theme two occurred when the learner did not interpret the compound marker, but did correctly interpret the case marker.

Example 2 from week 7, book 4, page 13 (see Video S1)

Text: ‘... yürüye yürüye evine gidiyordu.’ (target – ‘-ine’)

J: ‘Evine’ that’s house, to the house

D: To the house ...

J: ‘Gid’ go. And ‘yordu’ must be that verb tense that I haven’t really learnt, I’ve learnt it but I haven’t [points to head]

D: okay, that’s good

J: hmm

In example 2, the word *evine* is interpreted as *to the house*. The interpretation encapsulates the *-e hali* or dative case by way of referring to directionality (e.g., **to the** house). However, the interpretation does not encapsulate the meaning of the compound marker (e.g., *evine*). In comparison, an alternative interpretation, *to his/her house*, would have provided evidence of full interpretation.

Example 3 from week 4, book 3, page 7 (see Video S1)

Text: ‘... Cin Ali topacını aldı ...’ (target – ‘-ını’)

D: ‘Ne oldu?’

J: Some guessing here Devrim

D: Haydi

J: Ah, okay, ah ‘...Cin Ali topacını aldı ...’ Well he took the top, he, he took the top. I’m guessing. I’m not completely clear on the ‘-ını’ at the end.

D: ah ha

In example 3, *topacını aldı* is interpreted as *he took the top*, which again does not encapsulate the meaning of the compound marker. An alternative, and full interpretation of this target form would have been *he took his/her top*.

4.1.3 | Theme three: Noticing through full interpretation of meaning of the target form

Theme three was evident when J fully interpreted the meaning of the target form. Examples of this noticing theme occurred in relation to both level one and level two targets.

Example 4 from week 2, book 2, page 15 (see Video S1)

Text: ‘... Ağaçtan indi...’ (target – ‘-tan’)

J: Ah, ‘Ağaçtan indi’, ah, ‘indi’, ah got down from the tree.

D: ‘Aferin’

J: Down from the tree

The target in example 4 is *-tan* or *-den hali* (ablative case). The target is a single affix and thus an example of a level one target form. The learner interpreted *Ağaçtan indi* as *got down from the tree*. The interpretation fully encapsulates the meaning of the *-den hali* (ablative case) with specific reference to directionality (e.g., from the tree).

Example 5 from week 9, book 9, page 15 (see Video S1)

Text: “... Elinde mikrofon ...” (target – ‘-inde’)

J: Two buckets, one brush, and a razor was placed. Um, in the hand of one man was a microphone

D: Yep

The target form in example 5 is *-inde*, which includes *-in* (compound marker) and *-de* (*-de hali* or locative case). In the example, *Elinde* is interpreted as *in the hand of one man*. The interpretation encapsulates the *-de hali* by referring to the location of the object (e.g., *in the hand*) and the meaning of the compound marker by alluding to the possession of the object (*of one man*). This could also have been fully interpreted by saying *in the man's hand*. As the target form has two affixes, this is an example of a level two target form. Across the duration of the language learning period, there were many more instances of noticing through full interpretation of meaning (theme three) for level one targets than there were for level two targets, which given their relative complexity was not unexpected.

4.1.4 | Theme four: Noticing through partial morphological analysis of the target form

Theme four occurred when J provided a partial morphological analysis of the target form. This theme occurred infrequently, with a total of five instances across the duration of the language learning period.

Example 6 from week 13, book 6, page 15 (see Video S1)

Text: 'Masas**ından** kalktı' (target – '-**ından**')

J: Um, but this 'Masasından', I guess that's the '-den hali'

D: Yep, beautiful

J: From

In example 6, the target form is *-ından*, which includes *-in* (the compound marker) and *-dan* (-den hali or ablative case). The learner identifies the function of one of the affixes of *masasından* through morphological analysis of sorts, namely by identifying the *-den hali* and linking it to its function (e.g., from). However, the morphological analysis does not encapsulate the function of the compound marker. An alternative and full morphological analysis of this target form would have been something along the lines of the following: ... *that's -den hali, from, and that's the compound marker which indicates possession*.

4.1.5 | Theme five: Noticing through full morphological analysis of the target form

Theme five was evident when J provided a full morphological analysis of the target form. This theme also occurred relatively infrequently, with a total of 12 instances across the duration of the learning period.

Example 7 from week 2, book 2, page 9 (see Video S1)

Text: 'Ağaç**ta** bir de küçük kuş gördü' (target – '-**ta**')

J: So, 'Ağaçta' that '-ta' is the, ah, I guess some kind of article ... some kind of element that indicates that something's happening in there [in the tree].

The target form in Example 7 is *-de hali* (i.e., '-ta') or the locative case. In the example, J accurately identifies the function of the locative affix associated with the word *ağaçta* through morphological analysis (e.g., that 'ta' [is an] ... element that indicates that something's happening in there [in the tree]).

4.1.6 | Theme six: Noticing facilitated through teacher mediation

Theme six occurred when the learner was able to provide verbal evidence of noticing (themes two, three, four and/or five) after explicit instruction from the teacher. By definition, theme six entailed a combination of more than one noticing theme (see Figure 2).

Example 8 from week 3, book 2, page 15 (see Video S1)

Text: ‘... evine gitti ...’ (target – ‘-ine’)

D: No, no, no, where did he go? ‘Ev’

J: Oh, I’m not sure of this word.

D: ‘Ev’, [mimes house]

J: House

D: House

J: Hmm, ‘ev’

D: Okay, I’ll talk about it later, so ‘evine’ [gestures direction]

J: ‘Ev’, useful

D: ‘Ev’ is house.

J: ‘Ev ...evine gitti’ House, entered the house?

D: Ah, went, went to his home, his house

J: So, ‘gitti’ went, right?

D: Yeah

J: Yep, went to his house, ‘Kaya, Oya, Suna ...’.

In example 8, D uses explanation to facilitate J’s full interpretation of meaning of the target form (theme three). The target form in Example 8 is *-ine*, which includes the compound marker (-in) and *-e hali* or the dative case. In the example, in the initial stages of the interaction J could

not retrieve the meaning of the root word *ev* (house). After mediation by the teacher, the learner verbalizes a full interpretation of the meaning of the target form: *went to his house*. This encapsulates the genitive-possessive dimension of the case marker (**his house**) and the meaning of the dative case (**went to his house**). Another example of theme six is provided below. In this example, again teacher mediation facilitates the learner's noticing through full interpretation of the meaning of the target.

Example 9 from week 18, book 7, page 16 (see Video S1)

Text: 'Susamışsa suyunu iç' (target – '-unu')

D: 'Suyunu iç', so drinks water

J: Yep

D: But, so, 'su iç' is perfectly okay as well

J: Oh, oh okay

D: Of course, of course, so make, so the author made it into this possessive

J: Oh okay

D: So 'Cin Ali'nin suyu'

J: He drinks his water

D: That's the possessive, that's the, ah, genitive construction

J: Right

4.2 | Research Question 2: What trends in the occurrence of these types of noticing (themes) are evident in the first 6 months of language learning?

The frequency of the six themes for level one targets occurred in the following descending order: theme three (full interpretation of meaning), theme one (no noticing), theme six (teacher-mediated noticing), theme five (full morphological analysis), theme two (partial interpretation of meaning) and theme four (partial morphological analysis).

Of the two most prevalent themes over time, there was a trend in a decrease in the occurrence of theme one (e.g., no noticing) and an increase in the occurrence of theme three (full interpretation of meaning). With the assumption that across the duration of the language learning period, J went from absolute beginner to approaching basic user (A1), at a minimum here we can say that an increased level of noticing (attention and awareness) was associated with language learning. Noticing by teacher mediation (theme six) remained relatively stable across time (See Table 3).

The frequency of the six themes for level two targets occurred in the following descending order: theme three (full interpretation of meaning), theme one (no noticing), theme two (partial interpretation of meaning), theme six (teacher-mediated noticing), theme four (partial morphological analysis) and theme five (full morphological analysis) (see Table 4). As with level one targets, over time there was a trend in a decrease in the occurrence of theme one and an increase in the occurrence of theme three. Figure 3 provides a comparison of the percentage of level one and level two targets for which there was evidence of noticing through full interpretation of meaning (theme three). In all instances there was a higher proportion of theme 3 noticing for level one targets when compared with level two targets. Considering their relative complexity, this is not unexpected.

5 | DISCUSSION

This longitudinal descriptive study has presented an alternative perspective on noticing and how it manifested across an authentic language learning context. Noticing occurred in more than one domain: noticing via attention toward meaning or noticing via attention to morphological analysis. Thematic analysis showed it was possible to describe two levels of awareness that were evident within each of these two general domains: partial and full interpretation of meaning (themes two and three) and partial and full morphological analysis (themes four and five). Whether these themes are evident in analyses focussing on other grammatical targets and/or in languages other than Turkish is a matter for future research to resolve. Gathering think-aloud data with video enabled all instances of noticing of the target forms that occurred during the language learning period to be preserved in real time. Other related research has gathered think-aloud data of language learners engaged in relatively discrete tasks (e.g., Hama & Leow, 2010; Rosa & Leow, 2004), providing a cross-sectional snapshot of noticing. In contrast, the current study had a sustained (6-month) focus on a single language learner. This has facilitated the synthesis of a model of noticing grounded in an authentic case of language learning.

Conceptions of noticing interpreted through lived experience are likely to hold strong value for real-world teaching. Since Schmidt and Frota's (1986) seminal research, there has been a productive research agenda around refining the theoretical psycholinguistic foundation of the noticing hypothesis (e.g., Godfroid et al., 2013; Truscott & Smith, 2011). However, there is also benefit in promoting research that pushes beyond that which frames noticing within a discrete intrapersonal cognitive domain. Models of noticing that encapsulate both cognitive and sociocultural dimensions of importance during language learning are beneficial (Storch, 2018). In this regard, the identification of teacher-mediated noticing (theme six) as a component of this model is significant (Figure 2). Clearly, the mechanisms that modulate levels of attention and awareness in authentic language learning extend beyond the intrapersonal cognitive domain. Therefore, ongoing development of models of noticing that are grounded in both the

TABLE 3 The occurrence of noticing themes for level one targets over time.

Target		2: Partial			3: Full interpretation		4: Partial		5: Full morphological		6: Teacher-		
Book #	instances	1: No noticing	interpretation	of meaning	of meaning	morphological	analysis	analysis	mediated	noticing			
1	41	35	85%	0	0%	5	12%	0	0%	3	7%	6	15%
2	41	29	71%	0	0%	12	29%	0	0%	0	0%	6	15%
3	43	7	16%	0	0%	36	84%	0	0%	2	5%	5	12%
4	27	10	37%	0	0%	17	63%	0	0%	0	0%	4	15%
5	34	7	21%	0	0%	25	74%	1	3%	0	0%	3	9%
6	28	11	39%	1	3%	16	57%	1	3%	1	4%	4	14%
7	29	3	10%	2	7%	24	83%	0	0%	0	0%	4	14%
8	33	5	15%	0	0%	29	88%	0	0%	2	6%	1	3%
9	37	8	22%	0	0%	29	78%	0	0%	2	5%	2	5%
10	37	4	11%	0	0%	33	89%	0	0%	0	0%	3	8%
Total	350	119		3		226		2		10		38	

Note. Total instances of each theme (left) and each theme shown as a % of total target instances (right) shown in split columns.

TABLE 4 The occurrence of noticing themes for level two targets over time.

Book #	Target instances	1: No noticing	2: Partial interpretation of meaning	3: Full interpretation of meaning	4: Partial morphological analysis	5: Full morphological analysis	6: Teacher-mediated noticing
1	1	1	100%	0	0%	0	0%
2	5	3	60%	1	20%	0	0%
3	13	4	31%	5	38%	4	31%
4	15	8	53%	4	27%	3	20%
5	17	6	35%	4	24%	6	35%
6	26	5	19%	10	38%	10	38%
7	24	4	17%	4	17%	15	63%
8	13	3	23%	0	0%	10	77%
9	22	3	14%	4	18%	15	68%
10	14	3	21%	0	0%	11	79%
Total	150	40	32	75	3	2	15

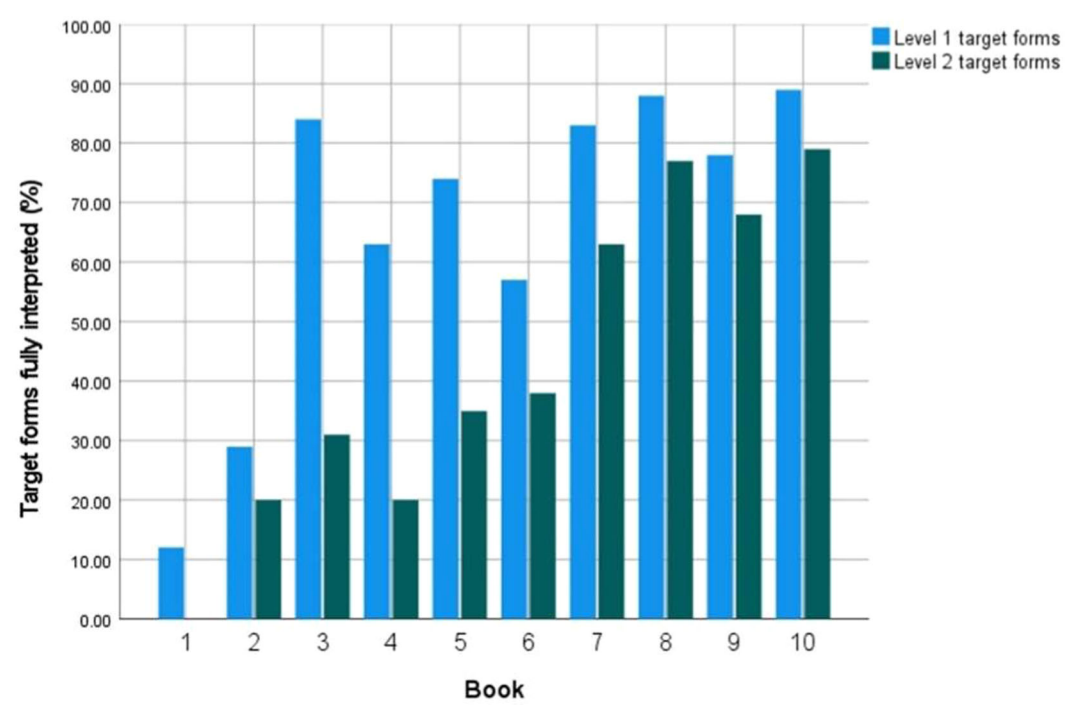


FIGURE 3 Occurrence of theme three for level one and level two target forms.

cognitive/intrapersonal and sociocultural/interpersonal dimensions evident in authentic language learning contexts are encouraged. The process of developing such models (e.g., through action research) and the models themselves will be useful in efforts to systematically raise levels of awareness around target language forms.

5.1 | Pedagogical recommendations

The findings of the current study have implications for both Turkish as a foreign language and foreign language learning more generally. In the current study, a first language (L1) meaning recall protocol enabled substantive engagement with a meaning-focussed task centered upon target language text, despite the learner having extremely limited linguistic resources in Turkish. This approach enabled data to be systematically collected about what the learner did not notice, partially noticed and fully noticed about the target forms. Instances of partial noticing by learners during meaning-focussed tasks can be useful signals for teachers. Such instances can help teachers know when directing learners' attention to form may be most effective in promoting explicit declarative knowledge of the target language. To date the value of L1 meaning recall formats have been highlighted in the second language testing domain (Cheng et al., 2023; Matthews et al., 2023), but to our knowledge have yet to be adequately explored as a meaning-focused approach to facilitate noticing in the very early stages of foreign language acquisition.

We believe there is potential to usefully elaborate on the paradigm of partial and full noticing in relation to various linguistic components of relevance to second language learning. The current study identified partial and full semantic and morphological noticing, but other linguistic components like phonological and syntactic noticing (partial and full) may also be useful in structuring task-based pedagogic efforts to focus learners' attention to form. Frameworks or rubrics defining what constitutes partial and full noticing for various linguistic components of a given task, for example, may provide a useful awareness raising device for both teachers and learners (Appendix A). Among early stage learners, teachers could use such frameworks to establish diagnostic or formative assessment data useful for guiding teaching decisions for individuals or groups of learners in relation to particular tasks. Such frameworks could be applied by teachers to map out important linguistic forms to draw learners' attention toward, if and when appropriate, during meaning-focussed tasks (e.g., L1 meaning recall of an L2 text). Over time, it is likely that frameworks mapping out what constitutes partial and full noticing in relation to a range of linguistic components (e.g., semantic, phonological, morphological, syntactic) for a given task would enable a teacher to pre-empt many of the problems that learners will experience. Such frameworks could be used both before, during and/or after communicative tasks to help build explicit declarative knowledge of the crucial elements of the target language systematically, while still remaining responsive to learners' internal syllabi (R. Ellis, 2016).

5.2 | Limitations and future research

Although the current research has presented a new perspective on noticing, it has a number of limitations, the identification of which may support future research efforts. Firstly, although individual cases can provide valuable insights around linguistic phenomena (e.g., Rosheim, 2022), such cases are obviously limited by the degree to which results can be generalized. Future research that captures longitudinal data among multiple learners and compares the types and frequency of noticing that occur is encouraged. Another limitation of the current research is that for practical reasons noticing was operationalized through verbalization of a subjective experience related to the target forms. Clearly, focal awareness may be directed toward language in a way facilitative of learning that for whatever reason is not verbalized. Eye-tracking technology presents another avenue to collect data relevant to noticing that does not necessitate verbalization (Godfroid et al., 2013). Future research that collects multiple modes of concurrent data (e.g., video and eye tracking) may provide a way to alleviate this potential methodological limitation. Another limitation was that as the primary data was drawn from L1 meaning recall, aspects of J's emerging productive phonological knowledge of Turkish (pronunciation) was not captured. Similarly as J was at such a low level of Turkish proficiency, there were no significant opportunities for J to substantively analyze sentence level or syntactic components of the target language. Future similar research that extends its scope to capture the noticing that occurs in relation to pronunciation and the ability to analyze syntactic structures would be a valuable contribution to the field.

Lastly, clearly the involvement of the author as the sole language learning subject of this investigation has its limitations. Replicating or partially replicating this study with other participants that are not directly involved as the researchers is suggested. Indeed, future studies that interrogate the robustness of the model of noticing presented as part of the current research with various languages and participants is encouraged. A vast majority of research on

noticing, and indeed in SLA in general, has been conducted in relation to a relatively few languages (e.g., English, Spanish, Portuguese). Modeling noticing in more authentic language learning contexts in relation to a broader array of target languages holds potential to broaden our collective understanding of noticing. Such research is likely to enable the development of more nuanced models of noticing that have stronger applicability and impact in foreign language classrooms globally.

6 | CONCLUSION

Audio-visual data collection has enabled actual instances of noticing to be presented in multimodal vignettes. The objective here was to draw the construct of noticing further out of the theoretical domain and offer a highly contextualized, explicit model of noticing with tangible links to the foreign language learning classroom. Analysis indicated that noticing could be categorized across two broad domains: interpretation of meaning and morphological analysis, with each of these categorizations evident at two levels of awareness (partial and full). Analysis also revealed that there were clear instances where teacher-learner interaction catalyzed noticing, which motivates future research that explores types of noticing that encompass both cognitive and sociocultural dimensions in a variety of authentic language learning contexts.

Although, the construct of noticing has become a fixture in SLA theory (Hulstijn, 2005), the mode of research that was instrumental in its conception (see, Schmidt & Frota, 1986) is far less well-established. The enduring impact of Schmidt and Frota's (1986) fine-grained, longitudinal investigation of an individual's language acquisition is juxtaposed by the lack of similar research that has been undertaken in various foreign languages since that time. This type of research is underrepresented in the foreign language learning literature and there is great scope for similar research to be undertaken across the globe in a myriad of foreign languages. Clearly such research does not fill the same niche as other more strongly quantitative research paradigms (e.g., experiments & quasi-experiments); it cannot take their place. However, as the current research makes clear, systematic interrogation of an individual's efforts to acquire a foreign language across time can provide new insights on the mechanisms of that learning (e.g., noticing). Such research approaches can draw insight from, and cast a spotlight on, the specific teaching and learning challenges particular to less commonly taught languages, such as Turkish, that may otherwise remain unnoticed.

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CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

REFERENCES

- Apaydin, N. (2019). Examining the process of establishing a museum with educational content: The case of *Cin Ali Museum* [Unpublished M.A. thesis]. Ankara University, Türkiye.
- Bialystok, E. (1994). Analysis and control in the development of second language proficiency. *Studies in Second Language Acquisition*, 16(2), 157–168. <https://doi.org/10.1017/S0272263100012857>
- Bowles, M. A., Leow, R. P. (2005). Reactivity and type of verbal report in SLA research methodology: Expanding the scope of investigation. *Studies in Second Language Acquisition*, 27(3), 415–440. <https://doi.org/10.1017/S0272263105050187>
- Braun, V., Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Cheng, J., Matthews, J., Lange, K., McLean, S. (2023). Aural single-word and aural phrasal verb knowledge and their relationships to L2 listening comprehension. *TESOL Quarterly*, 57(1), 213–241. <https://doi.org/10.1002/tesq.3137>
- Ellis, N. C. (1995). Consciousness in second language acquisition: A review of field studies and laboratory experiments. *Language Awareness*, 4(3), 123–146. <https://doi.org/10.1080/09658416.1995.9959876>
- Ellis, R. (2005). Measuring implicit and explicit knowledge of a second language: A psychometric study. *Studies in Second Language Acquisition*, 27(2), 141–172. <https://doi.org/10.1017/S0272263105050096>
- Ellis, R. (2016). Focus on form: A critical review. *Language Teaching Research*, 20(3), 405–428. <https://doi.org/10.1177/1362168816628627>
- Ellis, R., Loewen, S., Erlam, R. (2006). Implicit and explicit corrective feedback and the acquisition of L2 grammar. *Studies in Second Language Acquisition*, 28(2), 339–368. <https://doi.org/10.1017/S0272263106060141>
- Ellis, R., Sheen, Y. (2006). Re-examining the role of recasts in second language acquisition. *Studies in Second Language Acquisition*, 28(4), 575–600. <https://doi.org/10.1017/S027226310606027X>
- Gass, S. M. (1988). Integrating research areas: A framework for second language studies. *Applied Linguistics*, 9(2), 198–217. <https://doi.org/10.1093/applin/9.2.198>
- Godfroid, A., Boers, F., Housen, A. (2013). An eye for words: Gauging the role of attention in incidental L2 vocabulary acquisition by means of eye-tracking. *Studies in Second Language Acquisition*, 35(3), 483–517. <https://doi.org/10.1017/S0272263113000119>
- Göksel, A., Kerslake, C. (2011). *Turkish: An essential grammar*. Routledge.
- Hama, M., Leow, R. P. (2010). Learning without awareness revisited: Extending Williams (2005). *Studies in Second Language Acquisition*, 32(3), 465–491. <https://doi.org/10.1017/S0272263110000045>
- Hulstijn, J. H. (2005). Theoretical and empirical issues in the study of implicit and explicit second-language learning: Introduction. *Studies in Second Language Acquisition*, 27(2), 129–140. <https://doi.org/10.1017/S0272263105050084>
- Ketrez, F. N. (2012). *A student grammar of Turkish*. Cambridge University Press.
- Kunitz, S. (2018). Collaborative attention work on gender agreement in Italian as a foreign language. *The Modern Language Journal*, 102, 64–81. <https://doi.org/10.1111/modl.12458>
- Leow, R. P. (1997). Attention, awareness, and foreign language behavior. *Language learning*, 47(3), 467–505. <https://doi.org/10.1111/0023-8333.00017>
- Leow, R. P. (2000). A study of the role of awareness in foreign language behavior: Aware versus unaware learners. *Studies in Second Language Acquisition*, 22(4), 557–584. <https://doi.org/10.1017/S0272263100004046>
- Leow, R. P. (2001). Do learners notice enhanced forms while interacting with the L2? An online and offline study of the role of written input enhancement in L2 reading. *Hispania*, 84(3), 496–509. <https://doi.org/10.2307/3657810>

- Leow, R. P., Grey, S., Marijuan, S., Moorman, C. (2014). Concurrent data elicitation procedures, processes, and the early stages of L2 learning: A critical overview. *Second Language Research*, 30(2), 111–127. <https://doi.org/10.1177/0267658313511979>
- Lichtman, K., VanPatten, B. (2021). Was Krashen right? Forty years later. *Foreign Language Annals*, 54(2), 283–305. <https://doi.org/10.1111/flan.12552>
- Matthews, J., Masrai, A., Lange, K., McLean, S., Alghamdi, E. A., Kim, Y. A., Shinhara, Y., Tada, S. (2023). Exploring links between aural lexical knowledge and L2 listening in Arabic and Japanese speakers: A close replication of Cheng, Matthews, Lange and McLean (2022). *TESOL Quarterly*, 1–28. <https://doi.org/10.1002/tesq.3212>
- Norris, J. M., Ortega, L. (2000). Effectiveness of L2 instruction: A research synthesis and quantitative meta-analysis. *Language learning*, 50(3), 417–528. <https://doi.org/10.1111/0023-8333.00136>
- Rosa, E., O'Neill, M. D. (1999). Explicitness, intake, and the issue of awareness: Another piece to the puzzle. *Studies in Second Language Acquisition*, 21(4), 511–556. <https://doi.org/10.1017/S0272263199004015>
- Rosa, E. M., Leow, R. P. (2004). Awareness, different learning conditions, and second language development. *Applied psycholinguistics*, 25(2), 269–292. <https://doi.org/10.1017/S0142716404001134>
- Rosheim, K. (2022). Learning from Tina: A case study with a selective speaker. *Language Awareness*, 31(2), 175–193. <https://doi.org/10.1080/09658416.2021.1996583>
- Russell, V. (2014). A closer look at the output hypothesis: The effect of pushed output on noticing and inductive learning of the Spanish future tense. *Foreign Language Annals*, 47(1), 25–47. <https://doi.org/10.1111/flan.12077>
- Sato, M., Lyster, R. (2012). Peer interaction and corrective feedback for accuracy and fluency development: Monitoring, practice, and proceduralization. *Studies in Second Language Acquisition*, 34(4), 591–626. <https://doi.org/10.1017/S0272263112000356>
- Schmidt, R., & Frota, S. (1986). Developing basic conversational ability in a second language: A case study of an adult learner of Portuguese. In R. Day (Ed.), *Talking to learn* (pp. 237–326). Newbury House.
- Schmidt, R. (2001). Attention. In P. Robinson, (Ed.), *Cognition and Second Language Instruction* (pp. 3–32). Cambridge University Press.
- Schmidt, R. W. (1990). The role of consciousness in second language learning. *Applied Linguistics*, 11(2), 129–158. <https://doi.org/10.1093/applin/11.2.129>
- Storch, N. (2008). Metatalk in a pair work activity: Level of engagement and implications for language development. *Language Awareness*, 17(2), 95–114. <https://doi.org/10.1080/09658410802146644>
- Storch, N. (2018). Written corrective feedback from sociocultural theoretical perspectives: A research agenda. *Language Teaching*, 51(2), 262–277. <https://doi.org/10.1017/S0261444818000034>
- Tomlin, R. S., Villa, V. (1994). Attention in cognitive science and second language acquisition. *Studies in Second Language Acquisition*, 16(2), 183–203. <https://doi.org/10.1017/S0272263100012870>
- Truscott, J. (1998). Noticing in second language acquisition: A critical review. *Second Language Research*, 14(2), 103–135. <https://doi.org/10.1191/026765898674803209>
- Truscott, J., Smith, M. S. (2011). Input, intake, and consciousness. *Studies in Second Language Acquisition*, 33(4), 497–528. <https://doi.org/10.1017/S0272263111000295>
- Uggen, M. S. (2012). Reinvestigating the noticing function of output. *Language Learning*, 62(2), 506–540. <https://doi.org/10.1111/j.1467-9922.2012.00693.x>
- Ünlü, A. (2015). How alert should I be to learn a language? The noticing hypothesis and its implications for language teaching. *Procedia-Social and Behavioral Sciences*, 199, 261–267. <https://doi.org/10.1016/j.sbspro.2015.07.515>
- Williams, J. N. (2005). Learning without awareness. *Studies in Second Language Acquisition*, 27(2), 269–304. <https://doi.org/10.1017/S0272263105050138>

SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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APPENDIX A

For the student—In pairs or small groups

Task: First read the text aloud in Turkish to your partner/s. If there are words that you are unsure about how to pronounce, be sure to make a note. Next, explain what you understood from the text in English to your partner. Provide as much detail as possible. If there are parts of the text, such as words, parts of words, or grammar that you are unsure about, be sure to make a note. As you work on this task your teacher will move around the class and listen to your reading and discussions.

Text

Cin Ali ve arkadaşları, kırdan dolaşırken, bir kaplumbağa gördüler. Koşup kaplumbağanın başına toplandılar. Kaplumbağa onlardan korkup başını kabuğunun içine çekti.

For the teacher

As you monitor the learners undertaking the task, take note of examples that demonstrate partial and full noticing among the class members. All categories may not be relevant in all instances. If possible, categorise the instances of partial and full noticing in the relevant sections below.

Linguistic component	Evidence of partial noticing	Evidence of full noticing
Semantic		
Phonological		
Morphological		
Syntactic		