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EDITED BY  
Barbara Hofer,  
Free University of Bozen-Bolzano, Italy

REVIEWED BY  
Weifeng Han,  
Flinders University, Australia  
Yue Yu,  
Southeast University, China

\*CORRESPONDENCE  
Constanza Quinteros Ortiz  
✉ cquinter@uni-muenster.de

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# Navigating language learning through metalinguistic beliefs: a theoretical exploration informed by multilingual narratives

Constanza Quinteros Ortiz\*

Department of Psychology, University of Münster, Münster, Germany

This article reconceptualizes metalinguistic beliefs in multilingual learning by examining how they are constructed and mobilized in learners' narratives. Rather than treating self-reports as evidence of stable internal knowledge structures, the study approaches beliefs as discursively enacted interpretations that emerge through storytelling. Drawing on six multilingual life-story interviews conducted in Germany, the analysis combines narrative inquiry with reflexive thematic analysis to identify both the discursive mechanisms through which beliefs are expressed and their recurrent content across cases. The findings show that metalinguistic beliefs are constructed through epistemic positioning, modality, metaphor, and narrative sequencing. Three recurring domains were identified: beliefs about language (e.g., language as structured system, cultural world, or representation of cognition), beliefs about learners (e.g., inherent dispositions, self-regulatory tendencies, and heterogeneity), and beliefs about learning processes (e.g., experiential, cumulative, pattern-driven, and condition-dependent development). These beliefs function as interpretive resources that organize experience, stabilize explanations of progress and difficulty, and shape perceived agency across multilingual trajectories. Situated within a Complex and Dynamic Systems Theory framework, metalinguistic beliefs are understood as emergent and temporarily stabilizing components of multilingual meaning-making. This perspective refines their conceptualization and highlights the value of multilingual narratives for examining how such belief systems develop and operate.

#### KEYWORDS

language learning histories, metacognition, metacognitive beliefs, metalinguistic beliefs, multilingualism, narrative inquiry

## 1 Introduction

Research on additional and multilingual language learning has long examined the ability to evaluate one's own thinking and adjust actions accordingly. In multilingual learners, these regulatory processes are particularly salient, as they must monitor and coordinate several linguistic systems. This reflective capacity is commonly referred to as metacognition, often defined as "cognition about cognition" or "thinking about thinking" (Flavell, 1976). Through metacognition, learners draw on prior experiences to monitor their performance, modify strategies, and make informed decisions (Teng, 2023). Since these processes involve regulating one's actions, metacognition is closely linked to constructs such as self-regulation and autonomy, both central to successful learning (Dörnyei and Skehan, 2003; Wenden, 1998).

When reflective thinking is directed toward language and its structures, it falls within the domain of metalinguistic awareness. Hofer and Spechtenhauser (2024) place this concept at the intersection of language and metacognition, describing it as a midpoint between the two domains. Jessner (2018) locates it within the metacognitive system because it involves monitoring, evaluating, and reasoning about linguistic form and use. Metalinguistic awareness is therefore considered a domain-specific expression of metacognition rather than a separate faculty.

Although this relationship seems rather straightforward, the broader terminology around “meta” constructs is less clear. Concepts such as knowledge, awareness, and skill—widely used alongside “metacognitive” and “metalinguistic”—often appear in loose ways, and their boundaries shift across studies (D’Angelo, 2021). This volatility becomes most visible in how researchers use the term *knowledge*. This issue is not just terminological: it directly affects how we conceptualize learners’ reflections on language and language learning, particularly in multilingual contexts where such reflections are frequent and complex.

Research on metacognition in multilingual populations faces strong limitations in how the concept is empirically studied (Quinteros Ortiz, 2024). Many instruments (e.g., interviews, verbal reports, surveys) seek to measure *knowledge* or *strategy use* as if these were directly observable or stable entities, despite their susceptibility to contextual and social influences (Razavi, 2001). This creates a clear conceptual and methodological gap: in the absence of truth conditions, it remains conceptually unclear what qualifies as “knowledge” in these contexts, or whether metacognitive and metalinguistic knowledge can meaningfully be understood as *justified true belief* (Ichikawa and Steup, 2024). As a result, self-report data in additional language acquisition are often interpreted as evidence of internal knowledge structures or cognitive regulation that they cannot validly capture, producing a persistent mismatch between analytic constructs and available data. What these methods *can* reliably access, however, are learners’ beliefs: how they interpret their thinking, conceptualize learning, and understand their own agency.

Beliefs have long been recognized as informative for both cognition and behavior (Kramer et al., 2024). Research has examined how learners’ beliefs influence their interpretations of success and failure (Bandura, 2001), the strategies they intend to use (Mori, 1999), and the paths of motivation, engagement and academic outcomes that they experience (Kim, 2024). Beliefs also reflect cultural norms, language ideologies, and social expectations that surround additional language learning (Horwitz, 1999). As Umino (2023) notes, beliefs function as lenses through which learners frame their learning experiences. In this sense, beliefs provide access to the meanings learners attach to actions and experiences, rather than to verifiable internal knowledge states. However, current research does not address how beliefs should be conceptually and methodologically approached given the kinds of data through which they are typically studied. These unresolved issues are amplified in multilingual contexts, where reflections on language and learning span multiple linguistic systems and experiences.

This article develops a theoretical reflection on metalinguistic beliefs within multilingual learning and examines how they emerge in the narratives of multilingual learners. Drawing on

six selected multilingual learning histories collected in Germany, it addresses persistent conceptual and methodological gaps in metacognition research, particularly the tendency to treat learner self-reports as stable internal knowledge despite their discursive and contextual nature. Whilst addressing these gaps in this research field, the general aim of this paper is to identify what roles metalinguistic beliefs play in learners’ narrative interpretations of their multilingual trajectories.

## 2 Theoretical framework

### 2.1 Multilingualism, CDST, and the role of beliefs in metacognitive development

Research at the intersection of multilingualism and metacognition increasingly suggests that multilingual experience is not just cumulative but structurally transformative (Jessner, 2018). Managing several linguistic systems requires sustained monitoring, comparison, and regulation (Jessner, 2008), thus making metacognition a key explanatory principle of how language learning takes shape. Research in multilingual development has long hypothesized an advantage in learners who routinely coordinate multiple languages, pointing to enhanced monitoring, heightened awareness of linguistic form, and a more differentiated sense of how knowledge transfers across systems (Jessner, 2018). Building on this tradition, recent work argues that multilinguals may develop refined capacities for self-regulation and metacognitive control precisely because they operate within and across more complex cognitive ecologies (Greve et al., 2024; see also Quinteros Ortiz, 2024).

Complex and Dynamic Systems Theory (CDST) provides the most coherent theoretical frame for understanding this advantage. From a complexity perspective, multilingual development is dynamic, interconnected, and sensitive to initial conditions: small differences in prior experience or linguistic repertoire can result in different developmental trajectories and regulatory patterns (Herdina and Jessner, 2002). The so-called M-Factor proposed in the Dynamic Model of Multilingualism (DMM; Herdina and Jessner, 2002; Jessner, 2008) recognizes metalinguistic awareness, monitoring, and strategy use as emergent properties of multilingual systems rather than add-ons. Under this lens, metacognition is not a process that merely accompanies multilingualism, but it is shaped *through* the multilingual condition itself. Yet, despite the explanatory potential of CDST, the role of learners’ beliefs within these dynamic multilingual systems has remained theoretically under-specified, often treated as secondary to cognitive mechanisms rather than as integral components of system regulation.

Within this dynamic view, beliefs take on a central functional role. A complexity approach requires attending both to cognitive mechanisms and to interpretive filters through which learners evaluate their actions, constraints, and opportunities for change. Beliefs form part of the system’s regulatory architecture: they guide how learners monitor their linguistic behavior, what they attend to, how they interpret variability, and which strategies they consider legitimate or effective (Juanías, 2017). In multilingual contexts,

where learners must regularly arbitrate between competing linguistic cues, these belief systems acquire even greater weight. Beliefs do not only accompany metacognitive processes; they *affect* them, acting as moderators that enable, constrain, or redirect self-regulatory action.

This perspective has significant implications. First, it positions beliefs as active components of multilingual cognition, not as peripheral attitudinal variables. Second, it clarifies why multilinguals may display distinctive metacognitive profiles: the interpretive labor required to navigate multiple languages is itself catalyst for metacognitive development. Finally, from a CDST standpoint, beliefs are part of the system's internal dynamics, shaping trajectories of stability, variability, and change. Recognizing this allows integrating multilingual complexity with a more nuanced account of metacognitive functioning and provides conceptual bases for examining how belief systems emerge, stabilize, and guide learning in multilingual environments.

## 2.2 Conceptualizing and studying beliefs

Beliefs are a complex and multifaceted construct, embedded within broader systems that include values, personal knowledge, experiences, and other interpretive perceptions of the social world. Across the learning sciences, scholars have described beliefs as propositions felt to be true (Kramer et al., 2024), as judgments about the truth or falsity of a proposition inferred from what individuals say and do (Pajares, 1992), or as conceptual representations considered sufficiently valid to guide action (Cabarroglu and Roberts, 2000). Distinctions also appear between normative approaches (Ferreira Barcelos, 2008), which frame beliefs as preconceived notions, and metacognitive approaches, which view them as forms of metacognitive knowledge (Umino, 2023). This lack of consensus shows that belief is not a unitary concept and highlights the need to clarify how beliefs differ from knowledge.

Knowledge is traditionally defined in philosophy as a justified and verifiable truth, or “undefeated justified true belief” (Lehrer and Paxson, 1969). This implies standards of accuracy, rational scrutiny, and stability. Beliefs, by contrast, are considered more subjective and experience-dependent, grounded in episodic memory, personal impressions, and contextual circumstances rather than systematic evidence (Juanías, 2017; Truong, 2013). The distinction is difficult to maintain because people often claim to “know” things that later prove false, while only some beliefs meet the truth conditions for knowledge (Strube and Wender, 1993).

Because no consensus exists on the belief–knowledge distinction, some scholars adopt broader or integrated models. Woods's (1996) BAK framework treats beliefs, assumptions, and knowledge as interconnected rather than discrete categories. Other approaches conceptualize beliefs as a subset of metacognitive knowledge that contributes to learner autonomy (Wenden, 1999). These attempts underscore that the knowledge–belief distinction is porous and often operationalized pragmatically according to research aims. This lack of definitional agreement raises the question of how to articulate a workable understanding of beliefs that does not depend on unverifiable truth standards.

This study frames beliefs as a form of cognition defined by a stance of acceptance toward a proposition: individuals take the proposition as true without needing to meet the justificatory standards associated with knowledge. Beliefs are understood as evaluative and experiential judgments grounded on memories, impressions, and interpretations rather than established conventions or verifiable evidence. By focusing on this stance-based and experiential nature of beliefs, this definition prepares the ground for examining how beliefs operate within specific areas of cognition, such as learning and language development. It also aligns with the contextual and discursive tradition in SLA belief research, which argues that beliefs are dynamic, socially situated, and inseparable from learners' experiences and interpretive repertoires (Ferreira Barcelos, 2008).

## 2.3 Studying metacognitive and metalinguistic beliefs

The core components of metacognition encompass knowledge and cognitive activity that take as an object cognition itself (Teng and Zhang, 2022). Most theories of metacognition distinguish between knowledge (knowledge of cognition or KoC) and regulation (i.e., forms of monitoring and cognitive control; mostly referred to as Regulation of Cognition or RoC; Brown, 1978; Efklides, 2008; Schraw and Dennison, 1994). These dimensions have respectively been conceptualized as self-appraisal and self-management (Paris and Winograd, 1990), and generally address what we *know* about the mind and how we *control* it.

On the one hand, there is agreement that metacognitive knowledge comprises stored, long-term memory “awareness and knowing” of cognitive processes (van Velzen, 2017, p. 3). In line with Flavell's (1979) framework, it is often categorized into person, task and strategy knowledge. It is understood as declarative knowledge, and comprises models of cognitive processes (Efklides, 2008). Since, in practice, scholars use the terms metacognitive knowledge and metacognitive beliefs interchangeably (Graham, 2006), we could assume that they regard them as near-equivalent forms of cognitive schema. It would then be correct to apply the mentioned characteristics to metacognitive beliefs, in the sense that they are stored in long-term memory, might refer in content to person, task, and strategy aspects, and indeed form individual models of cognitive functioning.

In contrast to this parallel, some researchers have already established key differences, stating that metacognitive knowledge is typically understood as more stable and open to rational inspection (Wenden, 1999), whereas beliefs tend to be more subjective, experience-based, and resistant to scrutiny (Juanías, 2017). Beliefs have therefore been described as the conceptual representations individuals rely on to make sense of situations, even when their validity is uncertain, providing a sense of truth or trustworthiness that guides thought and action (Cabarroglu and Roberts, 2000). This emphasis on perceived rather than verifiable truth also explains why some authors explicitly prefer the term beliefs over knowledge when the focus is on what learners take to be true, rather than on what can be established as fact (Graham, 2006).

Beliefs are conceptualized here as subjective, experience-based representations stored in long-term memory, which help individuals make sense of complex phenomena without requiring standards of truth. Subsequently, metacognitive beliefs constitute this type of representation in the domain of cognition, functioning as background models that guide how learners interpret, monitor, and regulate thinking. Following the same logic, metalinguistic beliefs can be described as subjective, experience-derived representations about language as an object of cognition. Hence, they should be considered subjective, experience-derived representations that shape how individuals interpret language, how linguistic phenomena relate to one another, and how language learning is understood.

Against this background, the study wants to address major research gaps concerning the conceptualization and empirical access of metalinguistic beliefs in multilingual learning, particularly the lack of clarity about what learner-reported reflections on language represent and how they function within learners' meaning-making processes. By tracing how study participants describe and interpret linguistic experiences, the analysis seeks to identify the belief structures that underpin their metalinguistic thinking. The general aim of identifying what roles metalinguistic beliefs play in learners' narrative interpretations of their multilingual trajectories, is accomplished through examining the following research questions:

- a How do multilingual learners construct and express metalinguistic beliefs in their narratives?
- b What types of metalinguistic beliefs do multilingual learners reveal through these narratives?

## 3 Methodology

### 3.1 General methodological framework

Beliefs function as interpretive schemata through which individuals understand linguistic phenomena and experiences. Narratives, as discourse modes in which events are organized and framed through characters and locations (Bamberg, 2021), constitute a primary means through which people organize and bring meaning to those experiences (Willig, 2015, p. 146). For this reason, narrative inquiry was considered appropriate to examining metalinguistic beliefs: in narratives, “people organize and bring meaning to their experiences” (Willig, 2015, p. 146).

While narrative inquiry provides the conceptual frame for data generation, thematic analysis was used as analytic strategy. This combination follows applied-linguistics approaches in which narratives are collected as life stories and subsequently analyzed thematically to identify recurrent interpretive patterns (Barkhuizen, 2014; Benson, 2014). The analysis remained narrative-sensitive: coding attended to episodes, turning points, and participant-defined “chapters,” preserving temporal and contextual coherence while tracing cross-case patterns in how participants interpreted language, language learning, and multilingual experience.

Beliefs are operationalized as any evaluative or interpretive statement through which participants explained, justified, or make sense of linguistic experiences in a generalized or recurrent way. Beliefs are distinguished from emotions or momentary reactions by their stability across accounts, their clear explanatory function, and their relevance for guiding interpretations of language and learning, rather than referring to isolated feelings or situational responses.

To elicit these narratives, the Language Learning Story protocol was used (Hiver et al., 2020). Participants structured their linguistic histories into “chapters,” which were then explored through high points, low points, turning points, and challenging scenes. While the protocol used provided a general outline, interviews remained flexible; participants and the researcher could deepen episodes when they appeared meaningful for understanding belief systems.

### 3.2 Data collection and sampling

Thirteen multilingual speakers have been interviewed to date as part of a bigger ongoing project. Participants were recruited through word-of-mouth, university networks, and international community channels in Münster (e.g., Reddit, WhatsApp). The sampling strategy was purposive and variation-oriented: participants needed experience with a minimum of three languages, while variation in linguistic background, age, and learning trajectories was sought to capture diverse experiences. Importantly, participants were not enrolled in a formal educational setting at the time of the interview; this served as a qualifying criterion to broaden the empirical basis beyond institutional learner populations. Two participants anticipated beginning new learning pathways soon, but these had not yet started during data collection.

Interviews lasted approximately 45–90 min, were audio-recorded, transcribed using Whisper AI, manually checked for accuracy, pseudonymized, and imported into MAXQDA for coding. Interviews were conducted in Spanish with L1-speaking interviewees (i.e., INT2, INT7, INT10), while the rest were done in English. The transcripts kept the original language during analysis, while Spanish was translated to English for data triangulation and presentation. Translations were produced by the author and cross-checked with automated translation tools (Deep-L); original-language excerpts are retained here for transparency.

Six interviews were selected for in-depth analysis based on narrative richness and relevance to the research questions. These focal interviews had also undergone two full rounds of analysis at the time of writing, whereas the remaining interviews require further analytic refinement within the broader project. Table 1 provides background information and transcript word counts for the focal participants.

### 3.3 Data analysis

Data were analyzed using (reflexive) thematic analysis. Themes were treated as patterns in the data that illuminate the research topic: the concept of theme refers “to patterns in the data that reveal something of interest regarding the research topic at hand”, and more specifically “and distinctive features of participants' accounts,

TABLE 1 Background information and word count of focal participants.

Participant	Gender	Age	Mother language(s)	Additional languages	Word count
INT2	Male	56	Spanish	Basque, Catalan, English, German	12,843
INT3	Female	52	English	French, German	9,118
INT7	Male	38	Spanish and English	German; receptive Italian, Portuguese; minimal Russian, Japanese	7,669
INT10	Male	20	Spanish	English, German	16,383
INT11	Male	37	Portuguese	English, Spanish, German	13,183
INT13	Female	35	Cantonese	English, Mandarin, German (Spanish interrupted/incipient)	16,202

characterizing particular perceptions and/or experiences, which the researcher sees as relevant to the research question” (King and Horrocks, 2012, p. 150). Additionally, themes were organized to reflect how they were conceptualized to relate to one another. The procedure was aligned with the established Clarke and Braun’s (2017) model of thematic analysis.

The analytic process involved several stages. First, familiarization was conducted through repeated readings of each interview, beginning with manual correction of the automatic transcript and continuing with analytic notes and memos. Second, the data was inductively coded for broad analytic domains structuring the wider research project: metacognitive reflections, agency, and positioning. During this process, inductive codes related to metalinguistic awareness and metalinguistic beliefs emerged and were developed further for analysis. Third, the codebook was iteratively refined across multiple rounds, merging and reorganizing codes to improve conceptual coherence and fit across cases. Analytic memoing accompanied the process of documenting coding decisions.

To enhance analytic quality, investigator triangulation was applied at the coding stage (King and Horrocks, 2012). Based on the author’s judgment concerning the greatest quality threats, a code-confirming approach was taken. The author first conducted the full coding independently and subsequently engaged two experienced researchers working in related research areas in two structured data sessions. These sessions were designed to scrutinize the developing coding system across different levels of abstraction, moving from broader analytic domains to more granular categories.

During each data session, selected excerpts were presented alongside a provisional coding schema. The invited researchers completed targeted coding activities using this schema and were asked to justify their decisions and raise conceptual concerns. The sessions were followed by in-depth discussion, which focused on the coherence, boundaries, and conceptual precision of the categories rather than on generating new codes. No additional codes were introduced during these sessions.

Instances of divergent interpretation were resolved through joint discussion, and these deliberations were documented through analytic memos and informed subsequent refinements of the codebook. Analytic rigor was further supported through multiple rounds of coding, systematic codebook refinement, extensive memo-writing

(“thick description”; Geertz, 1973), and sustained self-reflexivity (Wang, 2024). The author’s background as a multilingual learner, researcher, and language teacher informed sensitivity to participants’ interpretive practices and required deliberate attention to avoiding the imposition of prior assumptions.

Metacognition-related codes were consolidated into three interrelated clusters used in this article: metacognitive beliefs about language, learning, and learners; metalinguistic awareness and learning-oriented reflection; and metacognitive experience related to conscious reflection and decision-making in language learning.

Alongside thematic analysis, targeted elements of positioning theory were incorporated to illuminate how participants enacted beliefs through narrative organization (e.g., storylines, metaphors) and how they positioned themselves, events, places, and other actors within their interpretive accounts. This allowed the analysis to capture both what participants assumed about language, learners, and learning and how these assumptions were discursively mobilized within narrative sense-making.

## 4 Results

### 4.1 How participants express beliefs: epistemic stances and internal coherence

This section addresses RQ1, concerning the ways in which learners construct and express metalinguistic beliefs in their narratives. The focus here is on the linguistic and narrative devices through which speakers frame their understanding of language, language learning, and cognition.

#### 4.1.1 Mechanisms of epistemic positioning

Learners rely on their experience as a primary source of epistemic authority. For multilinguals, these experiences are typically multiple, heterogeneous, and accumulated across languages and contexts, thus providing a particularly rich ground to observe stance-taking. This focus is compatible with a complexity-oriented view of multilingual development, which foregrounds

variability, context sensitivity, and adaptive adjustment within learning systems.

The analysis showed the participants' epistemic stances are conveyed through four main mechanisms: verb constructions, modality patterns, evaluative adverbs, and generic-person constructions using pronouns, which speakers combine and recalibrate in response to narrative demands. Together, these devices allow speakers to project certainty while grounding their perspectives in lived experience rather than empirical validation.

Participants frequently use verbs such as *think*, *feel*, *realize*, or *know* to present their claims as personally verified truths. In these assertive verb constructions, the epistemic authority derives from experience rather than external evidence:

**I think** watching a series on television with the subtitles on is a very good way as well. But I **don't think** you can do it (.) as an adult. I **don't think** you can do it without learning the structures. (INT3: 1715–1725)

**Siento** que solamente aprender gramática tampoco no te da la respuesta completa. [*I feel that only learning grammar does not give you the full answer either.*] (INT10: 911–917)

**I know** that there is like some relation to the way you think with the language you use, right? (INT11: 619)

These verb constructions do not signal fixed degrees of certainty. Rather, the way speakers move between verbal constructions such as thinking, feeling, and knowing, reflects context-sensitive adjustments in epistemic stance.

Modality constructions, on the other hand, describe what participants consider necessary, impossible, or inevitable. These belief assertions may focus on individual needs or extend beyond the participant as generalized truths.

I was fluent in French after living there for six months, and very confident with it, but to get that back, I'd **have to** go back there for another six months and live there, I think. (INT3: 1096–1103)

Through this comment, the participant projects her experience forward and turns it into a personal blueprint for future behavior. The modal construction encodes self-obligation: based on what worked before, she believes this is the only viable path toward achieving her language goals.

The following excerpt shows how the same participant takes her own experience—having learned through structure analysis—and states it as a generalized truth. “Can’t” constructs categorical impossibility and presents the speaker’s view as a limitation built into adult learning, not as a personal impression.

I don't think **you can do it** without learning the structures. You **can't** acquire it like you do as a child. (INT3: 1715–1726)

The following excerpt shows how this Spanish-speaking participant uses an obligation modality (“ *tienes que*”, “ *you have to*”) as a way of generalizing needed behavior. Yet, he anchors this belief

in his own experience. The modality is in bold, while the change in pronoun anchoring is underlined.

A veces **tienes que** aprender oraciones y luego esas mismas oraciones que yo he aprendido como esto, a medida que mi idioma y mi conocimiento ha ido como evolucionando, me doy cuenta de cómo se forman. [*Sometimes, you have to learn sentences, and then those same sentences that I have learned like this, while my language and my knowledge have kind of evolved, I realize how they are formed.*] (INT10: 911–917)

Another way of establishing an epistemic stance is through adverbs. Adverbs contribute to the construction of metalinguistic beliefs by shaping how speakers frame their claims, whether as obvious, personally-warranted, or based in first-hand experience.

[...] after that first half year or that first year was—**obviously**, you're always learning more and more and more. (INT3: 607–612)

Because, like I said, I don't **really** learn the languages from books, from school. I learn it by living it. (INT13: 978–981)

Generic-person constructions allow speakers to project their interpretations beyond personal experience, turning individual observations into general principles about language and cognition. By shifting from *I* to *you*, *people*, or *todos*, participants broaden the epistemic reach of their claims:

The language, understanding the language helps **you** understand the way people think. (INT3: 1452–1456)

The generic *you* and *people* universalizes the claim, presenting a personal belief about language–thought relations as a broadly applicable mechanism.

I mean, it's a proven way **people** learn like that... (INT11: 811)

Porque obviamente todos, o sea, cada idioma es un mundo completamente diferente y **tu** idioma determina **tu** mundo también. [*Because obviously, every, I mean, every language is a completely different world, and your language determines your world as well.*] (INT10: 421–423).

First-person anchoring consistently marks beliefs as individual cognitive models:

And then when **I** listen to, you know, from people, how they talk, and first **I** analyze in **my** brain, okay, this is how they construct the sentence. And **I** repeated it to someone. And then in some other situation, if **I** wanted to use— when **I** speak German, **I** try to replace the norm, you know, with different things that **I** know, and try to, you know, construct the sentence on **my** own and use it. (INT13: 593–595)

Through these shifts in participant reference and person marking, participants dynamically manage the epistemic scope of their beliefs, generalizing or individualizing claims as narrative and interactional conditions change. These shifts also index different layers of certainty and generalizability within participants' belief systems. Epistemic positioning is not random but based on experience and oriented toward internal coherence.

#### 4.1.2 Narrative framing as sense-making device

Participants use recurrent narrative patterns and metaphors to structure how they express beliefs. In narrative inquiry, these devices work as discursive frameworks that operate at different levels of abstraction. At one level, they contribute to the construction of *true* “narratives,” understood as relatively stable templates or scaffoldings used by narrators to build and structure storylines (Smith and Monforte, 2020). At another level, they shape “stories,” that is, the specific, context-bound tellings through which those narrative templates are instantiated in narration. Beyond organizing events, these patterns also stabilize interpretation frameworks over time, allowing learners to integrate their experiences into coherent belief structures. Through these forms, learners embed their beliefs within recognizable patterns of reasoning.

Speakers organize their accounts in logical or temporal sequences that implicitly validate their beliefs. One common form of positioning is causal-sequential framing. Personal experience is presented as causal evidence for a broader principle, allowing beliefs to emerge from specific episodes and take a broader explanatory scope. For example, immersion is presented as the cause of fluency, and the same causal logic is projected forward:

I was fluent in French after living there for six months... **to get that back, I'd have to go back there for another six months and live there**, I think. (INT3: 1096–1103)

Narrative positioning also appears through **naturalized progressions**, also in the form of sequences, where improvement is an inherent property of time and accumulated linguistic exposure:

Because the **more languages you learn the easier they get**. (INT3: 1240–1244)

Mientras más grande sea tu punto de referencia de cuáles son los sonidos, cuáles son las reglas, cuáles son las minucias, **se vuelve más sencillo**. [*The bigger your reference point of which are the sounds, which are the rules, which are the details, the easier it becomes.*] (INT7: 1570–1577).

These narrative mechanisms perform epistemic work by presenting beliefs as the natural outcome of lived, temporally ordered experience. Narrative framing allows learners to make sense of their trajectories and present their metalinguistic beliefs as grounded, patterned insights rather than isolated judgments. While beliefs remain flexible and adaptive, these narrative frameworks show how learners maintain coherence by stabilizing

their interpretations across experience. Furthermore, narrative progressions are often framed teleologically, with language achievement and improved proficiency positioned as the endpoint of learning. From a CDST perspective, such narrative framing can be understood as a self-organizing process through which beliefs emerge from experience, stabilize through repetition, and remain available for reinterpretation as learning contexts change.

This section showed that metalinguistic beliefs are not presented as isolated statements but are constructed through epistemic positioning and narrative framing. Participants anchor their beliefs in experiential authority and organize them through temporally ordered accounts that lend coherence and legitimacy to their claims. The next section turns to the essential content of these beliefs, examining the specific assumptions participants hold about languages, learners, and learning processes.

## 4.2 Metalinguistic beliefs: types of beliefs expressed

This section addresses RQ2, focusing on the types of metalinguistic beliefs multilingual learners articulate in their narratives. It shifts from the discursive mechanisms described in Section 4.1 to the content of these beliefs, examining recurrent assumptions about language, learners, and learning. Their interpretive functions are discussed later in relation to RQ3 in Section 5.3.

### 4.2.1 Ontological beliefs about language

Participants express a range of beliefs about the fundamental nature of language, often attributing structural, culture, and cognitive properties to them. These beliefs operate as *folk ontologies of language*, that is, intuitive models of what language is, what features its features are, and how different languages are organized.

These assumptions recur systematically, showing predetermined patterns to interpret linguistic phenomena in the form of metaphors and storylines. Across the data, these ontological beliefs cluster around four recurring themes: languages as structured systems, as cultural worlds, as representations of cognition, and as entities with inherent, stable characteristics.

#### 4.2.1.1 Languages as structures, puzzles, games

As argued by Lakoff and Johnson (1980), metaphors function as fundamental cognitive devices through which abstract domains are understood. In this sense, everyday descriptions of language as having “structure,” “logic,” or a “system” reflect metaphorical mappings that shape how speakers conceptualize what language is and how it operates. Participants draw on these resources when describing languages as coherent systems composed of rules, building blocks, or underlying architectures, treating languages as structured entities whose organization can be analyzed and assembled.

This speaker draws on the metaphor of a “puzzle,” framing language as something with discrete parts that must be assembled.

This treats grammar as a set of components that yield meaning only when properly arranged.

And when I learned German, I have the books and I have to learn the grammar and I have to understand how, ah, okay, in some situation you put the verb at the end. You know, so for me, in my brain **is all a puzzle**. How the sentence was built together. (INT13: 589–592)

In the following excerpt, “logic” functions as a metaphorical mapping of rational order. The belief expressed is that linguistic systems behave like structured, rule-governed entities whose inner workings can be inferred.

Just maybe to work things out, because you know that that’s how languages work. And **that all languages have a logic behind them** and that you can **work things out** if you think about it. (INT3: 835–849)

And after that, okay, these sentences I could not understand, like— tell me what is the **structure** behind it. (INT11: 641–643)

Across these accounts, participants adopt metaphors of puzzles, logic, and structure to conceptualize languages as organized systems. These metaphors are so culturally entrenched that they appear self-evident, yet they reflect a specific ontological stance: that understanding a language means uncovering its underlying design. This belief frame shows that multilingual learners rely on metaphorical reasoning to interpret linguistic complexity and to make sense of their learning experiences.

#### 4.2.1.2 Languages as cultures and worlds

Participants repeatedly make the claim that cultural attributes do not just accompany languages but are intrinsic parts of what a language *is*. Speakers describe languages as entities that embody cultural perspectives, values, or ways of living, effectively building cultural characteristics into their ontology of language.

Here below, the speakers present culture as part of the substance of language, not as something learned alongside it. Language is defined through the cultural meanings and practices it is thought to contain.

Y yo creo que la otra regla que también me impuse a mí es **un idioma es no nada más un idioma, sino una cultura**. [*And I believe that the other rule I imposed on myself is that a language is not just a language, but a culture.*] (INT7: 1578–1581)

By repeatedly invoking “worlds,” the participant assigns languages the property of embodying distinct perspectives and thinking styles. The belief expressed is that languages inherently encode these cultural outlooks.

Lo que dije antes, el **acceso a diferentes mundos**. [...] El acceso a diferentes perspectivas, el acceso a **diferentes formas de pensar**. [*What I said before, access to different worlds. [...] Access to different perspectives, access to different ways of thinking.*] (INT10: 794–797)

The speaker’s conceptualization suggests that cultural knowledge is embedded *within* the language, not simply associated with its use.

Porque obviamente todos, o sea, **cada idioma es un mundo completamente diferente y tu idioma determina tu mundo también**. [*Because obviously everyone, that is, every language is a completely different world, and your language determines your world as well.*] (INT10: 421–423)

Across these accounts, participants attribute cultural meanings, perspectives, and ways of thinking directly to the language, constructing languages as culturally constituted entities.

#### 4.2.1.3 Languages as representations of cognition

Some participants express beliefs that treat languages as mirroring thought or even directly corresponding to cognition. In this ontological frame, linguistic forms are understood to embody cognitive patterns, reasoning styles, or mental orientations. These accounts go beyond the idea that language influences cognition; speakers describe cognitive properties as *embedded within* the language itself. As a result, languages are conceptualized as containers of characteristic ways of thinking.

This participant links linguistic form to cognitive style, attributing “abstract” or “concrete” thinking directly to the language. The distinction is treated as inhering in the language itself, not simply in speakers or contexts, revealing a belief that cognition is encoded in linguistic patterns.

[...] these **abstract cultures that use like abstract meanings** in the language and like very strict ones because **they are more objective** and they are not abstract at all. They are like **everything it’s condensed in the language**. And it feels like South Americans are more abstract the way we think and we reason, that’s good. Yeah, and they are extremely concrete (INT11: 870–876)

Sentence structure is taken as a mirror of reasoning processes. The belief expressed is that grammatical organization maps directly onto cognitive organization, making linguistic form a representation of mental processes.

I know **that there is like some relation to the way you think with the language you use, right?** There are like **the way you structure sentences is how we think**. So it’s how you reason. And maybe it’s something related to this. (INT11: 618–622)

The following excerpt shows how grammatical constructions are taken as evidence of cognitive orientation. The forms themselves are seen as carrying insights into “mentality,” reinforcing the belief that linguistic structure embodies culturally shared ways of thinking.

Yeah, and he just doesn't get it. And (.) and there are things in German, like, the Germans say, “Ich habe mir sagen lassen” Like, “I let myself be told.” And to me that's like, that says a lot about the people. [...] Even things like, “Mir ist kalt”. Like, “to me it's cold”, and not “I'm cold”, and understanding, or, “Du fehlst mir.” Like, “You are missing me.” No, I miss you, but “Du fehlst mir.” All of these... Like, I am lacking of... Yeah, it's just... And **I think that kind of thing says a lot about the mentality of people. The language, understanding the language helps you understand the way people think.** (INT3: 1420–1456)

The following excerpt presents the most explicit claim: that German thought is “structured by” the German language. Here, cognition is treated as shaped and organized through linguistic form, such that the language is not just as reflective of thought but also as formative of thought.

Me mantenía en el día a día y me motivaba porque me gusta cómo suena, me interesa cómo el pensamiento alemán está estructurado por el idioma. [It kept me in my daily life, and it motivated me because I like how it sounds, I like how the German way of thinking is structured by the language] (INT10: 418–420)

Across these narratives, participants attribute reasoning styles, cognitive tendencies, and mental orientations directly to languages. These beliefs reveal an ontological stance in which languages function as representations of cognition that simultaneously reflect and shape how people think.

## 4.2.2 Beliefs about the language learner

Participants also express a set of assumptions about the nature of language learners, be it themselves or anyone learning a language. These beliefs function as *folk models* of what makes someone a *good*, *fast*, or *adaptive* learner and highlight the personal qualities participants consider important for language learning. These ontological beliefs position learners as fundamentally heterogeneous, with differences at times rooted in stable personal traits rather than in shared developmental processes.

### 4.2.2.1 Learners as having inherent dispositions

Some participants attribute learning outcomes to internal traits or abilities perceived as relatively stable. In the following case, this is constructed through metonymy: having a good ear shows the inherent characteristic of being good at decoding aural input.

pero yo también **tengo un muy buen oído** y los idiomas también me han dado eso. [...] Como **tener un buen oído** para las cosas y tener como ese gusto, esa sensación... [But I also **have a very good ear**, and languages have given me that too. [...] Like **having a good ear** for things and having that taste, that feeling...] (INT10: 1051–1052)

The same participant presents another set characteristic of himself as being “quick to pick things up”. Learning speed is conceptualized as an inherent capacity rather than a skill that develops over time.

Yo corro con algunas ventajas, yo lo tengo que aceptar, o sea, **yo cojo las cosas rápido**, pero yo sé que no todo el mundo lo hace así, pero aún eso no significa que no se pueda. [I have some advantages, I have to admit, I pick things up quickly, but I know that not everyone does, but even so, that doesn't mean it's impossible.] (INT10: 1123–1127)

In the following example, describing oneself as a “type of person” essentializes learning style, treating “learning by doing” as a stable, identity-like characteristic.

And at work, I get— because I'm **the type of person learning by doing**. And I get to actually do what I learn— in practice. (INT13: 720–721)

These statements reveal a belief that learners possess enduring cognitive or perceptual dispositions that strongly influence how they learn.

### 4.2.2.2 Learners as differing in behavioral tendencies and self-regulation

Several participants describe learning success as tied to discipline, routine, or willingness to persist.

Hay gente que— **es como ir a un gimnasio**. Yo hago deporte, me levanto en las mañanas, [...] a las cinco o las seis y lo hago. Y lo hago en el camarote abajo. Porque no tengo tiempo luego de ir a un gimnasio. **Pero hay gente que eso no lo puede hacer**. [There are people who... it's like going to the gym. I exercise, I get up in the morning, [...] at five or six, and I do it. And I do it in the bunkbed below. Because I don't have time after going to the gym. **But there are people who can't do that.**] (INT2: 2942–2961)

The comparison to gym routines frames learning as dependent on self-regulation. The participant treats discipline as a personal trait that some people have and others lack.

one has to be brave. (INT13: 1092)

Bravery is described as a required quality for engaging in learning challenges, suggesting that progress depends on emotional or behavioral predispositions.

These accounts construct learners as individuals whose behaviors and routines reflect underlying personal tendencies that shape learning outcomes.

#### 4.2.2.3 Learners as highly singular and incomparable

Complementary to the abovementioned cases, this category of beliefs add the nuance that it is not possible to apply similar rules to different people, thus presenting language learners as unique.

Participants frequently stress that learning pathways vary fundamentally from person to person.

Depende de qué gent— persona sea le aconsejaría. No puedes decirle, “ah, vete a aquí, este curso, coge estos libros,” igual los libros que yo hago no te gustan a ti ¿Sabes? entonces **eso es muy personal**. [It depends on what kind of person they are that I would advise them. You can't say, “Oh, go here, take this course, get these books,” because maybe you don't like the books I do. You know? So *it's very personal*.] (INT2: 3074–3087)

The speaker emphasizes that learning strategies must match personal preferences. This conveys a belief that learners differ so significantly that general advice loses validity.

#### 4.2.3 Beliefs about the language learning process

Participants' narratives exhibit a set of intuitive theories about how languages are learned. These beliefs frame learning as a process driven by experience, time, pattern recognition, personal engagement, and the conditions under which learning takes place. Across the interviews, the learning process is conceptualized through four interrelated lenses: learning as experiential and situated, as cumulative and staged, as pattern-based, and as dependent on appropriate conditions and affective alignment.

##### 4.2.3.1 Learning as experiential, immersion-based, and socially situated

Participants consistently describe language learning as emerging from active engagement with real environments. Learning is seen as inseparable from the contexts where the language is used, and progress is attributed to immersion, interaction, and meaningful participation.

It just becomes clearer over the years **that the only way to learn them is to actually live in the country and use them**. (INT3: 1117–1121)

Here, immersion is not simply described as helpful but as the defining mechanism of the learning process.

The following interviewee positions auditory exposure and real-world interaction as prerequisites, implying that language cannot be learned in isolation.

Porque no es autodidacta desde el principio, sobre todo en pronunciación. **Tienes que oírla, si lo haces tú solo no sale**. [Because you can't teach yourself from the beginning,

especially when it comes to pronunciation. **You have to hear it; if you try to do it on your own, it won't work.**] (INT2: 3050–3061)

The fact that the environment is a key driver is not necessarily taken as outside the learners' responsibility. This participant expresses how the learner needs to take an active role in shaping their language interactions:

Si quieres aprender a jugar ajedrez, **júntate con la gente que juega ajedrez**. No hay de otra. [If you want to learn how to play chess, **hang out with people who play chess**. There's no other way.] (INT7: 1633)

The chess analogy reinforces the belief that learning unfolds through participation with users of the language rather than through abstract study alone. The imperative mode in which the statement is constructed suggests a high level of certainty on the part of the speaker, claiming that this is the *only* way to achieve language proficiency.

Across these accounts, learning is portrayed as something that happens *in use*, grounded in contact with speakers and embedded in everyday settings.

##### 4.2.3.2 Learning as staged, cumulative, and oriented toward achievement

Across interviews, participants depict language learning as a sequence of recognizable stages shaped by accumulation, threshold moments, and shifts in contextual fit. The participants narrate learning sometimes as a linear ascent but also as a process marked by barriers, breakthroughs, plateaus, and regressions. Phases are varied, but in general are expressed as initial difficulty, steady growth, and occasional regression.

Language learning being displayed as staged is also a consequence of the instrument for the interview: participants were asked to divide their language learning histories into chapters or seasons. This framing interacted smoothly with participants' own sense-making, since many already held clear ideas about the stages that had shaped their learning and articulated these phases readily when prompted.

Participants often assume that learning progresses through identifiable phases. Early stages are described as perceptually unstable: the new language has not yet “settled,” languages mix, and segmentation or rhythm remains unclear.

[...] de que se pudiera hacer como la distinción de las palabras y de las frases, o sea, entender el ritmo, más que el idioma entender cómo se escucha el alemán. **Tardó eso como seis meses** de que me acostumbré a escuchar el alemán. [...] *that it could be done like distinguishing words and phrases, that is, understanding the rhythm, rather than the language, understanding how German sounds*. **It took me about six months to get used to listening to German.**] (INT7: 415–428)

Y entonces me costaba un poquito más de trabajo, a veces me costaba trabajo pensar en las palabras que eran en inglés, a veces pensaba en palabras en alemán, como que **todavía**

**no estaba asentado el idioma.** [And then it took a little more effort, sometimes I had trouble thinking of the words in English, sometimes I thought of words in German, as if **the language wasn't settled yet.**] (INT7: 635–642)

A recurring metalinguistic belief is that learning is cumulative: progress emerges not from steady increments alone but from moments where past exposure suddenly consolidates. Hence, language learning is seen as accumulation that facilitates language learning for the future.

Because **the more languages you learn the easier they get.** I'm starting to understand that now, I think that's true. (INT3: 1240–1244)

Entonces ya hay puntos en el aprendizaje de lenguajes que uno va rompiendo ciertas barreras, ¿no? Y luego **las barreras se van haciendo más fáciles de romper.** [So there are points in language learning where you break through certain barriers, right? And then **the barriers become easier to break through.**] (INT10: 249–253)

This excerpt conveys a belief in progressive facilitation, whereby prior knowledge accumulated through experience reshapes how future learning unfolds. Furthermore, this accumulation and facilitation are understood as bounded processes oriented toward an anticipated outcome, reinforcing the earlier observation that beliefs are shaped in a teleological manner.

Entonces lo que me doy cuenta por decir cuando la gente te dice “Schönen Tag.” Entonces, ¿por qué “Schönen?” [...] Y al principio como ya... ¿Y yo cómo realmente respondo eso? Yo no puedo decir, “ah, danke, du auch.” Yo no puedo decir eso, eso es... Incorrecto. Eso es incorrecto. No, “dir auch”, “Ihnen auch”, oder “ebenso, oder gleichfalls”. [So what I realize when people say “Schönen Tag” to you. So why “Schönen”? Exactly. And at first, as I already... And how do I really respond to that? I can't say, “ah, danke, du auch”. I can't say that, that's... Incorrect. That's incorrect. No, “dir auch, Ihnen auch, oder ebenso, oder gleichfalls.”] (INT10: 919–930)

Participants also conceptualize plateaus, regressions, and fluctuating performance as part of this trajectory toward appropriateness and mastery:

I think you **get to a level where you get by...** And I've become a bit lazier with it now. (INT3: 638)

Yeah, **I have phases...** the German's just not been there... And will I ever **conquer** this language? (INT3: 1575)

The narrative of “conquering” marks an imagined endpoint: an asymptotic horizon of mastery that learners move toward but often narrate as never quite reaching.

Finally, the sense of directionality is reinforced through beliefs about maintenance:

because if you don't use them, they disappear. (INT3: 1076)

This statement encapsulates a broader assumption: learning advances, accumulates, and refines, but it is also fragile, and its ongoing direction depends on continued engagement.

These trajectories depict learning as staged, cumulative, and teleological. Participants assume that the process moves toward perceptual stability, toward ease, and ultimately toward contextual adequacy. This shows an increasingly refined sense of how the language is expected to work in interaction.

#### 4.2.3.3 Learning as pattern discovery and balanced knowledge-building

Participants also conceptualize learning as the process of uncovering patterns (i.e., structures, rules, and regularities) and balancing this with memorized forms. This ontology of learning is complementary to what was analyzed in Section 4.2.1.1. (*Languages as structures, puzzles, games*) but this time conceptualizing the process of overcoming the challenge of learning.

The following account highlights pattern discovery: stored examples gain meaning as the learner's structural understanding evolves.

And after that, okay, these sentences I could not understand, like— tell me what is the **structure behind it.** (INT11: 643)

Learning is strongly connected to figuring out the patterns that compose the target language. Learners position *structure* as the core of meaning, indicating that uncovering rules is central to their understanding.

Furthermore, the balance between abstract knowledge and practical use is presented as the optimal path for development. The following two quotes show how the participants look at learning as a balanced practice with different levels of cognitive activity.

I think a **healthy mixture** of **reading** about the rules and learning about how **the language works** and **going out and using it** (INT3: 1685–1689)

Siento que solamente aprender gramática tampoco no te da la respuesta completa. **A veces tienes que aprender oraciones** y luego esas mismas oraciones que yo he aprendido como esto, a medida que mi idioma y mi conocimiento ha ido como evolucionando, **me doy cuenta de cómo se forman.** [I feel that just learning grammar doesn't give you the complete answer either. **Sometimes you have to learn sentences, and then those same sentences that I've learned like this, as my language and my knowledge have evolved, I realize how they are formed.**] (INT10: 911–917)

These accounts reveal a belief in learning as a process of detecting underlying organization while simultaneously accumulating usable exemplars.

#### 4.2.3.4 Learning as condition-dependent and affect-dependent

Finally, participants emphasize that learning depends on the conditions under which it occurs, including instruction, rest cycles, intensity, and emotional engagement. Among these conditions, participants often mention cultural and social immersion as key factors for achievement.

Por eso quería aprender inglés y decía **pues el mejor sitio es... es ir al país donde se habla.** [*That's why I wanted to learn English and said, "Well, the best place is... is to go to the country where it's spoken."*] (INT2: 249)

Another fundamental component is ensuring positive affect and enjoyment about the process. Disinterest or negative pressure is seen as blocking the process.

Un idioma que no disfrutas... pues no, no lo aprendes bien. [*A language you don't enjoy... well, no, you don't learn it well.*] (INT2: 2861–2880)

Along with needing enjoyment, the learning process needs to be accompanied by proper motivation, as the following quote highlights:

Yo siento que la gente necesita un **interés genuino...** O sea, propio de la persona. [*I feel that people need genuine interest... That is, interest that comes from within the person.*] (INT10: 1065–1070)

Beliefs connecting learning with affect also take a cognition-centered approach. Processing is seen as contingent on cognitive rhythms; pauses and recovery are understood as integral to progress.

Your **brain needs a break.** Just go and have a break and come back. (INT3: 1644)

Through these accounts, learning appears as a process regulated by both external conditions and internal affective states.

Across these narratives, participants conceptualize the language learning process as experiential, cumulative, pattern-driven, and dependent on appropriate conditions and emotional alignment. Their beliefs form a coherent folk theory in which learning is an emerging process shaped by time, interaction, recognition of structure, and meaningful personal engagement, and not purely cognitive nor environmental.

Overall, the analysis identified three recurring domains of metalinguistic beliefs: beliefs about language, the language learner, and the language learning process. The discussion examines how these belief types function within multilingual narratives.

## 5 Discussion

The general aim of this study was to identify what roles metalinguistic beliefs play in learners' narrative interpretations of their multilingual trajectories. It therefore examined what metalinguistic beliefs are according to multilinguals and how they become visible in their narratives on language learning. Despite the study's limitations, by approaching metalinguistic beliefs not only as internal mental entities (i.e., through conceptualizing them as *knowledge*) but also as interpretive acts expressed through discourse, the analysis provides a more empirically grounded understanding of the construct and a better foundation for conceptualizing its role in multilingual learning.

### 5.1 Metalinguistic beliefs as discursive and narrative constructions

Results from Section 4.1 suggest metalinguistic beliefs are not expressed as isolated propositions but are constructed through discursive and narrative practices. Through epistemic positioning and narrative organization, participants mobilize experiential claims as socially meaningful statements that position speakers, languages, and learning processes within broader discourses, functioning as forms of social action rather than purely individual cognition (McVee et al., 2024). Building on these findings, this section examines metalinguistic beliefs as dynamic meaning-making resources, highlighting how their discursive construction allows learners to present multilingual experience as coherent and interpretable trajectories.

The results align with discursive and contextual approaches to beliefs in applied linguistics, which argue that beliefs should not be treated as stable internal cognitive entities, but as dynamic, socially constructed accounts produced in interaction (Ferreira Barcelos, 2008). Beliefs emerge as discursive practices that reflect how individuals position themselves and others, draw on metaphors, construct narratives, and invoke culturally embedded assumptions about language and learning (Li, 2021).

Such an approach is particularly relevant in multilingual contexts, where learners draw on multiple linguistic histories and epistemic resources. In CDST, multilingual cognition is understood as hypercomplex, shaped by interacting subsystems and sensitive to contextual variation (Jessner, 2018; Larsen-Freeman, 2019). From this perspective, static or linear models of beliefs are ill-equipped to capture how multilingual learners continuously adjust their interpretations across languages, settings, and phases of experience. This contrasts with mainstream cognitive approaches, such as those informed by Beliefs about Language Learning Inventory (BALLI; Horwitz, 1987), where beliefs are conceptualized as decontextualized mental representations that can be reliably measured through self-report.

Discursive enactment is both expression of beliefs and a mechanism through which beliefs emerge and remain adaptive. As CDST emphasizes, systems change through interaction with

internal and external forces, and cognition cannot be separated from the contexts in which it operates (De Bot and Larsen-Freeman, 2011). Beliefs, when approached discursively, can be understood as emergent properties of this interaction: they crystallize through repeated narrative and evaluative practices that respond to experience while remaining open to modification. In this sense, beliefs are both constructed and enacted, gaining stability through use without becoming immutable.

This perspective also resonates with sociocognitive understandings of cognition, particularly Atkinson's (2011) formulation of cognition as relational, as "a node in an ecological network comprising mind-body-world" (p. 143). From this standpoint, metalinguistic beliefs are simultaneously cognitive judgments and socially situated enactments. Participants' reliance on narrative logics such as progression, causality, and discovery illustrates how beliefs are assembled through storytelling structures that exceed the individual speaker (Gálvez and Tirado, 2007). Likewise, the alternation between *I* and *you/we* shows how speakers negotiate the epistemic reach of their claims, shifting between individualized interpretations and generalized principles.

Taken together, these observations suggest that metalinguistic beliefs are best understood as discursively assembled and enacted interpretive acts. Emerging from experience, they are constructed through linguistic and narrative resources that draw on broader cultural, contextual, and experiential repertoires. This cognitive and discursive-narrative perspective offers a holistic and ecologically grounded framework for understanding how multilinguals interpret linguistic phenomena, regulate their learning trajectories, and situate themselves within wider discourses about language, cognition, and multilingual experience.

## 5.2 Types of metalinguistic beliefs and construction of folk theories

Results in Section 4.2 identified recurring types of metalinguistic beliefs clustered around three domains: beliefs about language, the language learner, and the language learning process. Rather than appearing as isolated ideas, these domains form a coherent system of intuitions that multilinguals draw on to interpret linguistic experience and their own learning trajectories. *Beliefs about language* reveal an intuitive ontology in which languages are conceptualized as structured systems, cultural worlds, or even representations of cognition. Although this echoes long-standing perspectives in linguistics (from Saussurean structuralism to Whorfism), the findings illustrate how such views function as everyday ontologies, that is, taken-for-granted assumptions that participants considered self-evident. Gurney and Demuro (2024) underscore that language ontologies must be traced from the ground up, attending to how users themselves enact what language is, rather than assuming a single expert ontology applies across contexts.

The analyzed metalinguistic beliefs resemble folk linguistic intuitions identified in research on lay understandings of language (Aragües y Oroz, 2025; Niedzielski and Preston, 1999; Pasquale, 2011). This analysis extends the folk-linguistics tradition by

showing that, in multilingual settings, such intuitions circulate across speakers' repertoires. From a CDST perspective, this circulation can be understood as an emergent property of multilingual systems. The interaction of multiple languages gives rise to system-level qualities (i.e., the M-Factor; Herdina and Jessner, 2002; Jessner, 2018) which may also extend to metalinguistic beliefs, shaping how multilinguals develop and deploy interpretive frameworks across their repertoires.

*Beliefs about learners* emphasize inherent dispositions, behavioral tendencies, and self-regulatory habits. Participants described differences in perceptual capacity, learning speed, discipline, and emotional orientation as stable personal characteristics that shape language development. In this respect, the analyzed narratives resonate with psychological research showing that motivational and self-related beliefs are central drivers of self-regulated learning behavior (Bai and Wang, 2023). However, while such studies model these beliefs as latent predictors of strategy use and achievement, these findings illustrate how learners themselves mobilize similar constructs as interpretive explanations for past experience and future expectations.

Participants' tendency to frame discipline, persistence, or confidence as enduring learner qualities also echoes trait-based models of self-regulation, in which stable dispositions such as conscientiousness are understood to shape long-term regulatory trajectories (Hampson et al., 2016). At the same time, these accounts function as domain-specific implicit theories of self-regulation (Hertel and Karlen, 2021), where learners articulate assumptions about who is able to regulate learning effectively and under what conditions.

Finally, the strong emphasis on learner heterogeneity aligns with research on epistemological beliefs in language learning, which shows that beliefs about learning and learners are multidimensional and only loosely integrated (Mori, 1999). Participants' narratives reflect this pluralism by treating learning pathways as fundamentally incomparable, privileging self-efficacy and effort-based explanations over abstract beliefs about knowledge itself. This pattern is consistent with findings that self-efficacy often outweighs epistemic beliefs in predicting learning behavior (Shirzad et al., 2022). Taken together, these beliefs portray learners as fundamentally heterogeneous and highlight how multilinguals rely on individualized explanatory models to make sense of learning differences.

Furthermore, the heterogeneity of language, learning, and language learning beliefs also mirrors contemporary perspectives on individual differences. From a CDST perspective, variability is a defining feature of complex systems: minimal differences in experience or disposition can lead to markedly different developmental trajectories, even under similar learning conditions (De Bot and Larsen-Freeman, 2011). These beliefs therefore function as interpretive tools that allow learners to explain their own and others' divergence without appealing to uniform developmental paths. At the same time, they shape expectations about what kinds of effort, strategies, or environments are considered viable, thereby feeding back into learning behavior.

*Beliefs about the learning process* depict it as experiential, cumulative, pattern-driven, and condition-dependent. Participants described language development as emerging through immersion,

meaningful interaction, and contextual exposure to highlight the conditions under which language learning occurs. These beliefs are not in themselves unusual: across several decades of research on beliefs in second language learning, learners and teachers alike have been found to emphasize experience, practice, effort, and time as central to learning (e.g., Horwitz, 1987; Pajares, 1992; Borg, 2003). In this sense, the content of participants' beliefs broadly aligns with how beliefs about learning have been conceptualized and reported in the literature, particularly within survey-based traditions that document learners' endorsement of gradual, experience-based views of learning.

However, prior research has typically approached such beliefs as decontextualized positions or variables. Beliefs are often elicited through predefined items and analyzed as relatively stable dimensions rather than as interpretive accounts grounded in learners' trajectories. Reviews of belief research have repeatedly noted that dominant methodological approaches tend to fragment beliefs into lists of components or factors, offering limited insight into how learners integrate these ideas into coherent understandings of how learning unfolds over time (Barcelos, 2003; Wesely, 2012). A similar pattern is evident in research on teachers' beliefs, where beliefs are often treated as internally held constructs that guide practice, yet are seldom examined as narrative resources through which experience is interpreted, justified, and stabilized (Borg, 2001; Pajares, 1992).

The contribution of the study lies less in identifying novel belief content, but in demonstrating how beliefs about language, learners, and learning operate together as a sense-making system. Methodologically, this discursive perspective makes visible dimensions of coherence, temporal organization, and epistemic grounding that remain largely obscured in much existing beliefs research. Substantively, it offers a foundation for qualitative work in the psychology of language learning that treats beliefs not only as predictors of behavior, but as interpretive resources. Future research in this field should reevaluate how instruments might capture the richness and systemic nature of metalinguistic beliefs.

### 5.3 The role of metalinguistic beliefs in multilingual narratives

Building on the analysis of discursive and narrative mechanisms in Section 4.1 (discussed in 5.1) and the typology of belief domains identified in Section 4.2 (discussed in 5.2), this section integrates these findings to examine how beliefs operate within learners' narratives. It argues that metalinguistic beliefs function as interpretive resources that help learners organize experience, attribute meaning to success and difficulty, and construct coherent accounts of multilingual development over time.

The findings show that metalinguistic beliefs operate as organizing principles within multilinguals' stories. They are not mere commentaries on experience but frameworks through which experience is interpreted. Beliefs provide causal explanations ("I became fluent because I lived there"), normative expectations ("you have to learn structures"), and identity-relevant distinctions ("I pick things up quickly"). In doing so, they help participants

create coherence across otherwise fragmented or complex linguistic histories.

From a CDST perspective, this organizing function reflects emergent system behavior. Multilingual learners are confronted with high levels of variability across languages, contexts, and phases of learning. Beliefs offer a way to manage this complexity by condensing experience into workable interpretive frames. In this sense, beliefs contribute to the self-organization of the multilingual system: they help learners decide what counts as relevant experience, what explanations are sufficient, and which learning paths appear viable.

Beliefs also modulate perceived agency. When participants generalize from personal experience to broader claims, they position themselves as knowers with access to a privileged experiential epistemology. This influences how they evaluate their strategies, interpret success and failure, and anticipate future learning needs. In this sense, beliefs serve as self-regulatory heuristics: narrative tools through which learners justify what they did, explain what worked, and decide what should be done next. Within CDST, such feedback loops are central: systems change through the interaction of internal representations and external experience (De Bot and Larsen-Freeman, 2011), and beliefs can be understood as part of the forces that enable or constrain adaptation.

Narrative positioning further reveals that beliefs shape temporal interpretations. Participants use causal sequencing to project past experiences into future obligations ("I learned this way, so I must learn that way again"), reinforcing the stability of their interpretations and limiting the space for alternative explanations. Likewise, metaphors such as puzzles, worlds, or cognitive maps organize how learners conceptualize linguistic complexity, making it intelligible through familiar experiential frames. This narrative coherence should not be read as evidence of fixed beliefs, but as a form of local stability that allows learners to maintain continuity across changing circumstances. CDST accounts for such patterns by emphasizing that complex systems can display stability without becoming static, especially when stability serves an adaptive function.

This stabilization can be productively interpreted through the notion of attractor states. In CDST, attractor states refer to preferred states that a system tends to settle into at a given moment, without implying permanence or finality (De Bot and Larsen-Freeman, 2011). Applied to metalinguistic beliefs, attractor states help explain why certain interpretations recur, resist revision, and continue to guide action even when learners acknowledge their contingency. Beliefs function as temporary interpretive balance: they reduce uncertainty, support decision-making, and economize cognitive effort. Shifting away from these states requires considerable experiential or contextual pressure, which explains both the persistence and the adaptability of beliefs within multilingual trajectories.

In sum, metalinguistic beliefs serve as interpretive, regulatory, and identity-building devices that structure how multilinguals understand their learning trajectories. Through a CDST lens, beliefs can be understood as dynamic components of the multilingual system that emerge from experience, feed back into learning behavior, and temporarily stabilize sense-making under conditions of complexity. They are essential narrative resources through which multilingual experience becomes meaningful.

## 6 Conclusion

This study examined how multilingual learners articulate and mobilize metalinguistic beliefs in narrating their language learning trajectories. The analysis showed that participants' beliefs cluster around three interrelated domains, i.e., language, learners, and learning processes, forming a coherent system of assumptions. Rather than appearing as isolated opinions or abstract propositions, these beliefs function as interpretive resources that organize experience, stabilize explanations of progress and difficulty, and project learning trajectories toward meaningful endpoints. In this sense, the study contributes not by identifying novel belief content, but by clarifying the roles that metalinguistic beliefs play in narrative sense-making.

By adopting a discursive and narrative perspective, the study extends existing research on language learning beliefs, which predominantly relies on survey-based approaches and treats beliefs as decontextualized variables or predictors of behavior. The findings show that when beliefs are examined in learners' accounts of lived experience, they emerge as temporally structured, epistemically grounded, and mutually reinforcing elements of a broader interpretive framework. This perspective complements prior work by making visible dimensions of coherence, justification, and meaning-making that are difficult to capture through predefined instruments, and by situating beliefs within learners' broader efforts to understand themselves as multilinguals.

Several limitations should be acknowledged. As a qualitative study based on a limited set of language learning histories, the findings are not intended to be statistically generalizable. The aim was instead theoretical and interpretive: to illuminate how metalinguistic beliefs operate within narrative constructions of learning. Future research could build on this work by analyzing a larger and more diverse corpus of language learning histories, or by adopting longitudinal designs that trace how beliefs evolve over time and how learners retrospectively reinterpret earlier experiences. Another promising avenue lies in combining narrative approaches with other methods, allowing researchers to examine how beliefs expressed in discourse relate to those elicited through surveys.

Overall, this study highlights the value of treating metalinguistic beliefs not only as individual cognitive variables, but as discursive and interpretive phenomena embedded in learners' meaning-making practices. By foregrounding beliefs-in-use, it opens new directions for research in the psychology of language learning that attend to how learners understand, narrate, and make sense of multilingual development across time.

## Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

## Ethics statement

The studies involving humans were approved by Department of Psychology Universität Münster. The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study. Written informed consent was obtained from the individual(s) for the publication of any potentially identifiable data included in this article.

## Author contributions

CQ: Writing – review & editing, Writing – original draft.

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## Conflict of interest

The author(s) declared that this work was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

## Generative AI statement

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