

Incorporating Visualisation in Qualitative Retrospective Interviews to Elucidate Temporality: A Methodological Illustration of L2 Motivational Dynamics

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Received November 13, 2025; revised December 15, 2025; accepted December 16, 2025

Abstract

This paper illustrates the development of a visual-based qualitative retrospective approach to data collection that enables learners to reflect on and uncover developmental trajectories in language acquisition. Often, interviews are used in applied linguistics research to encourage participants to reflect retrospectively on their learning; however, they may be ineffective at capturing temporality because of recall bias. To address this limitation, art-based methods are claimed to enhance participants' retrospection. We illustrate their use in a study designed to depict learners' mental self-visions across motivational trajectories. With the dynamic turn in applied linguistics research, Dörnyei's (2009) Second Language (L2) Motivational Self System opens up new possibilities for examining learners' motivation as a temporally focused trajectory. To capture the temporal sensitivity of motivational dynamics, we designed visual imagery drawing tasks and integrated visual motivation graphs into narrative interviews to trace self-guide development and to collect L2 learning experiences retrospectively. This methodological design contributes to our understanding of how participants interpret the past and navigate their futures, while providing a methodological blueprint that researchers can use to adopt similar methods in retrospective interviewing. Although self-report data collection methods such as interviews offer participants sufficient freedom to express their experiences, incorporating referential visual aids alongside verbal accounts may enhance the overall trustworthiness of retrospective accounts of learning over time.

Keywords: qualitative retrospective approach, visual imagery, narrative interview, L2 Motivational Self System, L2 motivation temporal development

As the past, present, and future dimensions of time are entangled with human emotions and behaviours (Kostoulas & Mercer, 2016), a temporal lens is fundamental to understanding the psychological dynamics of second language (L2) learning¹. This is especially true in motivation research. With increasing scholarly focus on the temporal aspect of motivation, researchers have demonstrated that L2 motivation fluctuates over time and constantly interacts with learners' situated contexts (e.g., Chan et al., 2014; Dörnyei, 2009; Thompson & Vásquez, 2015). Therefore, L2 motivational theories have evolved from a relatively static and trait-like socio-psychological model (Gardner & Lambert, 1959) to more dynamic and fluid frameworks such as the prevalent L2 Motivational Self System (L2MSS) (Dörnyei, 2009).

Dörnyei's (2009) L2MSS framework, informed by Markus and Nurius's (1986) notion of possible selves and Higgins's (1987) self-discrepancy theory, seeks to explain the dynamism of motivation through the past, present, and future dimensions of time (Kostoulas & Mercer, 2016). The L2MSS comprises the L2 self-guides and the L2 learning experience. L2 self-guides, namely ideal and ought-to L2 selves, refer to future-oriented self-perceptions about what learners wish to become or how learners feel they ought to become. They embody self-visions in future states, which also guide learners' current actions. The L2 learning experience represents learners' past/present-focused lived experiences. It has been defined by Dörnyei (2019) as "the perceived quality of the learners' engagement with various aspects of the language learning process" (p. 25). The motivational power of the L2MSS thus lies in individuals' psychological need to minimise the perceived gaps between their projected future L2 self-status and current/past experiences.

Tracking learners' self-guide development in response to learning experiences provides crucial insights into changes in motivation over time. Existing studies have substantiated learners' future visions using the L2MSS (e.g., Dörnyei & Chan, 2013) and employed (auto)biographies to probe into learners' past and present experiences (e.g., Thompson & Vásquez, 2015). With motivation understood as emerging from the interaction among system components, the L2MSS has been conceptualised as an evolving and self-organising open system (Hiver & Papi, 2019). However, due to methodological limitations associated with capturing motivational change, the temporal complexity of L2 motivation, particularly the dynamic interrelations among future-oriented self-guides and past/present-focused learning experiences, has not yet been fully addressed.

By validating a visual-based qualitative retrospective approach, this paper argues that learners' interpretations of their past and present experiences

¹ In this study, L2 learning is used as an umbrella term encompassing both second and foreign language learning contexts.

are likely to play a significant role in shaping their sense of self in future temporal periods. It aims to demonstrate how such an approach can sensitively capture the susceptibility of L2 motivation to contextual change and illuminate its temporal dynamics. In this sense, the proposed visual-based methodological tools could be relevant to both research framed by the L2MSS and recent theoretical developments that seek to refine motivational self-related constructs and their temporal organisation (e.g., Henry & Liu, 2023; Wang et al., 2025). By offering methodological tools capable of tracing motivational meaning-making across time, this study may therefore respond to ongoing calls for greater empirical attention to the temporal dimensions of L2 motivation.

Tracing Temporality in Motivational Dynamics

The L2MSS has been conceptualised as a dynamic self-system changing across time (Dörnyei, 2009). Recognising time and dynamics as the foci of analysis, researchers have investigated the variability and continuity of self-guides on different timescales, ranging from longitudinal (Li & Liu, 2023) to short-term (Magid & Chan, 2012) and momentary (Waninge et al., 2014) contexts. Given that L2 self-guides are believed to be dynamic motivational constructs, it is necessary to bring self-trajectory to the centre when exploring learners' motivational changes.

The dynamic connection between learners' future self-guides and their past/present experiences has not been sufficiently addressed in empirical studies (Henry, 2014). This is because the L2 learning experience, encompassing a broad range of temporal or contextually related motivational elements, is challenging to incorporate holistically into most quantitative research tools that may only focus on one time dimension and a limited number of contextual factors (Taguchi et al., 2009). Another reason is the difficulty in recreating the fluidity of the ever-evolving self-concepts when relating the two self-guides to the learning experiences. Since self-guides and learning experiences operate in two different temporal dimensions, many researchers disregard their inner connections and examine the L2MSS in isolation (Li & Liu, 2023). Changes in future self-guides are captured in a dichotomous process without any linkage to the progression of learners' current experience (Thorsen et al., 2017).

Although changes in L2 learning experiences are expected to bring changes to L2 self-guides, their interrelationship is far from linear. Henry (2014) argued that L2 learners were engaged in the constant appraisal of their learning experience and would adjust their self-guides accordingly over time. Therefore, a temporal lens in motivational research may help uncover the diachronic progression of learners' self-guides and reveal the non-linear dynamics within the system behaviours of the L2MSS.

Temporality in Qualitative Retrospective Approaches

It has been increasingly recognised that traditional quantitative approaches may not effectively capture the non-linearities of motivational development (Lamb, 2011). The field of motivation, like many other topics in individual psychological differences, has been flooded with study designs that attempt to create predictive models of learning, overlooking the individual (Ushioda, 2019) and paying little attention to the volatility of learners' surrounding contexts that exert influence on motivation (Taguchi et al., 2009). In contrast, the advantages of qualitative methodology lie in its ability to allow learners to self-identify important aspects of their motivation and articulate the subtle differences lost in quantitative approaches (Thompson & Vásquez, 2015). More academics have thus advocated the use of qualitative and learner-centred approaches to delineate individuals' meaning-making of learning experiences and illuminate the complexity of human beings with multiple roles and identities (e.g., Chan et al., 2014; Li & Liu, 2023; Thompson & Vásquez, 2015). While a qualitative longitudinal approach (see Henry & MacIntyre, 2024) would be most useful for capturing motivational changes in real-time, it is not always feasible for researchers to collect data from learners as they progress through and between different levels of education such as high schools and universities. In such cases, adaptations in qualitative retrospective data collection methods are needed to better capture temporality.

Every motivational construct tends to lead to certain salient outcomes (Dörnyei, 2009). Although we cannot predict with certainty what these outcomes might be, it is possible to work backwards to uncover the temporal development and pinpoint the principal factors leading to those motivational end-states (Chan et al., 2014). Even though we cannot generalise such motivational dynamics from past phases to the future, the identified patterns are fundamental enough to be useful in explaining the underlying mechanisms associated with the developmental outcomes of learners' future-oriented L2 self-guides (Verspoor et al., 2011). The fact that qualitative research has always involved drawing holistic patterns from retrospective learner self-reports can also shed light on the contextual factors driving learners' motivation to evolve over time (Thompson & Vásquez, 2015). As a result, instead of the usual forward-pointing "prediction", this paper harnesses the power of "retro-diction" (Dörnyei, 2014, p. 85) by asking transition-year students to reflect on their L2 learning experiences to unpack how contextual factors interacted with L2 self-guides to culminate in their unique motivational outcomes. Such a retrospective approach allowed researchers to capture temporal dimensions, trajectories, and chronologies in students' educational experiences through an interview. Given that the time scale of the phenomenon being researched might far exceed the time window of data collection in many cases of research into

language learning, retrospective methods are needed to help fully discern the developmental patterns of L2 motivation through a temporal lens, especially when longitudinal designs are not feasible, such as in the cases of students transitioning from one phase of education to another.

Enhancing Temporal Sensitivity through Art-Based Methods

To aid reflection during data collection, researchers may employ art-based methods to help students externalise and visualise the mental images of their evolving self-concepts. Visualisation techniques such as visual imagery and trajectory graphs can facilitate participants' temporal expressions of feelings, ideas, sensations, and thoughts by observing and making sense of the world around them (Latham & Ewing, 2018). Visualisation enhances participants' awareness of how specific moments contribute to their broader motivational trajectories. Art-based methods may therefore enable participants to express their thoughts in a structured and time-sensitive manner.

An Exemplar Using Visual Imagery Drawing Tasks in Data Collection

Visual imagery, a representation of scenes through visual means, is central to the L2MSS, as vision is considered one of the highest-order motivational forces that helps explain the process of L2 learning (Dörnyei, 2009). Since the L2MSS is inherently abstract, graphic elicitation such as visual imagery may prompt learners to externalise and verbalise their abstract experiences or inner thoughts about more concrete objects over time (Melo-Pfeifer, 2015). Previous researchers have found that when learners are given the chance to draw possible self-portraits or pictorial representations of their L2MSS, they tend to report a clearer vision of their L2 self-guides and learning experiences (Magid & Chan, 2012). A combination of visual imagery drawings and verbal explanations not only provides tangible representations of critical incidents embedded in language learning processes but also allows for a deeper exploration of the emotions, mindsets, contexts, and motivations associated with learners' perceptual development (Magid & Chan, 2012).

To demonstrate the application of the visual imagery drawing method in greater detail, this paper presents an exemplar single-case participant, Song, who was part of a larger research project investigating the motivational trajectories of Chinese students transitioning from high school to university-level L2 learning. Specifically, the research project aimed to answer the following research questions:

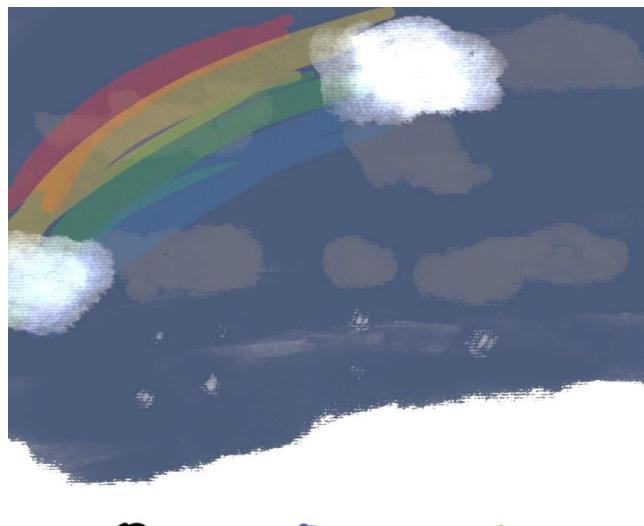
1. What changes, if any, do Chinese students' ideal L2 self and ought-to L2 self undergo during the transition from high school to university?

2. What elements of students' L2 learning experiences during the transition influence the fluctuation of their ideal L2 self and ought-to L2 self? Based on these research questions, we selected Song for the exemplar due to the heuristic value of his data in demonstrating changes and fluctuations. In particular, his motivational trajectory encompassed both periods of significant increase and decline, allowing for a comprehensive and analytically informative illustration of the L2 motivational dynamics. Song was a first-year English major at a Chinese public university. He was interviewed about the changes in his motivation for learning English as he transitioned from high school to university. The drawing task in this study focused on capturing Song's self-perceptions of L2 self-guides and the contextual influences shaping his motivation at different learning stages. By visualising different motivational states, this method enabled an interpretive exploration of how shifts in Song's L2MSS were represented and made sense of over time.

Prior to the commencement of the tasks, a sample drawing was provided as a reference to stimulate idea generation. This sample drawing served as an important springboard for learners to contextualise L2 motivation, take the initiative to reflect on their own motivational prototypes, and personalise their visual imagery accordingly. During the task, Song and other participants depicted their self-states and English learning situations in the last term of Year 12 and the first term of university, respectively. They were encouraged to draw creatively using visual imagery, metaphors, and representations. Afterwards, they were invited to explain both drawings and elaborate on their motivational self-states in retrospective interviews. Through retrospective interviews, more focused information on participants' visual imagery and motivational status could be sought. The two visualisations and accompanying retrospective interviews were conducted at one point in time at the end of Song's first term at university. All verbal data were collected in Mandarin Chinese, transcribed verbatim, and subsequently translated into English. To ensure translation accuracy, the English versions were checked against the original Chinese transcripts by a bilingual researcher with expertise in applied linguistics.

This integration of drawings and interviews may provide richer insights into participants' lived experiences than interview-only approaches and may help reduce recall bias by supporting memory recall through visual prompts. Song depicted his English learning self during the last term of secondary education as "waiting alone for the rainbow in the night sky", as shown in Figure 1.

Figure 1
Song's Drawing of His L2 Self-Guides at High School



Song elaborated:

"Overlooked by teachers and alienated from classmates because of my poor academic performance, I was eager for even a little bit of respect. Fortunately, I was good at English, and I believed that once my English was at the top of the class, there would be a possibility for me to be approved by teachers and classmates. To me, their approval resembles a glorious rainbow. I was waiting alone under a gloomy sky for the rainbow to show up."

This description suggests that Song's L2 learning motivation during this period was directed primarily by a robust ought-to L2 self, bounded by significant others' approval.

In contrast, Song's depiction of his English learning self-status at university took on a different form. As shown in Figure 2, he represented the university English learning process as "crossing a tortuous bridge".

Figure 2
Song's Drawing of His L2 Self-Guides at University



While explaining this illustration, Song remarked:

"The bridge represents my sense of duty as an English major. It was a crucial part of my English learning journey. Sometimes, my sense of duty was strong, pushing me forward. Yet sometimes, it was weak. I felt I was moving back. While crossing the bridge, I experienced sunshine and rain. They symbolised my imaginations about studying abroad. These imaginations just came and went."

Song's drawing and explanation highlight the fluctuating nature of both his ideal and ought-to L2 selves upon entering university. Unlike in high school, where his motivation was predominantly tied to significant others' approval, his university experience was marked by the responsibility of succeeding in his university studies and an aspiration to study abroad. The imagery of a winding bridge, with alternating moments of progress and regression, effectively illustrates the non-linear trajectory of his motivational development.

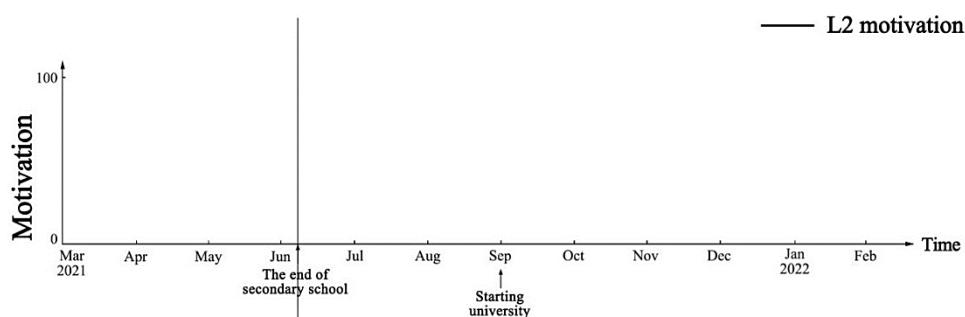
As demonstrated by the above case, the integration of visual imagery and verbal explanation enables learners to represent and summarise their emerging motivational dynamics in a visually accessible manner. This aligns with Dörnyei's (2014) assertion that visual representations serve as effective tools for capturing abstract self-concepts and motivational shifts. Depicting self-perceptions at distinct educational stages makes it easier for learners to

identify and discuss critical turning points in their L2 learning journeys. The process of drawing not only stimulates recall but also fosters deeper reflection on the continuity or transformation of self-guides over time. Moreover, visual imagery elicitation promotes chronological thinking by structuring learners' accounts around key moments of self-guide changes. By engaging in this process, learners are encouraged to recall past experiences, connect the past to present realities, and convey their thoughts in relation to future self-vision. As a result, the visual imagery drawing tasks display the natural flow of time through participants' self-guide growth, ultimately elucidating and foregrounding the temporality in L2 motivation research.

An Exemplar of Incorporating Visualisation in Narrative Interviews to Elucidate Temporality

The chronological and historical dimensions of retrospective narratives play a crucial role in reinforcing the coherence of data. Logical sequencing of (de)motivating events can contribute to a better comprehension of how the effects of learning experiences on L2 self-guides have accumulated. Drawing on Thompson and Vásquez's (2015) interview schema, the retrospective narrative interviews in the exemplar study were conducted at the end of the first university term to collate transition-year students' L2 learning experiences and their reflections on these experiences. To facilitate the delivery of the stories, we designed a motivational graph (see Figure 3) for interviewees to visually illustrate their L2 motivational trajectories. This design, with a blank space between two axes, provided participants with the flexibility to explain their evolving motivational states while preserving the clarity of chronological progression.

Figure 3



Motivational Graph

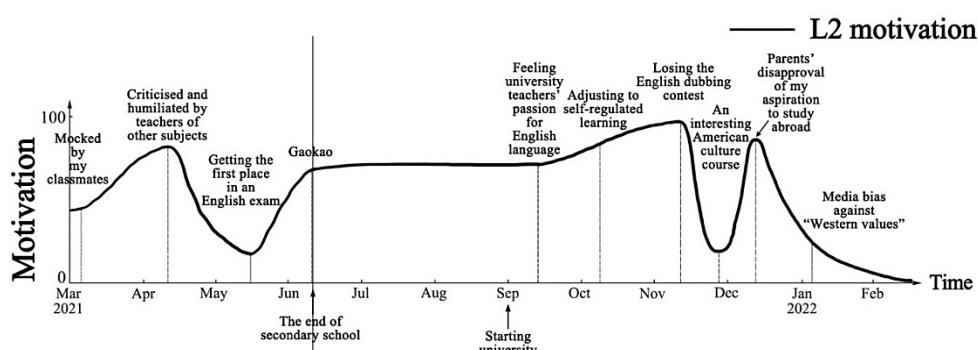
Adapted from Chan et al.'s (2014) motivational graphic elicitation, the motivational graph in this study specifies a defined timescale, key temporal

markers (e.g., the end of high school and the start of university), and a motivation intensity scale (0 to 100) to improve the efficiency of storytelling and provide direct insights into the learners' sense-making of motivational shifts. The visualisation not only enabled participants to pinpoint motivation levels at different time points but also encouraged them to reflect on the underlying reasons for motivational fluctuations. The combination of a structured timeline and an open-ended motivational intensity scale allowed interviewees to exercise their subjectivity at will without losing precision, continuity, and coherence (Chan et al., 2014).

Subsequently, interviewees were encouraged to recall their English-learning-related stories from the second term of Year 12 to the end of the first term in higher education and distil the defining moments or crucial events that influenced changes in their motivation. After depicting their perceived motivational development over time and annotating key turning points, the interviewees recounted their English learning stories in an uninterrupted flow. When students finished their narratives, we discussed some factual details in their storylines with them and asked for their opinions and feelings regarding the selected content. Additional questions were later posed to cover any missing details and clarify ambiguities arising from the previous narratives.

By incorporating visualisation in narrative interviews, researchers can gain richer insights into learners' evolving motivations than from interviews alone, while potentially mitigating issues related to recall bias through visual memory cues. Our case participant, Song, produced a motivational graph (Figure 4) that vividly illustrates the ebbs and flows of his motivational trajectory and exemplifies the effectiveness of our visual-based interviewing technique.

Figure 4
Song's Motivational Graph



Drawing on the visual summary provided by Song (Figure 4), the narrative interviews could precisely tease apart the key critical events in his motivational

journey. The first event was the public humiliation of Song's underachievement by a group of top students in high school:

"I wanted to join their discussion during an English lesson, only to receive a denial with snobbish mockery of my comparatively low English proficiency. In an attempt to win their approval and obtain an equal right to join in their discussion, I felt compelled to study harder and improve my English."

As competent L2 learners, Song's classmates took high L2 achievement as a prerequisite for a fair share of participation in their speech community. Since Song's performance could not guarantee him a high status in class, he was mocked as an incompetent outsider by this group of overachievers. Experiencing this indignity, Song expressed a strong desire for self-esteem to gain respect from his peers, which required him to devote himself to English learning. This irresistible impulse invoked his ought-to self in relation to peer approval. In reaction, Song stopped putting effort into learning other subjects and engaged solely in improving his English.

However, noticing Song abandoning his studies in other subjects, many teachers blamed this irrational partiality:

"My teachers criticised my excessive commitment to English and held me up to ridicule in their lessons. I was ashamed of being laughed at as an "English nerd". To restore teachers' and peers' respect and re-establish my dignity in the classroom, I had to relinquish my bias towards English learning."

Song admitted that his longing for other people's approval was still intense. Yet, it was temporarily sustained by balancing his engagement in each subject rather than a stubborn commitment to English learning. Therefore, the easing of his burden on English proficiency weakened his approval-related ought-to L2 self.

An important turning point at this stage was when his teacher announced to the class that Song had won first place in an English exam. Song felt so proud of "the sudden appearance" of his "peers' admiration" and "English teacher's recognition" that he became aware, again, of his mission to study English and "preserve this top position". Song's pride aligned with his fortified self-efficacy. His previous approval-related ought-to self was, therefore, revived, and it took control to maintain his English learning motivation until he finished the national college entrance exam (Gaokao).

When Song moved to university, there were significant ups and downs in his L2 self-guides. The fluctuation of Song's ought-to L2 self is demonstrated through his narratives. As university commenced, he noticed most teachers focused on the teaching of language itself rather than enhancing students' grades:

"Impressed by my teachers' genuine passion for English, I realised English is my major now. It is my responsibility to learn English well."

Song started to take English seriously and set a high self-requirement for his major learning. He, therefore, spent most of his spare time on English assignments and was dedicated to self-regulated learning, which, in turn, reinforced Song's sense of obligation to study hard.

However, his ought-to L2 self suffered a severe blow in an English dubbing contest. Despite extensive preparation, Song was defeated by a non-English-major student whose spoken English outperformed his own. Song believed English majors should "prioritise English learning" and "achieve higher competence than non-English-major students". Because Song failed to live up to this norm, his belief in the social status of the English major was challenged. Song regarded his major as "useless", and thus his motivation for English learning was undermined.

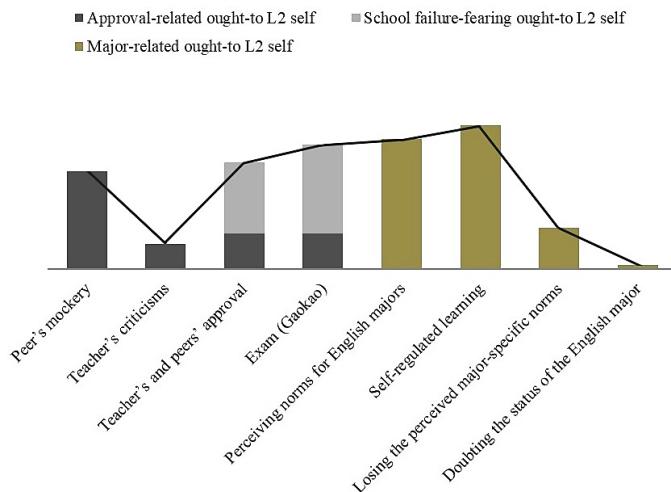
After this, catalysed by Song's interest in Anglophone cultures, his ideal L2 self was aroused. In an American culture lesson, his teacher held a Thanksgiving party and introduced relevant festival cultures. Song was unprecedently enchanted by the cultures and values of the Anglosphere. As a result, he envisioned a strong internationally oriented ideal L2 self, pursuing a master's degree in the US and experiencing American culture.

Nevertheless, Song's newly arisen aspiration to study abroad was challenged by his family's growing antagonism towards Anglophone society and culture. Song's father – lately out of work due to the recurrent Sino-US diplomatic disputes – voiced fierce opposition to his ambition of studying in America and later presented him with media coverage against "Western values". Consequently, Song questioned the validity of his ideal self-vision and even "felt guilty about learning English" as his parents considered integrating into an English-speaking community a "betrayal" of his family and nationality. He ultimately decided to abandon his internationally postured ideal L2 self for the sake of his family values and national identity.

In summary, the above narratives map Song's L2 learning experience to the temporal development of his ideal and ought-to L2 selves, preserving the wholeness, continuity, and dynamism of L2 learning motivation during the school-university transition. Based on these narratives, we constructed

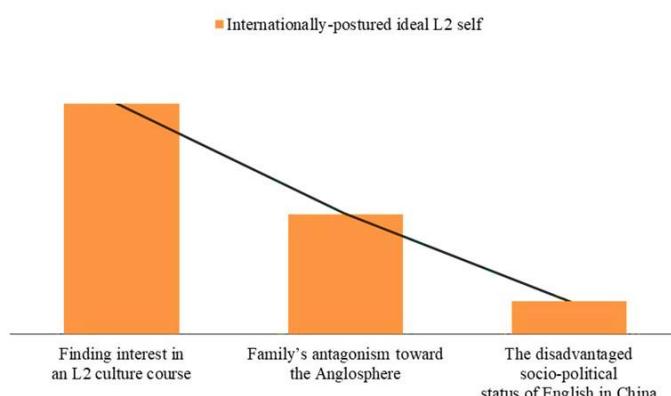
Figures 5 and 6 as researcher-recreated analytic representations of Song's L2 self-guide temporal development, while his reflections remain the primary data serving the research goals. These extrapolations are intended to exemplify a feasible way of organising and re-visioning participant-generated narratives within the widely recognised theoretical framework of L2MSS.

Figure 5
Song's Ought-to L2 Self-Trajectory Graph



According to Figure 5, at school, Song's approval-related ought-to L2 self ebbed and flowed because of the classroom appraisals. It eventually coexisted with school failure-fearing ought-to self. During university study, his major-related ought-to L2 self played a dominant role. It was influenced by the continuous negotiation of his varied attitudes towards the English major.

Figure 6
Song's Ideal L2 Self-Trajectory Graph



As shown in Figure 6, Song's ideal L2 self was insignificant until the university phase. His interest in L2 culture invoked an internationally postured ideal self, but it was soon undermined by the unfavourable family and social environment.

What unfolds using visual time graphs in this example are multi-dimensional layers of temporal aspects weighing the influence of Song's motivation, which extend beyond simple chronology. Song's latter reactions to failure in a contest at university are clearly intertwined with his previous experiences in high school, connecting his present and past. The views of others about the importance of English continue to shape Song's own view of English throughout, as these perspectives underpin all past and future attitudes towards learning, as can be seen in Figure 5.

The final series of critical events regarding his family's reaction to studying abroad shows a long-embedded history of family relationships and societal values, as well as an entrenched national identity that values international geopolitical relationships between China and the US over individual agency. This final predicament, which sees Song's motivation dissipate almost entirely (see Figure 6), is the result of a choice between his aspirational ideal future self and his loyal ought-to future self. While much of Song's motivation journey was tied to pleasing the 'other' (i.e., teachers, peers, and family), the reality is that Song's motivation remains at the mercy of others and their changing views of English. It also shows that temporality is multi-dimensional, with society, relationships, and geopolitics intertwined into chronological accounts of learning.

Conclusion

Mello et al. (2009) conceptualise "time perspectives" as a multidimensional cognitive-motivational construct, which can be differentiated according to the dimensions of orientation (past, present, and future) and scope (temporal distance in thought). Methodologically, this research may contribute to the advancement of qualitative retrospective inquiries into language learning by helping participants address both dimensions of temporality. Visual methods might help students overcome issues of retrospection associated with the time orientations of age by vividly recalling key orientations of the past and present. The use of visual imagery drawing and motivational graphs sheds light on the retrospective approach by addressing the interplay among the past, present, and future dimensions of temporality, as these visual representations provide comprehensive insights into how participants make sense of their past and present experiences and navigate their future self-guides across time.

By tracking the evolution of participants' thoughts, behaviours, and motivation at different learning periods, the time graphs facilitate participants'

ability to extend the temporal aspect of “scope” when describing their learning experiences. As Begić and Mercer (2017) argued, “scope implies distance, in other words, how far in time one thinks about or is able to envisage their life” (p. 269). The innovative use of visual elicitation empowers participants to recall experiences that span years of their learning and express their self-perceptions as well as meaning-making processes in a descriptive and explanatory manner.

While this paper has presented the two art-based methods separately, the underpinning visual-based interviewing technique in both exemplar studies complements learners’ self-images, allows for an integrated exploration of the temporal continuity of learners’ lived experiences, and offers participants sufficient freedom to articulate their interpretations in their own words. The visual data and verbal accounts are mutually referential, each supporting and deepening the insights provided by the other. In this study, they helped form methodological triangulation via a chain of data sources, strengthening the credibility of students’ temporal perspectives. Future research could, however, combine either method with other qualitative or quantitative approaches to achieve triangulation. Visual imagery drawing methods could be used to explore any number of constructs beyond motivation associated with the language learning experience. Likewise, visual time graphs could also be used to explore a myriad of measurable psychological constructs, such as anxiety, enjoyment, self-regulation, or self-efficacy, to deepen our understanding of the psychology of language learning.

Admittedly, several limitations of these methods should be noted. Firstly, the retrospective nature of data may still incur inaccuracies in participants’ reflections due to the attrition of memory (Dörnyei, 2014). The method relies heavily on learners’ self-reports, thus preserving participants’ subjectivity but, at the same time, introducing potential recall biases that may be difficult to detect. Secondly, the method places a constrained chronological framework of temporality on participants’ self-interpretations. As we saw in interpretations of Song’s trajectory, experiences are multilayered, and often past experiences undergird present and future experiences. Since the method encourages chronological thinking associated with points of change, other methodological innovations should be sought to capture unconscious, subliminal, and nuanced cognition.

Despite its limitations, the methodological strategies illustrated in this research offer an innovative means for qualitative studies to capture the evolving nature of human experience over time. The techniques discussed in this paper would help inform retrospective data collection methods to explore temporal aspects of individuals’ past, present, and future L2 learning journeys.

Biodata

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References

Begić, I., & Mercer, S. (2017). Looking back, looking forward, living in the moment: Understanding the individual temporal perspectives of secondary school EFL learners. *Innovation in Language Learning and Teaching*, 11(3), 267–281. <https://doi.org/10.1080/17501229.2017.1317261>

Chan, L., Dörnyei, Z., & Henry, A. (2014). Learner archetypes and signature dynamics in the language classroom: A retrodictive qualitative modelling approach to studying L2 motivation. In Z. Dörnyei, P. D. MacIntyre, & A. Henry (Eds.), *Motivational dynamics in language learning* (pp. 238–259). Multilingual Matters. <https://doi.org/10.21832/9781783092574-018>

Dörnyei, Z. (2009). The L2 motivational self system. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, language identity and the L2 self* (pp. 9–42). <https://doi.org/10.21832/9781847691293-003>

Dörnyei, Z. (2014). Researching complex dynamic systems: ‘Retrodictive qualitative modelling’ in the language classroom. *Language Teaching*, 47(1), 80–91. <https://doi.org/10.1017/S0261444811000516>

Dörnyei, Z. (2019). Towards a better understanding of the L2 learning experience, the Cinderella of the L2 motivational self system. *Studies in Second Language Learning and Teaching*, 9(1), 19–30. <https://doi.org/10.14746/ssl.2019.9.1.2>

Dörnyei, Z., & Chan, L. (2013). Motivation and vision: An analysis of future L2 self images, sensory styles, and imagery capacity across two target languages. *Language Learning*, 63(3), 437–462. <https://doi.org/10.1111/lang.12005>

Gardner, R. C., & Lambert, W. E. (1959). Motivational variables in second-language acquisition. *Canadian Journal of Psychology*, 13(4), 266–272. <https://doi.org/10.1037/h0083787>

Henry, A. (2014). The dynamics of possible selves. In Z. Dörnyei, P. D. MacIntyre & A. Henry (Eds.), *Motivational dynamics in language learning* (pp. 83–94). Multilingual Matters. <https://doi.org/10.21832/9781783092574-011>

Henry, A., & Liu, M. (2023). Can L2 motivation be modelled as a self-system? A critical assessment. *System*, 119, Article 103158. <https://doi.org/10.1016/j.system.2023.103158>

Henry, A., & MacIntyre, P. D. (2024). Keeping in time: The design of qualitative longitudinal research in SLA. *Research Methods in Applied Linguistics*, 3(1), Article 100102. <https://doi.org/10.1016/j.rmal.2024.100102>

Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, 94(3), 319–340. <https://doi.org/10.1037/0033-295X.94.3.319>

Hiver, P., & Papi, M. (2019). Complexity theory and L2 motivation. In M. Lamb, K. Csizér, A. Henry, & S. Ryan (Eds.), *The Palgrave handbook of motivation for language learning* (pp. 117–137). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-28380-3_6

Kostoulas, A., & Mercer, S. (2016). Fifteen years of research on self & identity in System. *System*, 60, 128–134. <https://doi.org/10.1016/j.system.2016.04.002>

Lamb, M. (2011). Future selves, motivation and autonomy in long-term EFL learning trajectories. In G. Murray, X. Gao, & T. Lamb (Eds.), *Identity, motivation and autonomy in language learning* (pp. 177–194). Multilingual Matters. <https://doi.org/10.21832/9781847693747-013>

Latham, G., & Ewing, R. (2018). *Generative conversations for creative learning: reimagining literacy education and understanding*. Palgrave Macmillan. <https://doi.org/10.1007/978-3-319-60519-7>

Li, Z., & Liu, Y. (2023). Theorising language learning experience in LOTE motivation with PERMA: A positive psychology perspective. *System*, 112, Article 102975. <https://doi.org/10.1016/j.system.2022.102975>

Magid, M., & Chan, L. (2012). Motivating English learners by helping them visualise their Ideal L2 Self: Lessons from two motivational programmes. *Innovation in Language Learning and Teaching*, 6(2), 113–125. <https://doi.org/10.1080/17501229.2011.614693>

Markus, H., & Nurius, P. (1986). Possible selves. *American Psychologist*, 41(9), 954–969. <https://doi.org/10.1037/0003-066X.41.9.954>

Mello, Z. R., Worrel, F. C., & Andretta, J. R. (2009). Variation in how frequently adolescents think about the past, the present, and the future in relation to academic achievement. *Journal of Childhood and Adolescence Research*, 4(2), 173–183. <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-334563>

Melo-Pfeifer, S. (2015). Multilingual awareness and heritage language education: Children's multimodal representations of their multilingualism. *Language Awareness*, 24(3), 197–215. <https://doi.org/10.1080/09658416.2015.1072208>

Taguchi, T., Magid, M. & Papi, M. (2009). The L2 motivational self system among Japanese, Chinese and Iranian learners of English: A comparative study. In Z. Dörnyei & E. Ushioda (Ed.), *Motivation, language identity and the L2 self* (pp. 66–97). Multilingual Matters. <https://doi.org/10.21832/9781847691293-005>

Thompson, A. S., & Vásquez, C. (2015). Exploring motivational profiles through language learning narratives. *The Modern Language Journal*, 99(1), 158–174. <https://doi.org/10.1111/modl.12187>

Thorsen, C., Henry, A., & Cliffordson, C. (2017). The case of a missing person? The current L2 self and the L2 motivational self system. *International Journal of Bilingual Education and Bilingualism*, 23(5), 584–600. <https://doi.org/10.1080/13670050.2017.1388356>

Ushioda, E. (2019). Researching L2 motivation: Re-evaluating the role of qualitative inquiry, or the 'wine and conversation' approach. In A. Al-Hoorie & P. MacIntyre (Eds.), *Contemporary language motivation theory: 60 years since Gardner and Lambert (1959)* (pp. 194–211). Multilingual Matters. <https://doi.org/10.21832/9781788925204-014>

Verspoor, M. H., de Bot, K., & Lowie, W. (Eds.). (2011). *Dynamic approach to second language development: Methods and techniques*. John Benjamins. <https://doi.org/10.1075/lilt.29>

Wang, J., Henry, A., Liu, M., & Thomas, N. (2025). The adjustment processes of international students at a UK university: An exploration using the L2 self-regulatory system. *Journal of Multilingual and Multicultural Development*, 1–17. <https://doi.org/10.1080/01434632.2025.2570842>

Waninge, F., Dörnyei, Z., & De Bot, K. (2014). Motivational dynamics in language learning: Change, stability, and context. *The Modern Language Journal*, 98(3), 704–723. <https://doi.org/10.1111/modl.12118>