Temporal Reconstruction of International Student Learning: A Conceptual Framework for Japanese Higher Education

Tetsushi Omori[a]
Yoko Oka
Seongsu Yun
Teikyo University

Michiko Iwai
Tokyo University of Marine Science and Technology

Abstract: Research increasingly connects international students' mobility motives, university experiences, learning, and post-graduation planning, but how these domains become mutually interpretive across narrated time remains underspecified. This conceptual paper develops temporal reconstruction through a structured literature synthesis, using Japanese higher education as its primary specification context. The framework shifts analysis from separate domains to a present-centred configuration linking four reference points: pre-arrival motives, purposes at university entry, current meanings of learning, and anticipated post-graduation pathways. It addresses narrated meaning, not observed longitudinal change. Continuity, discontinuity, redirection, and reinterpretation describe relations that may coexist within one account. The framework makes visible how anticipated futures reorganise present learning, earlier motives acquire new meanings, and stability coexists with change. It offers an interpretivist scaffold for qualitative and comparative inquiry across Japanese and other higher-education settings, allowing linguistic, institutional, and mobility conditions to shape different configurations.

Keywords: international students; learning motivation; temporal reconstruction; international higher education; student mobility

Introduction

International student learning unfolds within the broader internationalisation of higher education, encompassing cross-border mobility and institutional, national, and policy arrangements that shape educational possibilities (Knight, 2004; Altbach & Knight, 2007; de Wit & Altbach, 2021). Mobility scholarship examines students' motivations and experiences of studying abroad (Brooks & Waters, 2011), links mobility to wider life-course aspirations (Findlay et al., 2012), recognises international students as occupying multiple mobility and social roles (King & Raghuram, 2013), and treats students as agents in knowledge formation and circulation (Madge et al., 2015). A single snapshot of motivation or adjustment is therefore insufficient.Four questions often organise research on international student learning: destination choice, university experience, learning motivation, and post-graduation plans. Each has generated a substantial literature. Their separation can obscure how students themselves connect them. Destination-choice research identifies economic, social,

a Correspondence can be directed to: teshii@mac.com

educational, and reputational considerations (Mazzarol & Soutar, 2002; Findlay et al., 2012). International-student research separately documents loneliness and isolation (Sawir et al., 2008), supportive international social networks and learning communities (Montgomery & McDowell, 2009), and multidimensional connectedness (Hasnain & Hajek, 2022). Language-motivation research examines reasons for learning, self-guides, and dynamic motivational processes (Dörnyei, 2005; Dörnyei & Ushioda, 2009; Boo et al., 2015). Liu-Farrer (2009) examines international education as a channel into labour mobility in Japan, while Mosneaga and Winther (2013) examine study-to-work transitions, host-country career continuation, and longer-term settlement in Denmark.

A student may arrive with language or cultural interests and encounter unexpected academic or social experiences. Anticipated employment, postgraduate study, return migration, or onward mobility may then reshape what learning is for. Motivation concerns both intensity and the purpose of learning within the student's changing situation. The analytical question is relational: how do earlier motives, present experience, current learning, and anticipated futures become meaningful in relation to one another?

Japan is the primary specification context, not the framework's exclusive theoretical source. Across varied linguistic and institutional environments, Japanese may be a subject of study or a resource for academic participation, everyday life, employment, or further study. Studies document different parts of this nexus: motivations, learning experiences, and perceived outcomes at national universities (Huang & Chen, 2022); educational-mobility motivations and experiences in Japanese-language schools (Karki, 2025); and education as a channel into labour mobility, including the use of linguistic and cultural competence (Liu-Farrer, 2009). These strands inform questions about how educational, linguistic, social, and future-oriented concerns become temporally related. The changing function of a host or additional language, rather than Japanese itself, provides a contextual relation to examine across higher-education systems.

Recent studies reinforce a process orientation. Tan et al. (2026) examine how learning beliefs evolve among Chinese international students during their first academic year in Malaysia, while Karki (2025) examines motivations and experiences of educational mobility among Nepali students in Japanese-language schools. Temporal reconstruction asks a distinct present-centred question: how do students connect what brought them abroad, what they encountered after arrival, what they now consider worth learning, and the futures they regard as possible? This interpretive focus differs from stage models of learning change and typologies of mobility motives.

Temporal reconstruction refers to the present-centred interpretive linking of four analytic reference points: pre-arrival motives, purposes at university entry, current meanings of learning, and post-graduation pathways. University-life experiences and institutional conditions provide contexts in which these relations are confirmed, weakened, redirected, disconnected, or reinterpreted. The framework is a qualitative analytical lens, not a stage model or a new data-collection technique. This conceptual paper reports no human-participant data.

The paper makes four contributions. First, it integrates five literature domains: second-language motivation; international student experience and connectedness; agency and self-formation; career and mobility; and temporality and narrative meaning. Second, it shifts analysis from separate themes or variables to relations among temporal reference points, revealing how anticipated futures reorganise learning, similar motives acquire different meanings, and stability and change coexist. Third, it specifies the cross-temporal configuration of meaning as the unit of analysis and distinguishes narrated temporality from observed longitudinal change. Fourth, it offers common comparative questions while allowing linguistic, institutional, economic, and mobility conditions to generate different processes and categories.

International Student Learning as a Temporally Situated Process

The framework begins with a premise shared by several strands of contemporary scholarship: students are active meaning-makers situated within changing contexts. Marginson (2014) explicitly

contrasts student self-formation with adjustment-centred approaches. Related scholarship conceptualises international mobility through becoming and agency (Tran, 2016; Tran & Vu, 2018), while a systematic review documents the growing attention to international-student agency across the field (Inouye et al., 2023). More recent work extends self-formation to higher education more broadly (Marginson, 2024) and conceptualises mobility as agency situated within engagement with disciplinary knowledge (Lee, 2025). Temporal reconstruction builds on this agential orientation, focusing specifically on how students connect past motives, present learning, and possible futures in their accounts.

Learning motivation: from intensity to meaning

Motivation research distinguishes both the quality and the reasons for engagement. Self-determination theory emphasises forms of regulation (Deci & Ryan, 1985; Ryan & Deci, 2000), and Noels et al. (2000) relate second-language learning orientations to intrinsic and extrinsic forms of motivation. Dörnyei (2005) and Dörnyei and Ushioda (2009) connect language-learning motivation to future self-guides and the learning experience.

Later L2-motivation scholarship documents a changing field and increasingly foregrounds dynamic perspectives (Boo et al., 2015; Al-Hoorie, 2017; Dörnyei et al., 2015), while multilingual research challenges models that treat a learner's different language motivations as separate systems (Henry, 2017). For mobile students, purposes can shift across educational, linguistic, and professional domains, making a simple high-versus-low representation insufficient.

Person-in-context perspectives locate motivation within the learner's lived social world (Ushioda, 2020), while investment research foregrounds identity, ideology, and access to valued resources (Darvin & Norton, 2023). Thus, the same activity can change function: Japanese study may begin as cultural interest, become necessary for participation, and later serve professional preparation. Motivational intensity and the meaning of learning can diverge.

A temporal approach asks how earlier reasons, current circumstances, and anticipated possibilities relate to what learning means now. Earlier motives may remain salient but be reinterpreted; anticipated futures may reorganise present study before being realised.

University experience: where meanings are tested and revised

International students encounter academic, social, and everyday conditions—including coursework, relationships, finances, administration, isolation, and employment—that shape participation and the perceived feasibility of study. Acculturation research emphasises adaptation within person–environment relations (Berry, 1997), while international-student research documents how social, institutional, cultural, and linguistic environments can contribute to loneliness and isolation (Sawir et al., 2008).

Social relations can also become learning environments. International student communities may provide social and learning support (Montgomery & McDowell, 2009); connectedness is multidimensional, encompassing social, cultural, political, place, and translocal dimensions (Hasnain & Hajek, 2022); and institutional contexts can shape students' social and educational experiences (Arkoudis et al., 2019). Context therefore enters the process through which learning becomes more or less meaningful.

An agential perspective emphasises students' capacity to use, resist, and reorganise context. Self-formation and becoming scholarship foreground students as agents of their own trajectories (Marginson, 2014; Tran, 2016), and work on 'agency in mobility' develops this emphasis within transnational mobility (Tran & Vu, 2018). A systematic review documents the broader agency turn in international higher education (Inouye et al., 2023). Recent studies extend the argument to engagement with disciplinary knowledge (Lee, 2025), multiple forms of agency in study abroad (Tran & Huynh, 2026), and future-oriented aspirations within self-formation (Qin et al., 2026).

In Japan, Japanese may be both an object of study and a resource for classes, everyday participation, part-time work, or employment. Temporal reconstruction examines changes in these functions as learning meanings, rather than as a single developmental trajectory.

Career, post-graduation pathways, and anticipated mobility

International student education is future-oriented. Destination choice is shaped by home- and host-country factors (Mazzarol & Soutar, 2002), while mobility research situates study abroad within students' broader motivations and experiences (Brooks & Waters, 2011), life-course aspirations (Findlay et al., 2012), and multiple migration and social roles (King & Raghuram, 2013). Post-study career continuation in the host country and longer-term settlement may remain open questions during study (Mosneaga & Winther, 2013).

Japan makes this education–migration nexus visible. Liu-Farrer (2009) shows how international education can channel labour mobility and how Chinese students in Japan use linguistic and cultural competencies in labour-market roles. Japanese-language and career-education scholarship addresses employment-oriented language education and career education (Koga, 2018; Maruyama, 2023), organisational socialisation and resignation processes among former international students employed in Japanese companies (Nabeshima, 2020), career formation under job-rotation systems (Sakai, 2024), and career decisions among former international-student employees who returned home (Watabe, 2022).

In temporal reconstruction, post-graduation pathways serve as both anticipatory reference points and later outcomes. Host-country work, return, postgraduate study, onward mobility, or undecided options can reorganise present learning: language may become professional preparation, disciplinary knowledge may gain transfer value, or several linguistic and professional options may remain open.

The relation is reciprocal: anticipated pathways shape present learning, while current learning and university experience alter which futures appear feasible or desirable.

Temporality, agency, and narrative meaning

Temporal reconstruction also draws on temporally embedded agency. Emirbayer and Mische (1998) conceptualise agency as informed by the past, oriented towards the future, and evaluated in the present. Hitlin and Elder (2007) likewise argue that different temporal orientations entail different forms of agency. Applied to international student learning, remembered motives, current contingencies, and imagined futures can jointly organise what study means.

Recent research makes temporality explicit in international studentship. Shahjahan et al. (2025) theorise clock time, temporal discontinuities, and relations among temporality, privilege, and oppression; Spangler and Jayadeva (2026) examine university rhythms, everyday routines, and lifecourse trajectories across the United Kingdom, Denmark, and Germany; Zhao (2026a) analyses future-oriented waiting; and Zhao (2026b) uses temporal positioning to examine the international-student experience. Temporal reconstruction narrows this agenda to the meaning of learning and the cross-temporal configuration through which temporal positions reinterpret one another.

Agency is also ecological: it is achieved through active engagement with contexts-for-action (Biesta & Tedder, 2007). Mobility and self-formation scholarship likewise links student projects to changing contexts and structures (Tran & Vu, 2018; Marginson, 2024; Tran & Huynh, 2026). Financial, linguistic, institutional, relational, and labour-market conditions are therefore treated here as factors that may alter available possibilities.

Narrative inquiry treats interview narratives as constructed accounts rather than transparent records of experience (Riessman, 2008). Accordingly, a single interview can show how a student presently relates remembered motives to anticipated futures; longitudinal data are required to establish change over time.

The temporal integration problem

These literatures already connect domains. Huang and Chen (2022) examine motivations, learning experiences, and perceived benefits in Japanese national universities. Tan et al. (2026) examine the evolution of learning beliefs through social interaction, reflection, and culturally diverse classroom experiences; Karki (2025) examines motivations and experiences related to educational mobility in Japanese-language schools. These advances sharpen the question of temporal integration.

The unresolved problem concerns temporal integration in the meaning of learning. Direct temporality research has identified several relevant dimensions: clock time and temporal discontinuities (Shahjahan et al., 2025), university, everyday, and lifecourse rhythms (Spangler & Jayadeva, 2026), future-oriented waiting (Zhao, 2026a), and temporal positioning (Zhao, 2026b). Less specified is how domains usually examined separately become mutually interpretive within a student's present account. Existing studies often place motives, experiences, learning, and outcomes side by side or illuminate the temporal organisation of studentship, leaving cross-temporal reinterpretation of learning underspecified. A difficult experience can alter the significance assigned to an earlier motive; a new professional aspiration can make a previously peripheral subject central; a decision to return can change the value assigned to a university experience. Temporal reconstruction addresses this gap by treating these relations, rather than the domains in isolation, as the analytical object.

The framework asks how one temporal position interprets another, not simply whether motives, experience, or plans changed. It can distinguish a stable activity with a reinterpreted purpose, a changed future with continuing language commitment, or similar starting motives that diverge under different institutional and social conditions.

Conceptual derivation and criteria of adequacy

The four reference points and relational patterns were developed through a structured, theory-oriented, purposive synthesis of the literature; no participant data were used. The design most closely follows theory synthesis, which integrates complementary literature streams to generate a higher-order analytical perspective and makes the role of each stream explicit (Jaakkola, 2020).

Five literature clusters were purposively assembled to shape the internal analytical architecture: second-language motivation; international student experience and connectedness; agency and self-formation; career and mobility; and temporality and narrative meaning. Two additional clusters—internationalisation of higher education and comparative education—supported contextual transfer and cross-context use.

Sources were retained to define constructs, document integrative or contrasting relations, or specify contextual or boundary conditions. Selection prioritised conceptual relevance and complementary explanatory value, combining foundational works, reviews, and recent studies across Japan, Asia, and other higher-education settings. Examples illustrate our synthesis of the literature; the framework was not inferred from unpublished cases or anecdotes.

The synthesis proceeded in four passes. First, recurring constructs were mapped to their temporal functions. Second, distinct functions were separated: reconstructed pre-arrival reasons; university-specific entry aims; present meanings of learning; and anticipated pathways that organise learning. Distinguishing pre-arrival motives from entry purposes is an analytic contribution of the synthesis, not a distinction directly reproduced from one source. Third, experiences and institutional arrangements were treated as contextual conditions whose significance depends on interpretation. Fourth, continuity, discontinuity, redirection, and reinterpretation were retained as

relational descriptors, not student types. Table 1 links each reference point and analytical function to the principal literature strands informing its construction. These are integrative constructs, so the literature entries indicate their grounding rather than one-to-one source attributions.

Table 1. Four analytic reference points in the temporal reconstruction framework and their literature grounding

Reference point	Central question	Illustrative considerations	Analytical focus	Indicative literature
Pre-arrival motives	Why did the student choose the destination?	Language/culture; family or teacher influence; costs; institutional conditions; imagined work	Read the starting point as a present reconstruction	Mazzarol and Soutar (2002); Findlay et al. (2012); Brooks and Waters (2011)
Purposes at university entry	What did the student expect to study or become?	Programme and field choice; desired content; expectations; clarity of goals	Examine how broad motives become specific, remain diffuse, or shift at university entry	Mazzarol and Soutar (2002); Findlay et al. (2012); Huang and Chen (2022)
Current meanings of learning	What does educational engagement mean or enable now, and why?	Language and disciplinary learning; participation, professional preparation, or self-development only when explicitly construed as learning or as what learning enables	Analyse the present significance and function of learning; treat living, financial, relational, or administrative experiences as context unless they are linked to learning meaning	Dörnyei and Ushioda (2009); Ushioda (2020); Darvin and Norton (2023); Marginson (2024); Lee (2025)
Post-graduation pathways	What futures does the student regard as possible?	Host-country work; return; postgraduate study; onward mobility; multiple options	Examine how anticipated futures organise, narrow, expand, or reopen present learning	Liu-Farrer (2009); King and Raghuram (2013); Mosneaga and Winther (2013)

Note. Indicative literature identifies principal sources used in the structured conceptual synthesis. The four reference points are integrative analytic constructs rather than direct reproductions of any single source.

Source: Authors

Conceptual adequacy was assessed against six criteria: theoretical grounding, discriminant clarity, relational coherence, coverage of stability and change, parsimony, and empirical revisability. Each criterion required a distinct analytical function and an answerable empirical question. The framework was also evaluated against studies integrating motives and experience in Japanese contexts (Huang & Chen, 2022; Karki, 2025), studies foregrounding temporality (Shahjahan et al., 2025; Spangler and Jayadeva, 2026; Zhao, 2026a, 2026b), studies linking learning beliefs to sociocultural experience (Tan et al., 2026), and studies linking language, agency, and future aspirations in self-formation (Qin et al., 2026). Table 2 summarises these checks; empirical validation remains for future work.

Empirical work should prompt revision if reference points collapse, important relations fall outside the structure, patterns obscure the data, or a simpler configuration explains the accounts equally well. The present claim concerns conceptual adequacy—transparent derivation, coherence, analytical usefulness, and testability—not established empirical adequacy.

Table 2. Conceptual derivation and design-based adequacy checks

Criterion	What the criterion requires	How the framework addresses it
Theoretical grounding	Grounded in established theory or cumulative research.	Grounded in motivation, student-experience, agency/self-formation, mobility, temporality, and narrative literatures.
Discriminant clarity	Elements have distinct analytical functions and explicit boundaries.	Reference points differ by temporal/interpretive function; "current meanings of learning" is separated from contextual experience.
Relational coherence	Relations among elements are explicitly specified.	The unit is a cross-temporal configuration linking the reference points supported by the account within contextual conditions.
Coverage	The structure accommodates stability, change, ambiguity, and coexisting relations.	Relation-specific patterns may coexist; stable, ambiguous, and open-ended accounts remain analytically legitimate.
Parsimony	Only the minimum structure required by the analytical problem is retained.	Four reference points, contextual conditions, and relational patterns are retained without fixed developmental order or student types.
Empirical revisability	The framework generates answerable questions and can be contradicted.	Future data may collapse, extend, reorder, or reject elements when distinctions fail, important relations fall outside the framework, or a simpler account fits better.

Source: Authors

Ontological and epistemological position

Ontologically, temporal reconstruction is relational and contextual. Motives, purposes, experiences, and future possibilities acquire significance through their connections to other temporal positions and study conditions, rather than possessing invariant meanings. The meaning of learning is thus constituted relationally, not discovered as a single stable attribute.

Epistemologically, the framework is interpretivist. In future empirical applications, qualitative interview accounts would be treated as constructed narrative data through which students articulate and reconstruct relations among remembered pasts, current concerns, and anticipated futures (Riessman, 2008). The phrase "interview accounts" therefore refers to the form of data the framework is designed to analyse, not to data reported in this conceptual paper, which contains no participant interviews. This does not imply that material conditions are merely subjective. Language regimes, finances, institutional rules, relationships, and labour-market opportunities can be materially consequential; the interpretive question is how those conditions enter the student's account and become significant for learning.

Data collection should elicit concrete events, people, constraints, turning points, and cross-temporal links rather than only ratings or isolated themes. Analysis should distinguish reported events from assigned meanings, identify relation-bearing segments, and assemble case-level configurations

before cross-case comparison. Claims concern the organisation of meaning and the conditions that make particular relations salient. Causal or observed-change claims require additional designs, especially longitudinal data.

A Temporal Reconstruction Framework

Temporal reconstruction examines how a present account connects the four reference points within university-life experiences and institutional conditions. These temporal anchors do not imply a developmental sequence or fixed student types. Their function is to specify how remembered motives and anticipated pathways enter current learning meaning.

Reconstruction denotes present interpretation: pre-arrival motives and entry purposes are remembered, while post-graduation pathways are anticipated. The analytical object is the configuration through which these remembered pasts and imagined futures become relevant to current learning.

The first, pre-arrival motives, concerns why the student initially considered a destination and higher education abroad. Possible elements include language or cultural interests, perceived educational opportunities, affordability, safety, geographical proximity, family or teacher influence, and imagined employment or personal development. International student mobility research shows that destination choice involves multiple push and pull factors (Mazzarol & Soutar, 2002), while study abroad can be embedded in wider life-course aspirations (Findlay et al., 2012). These elements are analysed as present reconstructions of a starting point, with causal status left open.

Purposes at university entry concern how broader pre-arrival motives connect to a university, programme, or field. Aims may be clear, partly specified, or shaped by admissions opportunities and advice. Separating this reference point from pre-arrival motives reveals whether a mobility project becomes more specific, remains diffuse, or is redirected at entry.

The third reference point, current meanings of learning, refers specifically to the present significance, purpose, and perceived function that a student assigns to educational engagement. It asks what the student presently understands learning to be for and what kinds of learning are worth pursuing. Its core objects are language learning and disciplinary study. Academic participation, professional preparation, independence, relationships, or personal development enter this reference point only when the student explicitly construes them as part of what is being learned or what learning is meant to enable. The construct therefore concerns the meaning of educational engagement rather than the totality of the student's current life.

Several experiences are excluded from this reference point unless the account links them to learning meaning. Housing, finances, friendship, part-time employment, administrative procedures, and immigration conditions are coded as contextual conditions when they are reported only as circumstances. They become analytically relevant to current meanings of learning when the student explains how they alter what learning is for, what is worth learning, or how learning is used. This boundary separates the focal construct from the wider ecology of student experience.

The fourth reference point, post-graduation pathways, includes employment in the host country, return to the home country, postgraduate education, onward mobility to another country, and combinations or undecided possibilities. International-student migration research highlights students' multiple roles as actual or potential workers (King & Raghuram, 2013), and host-country research shows that study-to-work transitions and longer-term settlement can remain linked to international study (Mosneaga & Winther, 2013). The analysis focuses on how anticipated futures organise, narrow, expand, or reopen present learning.

Contextual conditions include language environments, coursework, teacher and peer relations, living and economic conditions, part-time work, immigration arrangements, scholarships, progression requirements, career support, and international student services. Their analytical relevance lies in

how they enable, constrain, test, or reorganise relations among reference points, not in automatically constituting learning meanings. Analysis asks both what happened and what interpretive work it performs.

Relational patterns and coding logic

Four relational patterns serve as sensitising descriptors of a relation, not as classifications of students. Continuity is coded when an earlier orientation remains substantively connected to a later one: its function may be elaborated, but its organising purpose is retained. Discontinuity is coded when a previously meaningful orientation no longer organises current learning or future planning; a replacement direction is not required. Redirection is coded when experience or a newly salient possibility establishes a different organising direction for learning or pathway planning. Reinterpretation is coded when a current position or anticipated future changes the meaning attributed to an earlier motive or experience, even if the observable activity itself remains similar.

The basic coding unit is a meaning-bearing relational segment: the smallest contiguous stretch of an account in which the student links at least two reference points, or links one reference point to a contextual condition in a way that explains or changes its significance. One sentence may suffice, but several adjacent sentences may be required when the relation is distributed across an exchange. The case-level unit of analysis remains the cross-temporal configuration assembled from these relation-specific segments.

Several patterns can coexist within one student account because the codes apply to specific relations, not to the person as a whole. A language-learning purpose may show continuity while a career orientation is redirected, and the same student may retrospectively reinterpret an earlier cultural motive. Discontinuity and redirection are distinguished by their analytic target: discontinuity concerns the loss of an earlier organising relation, whereas redirection concerns the emergence or prioritisation of a different direction. They may co-occur when both are narrated. Reinterpretation is distinguished by retrospective re-meaning and does not require a new behavioural direction. Ambiguous segments should remain unclassified until the relation is sufficiently supported.

Table 3. Operational distinctions among relational patterns

Pattern	Operational definition / inclusion	Key distinction	Illustrative relation
Continuity	Earlier orientation remains substantively linked to a later one; the organising purpose is retained.	Requires an explicit persisting or extending relation, not mere repetition.	Cultural interest remains a reason for Japanese study as additional academic uses emerge.
Discontinuity	An earlier orientation no longer organises current learning or future planning.	Targets loss of the earlier relation; no replacement direction is required.	A Japan-based career ceases to shape present study without a specified alternative.
Redirection	Experience or a newly salient possibility establishes or prioritises a different organising direction.	Targets emergence of a different direction; it may co-occur with discontinuity.	A new disciplinary interest reorganises study toward postgraduate education.

Pattern	Operational definition / inclusion	Key distinction	Illustrative relation
Reinterpretation	A current position or anticipated future changes the meaning attributed to an earlier motive or experience.	Requires retrospective re-meaning; observable activity may remain unchanged.	An emerging postgraduate orientation recasts earlier Japanese-cultural interest as broader cross-cultural learning.

Note: Illustrative relations are hypothetical.

Source: Authors

Worked hypothetical example

Consider an explicitly hypothetical student who chose Japan because of an interest in Japanese language and culture and initially imagined working there after graduation. At university entry, the student selected a business programme and expected Japanese study to support that goal. During university, difficulty participating in a Japanese-medium seminar made language proficiency seem instrumental rather than purely cultural, while a sustainability course and interactions with international peers created a new academic interest. The student now treats Japanese as a resource for participation and professional communication and gives greater priority to sustainability-related disciplinary learning. The student no longer treats immediate employment in Japan as the organising goal and instead prioritises postgraduate study in another country. Looking back from this emerging postgraduate orientation, the student now understands the earlier interest in Japanese culture not only as an attraction to Japan but as an early expression of a broader desire to learn across cultural boundaries. This vignette is illustrative only and does not represent participant data.

The account contains several patterns. Continued interest in language and culture at entry shows continuity. Re-reading that interest as broader cross-cultural learning shows reinterpretation, distinct from a contemporary shift in the instrumental function of Japanese. Sustainability and postgraduate study become new priorities, showing redirection. Immediate employment in Japan ceases to organise the future, showing discontinuity despite continuing Japanese study. The analysis identifies coexisting temporal relations without assigning the student a single type.

Table 4. Hypothetical worked example of temporal reconstruction

Analytical position	Hypothetical case element	Pattern(s)	Analytical reading
Pre-arrival → entry	Japanese language/ culture interest; imagined work in Japan; business-programme entry with continued Japanese study.	Continuity	Earlier language/culture orientation remains linked to the university-entry purpose.
Present/future position → earlier motive	From an emerging postgraduate orientation, earlier cultural interest is re-read as a broader cross-cultural learning desire.	Reinterpretation	A present/future position changes the meaning attributed to an earlier motive: retrospective re-meaning.
New academic experience → current learning	A sustainability course and international-peer interaction make disciplinary learning a new priority.	Redirection	A newly salient academic direction reorganises what the student now considers worth learning.

Analytical position	Hypothetical case element	Pattern(s)	Analytical reading
Current learning → future pathway	With sustainability-related disciplinary learning now central, immediate employment in Japan is no longer the organising goal; postgraduate study in another country is prioritised.	Discontinuity + redirection	The earlier future loses its organising role (discontinuity) while a different future gains priority (redirection).
Whole account	Japanese remains important while academic and career orientations change.	Coexistence	Different relations display all four patterns; the account is not assigned a single type.

Source: Authors

Cross-temporal configuration and propositions

Figure 1 presents an open configuration. Bidirectional links indicate interpretive reference, not sequential transitions, and may connect non-adjacent reference points. Relational patterns describe these links, not additional stages. Students may move between reference points within an interview, and an experience may take on different meanings depending on the future considered.

The case-level unit is the cross-temporal configuration assembled from relation-bearing segments. Cross-case comparison examines how similar motives or experiences are organised differently across conditions. This is consistent with narrative analysis of constructed meaning-making (Riessman, 2008), while substantive categories remain open to emergence from the data.

The framework generates five propositions for empirical examination. P1: relating current learning to earlier motives and anticipated futures should reveal distinctions beyond those captured by motivational intensity alone. P2: post-graduation pathways can function as present interpretive resources as well as later outcomes. P3: the significance of university experiences depends on how they are related to motives, self-understanding, and possible futures, so similar experiences can support different meanings of learning. P4: temporal relations should form configurations with open ordering, allowing continuity, discontinuity, redirection, and reinterpretation to coexist within or across accounts. P5: contextual differences should alter these configurations; comparative value lies in identifying the conditions under which particular connections become salient. Consistent evidence against any proposition would warrant revision or rejection of the corresponding element.

International and Comparative Significance

Specified for Japanese higher education, the framework addresses an international and comparative problem. Its architecture draws on international scholarship, while Japan is the primary context for specifying analytical questions and boundary conditions. The framework therefore separates analytical architecture from contextual configuration: the four reference points and relational patterns provide a common scaffold, whereas the functions assigned to language, study, participation, and future mobility remain context-dependent. Comparative inquiry can then ask how context produces variation across trajectories and systems (Phillips & Schweisfurth, 2014) without treating the Japanese configuration as universal.

Temporal reconstruction links system and institutional conditions to students' interpretive organisation of mobility. National policies, institutional strategies, and transnational opportunities shape internationalisation (Knight, 2004; Altbach & Knight, 2007; de Wit & Altbach, 2021), while mobility scholarship examines motivations and experiences that extend beyond recruitment (Brooks

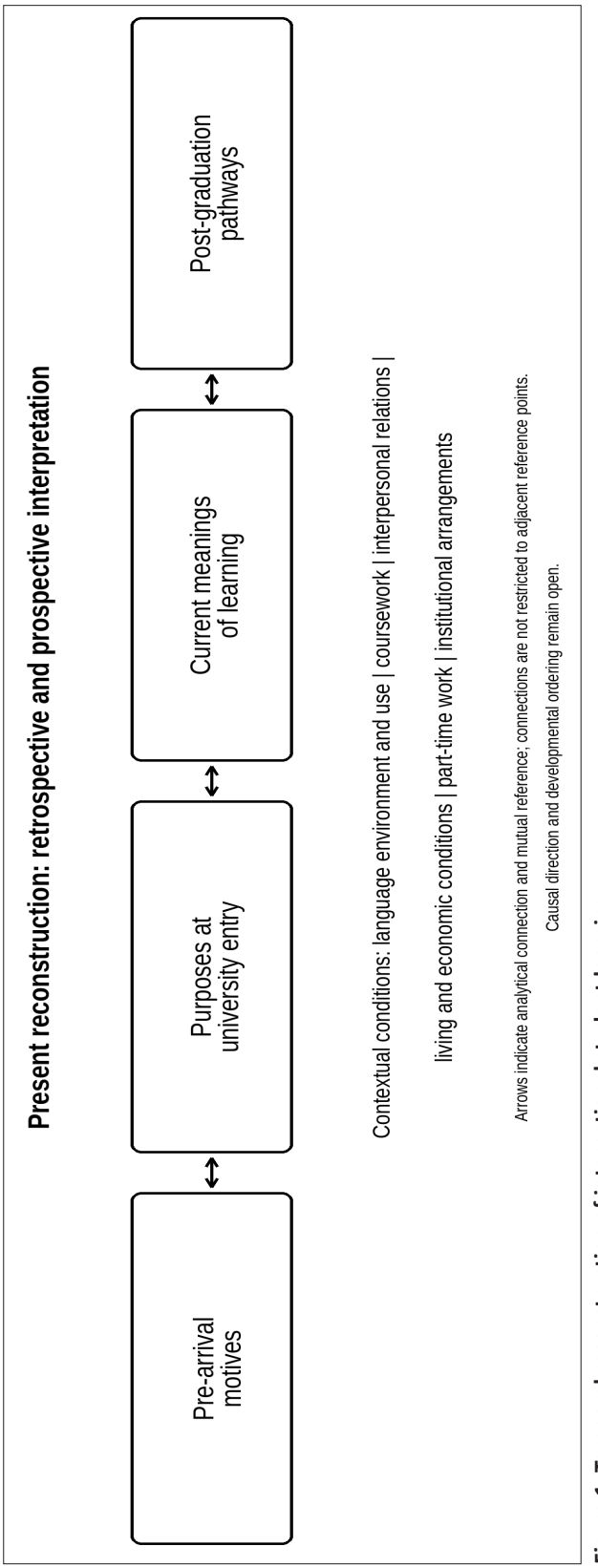


Figure 1. Temporal reconstruction of international student learning

Source: Authors

& Waters, 2011) and the multiple migration and social roles occupied by international students (King & Raghuram, 2013). Language arrangements are treated in this framework as an additional contextual condition whose function may differ across settings.

Japan is analytically informative not because Japanese is assumed to have a unique psychological status. Studies in Japan document different components of the language–education–mobility nexus: motivations and educational experiences (Huang & Chen, 2022; Karki, 2025), the labour-market role of linguistic and cultural competence (Liu-Farrer, 2009), and links between Japanese-language education and career preparation (Koga, 2018; Maruyama, 2023). Read together, these strands make Japan a productive setting for asking how a linguistic resource may change function as educational and mobility projects are reconstructed; this cross-temporal relation is the present paper's synthesis rather than a finding attributed to any one source. Japanese higher education is itself heterogeneous, so these functions need not coincide in English-medium programmes or across institutions. The contextual contribution of Japan is therefore the visibility of a potentially changing relation among language, participation, and future pathways, not a claim that the resulting temporal pattern is uniquely Japanese.

The same analytical questions can be asked in other higher-education systems. Where a host or additional language mediates academic participation, social access, professional preparation, or post-study work, researchers can examine whether its meaning shifts as anticipated futures change. Where the medium of instruction and the host-society language differ, or where several languages are in play, the framework can assess whether these functions are distributed across languages rather than concentrated in one. Research across Malaysia, China, and European settings separately illustrates how classroom and sociocultural experience can be linked to learning beliefs (Tan et al., 2026), how language, institutions, and future aspirations can intersect in self-formation (Qin et al., 2026), and how institutional and lifecourse rhythms shape temporal experience (Spangler & Jayadeva, 2026). Cross-context relevance therefore lies in the relational questions, not in assuming that Japanese-language patterns will be reproduced elsewhere.

Nationality and cultural background are treated as conditions rather than as sufficient explanations. Research conceptualises international students as agents of self-formation and mobility (Marginson, 2014; Tran & Vu, 2018), as contributors to knowledge formation and circulation (Madge et al., 2015), and as agents whose mobility is situated within engagement with disciplinary knowledge (Lee, 2025). Qin et al. (2026) further show how linguistic and institutional challenges, reflexive agency, and future-oriented aspirations intersect in self-formation. The framework compares how such conditions shape cross-temporal relations.

Comparison can occur within institutions, across programmes, or across countries, examining variation in language backgrounds, pathway expectations, media of instruction, support structures, and mobility regimes. Comparative use can ask whether host-language learning moves from cultural interest to participation or to an employment resource, whether post-study pathways revalue language or disciplinary learning, and which institutional arrangements strengthen or weaken these relations. A pattern that differs from Japan is not a failure of transfer; it is the comparative result the scaffold is designed to reveal. Longitudinal studies can also compare narrated futures with later pathways.

Implications for Qualitative Inquiry and Educational Practice

Interviews can use the four reference points while remaining open to other experiences. Prompts address pre-arrival expectations, purposes for entry, consequential university experiences, meanings of current learning, and possible futures. Follow-ups seek concrete people, events, constraints, turning points, tensions, ambiguities, and links through which one temporal position changes another's significance. Order and emphasis follow the student's account.

Analysis can proceed in three passes. First, identify statements associated with the four reference points and consequential contextual conditions without imposing relational pattern codes.

Second, code meaning-bearing relational segments using continuity, discontinuity, redirection, and reinterpretation as sensitising descriptors, while retaining unclassified or ambiguous segments when warranted. Third, assemble a case-level cross-temporal configuration and only then compare configurations across cases. This order keeps the reference points separate from substantive categories generated from data and prevents the four patterns from becoming predetermined student types. Stable, mixed, and open-ended accounts remain analytically legitimate.

The framework also has practical implications. Student support is often divided among language education, academic advising, welfare support, and career services, even though students experience these domains together. Participation difficulties, part-time work, and career plans can alter the perceived value of language or disciplinary learning. Research on international-student connectedness identifies multiple social, cultural, political, place, and translocal dimensions (Hasnain & Hajek, 2022), while research on student experience highlights the interaction of social and educational needs within institutional settings (Arkoudis et al., 2019). Advising that asks how experiences connect to present learning and anticipated futures may reveal needs missed by a simple measure of motivational level.

Language educators can examine changing language-learning functions; international student advisers can explore living, economic, and relational conditions within accounts of study; career services can connect employment and mobility planning to current learning. The effectiveness of these applications remains an empirical question.

Boundary Conditions and Research Agenda

First, a single interview can reveal present relations among remembered motives and anticipated futures, not longitudinal change. The framework distinguishes narrated temporality from longitudinal evidence.

Second, overlapping reference points should be coded by their analytical function, not by chronology alone. Statements serving multiple functions retain that overlap; repeated failure to maintain a distinction may justify merging or refining reference points.

Third, contextual conditions vary in salience. Field, language proficiency, finances, immigration status, family circumstances, employment opportunities, and institutional support can alter available projects and the meanings of learning. An ecological view of agency treats agency as achieved through active engagement with contexts-for-action rather than as a possession of the individual (Biesta & Tedder, 2007).

Fourth, Japanese-language schools, Japanese- and English-medium degrees, postgraduate settings, and exchanges may configure language and disciplinary learning differently. National-university evidence (Huang & Chen, 2022) and language-school evidence (Karki, 2025) do not establish a single national pattern. Comparative applications must specify institutional and linguistic arrangements, rather than treating languages or nations as homogeneous containers.

Fifth, the purposive, theory-oriented literature synthesis is necessarily selective. Additional literature may identify relations, constructs, or boundary conditions that require extension, reorganisation, or narrowing.

Future research can test the reference points qualitatively, compare how institutional and national conditions alter cross-temporal relations, and revisit students longitudinally to compare anticipated with experienced futures. Such work can move the heuristic towards empirically grounded explanations of continuity, change, and branching.

Conclusion

Temporal reconstruction analyses relations across narrated time rather than treating motivation, university experience, agency, and post-graduation planning as separate domains. Four reference points organise inquiry into linguistic, academic, social, economic, and institutional conditions.

Its cross-temporal configuration links remembered motives, present learning, and anticipated futures, showing how university experiences can alter their interpretation. Narrated temporality remains distinct from observed longitudinal change; empirical work may retain, revise, collapse, extend, or reject framework elements.

Specified for Japanese higher education, the framework offers context-sensitive comparison, not a Japan-specific trajectory model. Shared relational questions allow language functions, media of instruction, institutional supports, and mobility regimes to vary. The comparative question remains: under what conditions do international students reconstruct the meaning of learning across time?

Declaration on the Use of Artificial Intelligence

OpenAI ChatGPT (GPT-5.6 Sol; used in 2026) was used as a copy-editing aid on the authors' existing text to improve language, readability, structural clarity, consistency, and formatting during manuscript revision. All conceptual claims, source selection, interpretations, and final decisions were reviewed and verified by the authors, who take full responsibility for the creation and accuracy of the manuscript. No generative AI was used to generate or analyse empirical data.

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