

A Corpus Based Study on Tense Translation in Academic Discourse: French/English Theses Abstracts as a Case Study

Kaoutar Atarchi*

Chouaib Eddoukali University

Abdelkrim Elamari

Chouaib Eddoukali University

Mohamed Marouane

Chouaib Eddoukali University, Morocco

*Corresponding author. Email: atarchikawtar@gmail.com

How to cite:

Atarchi, K., Elamari, A., & Marouane, M. (2026). A Corpus Based Study on Tense Translation in Academic Discourse: French/English Theses Abstracts as a Case Study. *International Journal of Linguistics and Translation Studies*, 7(3).207-224. <https://doi.org/10.36892/ijlts.v7i3.769>

ARTICLE

HISTORY

Received:

28/06/2026

Accepted:

13/08/2026

Keywords:

Tense
Transfer;
English for
academic
purposes;
Research
writing.

Abstract

English verb tenses present significant challenges impacting both writing and translation into English by non-native speakers. This paper examines the translation of tenses from French to English in a corpus of 40 thesis abstracts across disciplines including biology, geology, physics, chemistry, and mathematics and computer sciences, submitted by Moroccan doctoral students with no prior training in translation. Drawing on Day's (1995), Malcolm's (1987), and Salager-Meyer's (1992) functional frameworks, the study classifies each tense mismatch according to the rhetorical function it serves in scientific discourse. The analysis shows that most mismatches follow a recurring pattern in which a French *passé composé* reporting the students' own methods, results, or attribution to prior research is rendered in the English present tense, blurring the distinction between the students' specific findings and established disciplinary knowledge. These patterns point to gaps in genre awareness, rather than to general English proficiency alone. The findings of this analysis have the potential to significantly inform curriculum designers in the development of specialized language courses tailored to enhance the genre awareness, academic writing, and translation skills of multilingual doctoral students.

1. Introduction

In academic writing, an abstract is a summary of a thesis, research article, or report. It is a standalone text summarizing the purpose, methodology, results, and implications of the study in question. The American Psychological Association (2020:25) defines it as "a brief, comprehensive summary of the contents of an article, allowing readers to survey the contents quickly. It should contain enough information for a reader to decide whether to read the complete text of the article". According to Bhatia (1993), abstracts are regarded as a standalone genre. However, Van Bonn and Swales (2007) contend that they constitute a 'part-genre' within more comprehensive genres, such as research articles or dissertations. Due to their promotional

nature, Hyland (2000) suggests that abstracts aim to persuade readers of the article's merit, and it guides their attention toward a complete reading until the end. Consequently, the body of research dedicated to examining the features, rhetorical structure, and disciplinary variations of this genre reflects the scholars' keen interest. Studies by (Nwogu 1989; Jordan 1991; Salager-Meyer 1992; Bittencourt dos Santos 1996; Hyland 2000; Dahl 2004; Lorés 2004; Tseng 2011; Doró 2014; and Kwary and Artha 2017) focus exclusively on abstracts of research articles. Notably, few articles have explored abstracts of other academic texts, such as theses, (Terzi, C. & Arslanturk, Y 2014), and abstracts of bachelor's papers by Suryani, Y. & Fitria, N. T. 2022).

Abstracts are often presented in multiple languages to reach a broader audience and foster international collaboration. Accurate translations are crucial as they faithfully represent the original content and serve as a gateway for readers to decide whether to engage with the full text. Maintaining the integrity of the original text through faithful translation ensures readers can make informed decisions about the relevance and value of the complete text. Therefore, inaccuracies or misrepresentations in the translation can mislead readers, potentially causing them to overlook significant research or misunderstand the study's findings and implications.

English has become the *lingua franca* of scientific communication, particularly in the pure sciences, where publication, dissemination, and international visibility increasingly depend on a scholar's ability to write and self-translate into English regardless of their first language. This raises a pressing challenge for multilingual scholars worldwide, Moroccan academics among them, who are required to produce English-medium scientific writing despite being trained and educated in other languages. Tense usage is a recurring source of difficulty in this process, posing significant challenges in interlanguage and affecting both the writing and translation into English by non-native speakers (Lackstrom et al., 1973; Oster, 1981; Guiora 1983; McCarthy, 1991; Hinkel, 1992; Bardovi-Harlig 1995; Hawes & Thomas 1994; Schramm, 1996; El-Dash & Busnardo 2003). Indeed, a Moroccan case study conducted by Bachiri and Tribak (2020) revealed that Moroccan students enrolling in engineering PhD programs at Euromed University of Fez face difficulties in choosing the appropriate tenses and maintaining consistency throughout the sections of their research articles. Examining how Moroccan doctoral students in the pure sciences handle tense when translating their own research therefore speaks to a challenge shared by multilingual scholars more broadly, while offering a concrete, disciplinarily grounded case through which to study it.

In response to this issue, the present study aims to analyze the accuracy of French/English translation of verb tenses in thesis abstracts by Moroccan doctoral students across five disciplines: biology, chemistry, geology, physics, and mathematics and computer sciences. It aspires to achieve the following research objectives:

- Identify the rhetorical functions served by verb tenses in the French source abstracts and assess whether these functions are preserved in the English translations;
- Classify the patterns of function-based tense mismatch found in Moroccan doctoral students' self-translations across five disciplines;
- Examine what these mismatch patterns reveal about Moroccan doctoral students' genre awareness as non-native users of academic English, and their implications for translation and writing pedagogy.

Regarding research questions, this study seeks to answer the following research questions:

- What rhetorical functions do verb tenses serve in the French source abstracts, and are these functions preserved in the English translations?
- What patterns of function-based tense mismatch occur in Moroccan doctoral students' self-translations, and how are they distributed across disciplines?
- What do these mismatch patterns reveal about Moroccan doctoral students' genre awareness as non-native users of academic English?

2. Review of Literature

2.1 Cross-Linguistic Transfer in Tense Translation

Several studies demonstrate that first-language structure directly influences tense choice when writers translate or compose in a second language, with lower target-language proficiency correlating with more frequent tense errors (Jabbari & Salimi, 2015; Btoosh 2019; Newbery-Payton & Mochizuki, 2020). Ma et al. (2019) found tense errors concentrated among lower-proficiency Chinese undergraduate and graduate writers, while Li and Zhao (2021) traced similar errors among Chinese English majors to gaps in understanding English tense rules and to cross-linguistic differences between Chinese and English. Yossatorn et al. (2022) found comparable patterns among Thai-speaking students translating into English. Together, these studies point to a consistent mechanism: tense mismatches in a second language reflect both incomplete command of the target tense system and structural interference from the first language, a mechanism directly relevant to Moroccan doctoral students, whose scientific training takes place primarily in French.

Directly relevant to the present study, Grisot and Cartoni (2012) conducted a contrastive analysis of a comparable English–French corpus across several registers, finding systematic divergence in how the English present perfect and simple past are rendered in French, the simple past variously corresponding to the French imparfait, passé composé, or passé simple depending on context. This finding establishes that French and English do not merely differ in surface tense marking but map tense onto different underlying functions, a point developed further in the discussion of French academic writing below.

2.2 Tense and Rhetorical Function in English Scientific Writing

Verb tense in English scientific writing follows conventions tied to specific rhetorical functions rather than to time reference alone (Taylor, 1989). A substantial body of work has documented these conventions (O'Connor, 1991; Weissberg & Buker, 1990; Swales & Feak, 1994; Day, 1995; Matthews et al., 1996; Huth, 1999), converging on a broadly consistent pattern: the past tense marks the writer's own methods and results and reports on specific prior experiments (Day, 1995; Malcolm, 1987; Salager-Meyer, 1992; Heslot, 1985; Vasquez, 1987), the present tense marks established knowledge, generalizations, and data presentation (Day, 1995; Malcolm, 1987; Salager-Meyer, 1992), and the present perfect marks attribution to prior research and the statement of a research gap (Gunawardena, 1989; Heslot, 1985; Lackstrom, Selinker & Trimble, 1973; Oster, 1981; Swales, 1981). Malcolm's (1987) corpus-based analysis further distinguished these functions along referential and deictic axes, and found this

system consistent with Comrie's (1985) general account of English tense. The significance of this system is functional rather than merely grammatical: consistent tense choice prevents a reader from confusing an author's specific findings with established disciplinary knowledge.

2.3 Tense in French Scientific and Technical Writing: A Contrastive Picture

Whether an analogous rhetorical-function system operates in French scientific writing is contested. Vigner and Martin (1976) argue that the temporal system of technical French is essentially atemporal, while Phal (1968) argues instead that it is aspectual, organized around the extension of an action over time. Kocourek's (1982) corpus analysis of French scientific and technical prose found that 85% of verbs occur in the present indicative, with the future and past tenses expected to cluster in the introduction and conclusion respectively.

Liddicoat's (2004) analysis of French biology journal articles complicates both positions. Liddicoat found that French tense choice is neither purely atemporal nor purely aspectual: verbs exhibit genuine temporal relationships to a "core discourse," but tense distribution follows a pattern that directly contradicts Kocourek's (1982) expectations past tense is more frequent in the introduction and methods sections and least frequent in the results section, while future forms cluster in the results section rather than the introduction. Read alongside Grisot and Cartoni's (2012) finding that English tense forms map unevenly onto multiple French tenses depending on context, this body of work indicates that French and English scientific writing do not merely use different verb forms to express the same underlying rhetorical functions. The functional systems themselves are organized differently, with no guarantee that a given French tense choice signals the same rhetorical status as its most literal English translation. This divergence is the central premise motivating the present study's analysis of tense correspondences in French-to-English doctoral thesis abstracts.

3. Methodology

3.1 Data Collection

The present study adopts a mixed-methods approach, combining quantitative corpus analysis with qualitative error analysis. Verb tense frequencies are calculated across the five disciplines, while the identified translation mismatches are examined qualitatively to assess their impact on meaning and coherence. The parallel corpus consists of 40 thesis abstracts in French and their English translations written and defended by Moroccan students at the following universities:

- Hassan II university
- Mohammed V university
- Ibnzohr university
- Moulay Slimane University

Thesis abstracts belong to the following disciplines:

- Biology
- Geology
- Physics
- Chemistry

- Maths and Computer Sciences.

These fields represent the departments of the faculties of sciences within the Moroccan educational system. Theses were selected using purposive sampling, ensuring an equal distribution of eight abstracts per discipline. The abstracts were retrieved from Toubkal, the national digital repository of Moroccan doctoral theses. All English versions are self-translations produced by the doctoral students themselves, as is standard practice in Moroccan thesis submission. However, it cannot be confirmed whether any of the translations underwent external editorial revision prior to submission, which constitutes a limitation of the present study.

It is worth providing a thumbnail sketch of Moroccan language policy in educational settings, which is directly relevant to interpreting the corpus. The language of teaching scientific and technical subjects in the Moroccan educational system has historically been contested. Post-independence language policies prioritized the Arabization of scientific and technical subjects at primary, secondary, and tertiary levels, aiming to strengthen Moroccan and Muslim identity and reduce the dominance of French. In practice, however, French has remained the official language of instruction in scientific fields in higher education. From primary to high school, the medium of instruction is Arabic; French becomes the medium of instruction for scientific and technical fields at the higher education level. English, by contrast, receives comparatively limited attention: students receive a limited number of hours of English instruction starting from middle school, and there is no standardized English curriculum at the university level, though Moroccan doctoral programs include a compulsory English language module of around 30 hours, mandated at the national level by the Centre National pour la Recherche Scientifique et Technique (CNIRST). This suggests that many Moroccan doctoral students reach the point of academic publication in English with comparatively limited formal training in academic English specifically, despite the disciplinary publishing experience described above.

Regarding prior publishing experience, Moroccan doctoral students are nationally required to publish two peer-reviewed research articles in indexed journals prior to defending their thesis. While French remains the primary medium of instruction across nearly all levels and disciplines of Moroccan higher education, an evaluative study by the Moroccan Higher Council for Education, Training and Scientific Research (2022) found that only 13.5% of Moroccan academic publications between 2008 and 2017 were in French, indicating that Moroccan researchers predominantly publish in other languages, primarily English, despite receiving their scientific training in French. This publishing requirement, however, does not necessarily entail sustained formal training in academic English: as detailed below, Moroccan doctoral students receive comparatively limited English instruction throughout their education, which may itself contribute to the tense mismatches identified in this corpus.

3.2 Data Analysis

The source texts (in French) and the target texts (in English) were meticulously analysed for finite verbs. These verbs were then categorized based the categorization of tenses outlined by the Oxford Learner's Dictionary for Academic English (OLDAE 2014) as among the nine tenses commonly used in English academic writing: present simple, present progressive, past simple, present perfect, present perfect progressive, past progressive, future simple, future

progressive, and future perfect. This initial tagging served as a descriptive baseline for the functional coding described below, rather than as an analytic endpoint in itself.

Each finite verb in the French source text was then coded for the rhetorical function it performed within the abstract, drawing on the functional frameworks identified in the literature review. Following Day's (1995) classification, tenses were coded according to four core discourse functions: established knowledge (present), description of methods and results (past), presentation of data (present), and attribution to prior research (past). This coding was refined using Malcolm's (1987) referential–deictic distinction and Salager-Meyer's (1992) section-linked functions (problem statement, methods, results, and conclusion/recommendation), which allowed each verb to be situated within the rhetorical move it served rather than treated as an isolated grammatical form.

The corresponding verb in the English translation was coded for the same functional categories, and the two codings were compared to determine whether the rhetorical function signalled in the French source text had been preserved, weakened, or altered in translation. This comparison follows the functional-pragmatic logic of House's (1997, 2015) Translation Quality Assessment model, under which a translation is evaluated not by measuring surface-level equivalence to the source but by comparing the situational-functional profile of the source and target texts; on this view, a mismatch between profiles, rather than a mismatch in surface form alone, is what constitutes a meaningful translation error. This step differentiates the present analysis from a purely grammatical examination of tense usage. Changes in surface tense were coded as meaningful mismatches only when they resulted in a shift in discourse function, for example, when established knowledge was presented as a one-time past occurrence, or when findings attributed to prior research were reformulated as the student's own present contribution. Tense shifts that altered the surface form but preserved the underlying function (e.g., a French *présent* translated as an English present perfect to retain present relevance) were coded separately as function-preserving shifts.

On this basis, and following House's (1997, 2015) distinction between covertly erroneous errors, mismatches in the functional profile of a translation, and formal variation that leaves that profile intact, each instance was classified into one of three categories: (1) Tense-Accurate, where both the grammatical tense and the rhetorical function were preserved in translation; (2) Function-Preserving Shift, where the grammatical tense changed but the underlying discourse function was maintained; and (3) Function-Violating Mismatch, where the change in tense altered the discourse function of the statement. This classification allows the analysis to move beyond a tally of grammatical discrepancies toward an assessment of how tense mismatches affect the genre-specific coherence of the abstract and, by extension, what they reveal about students' genre awareness as non-native users of academic English.

4. Findings

Following the coding procedure described in the Methodology, each mismatch has been further classified according to whether the change in tense preserved or altered the rhetorical function signalled in the French source text. Each numbered example is followed by an analytical paragraph that identifies the function at stake, evaluates how the translation handles it, and assigns one of three classifications : Tense-Accurate, Function-Preserving Shift, or Function-Violating Mismatch.

4.1 Examples of Tense Translation Shifts Across Disciplines

4.1.1 Biology

The analysis of the French source texts and English translations of the eight biology abstracts revealed five mismatches in verb tenses. The following table presents the original French sentence and its equivalent English translation along with a comment highlighting the mismatch and suggesting a revised translation of the verb tense.

Example 1

French source text	English translation
Les scénarios prévoient une augmentation de la température maximale de l'air et de la température minimale pouvant atteindre environ 2,9°C alors que les précipitations diminueront considérablement (-49%).	The scenarios expect an increase for the maximum air temperature and the minimum temperature that attain about 2,9 °C when the precipitation would decrease considerably (-49%).

In this example, the French present participle “pouvant atteindre” expresses a conditional capability within the study’s own climate-modelling projection, while “diminueront” reports that projection in the future tense. The translation flattens both: “attain” loses the modal nuance of “pouvant,” and “would decrease” recasts the projection as a counterfactual conditional rather than a stated future outcome. A more precise rendering would be “that can attain” or “that could reach,” and “will decrease” rather than “would decrease.” Because the French future here functions to present the study’s own modelled result (Day, 1995), softening it into a hypothetical weakens its epistemic force; the mismatch is therefore classified as a Function-Violating Mismatch.

Example 2

French source text	English translation
Les possibilités offertes par ces méthodes de modification d'électrode sont l'essence de plusieurs recherches et études des biocapteurs dès le début des années 80.	The possibilities offered by these methods of electrode modification have been the essence of several researches and studies of biosensors in the early 80s.

The verb “sont” is in the present tense, signalling an established, ongoing state, a function Day (1995) associates with asserting general or standing knowledge. The English present perfect “have been,” by contrast, conventionally marks a problem-statement move that summarises prior literature (Salager-Meyer, 1992) rather than a continuing fact. Using the present “are” would have preserved the original function more closely. Because the shift reassigns the sentence from a standing claim to a literature-survey frame, it is classified as a Function-Violating Mismatch.

Example 3

French source text

Les résultats **ont révélé** une modification des propriété physiochimique du bois.

English translation

The results **show** clearly the modification of the physiochemical characteristics of cedar wood.

Here, the French passé composé “ont révélé” reports a specific result obtained by this thesis, a results-reporting function that, per Day (1995), is conventionally expressed in the past

tense in English. The translation “show,” however, places the finding in the present tense, the form reserved for established knowledge or generalisation. The past tense “showed” would have kept the result tied to this study rather than implying a standing fact. This is precisely the confusion Day’s tense conventions are designed to prevent, so the mismatch is classified as Function-Violating.

Example 4

French source text

Le but de ce travail **est d’étudier** l’effet d’une nutrition minérale pauvre en soufre sur la qualité phytochimique et thérapeutique de trois plantes aromatiques et médicinales cultivées,

English translation

This work **aimed to** study the effect of low-sulfur nutrition on the phytochemical and therapeutic quality of the three cultivated aromatic and medicinal plants,

The purpose statement “le but de ce travail est d’étudier” uses the French present, but its English translation, “this work aimed to study,” shifts to the past. Purpose statements, however, are conventionally rendered in either tense in English abstracts without a change in their discourse function: both “aims to” and “aimed to” are read as stating the study’s objective. Because this shift does not relocate the sentence into a different rhetorical move, it is classified as a Function-Preserving Shift rather than a violation.

Example 5

French source text

Elle **a chuté** d’un ordre de 68%, 85% et 53% respectivement chez le fenugrec, le fenouil et la roquette.

English translation

It **falls** by 68% 85% and 53% in fenugreek, fennel and rocket, respectively.

As in Example 3, a French passé composé (“a chuté”) reporting a specific measured result is rendered in the English present (“falls”), recasting the study’s own finding as a generalisable fact rather than a result tied to this dataset. The past tense “fell” would have preserved the original function. This is classified as a Function-Violating Mismatch.

4.1.2 Chemistry

The analysis of the French source texts and English translations of the eight chemistry abstracts revealed two translation mismatches. The following table presents the original French sentence and its equivalent English translation along with a comment highlighting the mismatch and suggesting a revised translation of the verb tense.

Example 1

French source text	English translation
En plus, les résultats ont indiqué que toutes ces phases composites carbonées préparées présentent une stabilité significative dans la mesure où elles peuvent être utilisées de manière répétée sans leurs qualités initiales.	Furthermore, it was shown that all the prepared carbon phases showed significant stability in that they could be used repeatedly without degradation of their initial qualities.

This example contains two verbs with different functions. “Ont indiqué,” reporting the thesis’s own result, is correctly translated as the past “was shown,” preserving the results-

reporting function. “Présentent” and “peuvent être utilisées,” however, state a general, ongoing property of the prepared material, an established-knowledge function per Day (1995), and both are rendered in the past (“showed,” “could be used”), tying a general property to a single past test rather than to the material itself. The present tense (“show,” “can be used”) would have preserved this function. The mismatch is therefore Function-Violating for the second and third verbs.

Example 2

French source text	English translation
De plus, l’activité antioxydante des extraits a montré que les extraits hydroalcooliques présentent les activités les plus élevées	In addition, the antioxidant activity of the extracts showed that the hydroalcoholic extracts had the highest activities.

As in the previous example, “présentent” states a general property of the hydroalcoholic extracts rather than a one-off observation. Translating it as the past “had” ties the antioxidant property to the specific test rather than treating it as a standing characteristic of the extract. The present “have” would have kept this established-knowledge function intact; therefore, the mismatch is classified as Function-Violating.

4.1.3 Geology

The analysis of the French source texts and English translations of the eight geology abstracts revealed three mismatches in verb tenses. The following table presents the original French sentence and its equivalent English translation along with a comment highlighting the mismatch and suggesting a revised translation of the verb tense.

Example 1

French source text	English translation
La cartographie de la vulnérabilité de la nappe par la méthode GALDIT a montré une forte vulnérabilité à l’ intrusion d’eau de mer, notamment entre Azemmour et Tnine Chtouka.	The mapping of the vulnerability of the aquifer using the GALDIT method had shown a high vulnerability to the intrusion of seawater, especially between Azemmour and Tnin Chtouka.

Both the French passé composé and the English past perfect used in the translation remain within the results-reporting function described by Day (1995); the mismatch here is aspectual, since the past perfect implies an unwarranted sequencing relative to another past event, rather than relocating the statement into a different discourse function. The simple past “showed” would have been more precise. This is classified as a Function-Preserving Shift.

Example 2

French source text	English translation
Des propositions de stratégie de gestion et de la valorisation des eaux des sources salées sont présentées dans une perspective de développement durable.	A proposal for different strategies for the management and development of these water resources was presented under a sustainable development perspective.

The number mismatch between “sont présentées” (plural) and “was presented” (singular) is a subject-verb agreement error rather than a tense-function issue: the tense itself, a present-tense presentation move rendered as a past-tense results statement, is consistent with the

conventions discussed above. Because the discourse function is unaffected, this is classified as a Function-Preserving Shift that falls outside the functional coding scheme proper.

Example 3

French source text

Les différentes analyses (Microscope électronique à balayage, Fluorescence aux rayons X, Chromatographie ionique, Spectrométrie d'absorption atomique et Diffraction aux rayons X) effectuées sur les échantillons prélevés le long des pierres altérées de ces remparts (croûtes, alvéoles, pierres, enduits et mortiers) **a permis** la mise en évidence de particules polluantes (SO₄²⁻ et NO₃⁻), des aérosols marins (K⁺, Na⁺ et Cl⁻) ainsi que les métaux lourds (Pb, Cr, Ni, Cu, Zn).

English translation

The various analyzes (scanning electron microscope, X-ray fluorescence, ion chromatography, atomic absorption spectrometry and X-ray diffraction) carried out on the samples taken along the altered stones of these ramparts (crusts, alveoli, stones, coatings and mortars) **has revealed** polluting particles (SO₄²⁻ and NO₃⁻), marine aerosols (K⁺, Na⁺ and Cl⁻) as well as heavy metals (Pb, Cr, Ni, Cu, Zn).

This mismatch, like the previous one, originates in a number-agreement error already present in the French source abstract rather than in the translation process itself. The translated verb's discourse function, reporting the thesis's own result, is unaffected, so this is again classified as a Function-Preserving Shift.

4.1.4 Physics

The analysis of the French source texts and English translations of the eight physics abstracts revealed two mismatches in verb tenses. The following table presents the original French sentence and its equivalent English translation along with a comment highlighting the mismatch and suggesting a revised translation of the verb tense.

Example 1

French source text	English translation
Dans ce travail de thèse, nous avons développé une approche pour la résolution des problèmes de la dynamique des structures.	An approach is developed for solving structural dynamic problems.

The French passé composé “avons développé” reports the thesis's own methodological contribution, a results function that English convention renders in the past tense (Day, 1995). The translation “is developed” instead uses the present, recasting a specific, dated contribution as an ongoing general state. “We developed” or “an approach was developed” would have preserved the original function. This is classified as a Function-Violating Mismatch.

Example 2

French source text

Cette révolution **a engendré** d'énormes besoins et **suscite** une évolution technologique prodigieuse dans le domaine de la conception des antennes.

English translation

This revolution **is creating** new needs and **is inspiring** a phenomenal technological evolution in the field of antenna design.

This example again contains two verbs with different functions. “Suscite,” a French present describing an ongoing consequence, is correctly rendered as the present “is inspiring,” preserving its function. “a engendré,” however, reports a completed triggering event in the passé composé, and translating it as the present “is creating” collapses it into the same ongoing-

process function as its consequence, erasing the cause-and-effect distinction the French marks through tense.

4.1.5 Maths and Computer Sciences

The analysis of the French source texts and English translations of the eight mathematics and computer sciences abstracts revealed four mismatches in verb tenses. The following table presents the original French sentence and its equivalent English translation along with a comment highlighting the mismatch and suggesting a revised translation of the verb tense.

Example 1

French source text	English translation
Dans le cas de stabilisation forte, une estimation asymptotique polynomiale explicite de l'état stabilisé a été donnée .	In the case of strong stabilization, a polynomial decay rate estimate of the stabilized state is presented .

As in the Physics and Biology examples above, a French passé composé reporting this thesis's specific contribution ("a été donnée") is rendered in the English present ("is presented"), blurring the line between the study's own finding and a standing generalisation. The past tense "was presented" would have preserved the function. This is classified as a Function-Violating Mismatch.

Example 2

French source text	English translation
Les résultats théoriques obtenus ont été illustrés par des exemples et des simulations.	The theoretical results are illustrated by some examples and simulations.

The same pattern recurs here: the results-reporting function, conventionally past tense, is replaced by the presentation/established-knowledge function of the present tense. "Were illustrated" would have kept the verb tied to this thesis's own results. Function-Violating Mismatch.

Example 3

French source text	English translation
Finalement, certains résultats relatifs à la stabilisation des systèmes semi-linéaires non bornés sans tard ont été discutés .	Finally, some results of stabilization of unbounded semilinear systems without delay are discussed .

In the same vein, a past-tense report of the thesis's own discussion is rendered as an ongoing present state, conflating a specific, completed contribution with a standing claim. "Were discussed" would have preserved the function.

Example 4

French source text	English translation
Enfin, la nouvelle règle de décision établie précédemment est déployée .	Finally, the new decision rule established previously deployed .

Here the shift runs in the opposite direction from the pattern above: the French present "est déployée" signals the rule's current, ongoing operative status, an established-knowledge

function. The English past “deployed,” however, recasts this as a single completed event, losing the claim to continuing validity; “is deployed” would have preserved the function. This is classified as a Function-Violating Mismatch.

Taken together, the sixteen mismatches do not distribute evenly across the three coding categories. The majority are Function-Violating Mismatches that follow a single recurring pattern: a French passé composé reporting the thesis’s own methods, results, or attribution (a past-tense function, Day 1995) is translated into the English present tense, which conventionally signals established knowledge or generalisation. This shift risks precisely the confusion between an author’s own findings and disciplinary general truths that tense conventions in scientific writing are designed to prevent. A smaller number of cases move in the opposite direction, recasting a French present marking an ongoing or generally valid state into a one-off English past event, which instead undercuts a claim’s continuing validity. By contrast, the Geology mismatches, once examined functionally, prove not to be function violations at all: they stem from aspectual choices or subject-verb agreement errors that leave the underlying discourse function intact. This distinction matters for the study’s pedagogical aims: not every grammatical tense shift carries the same cost to the abstract’s coherence and credibility, and training should prioritise the function-violating pattern over grammatically driven but functionally harmless variation.

5. Discussion

As reported in the Findings, the majority of the translation mismatches are not random grammatical slips but follow a single recurring pattern: a French passé composé reporting the thesis’s own methods, results, or attribution to prior research is rendered in the English present tense. Because the English present conventionally marks established knowledge or generalization, this shift obscures the boundary between original findings and accepted knowledge, reducing the clarity and credibility of the abstract. A smaller number of mismatches moved in the opposite direction, downgrading a French present that signalled an ongoing or generally valid state into a one-off English past event, which instead undercuts a claim’s continuing relevance. Notably, the mismatches identified in the Geology abstracts did not, on functional analysis, alter the discourse function of the statement at all: they originated in aspectual choices or in subject-verb agreement errors already present in the French source. This distinction matters, because it indicates that not every grammatical irregularity flagged by a tense-mismatch analysis necessarily compromises an abstract’s coherence; some are functionally inert surface errors, while others substantively alter what the text communicates to its reader.

Taken together, these patterns point to a problem that extends beyond general second-language proficiency. As a highly conventionalized and promotional academic genre (Bhatia, 1993; Hyland, 2000), the abstract requires mastery of discipline-specific tense conventions in addition to grammatical competence in English, what Tardy (2009) distinguishes as rhetorical knowledge, acquired more slowly and less explicitly than formal grammatical knowledge. The recurring present-for-past flattening identified above suggests that, for many of these doctoral students, this genre-specific layer of rhetorical knowledge has not yet been acquired: they default to a general register of English rather than to the abstract’s function-specific tense system, even when they otherwise produce grammatically competent English sentences. It is worth noting that some of these patterns plausibly arise from the

interference of French, which serves as the medium of instruction in Moroccan higher education. Campbell (1998) suggests that writers composing in a second academic language should be understood as language learners whose output constitutes an "interlanguage" a transitional system evolving toward target-language norms (Selinker, 1969). Read this way, the tense mismatches identified here are less a translation problem to be corrected than a snapshot of genre acquisition in progress: evidence of which rhetorical conventions of English scientific discourse have, and have not yet, transferred successfully from these students' first-language academic writing. These findings suggest that academic genre competence develops differently from general grammatical competence and may require explicit instruction even among advanced multilingual writers. The following section outlines what such instruction could concretely look like, grounded in the specific patterns identified above.

6. Pedagogical Implications

- A targeted unit on tense-function in academic discourse within the existing doctoral English language course. Rather than treating tense as a general grammar topic, instructors could dedicate a focused unit specifically to the function-based tense system of English scientific writing, built directly around the three-way distinction this study found students struggle with most: distinguishing "this is what I found/did" (past tense) from "this is established in the field" (present tense) from "this is what prior work found" (present perfect). Because the recurring error in this corpus was a specific, identifiable substitution, French *passé composé* rendered as English present tense, the unit could open with this exact contrast as a worked example, rather than covering English tense rules in the abstract.
- Discipline-specific model-text analysis exercises, since the corpus showed this pattern appearing unevenly across the five disciplines studied. A concrete classroom activity: give doctoral students five to ten recently published abstracts from their own discipline (e.g., biology, physics), and have them highlight every finite verb and label it as reporting their own result, established knowledge, or attribution before attempting the same task on their own draft abstract. This directly operationalizes the coding scheme used in this study as a self-editing tool, rather than asking students to apply tense rules they have memorized in the abstract.
- A contrastive French–English tense-mapping exercise, addressing the mechanism this study's framework identifies as the likely source of the pattern (cross-linguistic transfer of rhetorical convention, not a general grammar gap). Since the study found that French *passé composé* does not map onto a single consistent English tense depending on rhetorical function, a targeted exercise would have students translate the same French sentence under three different rhetorical intentions (reporting their own finding vs. citing prior work vs. stating a generalization) and observe that the correct English tense changes each time, making the function-over-form principle concrete rather than abstract.
- Assessment implication: institutions could formalize a review step in which doctoral abstracts are scrutinized by a language professor or English-for-academic-purposes (EAP) specialist before submission.

7. Conclusion

This study examined how doctoral writers develop control over the rhetorical conventions of a second academic language, using verb tense in French-to-English thesis abstracts as a lens. The study analyzed tense correspondences in abstracts written by Moroccan doctoral students across five disciplines, biology, chemistry, geology, physics, and mathematics and computer sciences, classifying each as Tense-Accurate, a Function-Preserving Shift, or a Function-Violating Mismatch. The findings reveal that most mismatches follow a recurring pattern in which a French *passé composé* reporting the students' own methods, results, or attribution to prior research is rendered in the English present tense, blurring the distinction between the students' specific findings and established disciplinary knowledge.

These patterns point to gaps in rhetorical genre knowledge (Tardy, 2009) rather than to general English proficiency alone: the abstract is a tightly conventionalized genre (Bhatia, 1993; Hyland, 2000; Van Bonn & Swales, 2007) whose tense conventions must be acquired in addition to English grammar itself, and this acquisition does not happen automatically or evenly across writers. Section 5.3 outlines specific curricular and classroom interventions targeting the tense-function patterns identified here, grounded directly in this study's findings rather than in general recommendations for English instruction. Attending these patterns of cross-linguistic transfer can help researchers develop stronger disciplinary writing skills, increase their publication success, and engage more effectively with the international academic community.

8. Limitations

The study may have a limited sample size, which could affect the generalizability of the findings. Although the sample covers all the disciplines taught in the faculties of sciences in four universities, the size remains limited to represent the broader population of Moroccan doctoral students. Besides, the study might not adequately consider the quality and methods of English language instruction that students have received. Variations in teaching effectiveness can significantly impact students' language proficiency and their ability to apply grammatical rules correctly.

Funding: This research received no external funding

Conflicts of Interest: The authors declare no conflict of interest

ORCID iD: <https://orcid.org/0009-0005-3188-4309>

References

American Psychological Association. 2020. Publication manual of the American Psychological Association (7th ed.). <https://doi.org/10.1037/0000165-000>.

Bardovi-Harlig, K. (1995). A narrative perspective on the development of the tense/aspect system in second language acquisition. *Studies in Second Language Acquisition*, 17(2), 263-291.

Bhatia, V.K. (1993) *Analyzing Genre: Language Use in Professional Settings*. Longman, London.

Btoosh, Mousa. (2019). Tense and Aspect in the Academic Writing of Arab L2 Learners of English: A Corpus-Based Approach. *Journal of Language and Education*. 5. 26-47. 10.17323/jle.2019.7769.

Campbell, S. 1998. *Translation into the second language*. Routledge. <https://doi.org/10.4324/9781315841144>. Van Bonn, S., & Swales, J. M. 2007. English and French journal abstracts in the language sciences: Three exploratory studies. *Journal of English for Academic Purposes*, 6, 93-108. <http://dx.doi.org/10.1016/j.jeap.2007.04.001>

Comrie, B. (1985). *Tense*. Cambridge University Press.

Conseil Supérieure de l'Education et de la Formation et de la Recherche Scientifique. (2022). *La recherche scientifique et technologique au Maroc : Analyse évaluative*. Rabat.

Dahl, Ö. (1985). *Tense and aspect systems*. Basil Blackwell.

Day, R. A. (1995). *How to Write and Publish a Scientific Paper* (4th ed.). Oryx Press.

DOS SANTOS, M. (1996). The textual organization of research paper abstracts in applied linguistics. *Text & Talk*, 16(4), 481-500. <https://doi.org/10.1515/text.1.1996.16.4.481>.

Doró, Katalin. (2013). The Rhetoric Structure of Research Article Abstracts in English Studies Journals. *Prague Journal of English Studies*. 2. 119-139. 10.2478/pjes-2014-0013.

El-Dash, L.G., & Busnardo, J. (2003). Interaction of semantic and pragmatic choices in the translation of verb forms: English and Portuguese. *Journal of Pragmatics*, 35, 1823-1841.

Grisot, Cristina & Cartoni, Bruno. (2012). Une description bilingue des temps verbaux : étude contrastive en corpus. *Nouveaux Cahiers de Linguistique Française*. 30. 101-117.

Guiora, Alexander. (2006). The dialectic of language acquisition. *Language Learning*. 33. 3 - 12. 10.1111/j.1467-1770.1984.tb01321.x.

Gunawardena, C. N. (1989). The present perfect in the rhetorical divisions of biology and biochemistry journal articles. *English for Specific Purposes*, 8(3), 265–273. doi.org

Heslot, Jeane (1982) Tense and other Indexical Markers in the Typology of Scientific Texts in English .In Hoedt, Jorgen (ed) *Pragmatics and LSP : Proceedings of the third European symposium on LSP*, Copenhagen,

August 17 – 19 , 1981. Copenhagen School for Economics , 83-104.

Jorgen (ed) *Pragmatics and LSP : Proceedings of the third European symposium on LSP*, Copenhagen,

August 17 – 19 , 1981. Copenhagen School for Economics , 83-104.

- Hinkel, E. (1992), L2 Tense and Time Reference. *TESOL Quarterly*, 26: 557-572.
<https://doi.org/10.2307/3587178>
- House, J. (1997). *Translation Quality Assessment: A Model Revisited*. Gunter Narr Verlag.
- House, J. (2015). *Translation Quality Assessment: Past and Present*. Routledge.
- Huth, E. (1999). *Writing and publishing in medicine*. Baltimore: Williams & Wilkins.
- Hyland, K. (2000). *Disciplinary Discourses. Social Interaction in Academic Writing*. London: Longman.
- Jabbari, A. A., & Salimi, H. (2015). L3 Acquisition of Simple and Present Progressive Tenses by Iranian EFL Learners. *Sage Open*, 5(4).
- Jordan, M. P. (1991). The linguistic genre of abstracts. In A. Della Volpe (Ed.), *The seventeenth LACUSforum 1990* (pp. 507–527). Lake Bluff, IL: LACUS
- (PDF) On RA abstracts: From rhetorical structure to thematic organisation. Available from: https://www.researchgate.net/publication/222081171_On_RA_abstracts_From_rhetorical_structure_to_thematic_organisation [accessed Aug 17 2026].
- Kwary, Deny A. *The Distribution of Verb Tenses and Modals in Journal Articles' Abstracts* . Oxon : Taylor & Francis Group , 2017. *Southern African Linguistics and Applied Language Studies*, Vol. 35, No. 3, 2017, pp. 229-244 - Available at: <https://library.au.int/distribution-verb-tenses-and-modals-journal-articles-abstracts>
- Kocourek, R. (1982). *La langue française de la technique et de la science*, Wiesbaden, Brandstetter.
- Lackstrom, J., Selinker, L., & Trimble, L. (1973). Technical rhetorical principles and grammar choice. *TESOL Quarterly*, 7, 127-136.
- Lorés, R. (2004). On RA abstracts: From rhetorical structure to thematic organization. *English for Specific Purposes*, 23, 280–302.
- Li and Zhao. (2021). An Error Analysis of Tense Errors in English Major Undergraduates' Translations. *Proceedings of the 2021 International Conference on Public Relations and Social Sciences (ICPRSS 2021)*.
- Liddicoat, Anthony. (2008). Pedagogical Practice for Integrating the Intercultural in Language Teaching and Learning. *Japanese Studies*. 28. 277-290. 10.1080/10371390802446844.
- Ma L., Martohardjono G., McClure W. (2019). The functional roles of lexical devices in second language learners' encoding of temporality: A study of Mandarin Chinese-speaking ESL learners. *International Review of Applied Linguistics in Language Teaching*. Advance online publication. <https://doi.org/10.1515/iral-2018-0298>
- Malcolm, L. 1987. What rules govern tense usage in scientific articles? *English for Specific Purposes*, 6, 31-43.
- Matthews, J. R., Bowen, J. M., & Matthews, R. W. (1996). *Successful scientific writing: A step-by-step guide for the biological and medical sciences*. Cambridge: Cambridge University Press.

- McCarthy, M. (1991). *Discourse Analysis for Language Teachers*. Cambridge: Cambridge University Press.
- Nwogu, K. N. 1989. *Discourse variation in medical texts: Schema, theme and cohesion in professional and journalistic accounts* (Doctoral dissertation). Aston University.
- Newbery-Payton, Laurence & Mochizuki, Keiko. (2020). L1 Influence on Use of Tense/Aspect by Chinese and Japanese Learners of English. 4. 67-93. 10.24546/81011994.
- Oxford Learner's Dictionary of Academic English, Oxford University Press — confirm exact edition/year with co-authors.
- Oster, S. 1981. The use of tense in the reporting of past literature in EST. In L. Selinker et al. (Eds.), *English for academic and technical purposes* (pp. 53-64). Newbury House.
- O'Connor, M. (1991). *Writing successfully in science*. London: Harper Collins.
- Phal, A. 1968. De la langue quotidienne à la langue des sciences et des techniques. *Le Français dans le Monde*, 61, 12-19.
- Salager-Meyer, F. 1992. A text-type and move analysis study of verb tense and modality distribution in medical English abstracts. *English for Specific Purposes*, 11, 93-113.
- Schramm, A. 1996. Using aspect to express viewpoint in EST texts. *English for Specific Purposes*, 15(2), 141-164.
- Selinker, L. (1969). Language transfer. *General Linguistics*, 9, 67–92.
- Suryani, Y. & Fitria, N. T. 2022. Abstract translation in scientific writing by non-English major students using Google Translate. *JETAL: Journal of English Teaching & Applied Linguistics*, 3, 33-40. <https://doi.org/10.36655/jetal.v3i2.669>.
- Swales, J. M., & Feak, C. B. (1994). *Academic writing for graduate students: A course for nonnative speakers*. Ann Arbor, MI: The University of Michigan Press.
- Swales, J. 1981. *Aspects of article introductions*. Aston ESP Research Report No. 1. Language Studies Unit, University of Aston in Birmingham.
- Tardy, C. M. (2009). *Building genre knowledge*. West Lafayette: Parlor Press.
- Taylor, G. (1989). *The student's writing guide for the arts and social sciences*. Cambridge: Cambridge University Press.
- Terzi, C., & Arslanturk, Y. 2014. An analysis of dissertation abstracts in terms of translation errors and academic discourse. *International Journal of English Language & Translation Studies*, 2(4), 1-11. <http://www.eltsjournal.org>
- Tseng, F. 2011. Analyses of move structure and verb tense of research article abstracts in applied linguistics. *International Journal of English Linguistics*, 1(2), 27-39. <https://doi.org/10.5539/ijel.v1n2p27>.
- Thomas, S., & Hawes, T. P. (1994). Reporting Verbs in Medical Journal Articles. *English for Specific Purposes*, 13, 129-148. [https://doi.org/10.1016/0889-4906\(94\)90012-4](https://doi.org/10.1016/0889-4906(94)90012-4).
- Van Bonn, S., & Swales, J. M. (2007). English and French Journal Abstracts in the Language Sciences: Three Exploratory Studies. *Journal of English for Academic Purposes*, 6, 93-108. <http://dx.doi.org/10.1016/j.jeap.2007.04.001>.

- Vasquez, F. 1987. A comparative study of the rhetorical structure of the discussions sections in English and Spanish medical articles (MSc. dissertation). Aston University, Birmingham, UK.
- Vigner, G., & Martin, A. 1976. *Le Français Technique* [Technical French]. Didier.
- Weissberg, R., & Buker, S. (1990). *Writing up Research: Experimental Research Report Writing for Students of English*. Prentice Hall Regents.
- Yossatorn, Y., Binali, T., Chokthawikit, S., & Weng, C. (2022). Thai EFL University Students' Productions of the English Past Counterfactuals and Their Influences from Interlanguage Fossilization. *Sage Open*, 12(1).