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Dutch Passive Use in CLIL and Non-CLIL Learners: A Multimethod Study

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Abstract—**This study examines the use of Dutch passive constructions by French-speaking L2 learners in Content and Language Integrated Learning (CLIL) and non-CLIL educational settings. While prior research has documented CLIL benefits in areas such as vocabulary acquisition (e.g., Bayram et al., 2019) and listening comprehension (e.g., Nieto Moreno de Diezmas, 2018), its impact on the acquisition of more complex syntactic structures like the passive voice remains underexplored. Employing a mixed-methods design, this study triangulates spontaneous productions from the Multilingual Traditional Immersion and Native Corpus (MulTINCo) (Hiligsmann et al., 2021) with data from a controlled elicitation task. Results show that CLIL learners produce passive constructions more frequently than their non-CLIL peers but demonstrate lower morphosyntactic accuracy. Their production diverges from native patterns in agent expression, favoring medial agent placement, alongside a marked overreliance on *zijn*-passives and a notable absence of impersonal passives. These findings indicate that while CLIL instruction may enhance structural engagement and syntactic experimentation, it does not guarantee consistent target-like accuracy. The study underscores the importance of supplementing content-based exposure with explicit, form-focused instruction to facilitate the accurate acquisition of complex grammatical forms in CLIL contexts.**

Index Terms—**L2 acquisition, Dutch passive, L1 French, CLIL, mixed-methods**

I. Introduction

In the field of Second Language Acquisition (SLA), the development of syntactic complexity is widely recognized as a central indicator of linguistic proficiency (e.g., Ortega, 2003). The ability to use complex syntactic structures is often seen as evidence of developing language competence, reflecting not only grammatical knowledge but also the learner's capacity to use the language flexibly and accurately across diverse communicative contexts.[1] Among the range of syntactic structures available to advanced learners, the passive voice occupies a particularly revealing position: it is structurally intricate, functionally marked, and relatively infrequent in discourse. These characteristics make it an ideal lens through which to explore learners' developmental trajectories in complex syntax and the role of instructional factors in shaping them.

Content and Language Integrated Learning (CLIL) offers a compelling context for such investigation. Over the past decades, it has emerged as a promising approach to language instruction, in which learners are taught school subjects through the medium of a second language (Dalton-Puffer, 2011). Numerous studies have demonstrated that CLIL can enhance language acquisition by increasing exposure to the target language and promoting its use in meaningful, content-driven contexts. It has been linked for example to improvements in areas like vocabulary acquisition (e.g., Agustín Llach & Canga Alonso, 2016; Bayram et al., 2019; Cimermanová, 2020), listening comprehension (e.g., Nieto Moreno de Diezmas, 2018), speaking competence (Lee et al., 2025) and creative thinking skills (Guntur et al., 2023). However, much less is known about how CLIL affects the development of more complex and advanced structures like the passive voice, especially in Dutch.

To address this gap, the present study investigates the extent to which CLIL instruction influences the use of the Dutch passive voice among French-speaking L2 learners. Specifically, it compares the written production of passive constructions by two groups of learners: those enrolled in CLIL programs and those receiving traditional, non-CLIL language instruction. To investigate the influence of CLIL education on the use of the Dutch passive voice by French-

[1] See Biber (2024) for a critique of generalized structural measures of grammatical complexity. He argues for a more principled analysis that takes into account specific grammatical structures, syntactic functions, and discourse context, rather than relying solely on omnibus indicators.

speaking L2 learners, the study adopts a multi-method approach, combining learner corpus analysis with elicited production tasks to capture both spontaneous usage and controlled grammatical performance.

II. Literature Review

A. Complexity, Accuracy and the Study of Specific Constructions

Complexity and accuracy constitute two central dimensions of the Complexity–Accuracy–Fluency (CAF) framework, a widely adopted model in second language acquisition (SLA) research for evaluating L2 proficiency, developmental trajectories, and performance outcomes (e.g., Housen & Kuiken, 2009; Housen et al., 2012; Neumanová, 2025; Li & Sui, 2025). Within this framework, syntactic complexity is typically defined as the breadth and sophistication of syntactic structures that learners are able to access and deploy in communication (Wolfe-Quintero et al., 1998; Ortega, 2003). It has been consistently recognized as a robust indicator of language development and an indispensable construct in L2 assessment (Lu, 2011; Lu & Ai, 2015; Yang et al., 2015).

Most CAF-based studies operationalize syntactic complexity and accuracy through global indices, such as mean length of T-unit, clause-to-sentence ratios, or error frequency (Wolfe-Quintero et al., 1998; Osborne, 2011). While these measures capture broad patterns of grammatical growth, they often obscure the processes by which learners acquire, refine, and deploy specific syntactic constructions. Grammatical development, however, is not merely a matter of producing longer or denser sentences; it also entails the mastery of particular structures that encode subtle distinctions in meaning and serve diverse discourse functions. As Biber et al. (2024) argue, grammatical complexity cannot be adequately described without detailed grammatical analysis of individual constructions. A construction-focused approach, such as the analysis of the Dutch passive, directly responds to this call for fine-grained description. By examining the passive voice, we can gain insight into how learners acquire complex morphosyntactic knowledge and apply it in contextually appropriate ways, thereby linking micro-level grammatical competence to broader patterns of complexity and accuracy within the CAF framework.

The Dutch passive, especially in the context of French-speaking learners, offers an exemplary testing ground for such an investigation. This construction integrates multiple layers of morphosyntactic knowledge (including auxiliary selection, participle formation, and agent suppression) while simultaneously posing cross-linguistic challenges. In French, the passive voice is comparatively less frequent and relies exclusively on a single auxiliary, in contrast to Dutch, where auxiliary variation is required. Learners' ability to navigate these contrasts provides valuable insight into the extent to which their grammatical competence supports flexible and contextually appropriate language use.

Before examining learner performance, however, it is essential to first delineate the structure and formation of the Dutch passive voice. This will clarify the linguistic features under investigation and establish the foundation for subsequent analysis.

B. The Dutch Passive Construction

As outlined in the *Algemene Nederlandse Spraakkunst* (ANS, 1997), Dutch distinguishes between two types of passive constructions: those with an overt grammatical subject and those without. The most common form occurs with transitive verbs and structurally parallels the active sentence, as illustrated in Scheme 1.

Scheme 1
The Structural Relationship Between Active and Passive Sentences (With Grammatical Subject)

Active	Passive
Het kind eet het ijsje.	**Het ijsje wordt gegeten door het kind.**
L'enfant mange la glace.	*La glace est mangée par l'enfant.*
The child eats the ice cream.	*The ice cream is eaten by the child.*
[agent] [verb] [patient]	**[patient] [auxiliary + participle] [agent]**

This canonical passive is formally marked by the auxiliary *worden* combined with the passive past participle. In such constructions, the direct object of the active sentence is promoted to subject position, thereby shifting the perspective from agent to patient (the entity undergoing the action). The agent, when expressed, typically appears in a *door*-phrase, most often in final position (Bernolet et al., 2009). Although initial (e.g., *Door het kind wordt het ijsje gegeten*) and medial (e.g., *Het ijsje wordt door het kind gegeten*) placements are possible, they are relatively infrequent. More strikingly, the agent is omitted in the majority of Dutch passives: Cornelis and Verhagen (1995) report that over 80% of passives are agentless, a finding corroborated by Jisa et al. (2002), who observed that 94% of passive constructions in Dutch written texts lack an explicit agent. As De Schutter (2006) notes, such omissions typically occur when the agent is either contextually inferable or irrelevant to communicative intent. Agentless passives are particularly prevalent in academic and journalistic registers, where emphasis falls on events or outcomes rather than actors.

Another salient feature of Dutch passives concerns their behavior in the perfect tense. Here, the auxiliary *zijn* replaces *worden*, as in *Het ijsje is gegeten* ("The ice cream has been eaten"). Although the fuller form *Het ijsje is gegeten geworden* is grammatically possible, *geworden* is almost always omitted in usage. This omission creates the impression that *zijn* functions as the passive auxiliary in perfect constructions. However, the ANS (1997) clarifies that *worden* remains the core passive auxiliary, with *zijn* serving only to mark perfect aspect. This alternation is not merely formal but also semantic:

passives with *worden* typically denote an ongoing process or transition, whereas those with *zijn* signal a completed result or state.[2]

Cross-linguistically, Dutch passives share notable similarities with French. Both languages form passives with an auxiliary verb and a past participle, and both allow agent expression via a final prepositional phrase (e.g., *De wijn wordt gedronken door de koning / Le vin est bu par le roi* / "The wine is being drunk by the king"). Yet important differences remain. In French, the auxiliary *être* (equivalent to Dutch *zijn*) is used across all passive constructions, encompassing both dynamic processes and resultant states (Van Belle et al., 2011). Thus, *Le gâteau est préparé* may mean either "The cake is being prepared" or "The cake has been prepared", with interpretation dependent on context.

A more fundamental divergence lies in the domain of impersonal passives. Dutch permits impersonal passives with intransitive verbs, often introduced by the presentative *er*, as in *Er wordt veel gezongen* ("There is a lot of singing"). In some cases, *er* may be omitted, particularly when the verb phrase precedes it (e.g., *Over de muziekkeuze zal nauwelijks getwijfeld worden* - "The music choice will hardly be questioned"). Crucially, the subject position in these constructions is not filled by a grammatical subject but by an implied human agent. This explains why sentences such as **Er wordt geregend* ("There is being rained") are ungrammatical. French, by contrast, does not allow impersonal passives. Instead, analogous meanings are conveyed through *on*-constructions or *il y a*-constructions (e.g., *On chante* – "One sings" or *Il y a des enfants qui chantent* – "There are children who are singing"), both of which require an explicit subject (Van Belle et al., 2011). French also employs alternative syntactic strategies to approximate the pragmatic effects of Dutch impersonal passives, including topicalization (*C'est Vincent que Louise a invité* – "It is Vincent that Louise invited"), dislocation (*Quant à Vincent, Louise l'a invité* – "As for Vincent, Louise invited him"), and the middle voice (*Cette porte s'ouvre facilement* – "This door opens easily") (Jisa et al., 2002). While Dutch can convey similar meanings (e.g., *Deze deur wordt makkelijk geopend* – "This door is easily opened"), it lacks a dedicated reflexive marker such as French *se*, relying instead on agentless passives to achieve comparable discourse functions.

Taken together, these structural and functional contrasts underscore the challenges faced by French-speaking learners of Dutch. They must acquire not only unfamiliar morphosyntactic forms but also new mappings between form and function. The relative infrequency of passives in French, the auxiliary alternation in Dutch, and the absence of a direct equivalent to the Dutch impersonal passive, all compound the difficulty of mastering this construction in an L2 context. This raises a critical pedagogical question: to what extent do current instructional practices equip learners to navigate these complexities effectively?

C. CLIL and the Acquisition of Complex Syntax

One pedagogical approach that has attracted increasing scholarly attention in recent years is Content and Language Integrated Learning (CLIL), which fosters second language (L2) development through subject-specific instruction delivered in the target language. By embedding language learning within academic content, CLIL provides learners with sustained exposure to language in authentic contexts, thereby enabling the simultaneous acquisition of linguistic competence and disciplinary knowledge (Dalton-Puffer, 2011). Empirical studies have demonstrated that CLIL can yield measurable gains in several domains of language proficiency, including vocabulary growth (e.g., Agustín Llach & Canga Alonso, 2016; Bayram et al., 2019; Cimermanová, 2020), listening comprehension (Nieto Moreno de Diezmas, 2018), speaking competence (Lee et al., 2025) and creative thinking skills (Guntur et al., 2023).

Despite this expanding body of research, much of the literature has focused on CLIL's general benefits for language proficiency rather than its impact on specific dimensions of grammatical development. In particular, relatively little is known about how the increased, often implicit, exposure to the target language afforded by CLIL influences learners' ability to deploy complex syntactic constructions with accuracy and flexibility. Structures such as the passive voice, which require the integration of morphosyntactic knowledge and nuanced control of discourse functions, remain underexplored in CLIL contexts. Addressing this gap is crucial for understanding whether CLIL supports the acquisition of advanced grammatical competence.

D. The Present Study

To investigate the influence of CLIL education on French-speaking learners' use of the Dutch passive voice, the present study adopts a multi-method design that integrates learner corpus analysis with elicited production tasks. Learner corpora provide valuable insights into authentic language use (Ellis, 2008), capturing spontaneous instances of passive constructions in written production. Yet, given the passive voice's relative infrequency and structural complexity, corpus data alone risk underrepresenting learners' actual knowledge and potential command of the form. Previous research has consistently shown that passives are underused in SLA corpora (Hinkel, 2004; Granger, 1997; Xiao, 2007), a tendency also observed with other syntactically demanding constructions (Baten & Cornillie, 2019; Mackey & Gass, 2005).

Importantly, the rarity of such forms in corpus data does not necessarily indicate inability. Rather, it may reflect strategic choices in spontaneous production, such as avoidance of forms learners are uncertain about (Kleinmann, 1977; Cook, 1993), whether consciously or unconsciously, or a preference for more familiar structures (Gass & Mackey, 2007).

[2] In addition to the passive with *zijn* ('be') and *worden* ('become'), there is also the semi-passive with *krijgen* ('get') or *(zich) laten* ('let / have oneself') as auxiliary verbs (Van Belle et al., 2011). Constructions with these auxiliaries, as well as constructions with other posture or aspectual verbs (such as *zitten* 'sit', *staan* 'stand', *liggen* 'lie', *raken* 'get/become', *blijven* 'remain') which may combine with a past participle and are sometimes attributed a passive-like interpretation (Cornelis & Verhagen, 1995), are not analyzed as full passive constructions in the present study and are therefore excluded.

Schmid's (2000) *From-Corpus-to-Cognition Principle* further suggests that the frequency with which a structure appears in learner output is linked to its degree of cognitive entrenchment (see also Langacker, 1987). From this perspective, corpus data reveal what learners are comfortable producing, whereas elicited production tasks probe competence beyond habitual usage.

By encouraging learners to produce target structures in controlled conditions, elicited production tasks serve as an essential complement to corpus analysis (Gilquin, 2007). Together, these methods provide a more comprehensive account of learners' interlanguage competence, capturing both the entrenched patterns evident in spontaneous production and the latent grammatical knowledge that may remain underutilized in free language use.

III. Methodology

A. Research Design and Research Questions

This study adopts a mixed-method design that integrates corpus-based and experimental data to investigate the use of Dutch passive constructions by French-speaking learners in CLIL and non-CLIL educational settings. The combination of methods enables triangulation between two complementary sources of evidence: (a) spontaneous production data, which reflect learners' entrenched and habitual use of the passive, and (b) elicited production data, which probe their underlying grammatical competence under controlled conditions. Building on the theoretical and empirical background outlined above, the study addresses three interrelated research questions:

- RQ1: To what extent do CLIL and non-CLIL learners differ from native speakers in the frequency and accuracy of Dutch passive constructions?
- RQ2: How do CLIL and non-CLIL learners compare to native speakers in their structural realization of passives, particularly with respect to auxiliary choice, agent expression, and the use of impersonal passives?
- RQ3: What influence does instructional context (CLIL vs. non-CLIL) exert on learners' syntactic development and their ability to produce target-like Dutch passives?

B. Participants

Two complementary participant samples were included: one drawn from the MulTINCo learner corpus and one recruited for the elicited production task. Both samples consisted of French-speaking secondary-school learners of Dutch enrolled in either CLIL or non-CLIL programs in francophone Belgium, alongside a control group of native Dutch speakers. All learners were in their fifth or sixth year of secondary education.

The corpus sample comprised written productions collected from learners across nine secondary schools in Wallonia, representing all major provinces and both official and free subsidized networks (Hiligsmann et al., 2017; Van Mensel et al., 2020). Data were gathered in two waves: fifth-year students in fall 2015 and sixth-year students in spring 2017. The corpus included 223 CLIL learners (8–13 hours of Dutch per week, including subject teaching in Dutch) and 131 non-CLIL learners (approximately 4 hours of Dutch per week). Participants ranged in age from 15 to 18 years (M = 16.5); 207 (46.7%) were male and 231 (53.3%) female. The native control group comprised 59 Dutch-speaking students (M = 16.7) recruited from secondary schools in Flanders and the Netherlands (11 male, 50 female).

The elicitation sample consisted of a separate but comparable group of students recruited from similar CLIL and non-CLIL schools in Wallonia, and native speakers from Flanders. A total of 112 participants completed the task, of whom 14 were excluded due to incompatible language backgrounds, resulting in a final sample of 98: 30 CLIL learners (11 male, 19 female; M age = 16.57, SD = 0.73), 35 non-CLIL learners (17 male, 18 female; M age = 17.11, SD = 0.76), and 33 native Dutch speakers (4 male, 29 female; M age = 17.12, SD = 0.75). This design ensured comparability across datasets in terms of age, educational level, and exposure profile, while maintaining independent participant groups.

C. Instruments

Two complementary instruments were used to capture learners' use of Dutch passive constructions:

MulTINCo Corpus (Multilingual Traditional, Immersion, and Native Corpus; Hiligsmann et al., 2021). Compiled at UCLouvain in 2015 (T1) and updated in 2017 (T2), the corpus contains spoken and written L2 data from over 400 French-speaking learners of Dutch and English in CLIL and non-CLIL settings, alongside L1 productions and native controls. For this study, we selected written Dutch texts produced by French-speaking learners (CLIL and non-CLIL) and Dutch L1 speakers. Table 1 provides an overview of the sub-corpus used.

Table 1
Number of Texts and Number of Words per Sub-Corpus – L1 French, L1 and L2 Dutch

	L1 French		Dutch	L2 Dutch non-CLIL		L2 Dutch CLIL	
	T1-2015	**T2-2017**	**T1-2015**	**T1-2015**	**T2-2017**	**T1-2015**	**T2-2017**
Texts	290	274	59	73	58	117	106
Words	94 350	85 951	13 208	14 154	12 040	32 401	28 480
Average text length	325	314	224	194	208	277	269

The written data consisted of fictional emails in which participants described a recent vacation or party. Each text was at least 15 lines long, produced within 25 minutes without aids such as dictionaries or spell checkers. As Gilquin and

Gries (2009) note, writing under time pressure is not typical of everyday language use but is pedagogically natural in classroom contexts. We therefore consider these productions representative of learners' classroom-based language use.

To complement the corpus analysis, a written elicitation task was designed to elicit passive constructions in a controlled setting. Participants composed a continuous text of approximately 20 sentences using provided fragments (see Appendix). They were instructed to rearrange elements, conjugate verbs, and ensure grammatical correctness, adding articles and prepositions where necessary. Agent phrases were presented in parentheses, allowing learners to decide whether to include or omit them. This design enabled analysis of agent expression, auxiliary choice (*worden* vs. *zijn*), and impersonal passives. The task comprised 20 items: 10 fillers requiring active constructions and 10 critical items that could be realized actively or passively. The final item specifically targeted the impersonal passive. To ensure comparability with the corpus data, the task was administered to learners of similar age and background and addressed a comparable communicative theme (parties).

D. Data Extraction Procedure

For the analysis of the MulTINCo corpus, passive constructions were extracted from learners' written texts. Because Dutch passives vary considerably in form and length, and learner productions often contain errors, automatic retrieval is challenging. We therefore adopted a semi-automatic extraction process combining corpus queries with manual validation.

Initial searches were conducted using the MulTINCo interface. Table 2 summarizes the queries employed to identify each passive type. Representative lemmas were selected for the auxiliaries *worden* and *zijn*. For *zijn*, a POS tagger restricted results to verbal forms, thereby excluding possessive uses (e.g., *zijn hond* - "his dog").

TABLE 2
EXTRACTION PROCEDURE OF PASSIVES IN THE MULTINCO CORPUS

	Passive Construction Type	Example Sentence	Extraction Query
Dutch (Native, CLIL, non-CLIL)	Worden-passive	*Het ijsje wordt gegeten.*	[(lemma: worden)]
	Zijn-passive	*Het ijsje is gegeten.*	[(lemma: zijn, spos: VER)]
	Impersonal passive	*Er wordt veel gezongen.*	[(lemma: worden)] or [(lemma: zijn, spos: VER)]

Following automatic retrieval, all matches were manually inspected against strict criteria for passivity: (1) presence of a passive auxiliary (*worden/zijn*), (2) use of a past participle of a transitive verb, (3) absence or demotion of the agent (e.g., *door*-phrases), and (4) subject referring to the patient or theme. False positives such as progressive or copular constructions were excluded. Impersonal passives were identified by the presence of *er* and the absence of an agent. Only clear instances were retained.

To assess reliability, validation was conducted on the first 31 texts from the L1 Dutch corpus. Manual annotation identified 18 passives (14 *worden*, 4 *zijn*). The lemma search retrieved all *worden*-passives and one *zijn*-passive, missing three past-tense forms (*was, waren*). Precision was 100%, recall 83.3%, F1 = 90.9%.

Recall was lower for learner texts. Based on an analysis of 31 texts per group, three passives were identified manually in the CLIL corpus (two *worden*-passives and one *zijn*-passive), of which two were retrieved (recall = 66.7%). In the non-CLIL corpus, five passives were identified (two *worden*-passives and three *zijn*-passives), but only the *worden*-passives were retrieved (recall = 40.0%). In both cases, the missed items involved past tense *zijn*.

To address this gap, additional searches were run using *was* and *waren* as separate lemmas across all groups (L1 Dutch, CLIL, non-CLIL). This supplementation ensured that all relevant *zijn*-passives were correctly identified. Table 3 summarizes the process, showing initial matches, items eliminated after manual checking, and the final number of validated passives retained for analysis, with the additional *was* and *waren* instances added to the final counts.

TABLE 3
SUCCESS OF ELIMINATION PROCEDURE

		Matches (overall)	Irrelevant matches eliminated	Passive sentences (Matches retained)
L1 Dutch	*Zijn*-passive	240	234	13
	Worden-passive	37	20	17
L2 Dutch CLIL	*Zijn-passive*	1384	1378	24
	Worden-passive	37	24	13
L2 Dutch non-CLIL	*Zijn-passive*	752	747	9
	Worden-passive	10	6	4

For the elicitation task, 10 out of 20 sentences could consistently be realized in the passive voice. These passive constructions were manually identified and annotated using the same criteria for passivity as applied in the corpus analysis. The manual data extraction yielded a total of 97 passive sentences for native Dutch speakers, 72 for CLIL learners, and 65 for non-CLIL learners.

E. Data Analysis

Once the passive constructions were extracted from the corpus, they were subjected to systematic analysis. The first research question concerned the frequency and accuracy of the passive sentences produced.

For the passive constructions drawn from the MulTINCo corpus, relative frequencies were calculated based on the total number of verbs (rather than the total number of words). This verb-based normalization offers a more meaningful and comparable metric across corpora, as it approximates normalization by sentence units. Table 4 summarizes these results.

TABLE 4
PASSIVE CONSTRUCTIONS IN THE MULTINCO CORPUS

		Passive sentences (Matches retained)	Corpus size	Verbs in the corpus	Relative frequency (per 1000 verbs)
L1 Dutch	*Zijn*-passive	13	13208	2522	5.15
	Worden-passive	17	13208	2522	6.74
L2 Dutch CLIL	*Zijn*-passive	24	60 881	12039	1.99
	Worden-passive	13	60 881	12039	1.08
L2 Dutch non-CLIL	*Zijn*-passive	9	26 194	5225	1.72
	Worden-passive	4	26 194	5225	0.77

For the elicited production task, frequency was calculated as the total number of passive constructions produced per group divided by the total number of possible passive constructions per group (i.e., 10 target sentences per task multiplied by the number of participants in each group who completed the task).

The accuracy of the passive constructions in both the corpus data and the elicitation task was assessed manually. Each sentence was evaluated for morphosyntactic correctness according to three criteria:

- Appropriate selection and tense marking of the passive auxiliary (*worden* or *zijn*);
- Correct formation and use of the past participle;
- Subject–verb agreement in number.

To address the second research question, the structural realization of the passive constructions in both data sets was analyzed. Specifically, the following features were examined:

- Auxiliary choice: whether learners used *worden* or *zijn*;
- Agent expression: whether the agent was explicitly mentioned, and if so, its syntactic position (final or medial);
- Impersonal passive constructions: the presence and accuracy of passives without a grammatical subject, typically introduced by *er*.

For the third research question, the analysis incorporated all the above dimensions (frequency, accuracy, and structural realization) and additionally examined lexical diversity within passive constructions. Lexical diversity was operationalized as the range of vocabulary items used in connection with passive structures, providing insight into learners' ability to combine syntactic complexity with varied lexical choices.

This multi-layered analysis allows for a detailed comparison of both the frequency and structural characteristics of passive constructions across instructional contexts.

IV. RESULTS AND DISCUSSION

A. RQ1 – Frequency and Accuracy of Passive Constructions

The first research question examined whether CLIL and non-CLIL learners differ from native speakers in the frequency and morphosyntactic accuracy of passive constructions.

Across both datasets, L2 learners produced substantially fewer passives than native speakers. In the corpus data, native Dutch speakers used approximately 11.9 passives per 1,000 verbs, compared to 3.1 for CLIL learners and 2.5 for non-CLIL learners. A binomial logistic regression model fitted to the corpus data, with passive vs. non-passive verb use as the dependent variable and group as predictor, confirmed that both CLIL learners ($\beta = -1.36$, SE = 0.25, $p < .001$) and non-CLIL learners ($\beta = -1.57$, SE = 0.33, $p < .001$) were significantly less likely than native speakers to produce passive constructions. In the elicitation task, native speakers produced passives in 29.4% of possible contexts (97/330), compared to 24.0% for CLIL learners (72/300) and 18.6% for non-CLIL learners (65/350) (see Figure 1). A binomial logistic regression confirmed significant group differences: native speakers were significantly more likely than non-CLIL learners to use passives ($\beta = 0.60$, SE = 0.18, $p = .001$), while CLIL learners also showed a marginally higher likelihood ($\beta = 0.33$, SE = 0.19, $p = .091$).

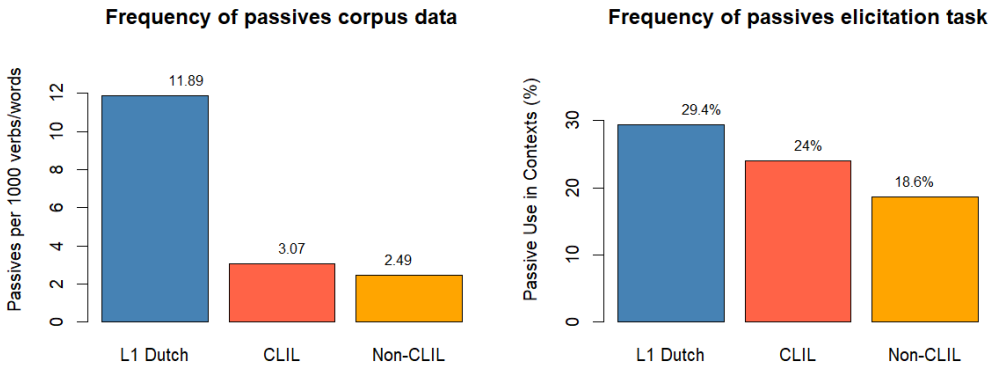

Figure 1. Frequency of Passive Constructions

These findings are consistent with previous SLA research showing that learners tend to underuse passive constructions (Granger, 1997; Hinkel, 2004; Xiao, 2007). The slightly higher proportion of passives produced by CLIL learners, particularly in the elicitation task, suggests that increased exposure to the target language may encourage greater engagement with complex syntactic forms, even if such forms remain relatively infrequent in spontaneous production.

In contrast, morphosyntactic accuracy revealed an inverse pattern. In the MulTINCo corpus, CLIL learners produced 37 passive sentences, of which 26 were morphosyntactically correct (70.3%) and 11 incorrect (29.7%). Non-CLIL learners generated 13 passive sentences, with 10 correct (76.9%) and 3 incorrect (23.1%). This difference was even more pronounced in the elicitation task, where non-CLIL learners achieved a mean accuracy of 81.5%, compared to 59.7% for CLIL learners.

Errors primarily involved incorrect auxiliary selection (e.g., overuse of *zijn* instead of *worden*) and non-target-like participle formation. Some CLIL participants also produced non-standard agent phrases, substituting *bij* for *door* in contexts requiring agentive prepositions, likely reflecting transfer from English (e.g., "The book was read by Mary").

Taken together, these results point to an accuracy–complexity trade-off between CLIL and non-CLIL learners. CLIL learners appear more willing to experiment with complex structures, producing passives more frequently but with less consistency in execution. Non-CLIL learners, by contrast, tend to avoid challenging structures, resulting in fewer but more accurate passives. This pattern highlights the dual impact of instructional context: CLIL exposure may foster greater syntactic risk-taking, while traditional instruction may encourage cautious reliance on familiar forms.

B. RQ2 – Structural Realization of Passives: Auxiliary Choice, Agent Expression, and Impersonal Passives

The second research question explored how CLIL and non-CLIL learners differ from native speakers in their structural realization of passive constructions, focusing on auxiliary choice, agent expression, and impersonal passives.

(a). Auxiliary Choice

Both learner groups showed a marked tendency to overuse *zijn* in passive constructions. In the corpus data, *zijn*-passives accounted for 64.8% of CLIL productions and 69.1% of non-CLIL productions. A similar pattern emerged in the elicitation task, where *zijn*-passives appeared in 17.3% (52/300) of CLIL responses and 6.6% (23/350) of non-CLIL responses (see Figure 2). The chi-square tests on both the corpus and elicitation task data revealed significant differences in the use of *zijn*-passives between the CLIL, non-CLIL, and L1 Dutch groups. In the corpus, the chi-square statistic of 158.05 ($p = 4.79 \times 10^{-35}$) indicates a clear difference in passive usage across groups, with a very small p-value confirming statistical significance. Similarly, the elicitation task showed a chi-square statistic of 30.74 ($p = 2.12 \times 10^{-7}$).

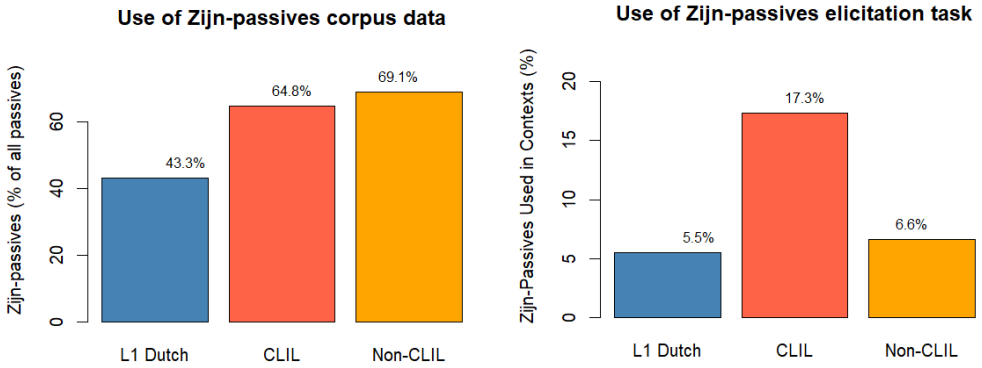

Figure 2. Auxiliary Choice

This overreliance on *zijn* is likely attributable to cross-linguistic interference from French, where *être* functions as the sole auxiliary in passive constructions. A possible, though unexamined, explanation may also lie in teacher input: Dutch teachers in Wallonia are often native speakers of French who have acquired Dutch as an L2. It is thus conceivable that they themselves employ the *zijn* passive more regularly in classroom discourse. Consequently, L2 learners may encounter this structure with greater frequency, which could reinforce its salience.

(b). Agent Expression

Patterns of agent expression also varied across groups. In the corpus, CLIL learners included explicit agents in 32.4% of passives, closely mirroring French usage (Jisa et al., 2002) and reinforcing the role of L1 transfer. Non-CLIL learners, by contrast, did not spontaneously include agents in corpus data but expressed them significantly more often in the elicitation task, where agents were presented in parentheses (see Figure 3). This suggests that non-CLIL learners were more task-dependent, feeling compelled to include the agent when explicitly prompted. CLIL learners, in contrast, displayed greater flexibility: they frequently omitted the agent even when it was provided, reflecting a willingness to experiment with syntactic options rather than adhering strictly to task cues.

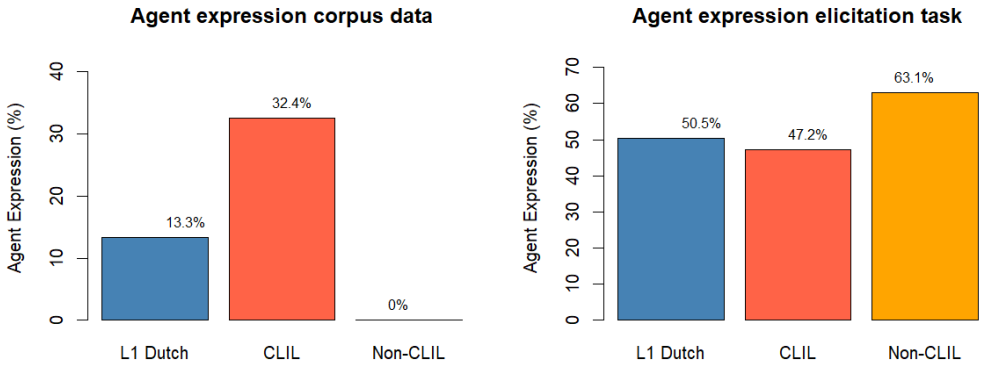

Figure 3. Agent Expression

Further analysis of agent positioning revealed striking group differences. CLIL learners favored medial placement of the agent (70.5%), whereas native speakers produced only 4% and non-CLIL learners 12.2% of such constructions (see Figure 4). Previous research indicates that native speakers of Dutch strongly prefer post-verbal (PP-final) agent placement (e.g., Van Lieburg et al., 2023). Interviews with Dutch teachers in Wallonia suggest that PP-medial placement is sometimes explicitly taught to French-speaking learners to prevent word-order errors in other constructions (Sijyeniyo et al., n.d.). The fact that CLIL learners (who typically receive more implicit instruction) produced medial agents more frequently than non-CLIL learners is therefore unexpected. Several factors may explain this discrepancy. The elicitation task itself may have influenced learners' choices, as agents were consistently presented at the end of sentences in parentheses, encouraging final placement. Non-CLIL learners, relying more heavily on the task and L1 transfer, may have gravitated toward PP-final passives, which align with French structures. CLIL learners, exposed to richer input, may have been more willing to experiment with rearranging sentence components, perceiving the passive as requiring alternative word orders.

The prevalence of medial agent phrases among CLIL learners may also signal a more advanced stage of interlanguage development. As Hiligsmann (1997) argues, learners at later stages often produce novel or overgeneralized forms as they test and refine their grammatical hypotheses. Thus, CLIL learners' deviation from native norms may reflect syntactic experimentation and developmental progress rather than regression or error.

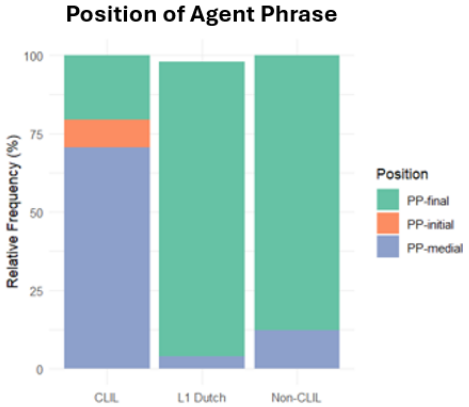

Figure 4. Position of Agent Phrase

(c). Impersonal Passives

A final point of divergence concerns impersonal passives. Native speakers produced such forms in both corpus (23.3%) and elicitation (9.1%) data, and non-CLIL learners also attempted to produce them (30.8% in corpus; 8.6% in elicitation). CLIL learners, however, did not produce any impersonal passives in either dataset (Table 5). This absence suggests that CLIL learners may struggle with structurally marked, low-salience features such as impersonal passives. Given their syntactic complexity and lack of an explicit agent, these constructions appear to be underrepresented in CLIL learners' output, highlighting a potential area of vulnerability in their grammatical development.

TABLE 5
USE OF IMPERSONAL PASSIVES

Group	Use in corpus (%)	Use in elicitation (%)
Native speakers	23.3%	9.1%
Non-CLIL learners	30.8%	8.6%
CLIL learners	0%	0%

C. RQ3 – Instructional Context and Syntactic Development

The third research question asked how instructional context (CLIL vs. non-CLIL) shapes learners' production of Dutch passives.

CLIL learners produced passives more frequently than non-CLIL learners but with lower morphosyntactic accuracy. They favored medial agent placement and omitted agents more often, while non-CLIL learners adhered more closely to native-like patterns. CLIL learners did not produce impersonal passives, unlike their non-CLIL peers. These patterns suggest that CLIL fosters syntactic variety and risk-taking, whereas traditional instruction promotes accuracy and conformity to target norms.

To complement this structural analysis, corpus data were examined for lexical diversity in verb use. Native speakers displayed the richest repertoire (30 tokens, 25 types; TTR = 0.83). CLIL learners produced more tokens overall (37) but fewer types (19; TTR = 0.51), while non-CLIL learners showed the lowest diversity (13 tokens, 6 types; TTR = 0.46). Both learner groups relied heavily on high-frequency verbs such as *organiseren* ("to organise") and *uitnodigen* ("to invite"), with non-CLIL learners additionally using *inviteren* (3), a formal near-synonym of *uitnodigen*. The preference for *inviteren* likely reflects cross-linguistic influence from French (*inviter*), underscoring stronger L1 reliance among non-CLIL learners. Overall, both learner groups drew on a limited verb repertoire, whereas native speakers demonstrated greater lexical flexibility and productive control.

V. CONCLUSION

A. Findings

This study examined how instructional context shapes the acquisition of Dutch passive constructions among French-speaking learners enrolled in CLIL programs compared to those receiving traditional L2 instruction. Drawing on spontaneous productions from the MulTINCo corpus and responses from a controlled elicitation task, the analysis captured both learners' grammatical competence and their productive tendencies.

The findings reveal that both CLIL and non-CLIL learners produced markedly fewer passives than native speakers. CLIL learners, however, used passives more frequently than their non-CLIL peers across both datasets, suggesting that increased exposure in CLIL settings may encourage engagement with complex syntactic structures. Yet this greater output was accompanied by lower morphosyntactic accuracy, pointing to a production–accuracy trade-off: CLIL learners appear more willing to experiment with complex forms, but their grammatical control remains less stable.

Structural patterns further distinguished the groups. Both learner groups overused the auxiliary *zijn* compared to native speakers, with CLIL learners showing a slightly stronger tendency. In agent expression, CLIL learners were more likely to include agents in spontaneous production, whereas non-CLIL learners expressed agents more often in the elicitation task. CLIL learners also favored medial agent placement, suggesting greater syntactic flexibility and experimentation. Notably, impersonal passives were entirely absent from CLIL output but present among non-CLIL learners.

This absence underscores the difficulty of acquiring low-salience, structurally marked forms through implicit input alone. It may also reflect the dynamics of instructional modality: in CLIL settings, implicit input through subject-matter instruction often outweighs explicit grammatical teaching in language classes. Such exposure may reinforce non-target-like forms, as seen in the entrenched use of *zijn*-passives. Taken together, these findings indicate that instructional context plays a decisive role in shaping learners' syntactic development. CLIL fosters syntactic diversity and risk-taking, while traditional instruction promotes grammatical precision and adherence to target norms. Neither context alone, however, appears sufficient for native-like mastery of the passive.

B. Implications

The results highlight the need for differentiated instructional input. In CLIL settings, language functions primarily as a medium for conceptual learning, mirroring conditions of first-language acquisition where forms are acquired incidentally through meaningful interaction. One might therefore expect CLIL learners to develop more native-like command of the

target language. Yet the data show that this expectation is not fully realized for the passive voice: CLIL learners produce and experiment more, but they do not attain native-like proficiency.

This suggests that additional exposure through implicit input is insufficient for acquiring structurally demanding forms. In some cases, subject-matter input may even interfere with or override explicit grammatical instruction. Such dynamics underscore the need for cross-curricular coordination, ensuring that grammatical targets introduced in language classes are reinforced across subject areas. These insights resonate with Lyster's (2007) *approche intégrée*, which advocates embedding form-focused instruction within communicative and content-based teaching. Learners benefit most when grammatical forms are not taught in isolation but revisited across contexts of meaningful discourse.

Accordingly, CLIL programs should integrate pedagogical strategies that raise metalinguistic awareness and promote deeper processing of grammatical forms. The observed overuse of *zijn*-passives and the absence of impersonal passives point to the need for instructional interventions that help learners notice and internalize subtle morphosyntactic distinctions. With such support, CLIL can foster both syntactic experimentation and the grammatical precision associated with native-like proficiency.

C. Limitations and Recommendations for Future Research

While this study provides valuable insights into Dutch passive constructions among CLIL and non-CLIL learners, several limitations must be acknowledged. First, the overall number of passive constructions identified in the learner corpus was relatively low, limiting the robustness and generalizability of corpus-based findings. Second, learner-related variables such as extracurricular exposure to Dutch, socio-economic background, individual motivation, and perceived proficiency may have influenced performance. Although efforts were made to ensure comparable profiles across groups in terms of age and educational background, these factors were not systematically controlled.

Future research should incorporate a broader set of learner variables to isolate the effects of instructional context more accurately. Such work would allow for a more nuanced understanding of how external factors interact with instructional input in shaping L2 development, particularly for low-salience or structurally marked constructions such as the passive.

APPENDIX. ELICITATION TASK

Opdracht (Nederlands)

Maak met de volgende woorden een doorlopende tekst van maximaal 20 zinnen. De zinsdelen mogen van volgorde veranderd worden. De werkwoorden moeten vervoegd worden. Bij de zinsdelen tussen haakjes mag je kiezen of je deze gebruikt in de zin of achterwege laat. Gebruik enkel de opgegeven woorden. Voeg waar nodig een lidwoord toe bij de substantieven (bv. de kat, het huis) of een voorzetsel bij de werkwoorden (bv. antwoorden op).

Consigne (Français)

Rédigez un texte cohérent de maximum 20 phrases en utilisant uniquement les groupes de mots suivants. Vous pouvez changer l'ordre des segments de phrase. Les verbes doivent être conjugués. Les éléments entre parenthèses sont facultatifs : vous pouvez les utiliser ou les omettre. Ajoutez un article devant les noms (par exemple : le chat, la maison) ou une préposition avec les verbes si nécessaire (par exemple : répondre à).

Instructions (English)

Write a coherent text of no more than 20 sentences using only the word groups provided below. You may change the order of the sentence elements. The verbs must be conjugated. The elements in parentheses are optional and may be used or omitted. Use only the given words. Add an article to nouns where necessary (e.g., the cat, the house) or a preposition with verbs if required (e.g., to answer to).

1. Lisa – uitnodigen voor – (vrienden) – een feest – vorige week
2. Lisa – vinden – dat – heel leuk
3. Feest – organiseren – in Antwerpen – (Bert)
4. Antwerpen – zijn – een stad - in Vlaanderen
5. Locatie – kiezen – (ouders van Bert)
6. Ouders van Bert – wonen – in Antwerpen
7. Eten – bereiden – veel – voor het feest – (een goede kok)
8. Kok – hebben – een bekend restaurant
9. Muziek – spelen – (DJ)
10. DJ – zijn – niet duur
11. Hij – zijn – vriend van Bert
12. Foto's – maken – (fotograaf)
13. Fotograaf – zijn – zus van Bert
14. De feestzaal – zijn – ook – erg mooi
15. Ballonnen – ophangen – (medewerkers)
16. Alle genodigden - verwachten – om 21 uur – (Bert)
17. Om 22 uur – krijgen – iedereen – stuk taart
18. Leuke cadeaus – geven – (de vrienden van Bert)
19. Bert – zijn – blij

20. Dansen – tot laat in de nacht

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