

Journal of Universal Language 26-1. March 2025, 37-67
DOI 10.22425/jul.2025.26.1.37
eISSN 2508-5344

Typological and Universal Influences on the Acquisition of Alternating Unaccusative Constructions: A Study of Moroccan EFL Learners

Khalid Elasri*, Rachid Ed-Dali, & Najib Bouhout*****

Mohammed V University in Rabat, Cadi Ayyad University**,
Sidi Mohamed Ben Abdellah University***, Morocco*

Khalid Elasri (First & Corresponding author)

Associate Professor, Department of Didactics, Mohammed V University in Rabat, Morocco
Email: elasrik@gmail.com

Rachid Ed-Dali (Co-author)

Associate Professor, Department of English, Cadi Ayyad University, Morocco
Email: rachid.eddali.est@gmail.com

Najib Bouhout (Co-author)

Associate Professor, Department of English, Sidi Mohamed Ben Abdellah University, Morocco
Email: najib.bouhout@usmba.ac.ma

Received 17 November, 2024; Revised 14 January, 2025; Accepted 17 March, 2025

Copyright © 2025 Language Research Institute, Sejong University

Journal of Universal Language is an Open Access Journal. All articles are distributed online
under the terms of the Creative Commons Attribution Non-Commercial License

(<http://creativecommons.org/licenses/by-nc/4.0>) which permits unrestricted non-commercial
use, distribution, and reproduction in any medium, provided the original work is properly cited.

Abstract

This study investigates how MA learners of English interpret AUC, focusing on the interaction between universal syntactic principles and typological differences. Within the framework of UG, AUC universally lacks an external argument and selects a single internal argument. However, cross-linguistic variation exists in how AUC is morphologically marked. Unlike English, MA relies on overt morphological markers to show alternation. These typological differences may influence MA learners' judgments of English AUC. An acceptability judgment task was submitted to 31 intermediate and 31 advanced learners. Using the scores from a group of 39 native speakers as a benchmark, the results revealed that both groups of learners did not perform at the same level as the native group. This implies that MA learners seem to delay the acquisition of AUC due to non-equivalence between L1 and L2. Although the advanced group received higher mean scores than the intermediate group, further tests showed no significant difference between them, which suggests that proficiency level was not influential in judging AUC. Thus, UG principles provide a foundational understanding of unaccusative syntax, but typological features such as overt morphological marking in MA could shape learners' perceptions of English structures.

Keywords: Universal Grammar, unaccusative verbs, typology, morphological transfer

1. Introduction

Typological and universal features have been investigated in many languages (Chin 2023, Park 2023, Ołánrewájú 2024, Tak & Lyuh 2024), including constructed languages, such as *Unish*, a constructed language developed at the Language Research Institute of Sejong University (Choo 2001). This paper focuses on AUC.¹ Unaccusative

¹ The following abbreviations are used in this paper: AUC (alternating unaccusative

verbs, which exhibit syntactic behaviors that distinguish them from transitive and unergative verbs, have been widely studied across languages, revealing both universal tendencies and typological distinctions (Perlmutter 1978, Haspelmath 1993, Sorace 2000, Alexiadou et al. 2004, Levin 2015). According to the Unaccusative Hypothesis, unaccusative verbs select a sole argument that originates as an internal argument, later moving to the subject position in languages like English due to case requirements (Burzio 1986). These verbs lack an external argument, setting them apart from unergative verbs, which involve a volitional subject. This universal aspect of argument structure is embedded in the principles of UG, which posits that certain syntactic configurations, such as the absence of an external argument, are innate features of human language (Chomsky 1981).

Despite their universal characteristics, the realization of unaccusative structures varies typologically. For instance, English lacks overt morphological markers to signal unaccusative alternations, while MA marks this distinction morphologically or with specific verb forms (Fassi-Fehri 2009). This typological distinction not only shapes the linguistic realization of unaccusative verbs in each language but also impacts the acquisition process for Moroccan learners of English, who may rely on MA morphological cues when interpreting English AUC.

This study aims to explore these universal and typological features by examining how MA learners of English acquire and interpret AUC in English, contributing to a broader understanding of both linguistic typology and second language acquisition. Specifically, it seeks to

constructions), CV (coefficient of variation), EFL (English as a foreign language), GJT (grammaticality judgment task), HSD (honest significant difference), IP (inflectional phrase), MA (Moroccan Arabic), MS (mean square), SD (standard deviation), SE (standard error), SLA (second language acquisition), UG (universal grammar), UHH (unaccusativity hierarchy hypothesis), UTH (unaccusative trap hypothesis).

address the following research questions and verify the related hypotheses:

1. How do MA learners of English at different proficiency levels judge the grammaticality of AUC, and how do their judgments compare to those of native speakers?

Hypothesis 1: Grammaticality judgments of AUC will vary based on proficiency level, with native speakers providing the highest ratings, advanced learners demonstrating greater accuracy than intermediate learners, and intermediate learners showing the lowest accuracy.

2. To what extent do typological differences between English and MA influence the acquisition of AUC, particularly among advanced learners?

Hypothesis 2: Even at an advanced level, MA learners of English will struggle with AUC due to typological differences between English and MA, leading to persistent L1 transfer effects.

3. Is the difference in grammaticality judgments more substantial between intermediate and advanced learners, or between advanced learners and native speakers?

Hypothesis 3: The gap in grammaticality judgments will be more pronounced between intermediate and advanced learners than between advanced learners and native speakers, reflecting the developmental stages of acquisition.

4. How does proficiency level impact the consistency of grammaticality judgments, and do lower-proficiency learners exhibit greater variability due to reliance on L1 transfer strategies?

Hypothesis 4: Lower-proficiency learners will exhibit greater inconsistency in their grammaticality judgments due to varied exposure to English AUC and reliance on L1 transfer strategies.

To achieve these objectives, the paper is structured as follows. Section 1 provides an overview of UG and unaccusative alternation. Section 2 presents a contrastive analysis of AUC in English and MA, highlighting typological differences. Section 3 reviews relevant literature on the acquisition of AUC. Section 4 describes the methodology, followed by the presentation of results in Section 5. Section 6 discusses the findings, and finally, Section 7 concludes with pedagogical implications.

2. Universal Grammar and Unaccusative Alternation

One of the universal aspects of languages is their similarity in argument structure as verbs are categorized in terms of the number of arguments they select, one, two, or three, for intransitive, transitive, ditransitive and complex transitive verbs, respectively. The following examples illustrate these structures using data from both English and MA:

- (1) a. John slept late last night.
 b. John wrote a book.
 c. John gave Mary a book.
 d. They made him the chief executive.
- (2) a. l-wəld nʕəs.
 DEF-boy slept
 ‘The boy slept.’
- b. ʃəf-t wahəd l-film amriki l-barəh.
 saw-I one DEF-film American DEF-yesterday
 ‘I saw an American movie yesterday.’
- c. l-wəld ʕta ktab l-l-bənt.
 DEF-boy gave book to DEF-girl
 ‘The boy gave a book to the girl.’
- d. fərd-u ʕli-h je-qbəl l-ʕarḍ dial-hum.
 made-they on-him INF-accept DEF-proposal of-theirs
 ‘They made him accept their proposal.’

For the intransitive verbs that select one argument as a grammatical subject, two general types of intransitivity exist. Ergative verbs (or unaccusative verbs) and unergative verbs. Unaccusative verbs carry the subject’s non-volitional action, whereas unergative verbs carry the subject’s volitional act (i.e., agentive role). In terms of theta roles, unergative verbs select an argument with the theta role of Agent, whereas unaccusative verbs select an argument with either a Theme or Patient Theta role. The distinction between unaccusative and unergative verbs was first proposed under the Unaccusative Hypothesis (Perlmutter 1978, Burzio 1986) and is illustrated in (3) and (4).

- (3) a. The girl smiled.
 b. The man laughed.
- (4) a. The ship sank.
 b. The car disappeared.

The difference between the two types of intransitives is also accounted for syntactically. Consider the two syntactic trees in (5):

- (5) a. Unergative verbs: [VP DP [V0 V]]
 b. Unaccusative verbs: [VP V DP]

The subject in (5a) is generated in spec-position since the verb *smile* assigns the nominative case as well as the agent theta role to its subjects. In (5b), the object of the verb *sink*, ‘the ship’ must move to [Spec, IP]. This movement is a case-driven obligatory movement. According to Burzio’s generalization, an ‘unaccusative’ verb assigns an accusative case to its object only if it theta-marks its subject. Hence, the ergative verb *sink* is a verb that lacks external argument and cannot, therefore, assign an accusative case to the ‘ship,’ which must move to [Spec, IP] to be case-marked. Thus, “unergative verbs’ only argument behaves like the external argument of transitive verbs, and unaccusative verbs’ only argument behaves like the internal argument of transitive verbs” (Hornstein et al. 2005: 106).

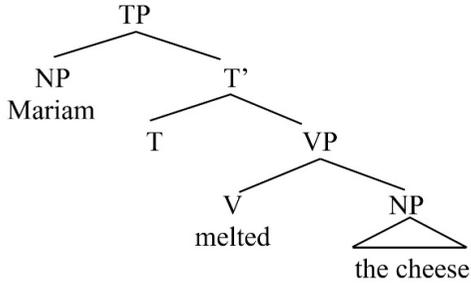
Unaccusative verbs can be divided into two sub-types based on their transitivity. The first sub-type includes alternating unaccusative verbs, which can form two different alternations, as shown in examples (6) and (7). The second sub-type consists of verbs that do not have a transitive counterpart, such as ‘fall,’ ‘arrive’ and ‘emerge.’ These verbs are considered pure unaccusatives because they do not

allow for any alternation, as shown in example (8).

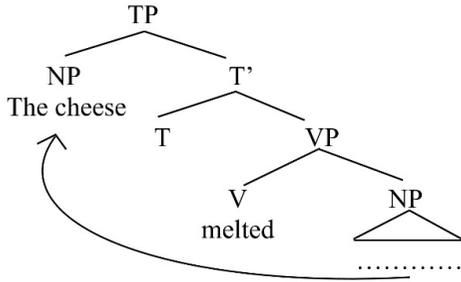
- (6) Transitive: Jim opened the gate.
Subject Direct object
<Agent> <Theme>
- (7) Alternating unaccusative: The gate opened.
Subject
<Theme>
- (8) Pure unaccusative: The parcel arrived.
Subject
<Agent>

In terms of Theta Theory and Case Theory, unaccusative constructions act like passive verbs since they assign neither an external theta-role to their subjects nor an accusative Case to their objects (Levin & Hovav 1995). An alternating unaccusative structure like ‘Mariam melted the cheese; the cheese melted’ is represented underlyingly in sentences (9) and (10). Sentence (11) displays the only difference between the alternating and passive structures.

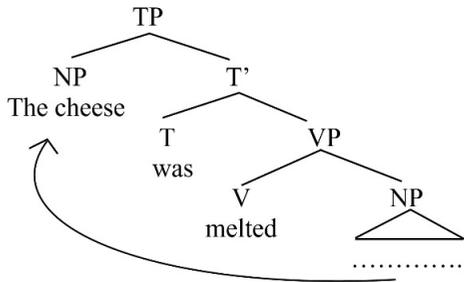
- (9) Mariam melted the cheese (transitive structure)



- (10) The cheese melted (alternating structure)



- (11) The cheese was melted (passive structure)



In example (9), the noun phrase ‘the cheese’ stays *in-situ* because the subject position is filled by Mariam. In example (10), however, ‘the cheese’ does not receive any Case and must move to the subject position to be Case-marked. This movement is allowed because the subject position is empty. Finally, sentence (11) shows that English passives are morphologically realized (via “to be” + past participle), whereas AUC is not. Another distinction between AUC and passive constructions lies in the requirement for transitive Agency. Passive constructions require a transitive Agent, whereas AUC does not. As a result, sentence (12a) is ungrammatical, while sentence (12b) is grammatical.

- (12) a. *The ice melted by the sun. (Ergative)
 b. A government official was bribed by a manager. (Passive)

The ubiquity of unaccusative structures in English has led to their investigation in other languages such as French, Korean, Spanish, German and Etulo, and their universality is well-established (Luján 1981, Park & Lakshmanan 2007, Jeong 2018, Mo 2020, Okoye 2023).

3. Typological Variation and Morphological Marking of Unaccusative Structures

Although languages share universal properties in their argument structure, they still differ in their morphological realizations of unaccusative alternation. This variation arises from the different types of morphology in languages. For example, Spanish is a fusional language, Turkish is an agglutinative language, and Arabic is classified as polysynthetic (Grabe & Yamashita 2022). Polysynthetic languages

like Arabic frequently use morphology to indicate changes in verb valency. In French, unaccusative verbs typically use auxiliary changes to differentiate between transitive and intransitive forms rather than morphological markers on the verb itself (*La porte s'est fermée* 'The door closed'). As for English, no morphological process is involved since the same verb form can yield transitivity and intransitivity (e.g., the enemy sank the ship; the ship sank). MA, on the other hand, which "is used in informal settings for daily conversations and transactions" (Elasri & Boubekri 2020: 92), uses morphological changes or different verb patterns to mark the shift between transitive and intransitive meanings. Consider the following examples of English AUC in (13) and (15) and their MA equivalents in (14) and (16):

- | | |
|---------------------------|--------------------------------------------------------------------------------|
| (13) a. The window broke. | (14) a. S-sarʒəm t-harrəs.
DEF-window REF-break
'The window was broken.' |
| b. The gate closed. | b. l-bab l-kbir t-səd.
DEF-gate REF-close
'The gate was closed.' |
| c. The plan changed. | c. L-blan t-baddəl.
DEF-plan REF-change
'The plan was changed.' |
| d. The ropes tightened. | d. L-ħbula t-ʕegdu.
DEF-ropes REF-tighten
'The ropes were tightened.' |
| e. The battery loaded. | e. L-batri t-ʃarʒa.
DEF-battery REF-load
'The battery was loaded.' |
| f. The wall cracked. | f. L-ħiʦ t-ʃəq.
DEF-wall REF-crack
'The wall was cracked.' |

- | | |
|-----------------------------|---------------------------------------------------------------------------------|
| (15) a. The painting dried. | (16) a. <i>Ş-şbağa nəffat.</i>
DEF-painting REF-dry
'The painting dried.' |
| b. The milk froze. | b. <i>L-ħlib ʒməd.</i>
DEF-milk REF-freeze
'The milk froze.' |
| c. The water boiled. | c. <i>L-ma ğla.</i>
DEF-water REF-boil
'The water boiled.' |
| d. The prices decreased. | d. <i>L-atmina naqso.</i>
DEF-prices REF-decrease
'The prices decreased.' |
| e. The cheese melted. | e. <i>ʒ-ʒbən dab.</i>
DEF-cheese REF-melt
'The cheese melted.' |
| f. The bridge collapsed. | f. <i>L-qantra rabət.</i>
DEF-bridge REF-collapse
'The bridge collapsed.' |

The English sentences in (13a)–(13f) and (15a)–(15f) demonstrate that unaccusative verbs do not undergo morphological changes between their intransitive and transitive forms (e.g., ‘break’ vs. ‘break something’). This absence of clear morphological markers can confuse learners, who might expect the verb forms to change. On the other hand, the sentences in MA (14a)–(14f) show that unaccusative verbs can undergo alternation using the morpheme {t}, which “is prefixed to a verb stem to express a variety of grammatical meanings” (Ech-Charfi 2023: 34). Besides indicating alternation, the morpheme {t} is also used in passive formation (e.g., *ftəħ* ‘open’, *t-ftəħ*, ‘PASS-open’). A different morphological process can be noticeable in the MA

sentences in (16a)–(16f) as the alternating verbs in these sentences undergo a change in verb stem to indicate reflexivization. That is, the AUC in MA is derived through reflexivisation which leads to a change in the form of the verb (e.g., *ǧalla* ‘to boil’, *ǧla* ‘REF-boil’).

A closer analysis of the MA sentences involving {t} indicates that they express change due to an external cause; therefore, unlike English where alternation would be understood from the sentence despite its null morphology, an elimination of the morpheme showing the alternation would make the sentence incomplete, as in example (17) below.

- (17) *S-sarʒəm harrəs.
 DEF-window Tr-break
 ‘The window broke.’

In the second set (15a)–(15f), the process of reflexivisation implies that the event requires some duration of time with the suppression of the external cause. The morphological reflexivization of the verb ‘collapse’ in example (18) below suggests that no external factor contributed to the bridge’s new state; its collapse is attributed to aging. In contrast, the passive/reflexive morpheme {t} in example (19) indicates that the bridge collapsed due to an external factor.

- (18) L-qanṭra rabət.
 DEF-bridge REF-collapse
 ‘The bridge collapsed.’

- (19) L-qanṭra t-əjbat.
 DEF-bridge REF-collapse
 ‘The bridge was collapsed.’

Given these typological differences between English and MA, the acquisition of English AUC by Moroccan learners of English might be affected by L1 morphological transfer. This has been documented in many studies in the literature, as will be mentioned in the next section.

4. Previous Studies

Cross-linguistic studies have shown that L2 learners often transfer morphological cues from their L1, affecting their interpretation of unaccusative structures in the L2 (Hirakawa 1995; Yip 1995; Balcom 1997; Montrul 1997; Mo 2014, 2016, 2020; Cabrera 2016; Kondo 2018; Lin 2023). For instance, Montrul (1997) attempted to explore the knowledge of English alternating constructions of two groups of English learners, L1 Turkish speakers and L1 Spanish speakers, through a picture judgment task. The results revealed that Spanish speakers preferred ‘get passives,’ which they rated as more correct than alternating constructions. In contrast, Turkish participants did not favor transitive constructions of ‘melt’ and ‘sink’ because these verbs lack causative morphemes. However, they accepted transitive sentences with other verbs (such as ‘break,’ ‘close,’ and ‘open’) that also lacked causative morphemes, demonstrating the influence of their L1 morphological rules.

Following the same line of investigations, Sato (2009) examined the effect of L1 Japanese morphology on the acquisition of English transitive and intransitive structures. Since Japanese has overt causative morphemes that are absent in English, the learners who participated in the study tended to prefer ‘get passives’ as well as ‘make causatives’ more than intransitive and transitive sentences that

lack morphological realizations in English. Similar findings were reported by Kim (2014), Pae et al. (2014) and Jo (2018), who found that Korean EFL learners preferred passive sentences of English alternating constructions.

Taking into account that L1 morphology might not be the sole factor that can affect learners' acquisition of alternating and non-alternating verbs, Chung (2014) explored two other factors that can explain the reason why learners experience great difficulty learning unaccusatives: discourse (external causation) and semantics (animacy). Using responses from Chinese and Korean participants learning English as a second language, Chung (2014) found that, besides the participants' proficiency level in L2, both external causation and animacy influenced the learners' performance of the given tasks. Nonetheless, L1 morphology was the most influential factor, followed by discourse, and then semantic factors.

For Arabic-speaking learners, Aldosari (2007) explored the acquisition of English unaccusatives by Arabic learners at low, intermediate, and advanced levels using a GJT, testing two hypotheses: the UTH and the UHH. The UTH posits that early learners treat unaccusatives as unergatives, but later restructure their grammar to distinguish them. The results showed that early learners did not treat unaccusatives as unergatives, intermediate learners differentiated the two classes, and advanced learners resembled native speakers. The UHH claims a universal semantic hierarchy for unaccusatives and unergatives, which native speakers were sensitive to, but learners showed little sensitivity, likely due to the lack of clear morphological cues in English unaccusatives. The study suggests that the morphosyntactic properties of the target language may influence learners' sensitivity to such hierarchies. Similar studies (e.g., Benmamoun et al. 2013) have also shown that morphosyntactic differences between Arabic and

English lead to persistent difficulties in AUC acquisition. The presence of explicit morphological markers in Arabic may cause learners to overgeneralize unaccusative structures in English, aligning with L1 transfer theories (Odlin 1989, Schwartz & Sprouse 1996).

Despite extensive research on unaccusativity, studies focusing on MA learners of English remain limited (e.g., Jilali 2023). This study extends previous research by examining how MA learners judge the grammaticality of English unaccusative constructions, exploring the extent to which L1 influence shapes their interpretations, and investigating whether proficiency level impacts their ability to distinguish unaccusative structures. By combining typological analysis with acquisition data, this research seeks to clarify how universal syntactic principles interact with language-specific morphology in the context of SLA.

5. Method

5.1. Subjects

The participants in this study included native English speakers, advanced learners, and intermediate learners of English. The intermediate learners (ages 17–19) and advanced learners (ages 21–25) were randomly selected from undergraduate and graduate cohorts (2022–2023) at the Faculty of Educational Sciences, the country's only faculty of education. Group membership was determined based on scores from a proficiency test administered by the first author. To ensure linguistic homogeneity, several filter questions were included in the test, and only students whose parents speak MA as their first language were retained. In total, 62 students participated in the study,

equally divided between the two groups (Table 1).

The recruitment of native English speakers was done using convenient sampling. An invitation was posted on the website www.linguist-list.com with a GJT, together with additional filter questions. The participants had different educational backgrounds, ranging from High School to PhD, but they all declared that English is their native language. Native speakers served as the reference group for between-group comparisons.

Table 1. Participant Gender Distribution

Group	Male	Female	Total
Native English	22	17	39
Advanced	11	20	31
Intermediate	15	16	31
Total	48	53	101

5.2. Material

The primary instrument for this study was the GJT, which comprised 30 sentences: 20 focusing on alternating unaccusative verbs and 10 distractor sentences designed to minimize participants' focus on the targeted grammatical structure. (e.g., The vase was broke into pieces when the cat touched it). The students were asked to rate the grammaticality of each sentence on a Likert scale ranging from 1 (*completely grammatical*) to 5 (*completely ungrammatical*). In addition, face validity of the test was ensured by building on the reviews of the test items by three linguists, two from the US and one from Morocco. The excerpts were presented with a pool of 40 sentences and were

asked to eliminate one that did not adequately measure the target structure and suggest improvement. The process resulted in the elimination of 6 sentences and suggestions for improvement for 12. Of the remaining 22 sentences, 20 were randomly chosen and presented to two other experts for inter-rater agreement (0 = does not measure the target construct, 1 = measures the target construct). Cohen's kappa was higher than 80 percent. The validity and usability of the test were thus established. As a final step, the test was piloted with a sample of 16 native speakers of English, and their suggestions were taken into account for the production of the final version.

5.3. Data Collection Procedure

After the research ethics committee of the Faculty of Educational Sciences approved the procedures of the present study, a participation request was sent to the students chosen via their academic emails together with a link to the online version of the test on Google Forms. The participants were guaranteed that no personal or biographic data would be collected, and so the answers they provided would be collected anonymously and used only in an aggregate form. A second invitation was sent after a waiting period of seven days. The response rate for the study was 100% as the request was made by the first author to students at their institution. For the reference group of native speakers, the link to the test was posted on www.linguist-list.com on 10th, August, 2023. The link was removed after the size of the reference group was deemed enough for comparison purposes.

5.4. Data Analysis Procedure

As far as data analysis is concerned, this was done in two steps. First, the ratings for each group (Native, Advanced, Intermediate)

were simulated using normal distributions based on their means and standard deviations. Second, a One-Way ANOVA was conducted to compare the means of the three groups. The F-statistic and p -value were calculated to check if there were any overall significant differences between the groups. Since the ANOVA was significant, Tukey's HSD was applied to perform pairwise comparisons between the groups. In other words, this test was used to pinpoint exactly which groups differed from each other. Thus, this methodology allowed us to both: test for overall differences between the groups (ANOVA) and explore exactly where those differences lie (Tukey's HSD).

6. Results

Table 2 presents the mean scores of three groups. As expected, native speakers gave higher grammaticality ratings than intermediate and advanced learners. They also exhibited less variability in their scores, as indicated by the coefficient of variation. This greater agreement in native speakers' ratings naturally reflects the similarity in their language competence. The advanced Group's mean score is lower than the native group but notably higher than the Intermediate group. The advanced group's scores of the coefficient of variation are twice as variable as the native group, reflecting differing levels of mastery within this group of learners. On the other hand, the intermediate group's mean (3.37) is the lowest among groups, suggesting emerging understanding. The intermediate group's scores in variability are also the highest: SD (0.77) and SE (0.139), indicating less consistency. Additionally, their judgments (CV: 22.8%), demonstrate significant variability, perhaps reflecting the range of learner progression.

Table 2. Mean Scores of Each Participating Group

Group	N	Mean	SD	SE	Coefficient of Variation (%)
Native	39	4.47	0.34	0.056	7.6
Advanced	31	3.82	0.58	0.105	15.2
Intermediate	31	3.37	0.77	0.139	22.8

SD (standard deviation); SE (standard error)

To validate the descriptive statistics by controlling for random error and ensuring that the observed differences are not due to chance, an ANOVA test was applied. This is important because significant differences suggest that group membership (e.g., language proficiency) influences how participants rate the grammaticality of the structures under study. Table 3 summarizes the results of the ANOVA test.

Table 3. ANOVA Test Results

Source of Variation	SS	<i>df</i>	MS	<i>F</i> -Statistic	<i>p</i> -value
Between Groups	2,245.60	2	1,122.80	37.02	<0.001
Within Groups	3,600.00	97	37.11	-	-
Total	5,845.60	99	-	-	-

df (degrees of freedom); MS (mean square); SS (sum of squares)

As shown in Table 3, the *p*-value of (<0.001) is far smaller than the typical significance threshold of 0.05, indicating a statistically significant difference in the mean ratings between the three groups

(native, advanced, and intermediate). Since the F -statistic is large and the p -value is very small, we can confidently conclude that the differences in grammaticality ratings between the groups are not due to chance. This suggests that group proficiency (native, advanced, intermediate) plays an important role in how grammaticality is judged. Yet, to determine which specific groups differ from each other (e.g., native vs. advanced, native vs. intermediate), the post-hoc test, Tukey's HSD, is conducted. Table 4 presents a summary of Tukey's HSD test results.

Table 4. Results of Tukey's HSD Test

Comparison	MD	SE	95% Confidence Interval	p -value
Native - Advanced	0.649	0.228	[0.132, 1.166]	0.012
Native - Intermediate	1.100	0.227	[0.582, 1.617]	0.000
Advanced - Intermediate	0.451	0.265	[-0.070, 0.972]	0.103

HSD (honest significant difference); MD (mean difference); SE (standard error)

Table 4 reveals that the mean difference in ratings between native speakers and advanced learners is 0.649, with a p -value of 0.012, which is statistically significant. This indicates that native speakers tend to rate grammatical structures higher than advanced learners. On the other hand, the mean difference between native speakers and intermediate learners is 1.100, with a p -value of 0.000, indicating statistical significance. This confirms that native speakers rate the

sentences significantly higher than intermediate learners. Nevertheless, although advanced learners received higher mean scores than intermediate learners, the results suggest that there is no significant difference in grammaticality ratings between them as the mean difference is 0.451, and the *p*-value is 0.103.

The results obtained from the GJT provide valuable insights into how MA learners of English acquire and interpret AUC. The findings align with the study's research objectives and hypotheses, highlighting the impact of typological differences and L1 transfer on L2 acquisition.

The results indicate a clear gradation in mean scores, with the native group outperforming advanced and intermediate learners. More specifically, native speakers scored significantly higher than both learner groups due to their familiarity with English's AUC and syntactic patterns. These findings confirm Hypothesis 1, which proposed that proficiency level would influence grammaticality judgments, with native speakers outperforming both learner groups and advanced learners showing more accuracy than intermediate learners. The fact that advanced learners could not reach a native-like performance in judging the grammaticality of the given sentences reveals that L1 influence can still impact a learner's performance even at an advanced level of language proficiency. This supports Hypothesis 2, which posited that even advanced learners would struggle with AUC due to typological differences and L1 influence.

On the other hand, advanced learners showed moderate proficiency, but not significantly better than intermediate learners. This suggests that while they likely understand the concept of alternations, they may struggle with consistent application due to L1 interference. This difficulty may stem from an over-reliance on MA patterns, such as interpreting AUC as incomplete passive constructions. Therefore, these findings contradict Hypothesis 3, which anticipated a more

pronounced gap between these two learner groups.

Intermediate learners, on the other hand, performed worse than native speakers but not significantly differently from advanced learners. This suggests that while intermediate learners are developing an understanding of English unaccusative structures, they still rely heavily on L1 transfer. Moreover, the variation in answers for each group implies that as proficiency decreases, variability in performance increases (higher SD, SE and CV), suggesting greater heterogeneity among learners with less exposure or mastery. The higher variability among intermediate learners ($CV = 22.8\%$) implies substantial individual differences in acquisition rates. This aligns with Hypothesis 4, which suggested that lower proficiency groups would exhibit greater inconsistency due to varied exposure and reliance on L1 transfer strategies.

7. Discussion

The results revealed that native speakers outperformed MA learners in judging the grammaticality of the given sentences correctly. This is expected, given that native speakers acquire English through natural exposure. Many studies in SLA have established that proficiency level is a strong predictor of grammatical accuracy and consistency in grammaticality judgments. For instance, research by Sorace (1993) and White (2008) suggests that native speakers generally outperform learners in GJTs, particularly as structures increase in complexity. This aligns with the present findings, where native speakers showed the highest mean scores. The fact that the learners could not perform as native speakers indicates that certain aspects of L2 can still be delayed in their acquisition due to transfer or non-equivalence in

structure between L1 and L2. While this pattern may be expected with intermediate learners, the results also revealed that advanced learners struggled to judge grammaticality accurately in some cases.

As predicted, typological differences between English and MA affected learners' judgments of AUC. More specifically, AUC in MA is derived by two morphemes; while in English these structures are morphologically null. As mentioned earlier, in MA, the alternating structure is usually characterized by morphologically related forms as well as the morpheme {t}. Unlike English, then, MA is a morphologically rich language. The difference in morphological marking between MA and English posed challenges for MA learners, as they appeared to overgeneralize MA-specific morphological patterns or fail to recognize the syntactic predictability of English alternations.

Several studies go in line with the present finding, indicating that AUC is difficult to acquire by L2 learners. For example, the studies mentioned earlier by Montrul (2001) and Sato (2009) show the influence of the learners' L1 (Turkish and Spanish learners of English in Montrul's study and Japanese learners in Sato's) in judging English unaccusative and causative constructions because the verbs involved in these constructions are morphologically overt in the learners' L1. Along the same line of research, the study conducted by Al-Shemmary et al. (2022) highlighted learnability problems associated with the acquisition of ergative structures by Iraqi students due to the learners' overreliance on their L1 morphological cues in interpreting these structures. Sorace and Keller (2005) demonstrated that near-native L2 speakers still struggle with the gradient nature of unaccusativity, particularly with verbs that are less prototypically unaccusative.

In contrast to studies demonstrating a developmental behavior in the acquisition of unaccusative alternation—where higher proficiency levels correlate with fewer difficulties—the results of the current

study showed no significant difference between the advanced and intermediate groups in judging the alternating sentences. This means that proficiency does not have a significant difference for MA learners of English. Nevertheless, the intermediate group judgments indicated greater variability than the advanced group, which aligns with findings from studies on variability in interlanguage grammar. For instance, Ellis (2002) and Han and Odlin (2005) suggest that intermediate learners often display more fluctuating judgments due to developing syntactic representations and unstable L2 processing strategies. The higher coefficient of variation in intermediate learners observed here supports this trend, indicating that learners in this group have less consistent grammatical intuitions, likely due to ongoing acquisition and restructuring of L2 syntax.

8. Conclusion and Implications

This paper aimed to investigate the acquisition of English transitive verbs yielding alternating constructions by advanced and intermediate EFL learners whose L1 is MA. The participants' judgment abilities were compared to responses submitted by a group of native speakers of English. The results show a significant difference between native speakers and the MA learners in favor of native speakers, who judged the grammaticality of the given sentences more correctly. A review of similar studies shows that English AUC is not only problematic for Moroccan learners of English but also for learners from different L1 backgrounds.

The findings of this study, viewed through universal and typological perspectives, highlight the interaction between universal syntactic challenges and language-specific typological influences in the acquisition

of complex grammatical structures. Unaccusative structures remain persistently challenging due to both cognitive processing demands and cross-linguistic differences. Hence, understanding the typological differences between MA and English can inform instructional strategies in EFL classrooms, especially because AUC is totally neglected in the grammar sections of all English textbooks used in the Moroccan EFL context.

Given the fact that some alternations have only passive equivalence in MA, English alternating constructions may appear as incomplete passive constructions to learners. The study's findings suggest that unaccusative structures should be included in EFL curricula after passive constructions, enabling students to clearly differentiate between the two. Teachers can introduce unaccusative verbs separately from passive constructions and highlight the lack of overt morphological markers in English, which may not align with MA learners' expectations. Additionally, teachers can encourage learners to compare English structures with MA equivalents, emphasizing typological distinctions. This approach not only raises awareness of structural differences but also aids in reducing reliance on L1 morphological transfer. Activities could focus on helping students identify and practice unaccusative verbs within syntactic structures, emphasizing when the structure alternates and when it does not.

In a nutshell, the typological differences between MA and English unaccusative structures create challenges for Moroccan EFL learners, even at an advanced level of language proficiency. The findings of this study suggest that the lack of gradual internalization of English-specific patterns indicates that AUC receives little attention in the Moroccan EFL curriculum. Therefore, future instruction and research should focus on strategies to mitigate L1 interference and support learners' progression.

References

- Al-Shemmery, M. et al. 2022. Iraqi EFL University Students' Usage of Ergative Verbs. *Res Militaris* 12.3, 598–610.
- Aldosari, S. 2007. *The Acquisition of English Unaccusative Verbs by Arabic Native Speakers*. M.A. thesis, University of Kansas.
- Alexiadou, A. et al. 2004. *The Unaccusativity Puzzle: Explorations of the Syntax-Lexicon Interface*. Oxford: OUP.
- Balcom, P. 1997. Why Is This Happened? Passive Morphology and Unaccusativity. *Second Language Research* 13.1, 1–9. DOI: 10.1191/026765897670080531.
- Benmamoun, E. et al. 2013. Heritage Languages and Their Speakers: Opportunities and Challenges for Linguistics. *Theoretical Linguistics* 39.3-4, 129–181. DOI: 10.1515/tl-2013-0009.
- Burzio, L. 1986. *Italian Syntax: A Government-Binding Approach*. Berlin: Springer Science & Business Media.
- Cabrera, M. 2016. L1 Transfer in the Acquisition of Unaccusative Verbs in L2 English. *Language Learning* 66.4, 857–886.
- Chin, S. 2023. Linguistic Diversity and Justice: The Role of Artificial Languages in Multilingual Societies. *Journal of Universal Language* 24.2, 71–89. DOI: 10.22425/jul.2023.24.2.71.
- Chomsky, N. 1981. *Lectures on Government and Binding*. Berlin: Walter de Gruyter.
- Choo, M. 2001. The Need for “Unish,” a Universal Language, and the Principles of Its Development. *Journal of Universal Language* 2.1, 3–14. DOI: 10.22425/jul.2001.2.1.3.
- Chung, S. 2014. Discourse and Semantics in the Acquisition of Unaccusatives. *Second Language Research* 30.3, 297–319.
- Ech-Charfi, A. 2023. *The Medio-Passive in Moroccan Arabic: Diachronic Change and Synchronic Structuring*. *Studies in African*

- Linguistics* 52.1, 33–49. DOI: 10.32473/sal.52.1and2.129536.
- Elasri, K. & A. Boubekri. 2020. The Universality and Cultural Specificity of Emotions through a Comparative Semantic Analysis of Emotion Terms in English and MA. *Journal of Universal Language* 21.2, 85–109. DOI: 10.22425/jul.2020.21.2.85.
- Ellis, R. 2002. *The Study of Second Language Acquisition*. Oxford: OUP.
- Fassi-Fehri, A. 2009. Arabic Morphology and Syntax. *Journal of Semantic Studies* 54.2, 345–368.
- Grabe, W. & N. Yamashita. 2022. Morphology in Typologically Diverse Languages. *Language Typology Quarterly* 18.1, 1–22.
- Han, Z. & T. Odlin. 2005. *Studies of Fossilization in Second Language Acquisition*. Bristol: Multilingual Matters.
- Haspelmath, M. 1993. More on the Typology of Inchoative/Causative Verb Alternations. In B. Comrie & M. Polinsky (eds.), *Causatives and Transitivity* 87–120. Amsterdam: John Benjamins.
- Hirakawa, M. 1995. L2 Acquisition of English Unaccusative Construction. In D. MacLaughlin & S. McEwen (eds.), *Proceedings of the 19th Boston University Conference on Language Development* 291–302. Somerville, MA: Cascadilla Press.
- Hornstein, N. et al. 2005. *Understanding Minimalism*. Cambridge: CUP.
- Jeong, S. 2018. Causatives and Inchoatives in Korean: A Unified Account. *Japanese/Korean Linguistics* 25, 1–13.
- Jilali, O. 2023. Crosslinguistic Interference in the Acquisition of English Middle Verbs by Moroccan EFL Learners. *Journal of Applied Language and Culture Studies* 6.1, 23–53.
- Jo, Y. 2018. Effects of L1 Morphology on L2 English Unaccusatives. *International Journal of Bilingualism* 22.4, 431–449.

- Kim, H. 2014. Testing the Advanced Korean EFL Learners' Acquisition of the Unaccusative Verb in Online Processing. *Journal of the Korea English Education Society* 13.2, 1–19. DOI: 10.18649/jkees.2014.13.2.1.
- Kondo, T. 2018. Morphological Cues in Unaccusative Acquisition. *Language Learning Research* 10.2, 227–245.
- Levin, B. 2015. *English Verb Classes and Alternations: A Preliminary Investigation*. Chicago, IL: University of Chicago Press.
- Levin, B. & M. Hovav. 1995. *Unaccusativity: At the Syntax-Lexical Semantics Interface*. Cambridge, MA: MIT Press.
- Lin, X. 2023. Cross-Linguistic Perspectives on Unaccusative Acquisition. *Journal of Second Language Acquisition* 40.1, 75–98.
- Luján, M. 1981. The Spanish Causative Alternation. *Linguistic Inquiry* 12.2, 415–449.
- Mo, H. 2014. The Acquisition of Unaccusative Verbs by Korean EFL Learners. *Korean Journal of English Language Studies* 16.2, 223–248.
- Mo, H. 2016. Morphological Constraints on Unaccusative Verb Learning. *Applied Linguistics* 37.4, 681–702.
- Mo, J. 2020. Second Language Acquisition of English Unaccusative Verbs: A Theoretical Critique and Prospects for Future Studies. *Theory and Practice in Language Studies* 10.6, 657–663. DOI: 10.17507/tpls.1006.05.
- Montrul, S. 1997. Transitivity Alternations in Second Language Acquisition: A Crosslinguistic Study of English, Spanish, and Turkish. Unpublished Ph.D. Dissertation, McGill University.
- Montrul, S. 2001. First-Language-Constrained Variability in the Second Language Acquisition of Argument-Structure-Changing Morphology with Causative Verbs. *Second Language Research* 17.2, 144–194. DOI: 10.1177/026765830101700202.

- Odlin, T. 1989. *Language Transfer: Cross-Linguistic Influence in Language Learning*. Cambridge: CUP.
- Okoye, A. 2023. Argument Alternation in Etulo. *Journal of Universal Language* 24.1, 57–76. DOI: 10.22425/jul.2023.24.1.57.
- Ọláńrewájú, E. 2024. Typology of Constituent Focus in a West African Language: A Minimalist Analysis. *Journal of Universal Language* 25.1, 69–98. DOI: 10.22425/jul.2024.25.1.69.
- Pae, H. et al. 2014. Animacy Effect and Language Specificity: Judgment of Unaccusative Verbs by Korean Learners of English as a Foreign Language. *Journal of Psycholinguistic Research* 43.2, 187–207. DOI: 10.1007/s10936-013-9246-6
- Park, K. & U. Lakshmanan. 2007. The Unaccusative-Unergative Distinction in Resultatives: Evidence from Korean L2 Learners of English. In A. Belikova et al. (eds.), *Proceedings of the 2nd Conference on Generative Approaches to Language Acquisition North America (GALANA)* 328–338. Somerville, MA: Cascadilla Proceedings Project.
- Park, S. 2023. Multilingualism, Social Inequality, and the Need for a Universal Language. *Journal of Universal Language* 24.1, 77–93. DOI: 10.22425/jul.2023.24.1.77.
- Perlmutter, D. 1978. Impersonal Passives and the Unaccusative Hypothesis. *Proceedings of the Annual Meeting of the Berkeley Linguistics Society* 38, 157–189. DOI: 10.3765/bls.v4i0.2198.
- Sato, Y. 2009. The Role of Morphology in the L2 Acquisition of Unaccusative Verbs. *Faculty of International Liberal Arts Review, Otemon Gakuin University*, 3, 61–75.
- Schwartz, B. & R. Sprouse. 1996. *L2 Cognitive States and the Full Transfer/Full Access Model*. *Second Language Research* 12.1, 40–72. DOI: 10.1177/026765839601200103.
- Sorace, A. 1993. Unaccusativity and Auxiliary Choice in Non-Native

- Grammars of Italian and French: Asymmetries and Predictable Indeterminacy. *French Language Studies* 3.1, 71–93. DOI: 10.1017/S0959269500000351
- Sorace, A. 2000. Gradients in Auxiliary Selection with Intransitive Verbs. *Language* 76.4, 859–890. DOI: 10.2307/417202.
- Sorace, A. & F. Keller. 2005. Gradience in Linguistic Data. *Lingua* 115.11, 1889–1892. DOI: 10.1016/j.lingua.2004.07.002.
- Tak, J. & I. Lyuh. 2024. More than a Language Itself: The Speech Act of Refusal in Constructed Languages. *Journal of Universal Language* 25.2, 93–117. DOI: 10.22425/jul.2024.25.2.93.
- White, L. 2008. *Second Language Acquisition and Universal Grammar*. Cambridge: CUP.
- Yip, V. 1995. *Interlanguage and Learnability: From Chinese to English*. Amsterdam: John Benjamins.