
| RESEARCH ARTICLE

Ethical Challenges in Website Localization: Evidence from AliExpress Websites

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| ABSTRACT

This study examines the ethical challenges of website localization through a comparative analysis of the UK and Saudi versions of the AliExpress e-commerce platform. The research investigates whether localization practices across linguistic, visual, and policy-related content meet the ethical principles of fairness, transparency, and inclusivity. A qualitative comparative case-study approach was adopted, drawing on data from homepages, promotional banners, product descriptions, and return and refund policies. The analysis integrates Venuti's concepts of domestication and foreignization, Fairclough's Critical Discourse Analysis framework, and principles of digital consumer ethics. The findings reveal significant differences between the two website versions. While both interfaces are adapted to their target audiences, the Saudi version relies more heavily on persuasive visual strategies and urgency-based marketing techniques. At the textual level, the Arabic content frequently exhibits literal translation, inconsistent terminology, untranslated English expressions, and semantically inaccurate renderings that reduce clarity and naturalness. The analysis also identifies omissions and accessibility issues in policy-related information, particularly in return and refund policies, which may limit users' access to essential information and undermine trust. The study concludes that website localization extends beyond linguistic transfer to encompass ethical responsibilities toward target users. The findings highlight the limitations of excessive reliance on automated localization and emphasize the need for human oversight, post-editing, and culturally sensitive quality assurance practices to ensure communicative equity in multilingual e-commerce environments.

| KEYWORDS

website localization; translation ethics; e-commerce localization; critical discourse analysis; domestication and foreignization; digital consumer ethics.

| ARTICLE INFORMATION

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1. Introduction

In recent years, artificial intelligence has quietly become an essential tool in both global communication and digital commerce. It has been commonly assumed that machine translation technologies make products and services accessible across languages and cultures. To deliver massive multilingual content for global consumers, well-known platforms such as *AliExpress* extensively utilize machine translation. The reason behind the total reliance on AI localization is that it enhances the speed and scale in rendering content internationally. Correspondingly, a crucial question to raise is about how automated systems handle culture, social identity, and ethical responsibility.

A growing body of research has investigated the performance of AI translation systems. Much of this literature has focused on evaluating accuracy, efficiency, and cost-effectiveness. Recent developments in neural MT have led to improved fluency and usability, which has reinforced the popularity of these systems in professional and commercial contexts. While earlier tools, such as the Translation Memory applications discussed by Pym (2013), provided consistency and productivity for large projects, the current reliance on sophisticated AI introduces new complications. However, the issue of ethical risks in AI-assisted localization

has received limited attention. Questions remain about how localized content, when shaped by AI without careful human oversight, may reinforce bias, produce stereotypes, or distort cultural values.

The problem is particularly relevant in e-commerce, where translated content directly influences consumer perception and trust. The localized content, such as product descriptions, interface texts and images, goes beyond functionality to convey cultural messages. Any mistranslations or cultural misalignments of these elements can lead to the dissemination of misleading or discriminatory representations. However, regarding website localization, decision makers in international businesses may lack knowledge of how local culture influences their business (Qin, 2015). Despite the significance of this area, it remains under-explored in translation studies. The lack of research highlights the need to view localization from a different angle, the process is not purely technical. However, it is a site where ethical concerns are deeply embedded.

This paper argues that AI-generated localization involves inherent ethical challenges such as bias, stereotypes, and cultural misinterpretation. Through a dataset of selected corpus including homepages, promotional banners, and policy sections from *AliExpress* UK and Saudi websites, the author compares the two versions and analyze them linguistically and extralinguistically. Employing a holistic approach that took extra-linguistic factors into consideration, the study aims to contribute to the ongoing debate in translation studies and localization about automation of translation. The findings are anticipated to reveal the risks associated with uncritical reliance on AI-generated translation in global platforms. It also investigates how ethical frameworks and human post-editing might enhance practice. The paper seeks to elucidate the ethical implications of AI localization and offer practical insights for scholars, practitioners, and global consumers.

2. Literature Review

Much of the current literature on machine translation has grown rapidly with the development of neural MT, which has improved fluency and usability of its products. Based on this, it has encouraged its adoption in professional and commercial contexts. However, translation scholars caution that technological progress does not remove cultural and social bias. An example of this is the study carried out by Prates, Avelar, and Lamb (2018) who found that MT reproduced gender stereotypes when translating from gender-neutral languages. It highlights the risks of uncritical reliance on machine translation systems. Within the broader context, Pym (2004) also showed that localization should not be understood as a purely technical adjustment but as the adaptation of a product to the linguistic and cultural norms of its target region. To add to this, a recent study by Ethelb (2019) investigated two machine translation tools and concluded that successful localization requires more than linguistic transfer, since technical and cultural challenges such as the 'right to left display' in Arabic must also be addressed. The studies presented thus far have provided evidence that although MT has increased accessibility, it can also reinforce stereotypes or distort cultural norms. Therefore, evaluating e-commerce platforms localization requires attention not only to accuracy but also to consider both ethical and technical aspects.

Technical adaptation formed the central focus of studies in localization; however, theoretical perspectives also provided valuable ways of examining cultural and ethical questions. Theories in translation studies provide an insight to examine cultural context in localization. Localization is often described as "the linguistic and cultural adaptation of digital content to the requirements and locale of a foreign market" (Schäler, 2011, p.157). To evaluate AI-generated localization, Venuti's (1995) distinction between domestication and foreignization has been especially influential. The former is defined as the "ethnocentric reduction of the foreign text to target language cultural values", whereas the latter seeks to preserve the cultural uniqueness of the original text (Venuti, 1995, p.20). In a study on translating culture-specific references from English into Arabic, Mansour (2014) found that translators tend to shift between domestication and foreignization and rarely stick to one of them. The translation strategies used depend on some factors, including target readership, the purpose of the translation and cultural sensitivities. This helps to see that localization may involve cultural manipulation, a point that is directly relevant to evaluating AI-assisted localization. Fairclough's (1995) Critical Discourse Analysis (CDA) model provides a valuable framework for analyzing linguistic, discursive, and socio-cultural contexts that shape localized content in e-commerce. This approach aligns with localization studies because meaning fluctuates between the ideologies of global commerce and local cultural values. According to Fairclough (1995), discourse is the complete process of social interaction. The first phase of analysis, the micro-level or description stage, examines the stylistic and formal features of the text. The second phase, interpretation (meso-level analysis), considers intertextuality to derive explicit and implicit preferences in the discourse. The last stage is called explanation; 'macro-level analysis' examines the social and ideological context in which the discourse operates. The present study employs this approach because it connects linguistic analysis with interpretation and explanation, thereby facilitating the examination of the ethical implications of AI-driven localization.

On the other hand, practical studies highlight further challenges in localization. In particular, it is assumed that different cultural backgrounds would cause different perceptions of quality and satisfaction. To support this, Turan's (2015) doctoral study on the ready-to-wear sector, which applied Hofstede's cultural dimensions, found that localization quality level whether (low, medium, high) affect significantly the customer satisfaction, trust and engagement. Previous studies mentioned provide both theoretical foundations and empirical evidence for evaluating the influence of AI-driven localization on consumer trust and experience. Based on this, it can be said that localization goes beyond putting text in a cultural context to include visual and design elements that show cultural values.

Research on cultural localization shows that design elements such as imagery, color, and navigation signal cultural values and directly shape usability, satisfaction, and inclusivity. Qin (2015) conducted a study on cultural localization of international websites and argued that localization is a process of cultural negotiation. He mentioned that website design communicates effectively the users' trust and identity. The findings revealed that customer satisfaction and usability of commercial websites rely heavily on cultural adaptation. If a platform fails in adapting the local culture, this may result in alienation or misunderstanding. In the same way, Al-Sedrani and Al-Khalifa (2012) highlight that the design of interface features is particularly sensitive in Saudi contexts, where cultural restrictions on female imagery strongly influence design expectations. Their study concluded by setting up guidelines for localizing e-commerce websites targeted for Saudi community. Miraz, et al. (2017) complemented this view, by showing that non-English versions of websites often underperform in readability and visual structure and fail to achieve user satisfaction. When comparing study findings, it can be noticed that design choices also entail ethical interventions that shape fairness, transparency, and trust in digital commerce. So, in localizing platforms, the study argues for the need to ensure that the design of visual elements reflects the local norms and ethical expectations.

Research consistently underscores the significance of transparency and cultural sensitivity in building trust in e-commerce. In their study of *AliExpress* in Indonesia, Shia et al. (2016) claimed that there is a significant gap between customer expectations and website performance. By way of illustration, if important information with regard to return or refund policies are obscured or overshadowed by promotional design, this certainly affected the consumer's perceptions. This evidence provides a foundation for examining how *AliExpress* frames deals and policies across its English (UK) and Arabic (Saudi) versions. Any difference in presentation between the two websites may strongly influence transparency and engage manipulation in digital commerce. The discussion on transparency and consumer trust is directly related to broader debates about the ethical risks embedded in AI-driven localization.

To address the ethical dimensions of AI-driven translation, Ghosh and Caliskan (2023) showed that machine translation systems can generalize gender and cultural stereotypes. This phenomenon was explored by Helm et al. (2023) who call it *techno-linguistic bias*. "It is observed when the technology, by design, represents, interprets, or processes content less accurately in certain languages than in others, thereby forcing speakers of the disadvantaged language to simplify or adapt their communication, (self-)representation, and expression when using that technology to fit the default incorporated in the privileged language" (Helm et al., 2023, p.9). The consequence is that minority languages and their perspectives may be marginalized in digital communication. Therefore, these findings raise important questions about fairness and inclusivity in AI-assisted localization. The danger of embedded stereotypes and techno-linguistic bias in global platforms may result in experiences of unfair discrimination among minority users. This case highlights the need for frameworks that can account for cultural context and ethical responsibility.

In the context of AI-assisted localization, scholars have observed that the structural features of the Arabic language cause failures in providing content compared to other languages. A significant challenge is that the Arabic language depends on roots and patterns, causing AI systems to struggle to process derivational morphology and templatic morphology (Zhang et al., 2023). Additionally, these systems mostly cannot identify the appropriate meaning without a clear context due to Arabic diacritical ambiguity. As a result, Arabic-speaking consumers may receive low-quality product information which leads to digital inequality, which Helm et al. (2023) refer to as "techno-linguistic bias". Zhu (2025) reinforces this point, arguing that AI tools may produce a target text that reflects Western assumptions embedded in their training data and achieves surface-level fluency. Consequently, the cultural register and the pragmatic appropriateness of the target text must be considered when producing appellative content aimed at Arabic-speaking consumers.

Although interest in AI-assisted translation has grown, relatively little detailed work has focused on Arabic e-commerce localization. Studies that do exist point to serious challenges. *Localization Quality Assessment for More Reliable E-Commerce Websites* (2022) notes recurring problems of poor translation quality, inconsistent terminology, and limited cultural adaptation, especially in promotional material. Zhang, Danial, and Walter (2023) add to this picture, showing that Arabic's morphological complexity and its dialectal diversity significantly affected machine translation output that resulted in awkward translation that may alienate users.

Taken together, these studies confirm that the difficulties of Arabic localization are also cultural ones. For platforms such as *AliExpress*, relying on automated systems without attention to these issues risks damaging consumer trust and perceptions of authenticity. For this reason, Arabic localization is a particularly useful context in which to study the intersection of translation, culture, and ethics. These localization challenges shed light on the ethical issues of relying on automation, a concern directly taken up in debates on situated ethics.

The challenges highlight the need for wider frameworks to guide automation in localization. Recently, the widespread view on universal applicability of 'global AI ethics' frameworks has been challenged. Mager et al. (2025) argue that principles such as privacy and transparency, that are regarded as universal ones, often reflect Western perspectives and may overlook the social and cultural diversity of other nations. To tackle this issue, the concept of 'situated ethics' was suggested by authors to emphasize locale contexts, concerns, and lived experience. In other words, these local perspectives must have context-specific interpretations. In practice, 'decisions about how policies and promotions are presented' must be reviewed by local experts to

develop digital ethics that respect the local culture. To conclude, the ethical design requires sensitivity to cultural norms and values rather than reliance on universal frameworks.

Translation studies has also examined professional responsibility in the age of automation. The professional translators in the Mutashar (2024) study emphasized the importance of becoming ethical mediators rather than just post-editors. He strongly advocated a cooperative model in which AI tools help human translators instead of taking their place. So, to reduce bias, it is crucial to make sure that AI-generated translations are culturally sensitive through human oversight.

This cooperative model between AI tools and human translators is gaining empirical support in recent translation process research. Briva-Iglesias, O'Brien, and Cowan (2023) demonstrated that post-editing improves translation quality and increases translators' control over the target text. Their study findings suggest that the ethical responsibility of the human translator is still crucial. Translators are ethical gatekeepers who ensure that the communicative and ethical standards of the target audience are met. As MT systems consistently produce inappropriate register and morphology in the Arabic context, translators' role is essential to ensuring that Arabic-speaking consumers receive equal access to product information.

Most prior studies treat MT, localization, and ethics separately. The present study seeks to integrate these dimensions in an empirical framework that analyzed and compared two localized versions of well-known platform. It draws an insight from translation studies and digital consumer ethics to evaluate how AI-generated localization shapes cultural meaning, influences consumer trust, and raises questions of ethical accountability.

3. Methodology

This study adopted a comparative qualitative case-study approach aiming at exploring the ethical challenges of AI-assisted localization. *AliExpress* English 'UK' and Arabic 'Saudi' websites provided an opportunity to investigate how the same global platform adapts its content to very different cultural and linguistic contexts. A case study approach was chosen to closely examine the interplay between textual, visual, and ethical elements. The analysis was based on a cohesive framework that incorporated translation, critical discourse analysis, and ethical principles. The adaptation of linguistic and cultural elements is evaluated using Venuti's (1995) concepts of domestication and foreignization. In addition, the three-dimensional model of Fairclough's CDA (1995) established a framework to link the localized text 'description' with the discursive and socio-cultural practices 'interpretation and explanation' which encompass ethical issues of fairness, transparency, and bias.

Data in this research were collected through synchronized browsing and systematic archiving of the English (UK) and Arabic (Saudi) websites of *AliExpress*. To ensure the materials' direct comparability, screenshots were captured under identical settings, utilizing the same device, browser, and browsing session. This facilitated the regulation of external variables such as algorithmic customization and time-sensitive sales campaigns.

The dataset consisted of a variety of website components: homepages, product description pages, promotional banners, and policy sections; for example, delivery, returns, and refund pages. For the purpose of selecting these elements to analyze, they signify critical points of user interaction with the platform and where localization choices are most visible. To allow multimodal analysis of textual and visual materials, all material was archived as images and as text extracts. Screenshots were captured using the macOS utility on a MacBook Pro and verified via the Internet Archive's Wayback Machine. These measures reduced distortions and enhanced the reliability of comparisons.

For this study, the analytical framework was used to explore insights from translation studies, critical discourse analysis, and digital consumer ethics. First, in order to assess the cultural and linguistic adaptation in localized content, Venuti's (1995) concepts of domestication and foreignization were applied. Then, the three-dimensional model of CDA by Fairclough (1995) was used to reinforce the analysis of localized content at the levels of textual description, discursive practice, and socio-cultural practice. After that, principles from digital consumer ethics 'fairness, transparency and inclusivity' were used as standards for assessing the ethical implications of AI localization. The purpose of integration is to offer a coherent framework that connected micro-level linguistic strategies to macro-level questions of ethics and consumer trust.

Triangulation was utilized to enhance methodological rigor and mitigate interpretive bias (Flick, 2017). This was achieved by synthesizing complementary viewpoints: employing translation studies for linguistic strategies, utilizing CDA for discursive and contextual analysis, and applying digital consumer ethics as the evaluative framework. Data analysis included visual, textual, and policy-related materials to make it more reliable. These procedures made the results more credible and reliable and set up a framework that can be used again in future research on AI-assisted localization. Instead of human participants, the researcher examined data from publicly available websites. This meant that they did not require ethical approval or permission. Personal or sensitive information was not collected, and the researcher committed to research integrity standards when handling archived materials.

This methodology offered a holistic approach for analyzing website localization by integrating linguistic, cultural, and ethical perspectives. More precisely, this approach assessed the broader implications of language and design for consumer trust and fairness. Situating the research within the realms of translation studies and digital consumer ethics enabled the study to move beyond descriptive comparison and to underscore the ethical implications of AI-assisted localization. Ultimately, this approach provided a profound insight into how global platforms such as *AliExpress* negotiate cultural differences and how these differences influenced user experiences across markets.

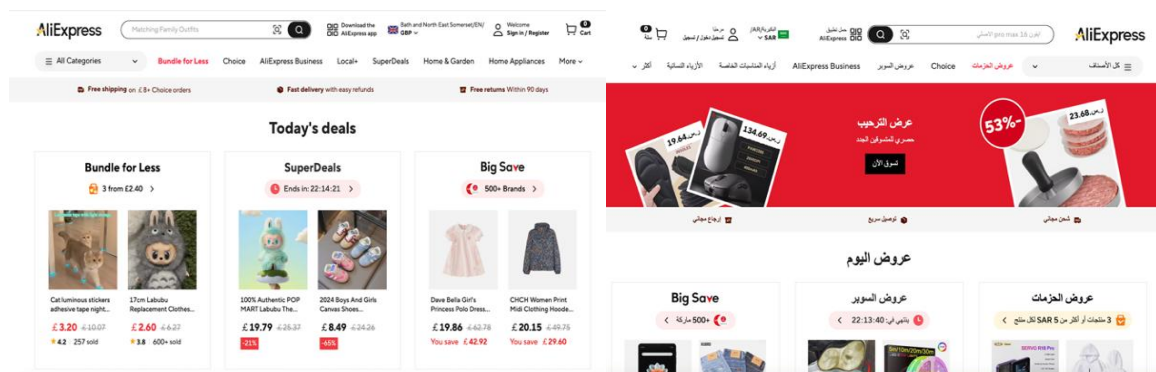
4. Findings and Analysis

This part of the study applies Venuti's (1995) notions of domestication and foreignization, Fairclough's (1995) three-dimensional CDA model 'description, interpretation, and explanation', and ethical principles of fairness, transparency, and inclusivity to assess how *AliExpress* localizes its content across linguistic and cultural boundaries. The comparative analysis of *AliExpress* UK and SA websites is represented in screenshots of interfaces, product pages, promotional banners and extracts from return/refund policies. Two representative product cases are analyzed: a Handaiyan lipstick and a men's autumn-winter hoodie. The materials were analyzed comparatively to detect shifts in language, layout, and meaning. The analysis is subdivided into three sections that illustrate the multimodal nature of localization; visual localization, textual localization, and policy localization with particular attention to return and refund pages.

4.1 Visual Localization

Figure 1

UK vs. Saudi user interface



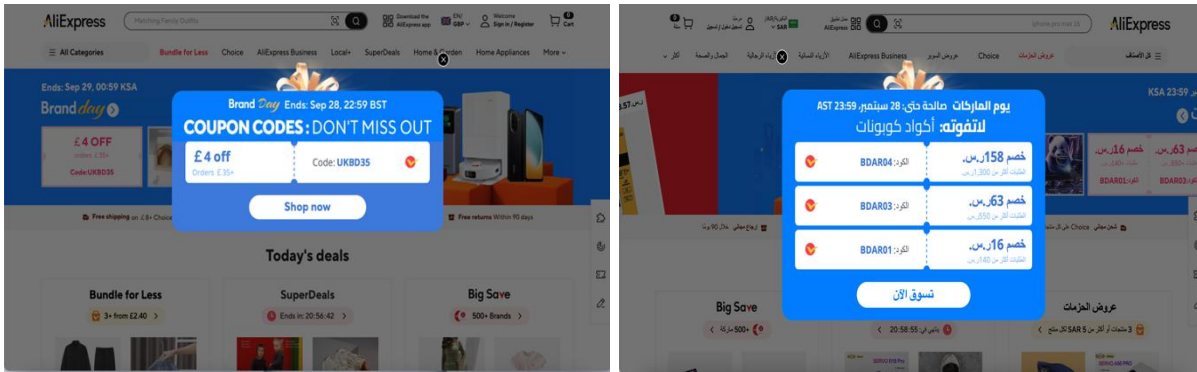
Note. Screenshot captured from AliExpress UK and Saudi interfaces for comparison.

As shown in Figure 1, the UK homepage interface presents a simple visual design, characterized by the use of neutral colors such as white and light gray with subtle red highlights. It is apparent from the picture that the interface displays products such as children's clothing, toys, and home items that convey a sense of family-oriented lifestyle. It can be noted that the UK interface adopts a domestication strategy. Content is carefully balanced and left-to-right aligned which can give an impression of simplicity and professionalism. Interestingly, such a representation indicates that it reflects the Western marketing culture that tends to emphasize functionality and clarity. For instance, the "today's deals" section includes three categories: "Bundle for Less, SuperDeals, and Big Save", these categories are organized symmetrically and supported by product images with clear prices. This design choice suggests that the English version adopts a pragmatic and informative tone and aligns with the rational persuasion strategies typical of Western digital marketing.

By contrast, the Arabic Saudi homepage employs a more visually intense layout. It is dominated by red banners and large promotional texts. The promotional banners occupy more space on screen and place emphasis on discounts, e.g., 53% خصم. At the interpretive level, the use of the color red makes the overall tone more appealing and energetic because it creates a sense of enthusiasm. The interface highlights technology-related products such as electronics and gadgets. The imagery presented on the homepage implicitly reinforces a stereotype of Saudi customers as being technologically driven in their consumption habits. Generally speaking, the Saudi site domesticates the Saudi market through the use of culturally localized elements such as the color red, large banners, and high-consumption products.

In a wider sense, the difference between the two interfaces reflects the cultural expectations in e-commerce design. It appears that both interfaces are domesticated at the visual and cultural level. Functionality and efficiency are prioritized in Western cultures. On the other hand, Arab customers respond positively to vibrant colors and promotions, which makes their shopping experience resonant with their culture. However, the structure of the UK interface is more balanced and organized, also policies, such as "free shipping on £8 + choice orders", are visible, which creates a transparent and trustworthy impression. The overall structure of the Saudi homepage is highly promotional and this results in concealing the important policy details. For example, phrases such as "free shipping, free return" lack a clear explanation of terms and conditions.

Figure 2
UK vs. Saudi pop-up



Note. Screenshot captured from AliExpress UK and Saudi pop-ups for comparison.

The pop-up in the UK version is concise, focusing on key information without exaggeration and is presented in a single code. In contrast, the Saudi version displays three codes, generating a sense of purchasing urgency. This feature implies a low-context Western style versus a high-context Arabic style, in which more details aim to persuade and attract consumer attention. Regarding the translation strategies, the Saudi site interface reveals a major inconsistency in rendering elements in Arabic. Some terms such as "عرض الترحيب و عروض الحزمات" are culturally adapted in ways that align with the local Arabic notions of hospitality. Other terms such as "big save and choice" remain untranslated and this may confuse non-English-proficient consumers. This linguistic hybridization through the combination of well-localized and untranslated items results in undermined consistency and clarity.

Overall, this comparison suggests that localization of the user interface extends beyond the linguistic features to include the cultural communication style. This is evident in how the UK site domesticates the user experience through functional simplicity. However, the Saudi site uses emotional amplification and visual persuasion to make the experience more relevant for local consumers.

4.2 Textual Localization

A notable difference between the UK and the Saudi sites is observed regarding two product descriptions, lipstick and winter men's hoodie. The language of the English page is concise, descriptive, and factual. It uses phrases such as "sexy nude red brown purple lipgloss, matte lip gloss velvet lipstick matte waterproof makeup long lasting cosmetic" that focus on listing descriptive adjectives that describe the product. Although the product description is dense, the tone is practical and businesslike, aiming to present key product features: color, texture, and longevity without making any emotional appeals. In the same way, the language of the promotional tags like "today's deal" on the homepage is brief and remains functional within online marketing norms. Thus, the English page follows practical and direct discourse that matches the marketing values of clarity and efficiency in the West.

In contrast, the Arabic translation directly mirrors the English version, producing unnatural, semantically poor text. The product title of the lipstick is semantically incoherent and lacks an idiomatic rendering of the ST "مثير عارية الأحمر البني الأرجواني ملمع". It resembles a list of keywords than a persuasive description of a product. It can be seen that this is typically a machine translation output with no post-editing; the translation therefore seems inaccurate. Beyond issues of translation quality, additional localization inconsistencies emerge; hoodie sizes show inconsistent localization. While smaller sizes remain in Latin letters (M), larger sizes are translated to Arabic (J for Large, اكس ال for XL), while 2XL and 3XL remain in Latin. Both products show currency localization; however, the lipstick price in the Saudi site (£ 4.59) is slightly cheaper than the UK site (£ 5.35) after conversion.

In terms of item description, the English version consists of short factual sentences, for example "the texture is soft and delicate, fresh and not greasy, and compact and easy to carry". The English version employs lexical repetition to fulfill the marketing purpose of search optimization. The tone here is promotional but consistent with the norms of Western e-commerce. The Arabic text renders it literally "لملمس ناعم ورقيق طازج وغير دهني". The translation looks artificial and stylistically inappropriate. The text lacks naturalness in its marketing language and does not use common Arabic collocations like "ناعم ملمس أو حريري" that are found in Arabic online marketing. Unidiomatic phrasing such as "أحمر الشفاه مثير" represents a form of unintentional foreignization; it retains the foreign tone instead of domestic fluency. This undermines the readability of the Arabic text. A similar issue appears in the description of the hoodie that replicates the English phrases to maintain the foreign syntactic rhythm: "كم طويل مبطن بالصوف ... مثالية لمختلف المناسبات غير الرسمية ... مستوحاة من اتجاهات الموضة الكورية".

More importantly, the technical specification contains a misinterpretation in rendering phrases such as "المواد الكيميائية عالية القلق", which is the literal translation of "high-concern chemicals". It distorts the meaning and misinterprets the safety information. The literal structure of machine translation reveals a lack of discursive adaptation expected in localized marketing. Regarding terminology, some of them are borrowed from English, such as casual hoodie and long-lasting; the foreign terms are used to serve searchability and to project a global fashion identity. However, there are numerous risks associated with extensive borrowing within the Saudi localization context. First, relying on English borrowing can create linguistic distance between the text and local users. Users may feel alienated when they are exposed to foreign terms. As Venuti describes, the dominance of the source-language ideology may gradually erode the local linguistic identity. Also, borrowed jargon may obscure important information regarding material type, product function, and shelf life. Finally, the extensive borrowing may make languages sound the same and obscure local conceptual meanings; therefore, the communication with target audiences is not fair. The English version shows a domesticated and practical approach. It prioritizes clarity and product features over emotional language. Its goal is to make this information more useful for the target audience. By contrast, cultural domestication is invisible in the Arabic version in the product pages that have been discussed. Through direct transfer of structure and terminology, the translation fails to conform to Arabic linguistic standards and meet readers' expectations. This represents pseudo-foreignization or literal transfer where the translation demonstrates no localization attempts at all. It illustrates that there is an imbalance in the international e-commerce discourse that overlooks linguistic clarity.

4.3 Policies Localization

Return and Refund Policies are discussed as indicators of ethical transparency and consumer trust. Unfortunately, policies on the Arabic page are not localized in Arabic. Rather than rendering this section in another language, the text is shorter and critical details regarding exceptions and refund methods are omitted. This creates an accessibility barrier for many users as they are left with linguistically inaccessible content. A serious ethical concern relating to fairness and transparency is demonstrated by *AliExpress*'s failure to translate this section into Arabic. This constitutes digital exclusion that violates the principles of fairness and inclusivity essential to digital commerce.

From an ethical perspective, the ethical divergence between the two versions does not lie only in direct manipulation but also involves the omission of information. The English text is easy for customers to understand, while the Arabic version seems inaccurate and hard to interpret. As mentioned earlier, the term "المواد الكيميائية عالية القلق", "high-concern chemicals" exemplifies that poor translation can foster misleading perceptions regarding product safety.

In terms of digital consumer ethics, these practices discussed above undermine the core principles of ethical localization: transparency, fairness, and trust. It misleads the Arabic consumers through unclear and unnatural information, which signifies an ethical issue in undermining communicative equity across languages. The language of the English version seems technical and communicative; however, due to over-reliance on automation in providing the Arabic description, it fails to achieve accessibility. This may affect the users' trust as it is hard for customers to understand the specifications of a particular product.

5. Discussion

The study set out with the aim of assessing AI localization of e-commerce websites. When the *AliExpress* UK and Saudi websites were compared, the study found that localization practices are not identical across the UK and Saudi sites and revealed an uncritical reliance on AI localization, which led to inconsistent and ethically compromised results. The study also demonstrated a significant ethical divergence rooted in the fundamental imbalance in communicative equity across visual, textual and policy elements. These findings have been interpreted through Venuti's concepts of domestication and foreignization, the three dimensions of Fairclough's CDA model, and digital ethics principles.

It can be argued that both versions tend to domesticate the user experience. The Saudi site employs a visual style of bright colors and different codes to capture immediate attention, placing more emphasis on urgency than clarity and sacrificing transparency for marketing appeal. Through the organized design of the UK site, it reflects Western culture that is geared toward trust and rationality. In general, it can be said that each interface produces a different cultural discourse that reflects consumer values in e-commerce.

However, at the textual level, the Arabic text of product titles and descriptions were characterized by unedited machine translation that resulted in content that retained the foreign textual features of the English text. Therefore, texts sound awkward and culturally inappropriate in the Arabic commercial context. The literal transfer is particularly problematic when translating important safety phrases, such as the misrepresentation of the phrase "high-concern chemicals". This error in rendering the Arabic phrase implies a breach of fairness and transparency that customers demand. The pervasive use of unedited loan words reinforces Venuti's source-language ideology in which international search optimization is prioritized over providing Arabic terms. Failing to adhere to target language linguistic norms leads to what Helm et al. (2023) refer to as techno-linguistic bias. The omission of the translation of return and refund policies on the Saudi site formed a discursive barrier to accessing essential information customers need. This omission reinforces the critical role of a human translator as an ethical mediator to ensure that content is linguistically accurate, accessible, and culturally appropriate. If the platform intentionally or unintentionally denies

Arabic-speaking customers from their right to access this content, this is a serious fundamental imbalance in communicative equity. In *AliExpress*'s case, the omission of policies represents a practical failure to achieve transparency and fairness. The above discussion provided compelling evidence that AI-generated localization is not neutral and highlights the necessity of human oversight. The findings of the current study corroborate previous research by Mutashar (2024), who asserts the need for a cooperative model that fully engages human editing and revision of AI-generated translation to fit the target audience needs.

5.1 Limitations of the Study

The findings of this study are subject to at least three limitations. First, only one e-commerce platform was analyzed, which restricts the generalizability of the results. E-commerce websites with different policies and budgets may employ various localization strategies and human oversight procedures, resulting in different ethical outcomes. Another challenge lies in applying Venuti's concepts of domestication and foreignization to AI-generated translations. These strategies were originally formulated in the context of human translation and rely on an understanding of the translator's intent and the target audience. As such, it becomes difficult for the researcher to clearly classify the localization choice as either domesticating or foreignizing. The absence of translator's intent in AI localization necessitates the researcher's interpretive judgement of these practices. This interpretive challenge extends to the evaluation of ethical issues in this paper, which depends on the researcher's qualitative interpretation of the data. Third, the data collection process involved evaluating a static snapshot of *AliExpress* web pages at a particular point in time. Because of the dynamic nature of AI-generated localization, content is continuously revised and tested. Therefore, the results may reflect the quality of AI localization at the time of the collection and not reflect the overall performance of the AI.

6. Conclusion

This study was undertaken to trace the ethical challenges in AI-assisted localization through a comparative case study of the *AliExpress* UK and Saudi websites. Through comparative analysis, it can be said that the UK site is highly localized, whereas the Saudi site is a semi-localized website. The promotional features on the Saudi homepage seem to be successfully localized and adapted to the target culture. In contrast, the product content was largely produced by machine translation with no adjustments were made. The analysis offers some insight into the inadequate performance of AI in localization, including textual misinterpretation and policy omission that reflect the platform's failure to uphold the ethical principles of fairness, transparency, and inclusivity. The study enhances our understanding of the limitations inherent in AI localization practices, specifically their shortcomings in addressing ethical implications. Based on these findings, several recommendations emerge. First, global e-commerce platforms should implement compulsory human post-editing especially for high-stakes content. Second, it is necessary to adopt quality assurance metrics that explicitly evaluate the fairness, accessibility, and cultural integrity of localized content. Finally, further investigation of AI localization of Arabic e-commerce websites is strongly recommended to develop more contextually sensitive and ethically sound machine translation algorithms.

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