To Mix or Not to Mix? A Study of English-Vietnamese Code-Mixing in Vietnamese Weekly Magazines

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ABSTRACT

Vietnam is becoming increasingly interconnected with modern Asia and the wider global community across professional, cultural, and social spheres. This study investigates how English terms are used in Vietnamese magazine articles, exploring how such usage aligns with broader sociolinguistic trends and is shaped by the sociocultural context of contemporary Vietnam under globalisation. Framed within sociolinguistics, this mixed-methods study examines systematic patterns of code-mixing in the media, drawing on a substantial and carefully curated corpus of over 500,000 words from magazine articles published in 2024 targeting the educated general public. Three key research questions guide the analysis: (1) Which English terms appear in Vietnamese magazines, and what are their frequencies and distributions? (2) What patterns and functions do these borrowings serve? (3) What are the morphological and phonological characteristics of both non-English and Vietnamese-adapted English terms? The findings revealed that English borrowings accounted for less than 1% of the total word count across all thematic subsets. Their presence varied significantly by topic, with technology- and science-related articles, as well as those on music, travel, and cuisine, showing higher concentrations of foreign terms. Adapted English terms exhibited notable phonological and morphological features, while a small number of borrowings from French, Korean, Indonesian, and Malay were also identified. These findings reflect Vietnam's dynamic engagement with both Western and Asian cultural and geopolitical influences. The study contributes to our understanding of Vietnam's evolving media landscape and offers meaningful insights to the Asian Englishes research agenda.

Keywords: sociolinguistics; code-switching; code-mixing; English-Vietnamese code-mixing; Vietnamese weekly magazines

INTRODUCTION

Sociolinguistics, the study of the relationship between language and society, provides a crucial lens for understanding how languages interact and evolve. It examines how linguistic variation arises in different social contexts (Meyerhoff, 2018; Trudgill, 2000) and how social structures shape language use (Wardhaugh & Fuller, 2021). Code-switching and code-mixing have long been popular areas of research within the framework of sociolinguistics (Moody, 2020). However, the recent acceleration of globalisation has intensified scholarly attention on these phenomena, particularly in relation to English as a global language. Studies have increasingly documented English's influence across various contact scenarios, from literature (Haruna & Christopher, 2016; Octavita, 2017) and education (Nguyen, 2024), to entertainment (Aqsha & Zaim, 2024; Asrifan et al., 2021; Swandani et al., 2022), and advertising (Dąbrowska, 2022; Trakulkasemsuk & Tontiwatkul, 2018). Nowhere is this phenomenon more evident than in the media, where language use reflects shifting social identities, cultural affiliations, and communicative needs. This has sparked a growing body of research on English code-mixing in social media (Fitria, 2020; Patro et al., 2017; Verschik & Kask, 2019) and print or online media (Febiyaska & Ardi, 2019; Fotiou,

2017; Hsu, 2019; Nugraeni & Setiawan, 2021; Selemeneva, 2020; Syafryadin & Haryani, 2020; Syafryadin et al., 2020; Thongsombat et al., 2021).

Within this framework, the present study examines the use of English borrowings in Vietnamese discourse. Although Vietnamese is classified as a low-resource language, it has been described as having "borrowed heavily from English" (Haspelmath, 2009, p. 45). This study draws on a unique dataset of Vietnamese weekly magazines to systematically investigate how English borrowings reflect broader sociolinguistic trends in contemporary Vietnamese society. Newspapers and magazines serve as powerful conduits of cultural and linguistic influence, shaping English usage in different regions (Mukherjee & Bernaisch, 2015). Their wide readership ensures the dissemination of linguistic innovations, making them an invaluable resource for studying the adaptation and localisation of English in other languages.

This study addresses the following key questions: Which English terms appear in Vietnamese magazines, and what are their frequencies and distribution? What patterns and functions do these borrowings serve? Additionally, we expand the scope beyond English to examine non-English borrowings, analysing their morphological and phonological characteristics. By addressing these questions, this research contributes to the growing scholarship on language contact in Asia, a region of immense linguistic and cultural diversity. While previous studies have focused on code-mixing in well-researched languages or specific social groups, our study represents the first large-scale analysis of English-Vietnamese code-mixing in mass media. Importantly, this study advances sociolinguistic theory by demonstrating how English borrowings interact with local linguistic norms in a low-resource Asian language, thereby extending existing models of code-mixing and lexical borrowing. Beyond shedding light on English's role in Vietnam's evolving linguistic landscape, this study offers deeper insights into how English functions within Asia's multilingual fabric - shaped by technological advancements and unique sociocultural dynamics.

LITERATURE REVIEW

In sociolinguistics, *code-switching* and *code-mixing* both refer to language alternation, but they describe distinct phenomena. Code-switching involves shifting between languages or dialects at sentence or clause boundaries, often across longer stretches of discourse (Hayat, 2019; Wardhaugh, 2010). In contrast, code-mixing typically entails the insertion of words or phrases from one language into another within a single sentence or utterance, usually without a change in topic or context. When this involves isolated lexical items, the term *borrowing* is sometimes used interchangeably with *code-mixing*. However, as Haspelmath (2009) clarifies, borrowing differs significantly: it occurs when a word from one language is permanently adopted into the lexicon of another and typically undergoes phonological and morphological adaptation. Haspelmath (2009, p. 36) emphasises that "code-switching is not a kind of contact-induced language change, but rather a kind of contact-induced speech behaviour."

These linguistic phenomena are widely observed across both outer-circle and expanding-circle countries. This breadth of research across linguistic contexts highlights the global appeal and functional adaptability of code-mixing as a tool for communicative efficiency, social signalling, and cultural hybridity. In outer-circle countries, where English has an institutionalised presence, code-mixing is particularly prominent in languages such as Hindi (Ali et al., 2019; Patro et al., 2017), Indonesian (Aziz et al., 2019; Febiyaska & Ardi, 2019; Firima, 2018; Nugraeni &

Setiawan, 2021; Syafryadin & Haryani, 2020), Sinhala (Senaratne, 2017), and Urdu (Ehsan & Aziz, 2014; Hayat, 2019; Khan, 2014; Riaz, 2019). These studies highlight how English is woven into everyday communication, often signalling modernity, prestige, or technological advancement.

In expanding-circle countries, where English does not hold official status but enjoys widespread influence, code-mixing assumes other sociolinguistic roles. Research on European languages such as French (Martin, 2002), Italian (Vettorel & Franceschi, 2019), and Polish (Dąbrowska, 2022) illustrates how English borrowings and switches have permeated even traditionally resistant linguistic landscapes. A similar trend is observed in Asian languages, albeit shaped by local sociocultural motivations. Studies on Chinese and Cantonese (J. Y. Chan et al., 2006; K. L. R. Chan, 2018; Chen, 2015; Hsu, 2019; Zhang, 2019), Arabic (Salah, 2023), Egyptian Arabic (Gad, 2019), Japanese (Nishimura, 1995), and Thai (Aungsuwan, 2018; Kunarawong, 2014; Thongsombat et al., 2021) further reveal how English serves as a marker of globalisation, youth identity, and digital culture.

Notably, studies on Vietnamese (Nguyen, 2024; Tran & Do, 2015) underscore the increasing visibility of English in both media and academic domains; however, there remains a lack of systematic, large-scale analyses examining the specific patterns, frequencies, and sociolinguistic functions of these borrowings in everyday discourse. Existing research tends to focus either on specific educational contexts or general observations of English influence, without offering detailed empirical insights into how English terms are integrated, adapted, and utilised within Vietnamese mass media. This study seeks to fill this gap by providing a comprehensive corpus-based investigation, thereby contributing nuanced evidence to current understandings of English's role in Asian multilingual societies.

The complex nature of language contact phenomena has led to a wide range of classifications for code-switching, code-mixing, and borrowing. Gumperz (1982, as cited in Akhtar et al., 2016), for instance, distinguishes between inter-sentential, intra-sentential, and tagswitching, and further categorises code-switching as situational or metaphorical depending on the communicative context. Myers-Scotton's (2006, as cited in Asrifan et al., 2021) Markedness Model adds a psycholinguistic dimension, suggesting that speakers choose either marked or unmarked code-switches based on social and communicative expectations. In the realm of codemixing, linguistic form provides another basis for classification: Asrifan et al. (2021) identify words, phrases, clauses, idioms, hybrids, and reduplications; Chen (2015) categorises code-mixing mechanisms into insertion, alternation, and congruent lexicalisation. Mellado and Lignos (2022) distinguish intrasentential code-switching from lexical borrowing, while Janhom (2011, as cited in Akhtar et al., 2016) offers a typology based on nativised features, including truncation, hybridisation, semantic conversion, reduplication, and word order shift. Haspelmath (2009), focusing on borrowing, contrasts core borrowings (basic vocabulary) with cultural borrowings (new or foreign concepts). These overlapping but distinct frameworks reflect the need for contextsensitive, multidimensional approaches to understanding multilingual practices.

The motivations behind code-switching, code-mixing, and borrowing are equally diverse, shaped by a mixture of social, psychological, and communicative needs. Kachru (2005) outlines three primary purposes: role identification, register identification, and elucidation. These are echoed in more recent work emphasising factors such as social relationships, age, gender, class, and speaker attitudes (Khan, 2014; Kunarawong, 2014). In educational settings, language alternation serves various functions: to express identity and solidarity or avoid misunderstandings. Prestige is another key factor. Salah (2023) observes that English is often used to enhance social standing, particularly among students.

Tadmor (2009) observes that borrowing rates vary significantly across different semantic fields. Fields that are least prone to borrowing typically involve concepts that are universal across human societies — such as sense perception, spatial relations, the body, and kinship — since nearly all languages already possess native terms for these domains. In contrast, fields more susceptible to borrowing often involve culture-specific or externally influenced concepts. These include religion and belief systems, clothing and grooming, and domestic life — areas frequently impacted by intercultural contact and social change. Tadmor's findings thus highlight the importance of considering not only grammatical or phonological factors, but also semantic and cultural dimensions when analysing code-mixing and lexical borrowing.

In light of the above, the present article adopts code-mixing as a cover term to refer to all instances in which non-Vietnamese lexical items appear in Vietnamese articles. This decision is grounded in the observation that the vast majority of such instances are intrasentential.

METHODOLOGY

CORPUS DESCRIPTION

This study is based on a corpus of articles published in *Tuổi Trẻ Cuối Tuần*, a highly reputable Vietnamese weekly magazine. *Tuổi Trẻ Cuối Tuần* is produced by *Tuổi Trẻ*, one of Vietnam's most well-established and widely circulated newspapers. Available in both print and online formats, the magazine covers a diverse range of topics, including three sections with 32 sub-sections. This periodical is recognised for its in-depth analyses, investigative journalism, and insightful commentary, making it a trusted source of information for intellectuals, policymakers, and the general public. Given its broad readership and diverse content, the magazine serves as an ideal source for examining the integration of foreign words and expressions into Vietnamese. Its journalistic style frequently incorporates foreign terms to convey modern concepts, technological advancements, and global influences, providing rich data for sociolinguistic analysis. Furthermore, the magazine's credibility and influence in shaping public discourse reinforce its value as a resource for studying linguistic trends, including the adoption and adaptation of foreign vocabulary in contemporary Vietnamese. The corpus was limited to all 50 issues published in 2024.

Specific criteria were established for selecting topics as data: (1) The articles were available in the online version to facilitate word count measurement, data collection, and analysis; (2) the topics covered both global and domestic issues; those exclusively concerned with domestic matters were excluded; (3) articles written by a single author in dedicated subsections were excluded to minimise idiosyncratic stylistic influences; and (4) all forms of creative writing were omitted from the corpus. Based on these criteria, thirteen thematic groups were selected.

Within each theme, articles were downloaded in reverse chronological order, starting from the most recent. The size of each thematic subset was constrained to approximately 60,000 running words to ensure the corpus remained manageable for a comprehensive analysis encompassing multiple dimensions. For the thematic subsets with a low total word count resulting from both the short length of articles and the limited number of articles over the 12-month period, all issues from 2024 were included. As a result, the number of issues included in the corpus varied across the thirteen thematic groups. The final corpus comprised 540,979 running words extracted from 416 articles. Table 1 provides an overview of the corpus, detailing the thematic groups, the number of articles analysed per theme, the total word count per theme, as well as the maximum and minimum word counts per article within each theme.

TABLE 1. Corpus summary by themes and word metrics

Theme	No. of articles	Word count	Max. of words per article	Min. of words per article
1. International News	39	52.347	2.283	870
2. Economy	38	46.708	1.947	894
3. Technology	35	46.626	2.497	948
4. Education	27	38.459	2.091	849
5. Health	36	56.023	2.128	601
6. Science Insights	30	38.199	2.023	605
7. Environment	44	59.096	2.308	665
8. Culture	42	61.956	3.242	490
9. Music	15	23.582	2.113	1.082
10. Cinema	14	21.221	2.059	851
11. Fine Arts	6	5.455	1.940	538
12. Sports	62	45.748	1.772	240
13. Travel & Cuisine	28	44.010	2.539	858
Total	416	540.979		

Thirteen thematic subsets were stored as Word files. Each article was initially downloaded from the magazine's specific thematic categories along with its title, word count, and publication date. Articles were then perused to eliminate those which did not contain any foreign terms. Up to 59 articles, accounting for 14,18 %, were excluded from the corpus. The remaining articles were then screened carefully independently by the authors according to the following criteria, to record the borrowings.

ANALYTICAL FRAMEWORK

The identification and analysis of borrowings was piloted with five issues of the print magazines. The pilot phase revealed the pervasiveness of foreign names, leading to our decision not to include the proper nouns in the data. Proper nouns, easily identified by capitalisation and meaning, were excluded, including foreign names of individuals, organisations, institutions, programs, etc. The following cases were also excluded: acronyms of units of measurement (e.g., µg, kg, l, GB, h), single-letter acronyms (e.g., F/F); molecular formulas (e.g., CO₂, H₂O, NO₂), direct quotations and foreign terms embedded within them, and foreign words mentioned as illustrations. For instance, in the extract from MIT Technology Review, the word 'enter' was excluded:

Trong một bài trình diễn minh họa cho MIT Technology Review hồi tháng 4, CEO Cleanlab Curtis Northcutt gõ một câu đơn giản vào ChatGPT: Trong từ enter có mấy chữ cái n? Chatbot này trả lời ngay, 'Chữ n xuất hiện một lần trong từ enter.' Vẫn câu hỏi đó, Northcutt hỏi tới hỏi lui vài lần, tới khi ChatGPT nói: 'Chữ n xuất hiện hai lần trong từ enter.'

[04/06/2024]

Borrowings were identified in terms of tokens, with a token defined as an individual occurrence of a word or word-like unit in a text. Items were identified based on meaning and syntactic structure. For instance, the noun phrase 'imperial presidency' was counted as one token, while with 'drone mini', reflecting Vietnamese syntax where an adjective follows a noun, 'drone' and 'mini' were counted separately as two entries. Items originally accompanied with abbreviations, such as 'decabromodiphenyl ether (decaBDE)', were counted as one token. Within each article, only the first occurrence of each foreign item was recorded, while subsequent repetitions, serving a textual function and contributing to lexical cohesion, were omitted.

Figure 1 summarises the data collection procedure, including the number of articles, tokens, and items at each stage. First, borrowings were categorised etymologically into two groups: English items and non-English items. The former group was then further screened to identify items that could not be counted as proper English lexicon due to typographical modifications in accordance with Vietnamese conventions — namely, 'adapted borrowings' in contrast with 'direct borrowings.'

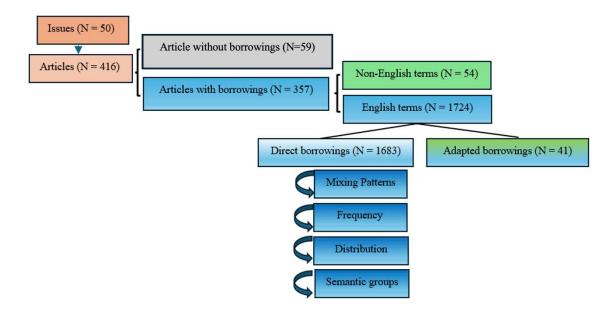


FIGURE 1. Data Collection Procedure with Article, Token/ Item Counts at Each Stage

DATA ANALYSIS

Only the list of direct English borrowings underwent in-depth analysis in terms of mixing patterns, frequency, distribution, and semantic grouping. The analysis was conducted sequentially, starting with the qualitative identification and categorisation of terms, followed by a quantitative analysis to generate frequency and distribution statistics. Coding categories were developed inductively from the data and refined through iterative reading. To ensure coding reliability, two authors independently coded the dataset. Inter-coder agreement was calculated, yielding an agreement rate of 92%, and discrepancies were resolved through discussion to reach full consensus. All quantitative analyses involved simple counts managed using Excel and Word processing tools.

FINDINGS

OVERVIEW OF BORROWINGS IN VIETNAMESE MAGAZINES

The analysis reveals that among the corpus, 59 articles (14.18%) do not include any borrowings, and the presence of foreign terms varies significantly across different thematic subsets. (Table 2). Notably, the Sports category has the highest number of articles without foreign terms (40.32%). International news (23.07%) and culture (19.04%) also have a considerable proportion of articles without foreign terms. In contrast, the Health and Cinema sections contain no articles without

foreign terms, indicating a high degree of foreign term integration. Technology (2.85%) and Science insights (3.33%) show minimal avoidance of foreign terminology. These findings suggest that certain domains, particularly Sports, International news and culture, may exhibit a stronger preference for native language use, whereas technology- and science-related topics tend to incorporate more foreign terms. As can also be seen in Table 2, English terms constitute a very small fraction of the total word count across all thematic subsets, with percentages consistently below 1%. The overall proportion of English terms is 0.31% (1,683 occurrences in 540,979 running words). The highest percentage is found in the music (0.55%) and travel & cuisine (0.52%) subsets, while the lowest appears in International news (0.12%) and Fine arts (0.18%).

TABLE 2. Distribution of articles without foreign terms and frequency of English terms across subsets

Thematic Subsets	Articles witho	ut foreign terms	Articles with English terms	
·	Number	Percentage	Number of English terms	%
1. International news	9	23.07	63	0.12
2. Economy	3	7.89	111	0.24
3. Technology	1	2.85	195	0.42
4. Education	3	11.11	95	0.25
5. Health	0	0	248	0.44
6. Science insights	1	3.33	166	0.43
7. Environment	4	9.09	139	0.24
8. Culture	8	19.04	153	0.25
9. Music	1	6.66	130	0.55
10. Cinema	0	0	52	0.25
11. Fine arts	1	16.66	10	0.18
12. Sports	25	40.32	92	0.20
13. Travel & cuisine	3	10.71	229	0.52
	59	14,18	1683	0.31

In addition to the predominant presence of English borrowings, the analysis identified a minimal presence of non-English terms (Table 3). French stands out as the most significant contributor, offering culinary, cultural, and literary terms such as bûche de Noël, café au lait, or poète maudit. Japanese terms like ukiyo-e and tsumamono, Korean terms such as jayu or minju, and Indonesian or Malay terms like bebas aktif or gulai banak reflect Vietnam's dynamic engagement with various Asian cultural and geopolitical influences. Scientific nomenclature appears in entries such as Capsicum spp. or Piper nigrum. Most of these borrowed terms are represented using the Latin script to approximate their pronunciation. Representations in the original or slightly adapted scripts are far less common, with only a few cases found, including tōgarashi, 豉油, āhuacatl, and vergangenheitsaufarbeitung. This linguistic diversity highlights Vietnam's global cultural exchanges and the evolving nature of its modern media landscape.

TABLE 3. Non-English borrowings identified in the corpus (N = 54)

French (26)	Pardessus	Latin (3)	Spanish (3)
art nouveau	pâté chaud	Capsicum spp	salsa macha
bande dessinée	pâté	Piper nigrum	sillao
baba au rhum	poète maudit	Ioeides	mojito
bûche de Noël	Poule d'Indes	Japanese (6)	Indonesian/Malay (2)
café au lait	réveillon	hagwon	bebas aktif
C'est la vie!	rhum	juku	gulai banak
dinde	savon	nandina	German (1)
dindon	s'endimancher	tōgarashi	vergangenheitsaufarbeitung
diphtérite	Trop d'impôt tue l'impôt!	ukiyo-e	Miscellaneous (5)
fraîche	Italian (2)	tsumamono	āhuacatl

Jambon Japonisme manteau mille feuilles	praktios pullati <i>Korean (2)</i> jayu	Chinese (3) 豉油 neijuan chaufa	bina ganne ka ras Oreshnik cheir
Noël	minju	Portuguese (1)	
œuf au plat		Cabreúva	

A detailed examination of the 41 English terms adapted into Vietnamese highlights several phonological and morphological characteristics central to their adaptation (Table 4). Phonologically, many terms exhibit a simplification of syllable structures and the use of alternative letters to better fit the phonetic patterns of Vietnamese. For example, 'amoniac' and 'nikel' replace English consonant clusters with easier-to-pronounce syllables. Additionally, vowels and consonants are often substituted to match the Vietnamese phonemic system, as seen in 'canxi' for 'calcium', 'crom' for 'chromium', 'clorat' for 'chlorate', or 'hidroxit' for 'hydroxide'. In one case, diacritics are used (e.g., 'balô'). Morphologically, these terms tend to adopt a truncated form of the original words, often dropping the final 'e', as seen in 'caffein', 'enzym', 'hormon', 'limonit', or omitting certain syllables, such as in 'calo', 'canxi', 'centimet', 'hydro', 'magie', 'mangan', 'miligam', and 'milimet'. The general trend is that the adapted terms are shorter than the original English words. Furthermore, the adaptation often involves alternation of word order to fit Vietnamese grammatical rules, such as in 'acid amin' (amino acid) and 'acid lactic' (lactic acid). These adaptations ensure that technical and scientific terms are accessible while maintaining some connection to their foreign roots. The overall process reflects a blend of linguistic convenience and phonetic approximation to align with Vietnamese phonology.

TABLE 4. Vietnamese-adapted English borrowings (N=41)

acid/axit amin [amino acid]	centimet [centimetre]	mili [milli-]
acid axetic [acetic acid]	crom [chromium]	miligam [milligram]
acid citric [citric acid]	enzym [enzyme]	milimet [millimeter]
acid clohydric [hydrochloric acid]	este [ester]	natri [sodium]
acid lactic [lactic acid]	hidroxit [hydroxide]	natri hydroxid [sodium hydroxide
amoniac [ammonia]	hormon [hormone]	nikel [nickel]
asernic [arsenic]	hydro [hydrogen]	nito [Nitrogen]
acid/axit [acid]	jean [jeans]	nito dioxide [Nitrogen dioxide]
axit pyroligneous [pyroligneous acid]	kali clorat [potassium chlorate]	oxit /oxid [oxide]
balô [ballot {French}]	limonit [limonite]	oxit nitric [nitric oxide]
cacbonat [carbonate]	magie [magnesium]	oxy [oxygen]
caffein [caffeine]	mangan [manganese]	silic [silica]
calo [calorie]	methan [methane]	tivi [TV, television]
canxi [calcium]		vani [vanille]

In the following sections, we will conduct an in-depth exploration of the most dominant group of borrowings — direct English borrowings — analysing their incorporation into Vietnamese news, their frequency and distribution, and their semantic characteristics.

ENGLISH BORROWINGS IN VIETNAMESE MAGAZINES: PATTERNS AND FUNCTIONS To capture the patterns and functions of mixing English in the Vietnamese magazines, we analysed how English terms were integrated into the Vietnamese texts. From this perspective, two broad patterns were identified – unmarked and marked (Table 5).

TABLE 5. Marked and unmarked patterns of English borrowings in Vietnamese magazines

Theme	No. of	Mixing patterns	
	tokens	Marked	Unmarked
1. International news	63	14	49
2. Economy	111	30	81
3. Technology	195	48	147
4. Education	95	30	65
5. Health	248	53	195
6. Science insights	166	61	105
7. Environment	139	23	116
8. Culture	153	51	102
9. Music	130	37	93
10. Cinema	52	27	25
11. Fine Arts	10	5	5
12. Sports	92	15	77
13. Travel & cuisine	229	54	175
Total	1683	448	1235

The quantitative analysis reveals that the unmarked group is approximately more than double that of the marked group and occurs more frequently than the marked one across nearly all thematic categories. The only exceptions are Fine Arts and Cinema, where the former exhibits an equal number of marked and unmarked instances, while the latter shows approximately the same frequency. The marked borrowings are explicitly flagged with punctuation, indicating their foreign nature or specialised function.

The unmarked group consists of English borrowings that remain untranslated or uninterpreted and are seamlessly integrated into written discourse. These foreign terms are presumed to be familiar and comprehensible by the target audience within specific domains. This pattern of use is prevalent across all thirteen themes. The following excerpt illustrate this unmarked pattern.

Với sự tăng trưởng mạnh mẽ của Nvidia trong năm 2024, tài sả ròng của CEO Jensen Huang cũng tăng vọt. Theo Bloomberg Billionaires Index, Huang đã bổ sung thêm 76 tỉ USD vào tài sản của mình kể từ đầu năm, nâng tổng giá trị tài sản lên 117 tỉ USD.

[31/12/2024]

The qualitative analysis of marked borrowings highlights the dynamic ways in which English interacts with Vietnamese across various contexts. Based on punctuation and function, four distinct methods of integrating English borrowings have been identified.

English terms are enclosed in parentheses for clarification. These include English terms within parentheses, following the Vietnamese words or expressions, often used for technical or scientific terminology. This usage helps to provide additional information, making the text more accessible to readers unfamiliar with specific English terms. It aids in explaining complex concepts, technical terms, or foreign concepts in a way that bridges the gap between Vietnamese and English-language content, ensuring comprehension without interrupting the flow of the article.

Để làm được điều đó, Ichikawa tin tưởng vào tầm nhìn của bậc thầy quay phim Kazuo Miyagawa. Cả hai làm việc sâu sát nhằm tận dụng tối đa các kỹ thuật điện ảnh tối tân bấy giờ như ống kính tiêu cự dài (telephoto lens), chuyển cảnh đột ngột (jump cut), đóng băng khung hình (freeze frame) và quay chậm (slow motion).

[08/08/2024]

English terms are enclosed in quotation marks for emphasis or rhetorical effect. Some borrowings appear in quotation marks, directly showcasing the foreign term. They are used to introduce technical, cultural, or linguistic concepts unfamiliar to the Vietnamese audience. This use serves to highlight key concepts, ideas, or jargon that may carry a particular connotation or cultural significance. The quotation marks draw attention to these terms, signalling their importance or adding a layer of nuance to their meaning. It may also convey irony, foreignness, or specialised knowledge, engaging the reader and emphasising the intended message. Also, there are hybrid forms, which often blend English with Vietnamese cultural or colloquial terms, such as 'cày view', 'triệu view', or 'fan cứng'. These often involve cultural references. These integrate Vietnamese and English seamlessly, typically without punctuation, forming hybrid expressions that reflect contemporary communication styles.

Còn khả năng phun lửa, đó là điều khiến chúng trở nên thật sự... 'hot'. Đây là một đặc điểm khó giải thích hơn vì không sinh vật nào có thể tạo ra lửa từ miệng. Tuy nhiên, một số động vật có thể sản xuất ra các chất có thể bắt lửa, như khí methane, khí hydro hay là một loại chất độc nào đó.

[12/02/2024]

English terms are accompanied by brief or elaborate clarifications. These terms are typically from technology, entertainment, or business fields. In some instances, Vietnamese explanations follow these terms, marked by commas, dashes, or parentheses. For example, in business contexts, phrases like 'kiểm thử - testing or phần mềm ERP (hệ thống hoạch định tài nguyên doanh nghiệp)' offer bilingual comprehension while introducing readers to emerging technological concepts. Similarly, in popular culture and informatics technology, terms such as 'dystopia (phản địa đàng)' and 'smartwatch (đồng hồ thông minh)' reflect the growing familiarity of Vietnamese readers with global trends.

Technical and scientific terms come with more explicit translations or detailed definitions, typically presented within parentheses. These are specialised or academic terms whose meanings may not be immediately evident to the general readership. Including translations ensures that complex ideas are accessible while maintaining the authenticity of the original English term. In medical and pharmaceutical contexts, examples like 'cetuximab (thuốc điều trị ung thư đại tràng)' and 'Propranolol (nhóm thuốc chẹn beta)' demonstrate the necessity for precise definitions due to their critical implications for health discussions. Similarly, scientific and technological concepts such as 'mTOR (chất điều hòa chính)' or 'GIS (hệ thống thông tin địa lý)' reveal the interdisciplinary nature of content presented to readers. Abstract or philosophical terms like 'catharsis (thanh lọc cảm xúc)' are carefully defined to ensure accurate comprehension. This method of explicit translation serves to bridge the knowledge gap between specialised fields and the general audience, promoting education and fostering a broader understanding of scientific and technological advancements in Vietnam.

ENGLISH BORROWINGS IN VIETNAMESE MAGAZINES: FREQUENCY AND DISTRIBUTION

In order to capture the frequencies and distribution of the English terms which appear in Vietnamese magazines, the data were examined in two ways: (1) the total number of encounters of each English borrowing in the data (frequency of occurrence), and (2) the total number of thematic sets in which each target English borrowing was encountered (distribution of occurrence).

The analysis of 357 articles yielded 1,683 direct borrowings, with some items recurring in multiple articles within and across subthemes. From this collection, a list of English borrowings used in the Vietnamese magazines was extracted, totalling 919 items. The frequency of occurrence of these 919 English borrowings was classified into five categories (1-5, 6-10, 11-15, 16-20, and above 20 encounters). Findings revealed that the occurrences of these borrowings varied widely, ranging from 1 to 133 times. Table 6 highlights that only a mere 3.44% of the English borrowings (32 out of 919 terms) occurred more than five times, with the majority of English borrowings occurring between 1 and 5 times. Regarding distribution, these borrowings were found across 1 to 13 thematic subsets. Table 7 illustrates that a substantial majority of terms (782 terms) appeared within a single thematic subset. Furthermore, 73 terms were present in two subsets, 30 in three, 15 in four, 12 in five, and seven terms appeared across 6 to 13 subsets. The ten most frequently occurring borrowings include USD, noted 133 times across 13 themes, followed by AI, video, protein, carbon, euro, web, CEO, gene, and vitamin. These findings suggest that while English borrowings are present in Vietnamese magazines, their overall frequency of use remains relatively low, with most terms appearing only a few times and within a limited number of thematic contexts. Appendix A and Appendix B provide a list of the 919 English borrowing terms found in Vietnamese magazines, organised by frequency and distribution, respectively.

TABLE 6. Frequency of 919 English borrowings in Vietnamese magazines

 Frequency of	Number of English	Percentage	Examples
occurrences	borrowings		
1-5	887	96.52	acid, ADN, baht, blog, carbohydrate, CD, email, gram
6-10	19	2.07	album, hormone, streaming, tour, website, fan
11-15	5	0.54	CEO, gene, vitamin, top, chip
16-20	5	0.54	carbon, euro, web, GDP, protein
 Above 20	3	0.33	USD, AI, video
Total	919	100	

TABLE 7. Distribution of 919 English borrowings across 13 thematic subsets in Vietnamese magazines

Distribution across	Number of English	Percentage	Examples
thematic subsets	borrowings		
1	782	85.09	3D, accounting clerk, ACE, acetic, acid acetic
2	73	7.94	acid, album, Alzheimer, baht, bar, blog, carbon dioxide
3	30	3.26	app, AUD, bestseller, carbohydrate, cholesterol, clip
4	15	1.63	camera, CD, chatbot, gram, hot, online, polymer, pop
5	12	1.31	carbon, chip, email, fan, GDP, Gen Z, gene, marketing
Above 5	7	0.77	USD, AI, euro, video, top, web, CEO
Total	919	100	

These findings highlight the highly specialised nature of most borrowings, as the majority are confined to a single thematic subset. However, a smaller portion demonstrates broader applicability, appearing across multiple subsets, with the most frequent borrowings spanning all thematic categories. This variation in distribution underscores the need for a systematic categorisation of borrowings into semantic groups. Such classification not only reveals how English terms integrate into different domains but also provides insights into their degrees of entrenchment and the linguistic or conceptual gaps they fill in Vietnamese news discourse.

ENGLISH BORROWINGS IN VIETNAMESE MAGAZINES: SEMANTIC GROUPINGS

Eighteen thematic groups emerged from the breakdown of English direct borrowings by semantic fields (Table 8). The most represented category is *Biological & chemical concepts*, comprising 210 terms, which are pervasive in health-related news and scientific insights. These concepts also appear in articles about culture and cuisine. The *Technology & Computing* lexicon also features prominently. These terms are commonly mixed in articles on technology and scientific insights. Following this category are terms related to groups of *Art, music & entertainment,* of *health, medications & treatments*, and *Beverages, food & ingredients*, reflecting strong coverage of health topics, cultural content, and culinary interests. Similarly, the *Business, economics & finance* category is primarily confined to economic articles, though some terms also appear in world news coverage. Closely related are terms representing *Currencies*. Although this group consists of only a small number of items (15), their frequency and distribution are high, with *'USD'* being particularly pervasive. Other currency terms are less frequent and often accompanied by equivalent amounts in USD enclosed in parentheses, appearing across various domains.

TABLE 8. Semantic groupings of English lexicon in Vietnamese magazines

	Semantic groups	No. of terms	Examples
1	Biological & chemical concepts	210	acetic, silvorchis,
2	Technology & computing	106	big data, admin,
3	Art, music & entertainment	96	playlist, podcast,
4	Health, medications & treatments	88	stent, aspirin,
5	Beverages, food & ingredients	83	pizza, biryani,
6	Everyday life & lifestyle	78	lively, fan, hashtag,
7	Business, economics & finance	58	shipper, marketing, CEO,
8	Travel & tourism	50	tour, visa, MICE
9	Sports & fitness	22	yoga, taekwondo, tennis,
10	Psychological, emotional & behavioural concepts	18	FOMO, mindfulness,
11	Communication & media	18	web, tweet, viral,
12	Environment, plants and natural phenomena	17	greenwashing, net zero,
13	Currencies	15	AUD, USD,
14	Literary & creative concepts	15	bestseller, blog,
15	Education	14	STEM, IELTS, IQ,
16	Scientific research	14	DOI, archive,
17	Measurement & units	9	gram, ounce,
18	Political, military, and geopolitical concepts	8	imperial presidency, ICBM,
	•	919	•

English borrowings in Vietnamese magazines also span other diverse categories. *Measurement & units*, though small in number (9), are commonly and inevitably used across multiple domains, including technology, computing, health, and science. Terms related to *the Environment, plants, and natural phenomena* are found in environmental articles. The categories of *Travel & tourism* and *Sports & fitness* primarily appear in tourism and sports-related content, respectively. Articles concerning education sparsely incorporate English terms, and the lexicon belonging to this category is equally limited (14). The *Literary and creative concepts* category tends to appear in discussions about culture and fine arts. Terms grouped under *Psychological, emotional, and behavioural concepts* are categorised based on their specialised meanings. These terms often appear in articles related to health and science. A small number of expressions, mostly confined to international news and limited in frequency, are categorised as *Political, military, and geopolitical concepts*. Finally, a moderate group of terms tends to appear across multiple themes,

focusing on social trends and daily living. These are categorised under *Everyday life & lifestyle*, reflecting their widespread usage and relevance across diverse topics.

Appendix C provides a complete list of English borrowings used in Vietnamese magazines, categorised into eighteen semantic groups. The classification was based on the core meanings of the borrowings and the thematic subsets in which they predominantly appeared. However, this categorisation is not rigid, as some terms exhibit semantic overlap. Most ambiguous cases were assigned to the *Everyday life & lifestyle* group.

DISCUSSION

Thus, to mix or not to mix? In the case of Vietnamese weekly magazines targeting a general audience, the answer is a resounding yes. Despite common criticisms that view code-mixing as either a sign of linguistic incompetence or a threat to language purity, research suggests otherwise. Muysken (2000, as cited in Akhtar et al., 2016) contends that code-mixing is often a fluent and intentional choice. For many bilinguals, it represents an unmarked or natural mode of communication, not a result of lexical gaps or cultural pressure.

Regarding Research Question 1, the findings of this study support this view. While roughly one-seventh of the articles surveyed contain no borrowings, English terms account for less than 1% of the total word count across all thematic subsets. The overall frequency of use remains relatively low, with most terms appearing only a few times and within a limited number of thematic contexts. Still, their presence seems inevitable. These magazines are crafted for a generally educated readership, and their linguistic style reflects the hallmarks of effective popular writing: clarity, liveliness, and engagement. To maintain accessibility, they avoid dense technical jargon, yet still strive for precision. Their persuasive tone calls for rhetorical flair, enabling writers to assert their viewpoints confidently. Within this context, English borrowings are not gratuitous – they serve as stylistic tools that enhance expressiveness and help writers connect with audiences in a modern, dynamic linguistic landscape.

In relation to Research Question 2 on patterns and functions, the findings of this study diverge from those reported in previous research. This discrepancy is understandable given differences in corpus genres and the methods used to identify borrowings. While earlier studies often emphasise the symbolic functions of English – such as signalling prestige, modernity, globalisation, youth identity, or digital culture – this study reveals a more semantic-oriented pattern of use. One group of borrowings, described as unmarked, includes terms that remain untranslated or unexplained, yet are smoothly integrated into the discourse. These terms are presumed familiar and intelligible to the target audience, particularly within specialised domains. Additionally, English is employed strategically to enhance clarity, emphasis, and reader accessibility. Writers use parentheses to gloss technical or foreign terms, making them more comprehensible without interrupting the narrative flow. Quotation marks highlight emphasis, foreignness, or rhetorical nuance. In popular fields such as technology, business, and entertainment, borrowings are often accompanied by brief explanations that foster bilingual comprehension and reflect global engagement. In more specialised areas – science, medicine, and philosophy – borrowings are typically followed by detailed translations to ensure precision and promote public understanding.

The motivations behind these practices are multifaceted. They include gaps in the Vietnamese lexicon – especially in denoting cutting-edge concepts – alongside increasing global connectivity and the pervasive influence of English-language media. The wide accessibility of

English-language content through radio, television, newspapers, magazines, and movies has familiarised audiences with popular culture genres in English. These acquisitional, sociocultural, and functional factors – shaped by education and media policies – play a critical role in how English is consumed, repurposed, and localised in contemporary Vietnamese media.

Addressing Research Question 3 on morphological and phonological characteristics, the analysis revealed that while many English borrowings retain their original forms when used in Vietnamese magazines, others undergo minor adaptations to conform to Vietnamese phonological or orthographic norms. Such adaptations facilitate pronunciation and integration into Vietnamese syntax while preserving recognisability. This finding aligns with observations in other contact settings (Abdulrazzaq & Al-Ubaidy, 2023), highlighting the interplay between linguistic accommodation and identity marking in borrowing processes.

Regarding distribution, English borrowings were found across between one and thirteen thematic subsets, with the vast majority of terms appearing in only a single subset. This indicates their highly specialised nature. In Vietnamese weekly magazines, borrowings are not randomly dispersed but follow clear thematic patterns. The highest concentrations are found in scientific, technological, and health-related content, with cultural and lifestyle articles also showing notable usage. In contrast, borrowings are relatively scarce in more specialised or institutionally bound fields such as politics and education. These patterns suggest that English borrowings are most prevalent in areas where global discourse and modern developments intersect with public interest. This observation aligns with Tadmor (2009), who found that borrowing rates vary across semantic fields, particularly in domains involving culturally specific or externally influenced concepts. Similarly, Rudra et al. (2019), in their study of English-Hindi code-switching on Twitter, showed that the frequency and nature of switching strongly depend on the topic of discussion, such as sports or politics. It is important to note, however, that the thematic categories used in this study are not sharply defined. From a cognitive linguistic perspective, these are 'naive models' rather than precise expert classifications. As Ungerer and Schmid (2006) argue, social groups do not require scientifically accurate models, but rather ones that are functionally effective: "As long as a model is in line with what we perceive and enables us to make functionally correct predictions, it can have widespread currency although it may be technically inaccurate" (p. 57).

These findings have important implications for language planning and media policy in Vietnam. The strategic use of English borrowings suggests a trend towards linguistic hybridity that reflects Vietnam's ongoing global integration. Language planners may consider how such borrowings can be accommodated within Vietnamese orthographic and lexical standards without undermining language purity, balancing the needs for internationalisation and national identity preservation. From a media policy perspective, the deliberate incorporation of English terms to enhance clarity, precision, and rhetorical appeal indicates that English is not merely ornamental but serves communicative and cognitive functions valued by writers and readers alike. Finally, these practices reveal how educated Vietnamese writers and readers negotiate modernity and global belonging through selective linguistic choices. This highlights code-mixing as an act of identity that navigates between local cultural anchoring and global citizenship.

CONCLUSION

This study set out to explore whether, amid increasing globalisation, news content across various sections in Vietnamese magazines can be conveyed without incorporating borrowings from other languages—particularly English, the modern international lingua franca. The findings suggest that although code-mixing remains limited in extent, it has become socially and communicatively inevitable, often serving important pragmatic functions. English terms were most commonly observed in the scientific, technological, and health-related domains, where their inclusion enhances the precision and accessibility of technical content. This trend reflects the growing engagement of Vietnamese professionals with global discourses, where English functions as a key medium of communication. English borrowings also appeared frequently in entertainment, tourism, and lifestyle articles, likely due to the strong connection between Vietnamese youth and contemporary Asian popular culture, much of which is mediated through English. With regard to thematic groupings, the study offers insights into how Vietnam's unique linguistic ecology and sociolinguistic context shape the specific patterns of English borrowing. These observations support Moody's (2020, p. 768) assertion that 'the Expanding Circle comes to adopt English as part of a more general commitment to globalisation.'

This is the first study to systematically examine both direct English borrowings in Vietnamese media, analysing their patterns, functions, frequencies, and distribution, and adapted borrowings, focusing on their phonological and morphological modifications. Theoretically, the findings extend sociolinguistic models of code-mixing by demonstrating that in Vietnam, English borrowings are not only stylistic or symbolic but also fulfil semantic and pragmatic needs within a rapidly globalising media landscape. Regionally, this study contributes to the scholarship on Asian Englishes by highlighting how English functions as a linguistic resource integrated into Vietnamese public discourse in ways that reflect Asia's diverse yet interconnected sociolinguistic realities. Methodologically, the study highlights the complexity of categorising English borrowings, which may fall into three distinct types: direct borrowings, nativised/adapted borrowings, and non-English borrowings of English origin.

Looking forward, we rely on future research to address some of the limitations that we were not able to tackle in this study. Firstly, exploring English code-mixing in media would benefit from a more diachronic and multi-genre approach, incorporating not only popular magazines but also academic journals and literary texts. Such an expansion would allow for more insights into how borrowings evolve over time and across discourse types. Moreover, the existing lists of English items provided in this study could serve as a solid foundation for further research into the diachronic and synchronic landscape of language change. Such research could provide valuable resources for fine-grained phonological, morphological, and syntactic descriptions of English borrowings not only in media but also in wider contexts. It is also hoped that English terms can be more accurately captured through the use of computational tools and well-designed corpus compilation strategies that ensure data representativeness. Another line of study could combine corpus-based descriptions with psycholinguistic methodologies, particularly those that investigate both producers' and receivers' attitudes toward various borrowing forms, alongside patterns of frequency and distribution. Additionally, future research should scrutinise the assumption of reader familiarity with English terms, especially how certain 'unmarked' borrowings are presumed intelligible without explicit explanation. Such studies could yield deeper insights into the social dynamics of language contact, language evolution, and the extent to which borrowings are truly integrated into the linguistic repertoire of readers.

Finally, Aldhuwaihi and Albawardi's (2024) study of Saudi academics on X highlights how gender and platform affordances shape language variation. Future research could examine similar dynamics among Vietnamese users, shedding light on how code-mixing online reflects audience awareness and the perceived prestige of English, particularly in contrast to formal print media. In addition, Xiao and Pang's (2024) investigation into English use at the Palace Museum foregrounds the language's economic functions in tourism. Extending this perspective to Vietnamese advertising could uncover the commodification of English borrowings and their role in signalling modernity, prestige, or global orientation. Such research would enrich our understanding of the socio-economic dimensions of code-mixing in commercial discourse.

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APPENDIX A

FREQUENCY OF 919 ENGLISH BORROWINGS IN VIETNAMESE MAGAZINES

Frequency above 20 (3): USD, AI, video

Frequency 16-20 (5): carbon, euro, web, GDP, protein

Frequency 11-15 (5): CEO, gene, vitamin, top, chip

Frequency 6-10 (19): album, hormone, streaming, tour, website, fan, podcast, robot, Alzheimer, camera, cholesterol, marketing, pop, start-up, yen, gen Z, insulin, menu, oxygen

Frequency 1-5 (887); acid, ADN, baht, blog, carbohydrate, CD, email, gram, lithium-ion, online, pizza, salad, SAT, series, show, chatbot, glucose, hot, LGBT, lithium, logistics, miso, polymer, rap, semaglutide, umami, view, visa, won, app, AUD, bestseller, BNPL, boxing, caffeine, chat, click, clip, DNA, dopamine, drone, enzyme, estrogen, fact check, file, flavor, FOMO, golf, hip-hop, IELTS, KPI, laptop, laser, lobby, logic, MRI, mRNA, ounce, peptide, PET, pickleball, playlist, R&D, ringgit, RNA, rock, rupee, smartphone, stream, taekwondo, teen, tweet, VAR, anime, bar, big tech, blogger, carbon dioxide, carbonic, cassette, catharsis, cent, chocolate, cider, coban, cocktail, code, Coenzym Q10, concert, container, content, copy, corticoid, cotton, crouton, decouple, detox, domino, ETF, fair use, fanpage, FDI, gas, glucagon, gout, GPS, hashtag, homestay, hydrogen, hyperscale, IP, iPSC, IT, karate, lactose, LGBTQ, like, link, lipid, livestream, LLM, machine learning, macro, marathon, MFN, MICE, micro, microRNA, mini, monitor, mozzarella, net zero, noise, organoid, Parkinson, piano, play-off, polyester, pressing, prolactin, OR, Radar, rapper, REM, resort, runner, second hand, sheet, shipper, sofa, spa, stand by, STEM, steroid, taco, tatami, taxi, track, trend, TV, type, UAV, viral, watermark, yogurt, 3D, accounting clerk, ACE, acetic, acid acetic, acid asparagusic, acid chlorogenic, acid lactic, acid palmitic, acid stearic, adenine (A), adenosine, ADIZ, admin, adrenaline, advanced heart failure, affirmative action, AGI, AI agent, AI washing, air pillow, alarm fatigue, aldehyde, aldosterone, alligator pear, alphabet, American-styled, amplitude, amylase, amyloid, amyloid-beta, analog, angiotensinogen, Anopheles, antiestablishment, anti-fan, antioxidants, APC, aphanus, aphanus rolandi, archive, arena, aroma, art house, artist-centric, asparagaceae, asparagus, asparagus urine, aspartame, aspidistra sonlaensis, aspirin, assistant professor, ATACMS, atherosclerosis, ATM, auteur, autosomal, aviary, avocado, avocado pear, baby, bakery, ballad, ballet, baroque, bass, BBQ, BESS, beta, beta amyloid, beta-glucan, better than before, bibliotherapy, big data, billiards, biogenic iron, biometrics, biryani, bismuth, bland, bluegrass, BNP, board, bombardier beetle, box, box farm, broadcast, brom, brown, buddy, buffet, bungalow, burger, buttered popcorn index, cabin, cacao, cacao liquor, cadaverine, cadmium, caffeol, calcitriol, calcium, call center, callithrix jacchus, calorie, camellia velutina, campus, cappuccino, caramel, carb, carbon monoxide, carbon offset, carbon, carson valley monkeyflower, carton, CBT, center of learning, central dogma of molecular biology, cents, CEP, cervello, cetuximab, ceviche, CGRP, champagne, check in, cheese, chemsex, chewing gum, chili pepper, chill, chilli crisp, chiropractic, chlorogenic, chocolate liquor, cholecalciferol, choline, chronological age, cinematherapy, cinephile, cisgender, clean eating, clear-air turbulence, climate medicine, clinker, cloud services, coca, coddled, coddled egg, coffee essential oil, cognitivism, collection, combo, comfort food, comment, communion, compost, confessional poetry, confluence, confluence dancing, coolie, corn syrup, cortisol, corydalis ambigua, cosplay, counter-cyclical, cozy fiction, CPI, crepe, croissants, cross-sectional study, CRP, Crypto, crypto stablecoin, cubicula, culture industry, cupper, curcuma pygmaea, curcuma vitellina, cURL, custom layout, CV, cyborg, cytosine, dark chocolate, dark web, D-dimer, DDoS, deal, decaBDE, decabromodiphenyl ether (decaBDE), decaf, decoder, deep learning, deepfake, degrowth, DEI, delta, de-risking, design verification, designer, detox foot pad, dextrin, DFR, dichocarpum hagiangense, diesel, digital trade deficit, disco, discrete emotions theory, disposable pod, ditans, diva, do not train, DOI, drama, drap, due diligence, dull, dupe, dupe destination, durability, dyke, dykette, dystopia, E.coli, El Nino, electroceutical, electrophysiology, elite, emoji, emotivism, endorphin, engage, engagement, epigenetic clock, ergocalciferon, ERP, erythranthe carsonensis, erythritol, Erythromycin, ester, etanol, ethanol, eureka, expected goal, extractive institution, F&B, F.nucleatum, Fab, fake quote, FBI agent, FDC, FEC, feelings of common humanity, fibraurea tinctoria, finger food, fishpaste-phobia, flavonoids, fluoride, foamy, font, foul, fourpenny coffin, fragrant, franc, free and reduced meals, freeze frame, frequency, friend, friendshoring, FTA, fungi, furfuryl alcohol, futon, game, gas chromatograph, Gel, gene tox, generative AI, gepants, germanium, gesneriaceae, gigabyte, GIS, Glamping, globulin, glutamate receptor, gluten, gluten-free, glycaemic load, GNH, goethite, goiter belt, grandmaster, graphene, GRDP, greenwash, greenwashing, grunge, guacamole, guanine, hallucination, hamburger, happy cake, headliner, healing design, heatwave, Helicobacter Pylori, hematite, hemikrania, hertz, histamin, hit, home composter, homo, Homo sapiens, hormone GLP-1, hospital gown, host, hot girl, house, hova lockii, hova longipedunculata, HRC, human factor, humus, HVAC, hydrophone, hyperscale data center, IC, ICBM, icon, ID Internet, idol, imperial presidency, in line, inbound, inclusive institution, incorrectly believe, index, indie, indie rock, industry, influencer, influencer fatigue, insomnia, interleukin-1, interval, invalide, ion, IQ, ISO, jazz, jet stream, jody, judo, jump cut, kale, kali, katharsis,

keffiyeh, kickboxing, killer app, kilogram, kilowatt, kinase, king of fake quote, kojikin, kokumi, KOL, kopek, K-pop, KYC, lab, lac, lactase, lactoferrin, lectus cubicularis, lectus lucubratorius, LED, leftover, leisure sickness, leontopithecus chrysopygus, LGFV, libero, lin-14, lin-4, literature review, live, live-action, lively, liveness, living wage, log, logo, loop, lukaku miss, lutein, lympho, M&A, MAb, macrogol, made in ASEAN, made in Vietnam, magnesium, maillard, mainstream, maltitol, Man flu, manga, mangan, marmalade, marmoset, matcha, mayo, MBM, megawatt, melancholia, meme, mentalizing, mere exposure effect, metadata, metformin, methane, methyl, mic, migraine, milk chocolate, millennial, mindfulness, mining, miR-124, miR-134, miR-199b-3p, miR-34a, misconception, MMR, model, modern-art, modernism, morphine, MRX34, mTOR, multi-voice, MWIR HIS, nano, nanogram, nanoString, NCD, ncRNA, neck cracking, neuron, newsletter, nickel, niken, NIR, No.1 best-seller, nonbinary, norepinephrine, NT-proBNP, nucleotid, nut free, observative study, ocher (ochre, ocre, ocker...), oesophagostomum stephanostomum, oleic, olflaction, oligosaccharides, omega-3, omelette, open access, opera, ophiopogon muongnhensis, orchidaceae, oscillation, oscilloscope, otaku, outsource, outsourcing, oxygen, oxytocin, ozone, PAD, palladium, panic attack, pansy, pansy viola arvensis, partner, patin, PDF, pectin, PEF, pence, penicillin, pentosan, pentose, pepper, pepperoni, per se, perchlorate, perfume, peso, phenyl, phone, phone farm, phosphate, physical implementation, phytochemical, picnic, PIN, pipe, pixel, Plasmodium, decoupling, liquor, poets, poker, polyol, polyp, polyphenols, positrom, post-holiday blues, post-transcriptional regulation, potassium, PR, preservation instance, private-equity, professional service, progesterone, prompt, propranolol, PTSD, punk, putrescine, pyroglutamate amyloid beta, PYY, queer, quinoa, R&B, racial harmony day, radio, ramdon, RDC, real-world proximity, Remternetug, reset, residency, residente temporal, risky reboot, RM, road, robotics, rock n' roll, roller, root exudation, rotten, rowing, RTL Coding Layout, rubella, rupiah, sainfoin, salad guacamole bowl, sample, sandwich, sandwiches, savon, schema, schematic diagram, scoping review, screen time, script to screen, self-compassion, selffulfilling prophecy, self-kindness, seminar, separation anxiety disorder, serine, serotonin, serum, server, SGLP2, sharp, shellac, ship, shots, show don't tell, shut down, sight, silicon, silvorchis, silvorchis vietnamica, simian, siRNA, site, size, sleepcation, slow cinema, slow motion, smart, smartwatch, snapshot, snooker, soda, sodium, SOHLH2, soiu, sonde, songwriting, sorbitol, spaghetti, spandex, spankopita, species, spermaceti, spin, spread, spreadsheet, SPS, stadium rock, start listening, steak, stent, stereotype, sterol, stock, stress, strontium, student accommodation, studio, sub4, sugar alcohols, sulfur, surimi, swicy, symbol, synap, synapsin, synaptotagmin, synthetic identity fraud, tag questions, tamari, tango, tannin, tart, taste, taste receptor, taurine, taxonomy, tayra, team, telephoto lens, tennis, tenured, tequila, test, testing, testosterone, text, textual proximity, texture, theaceae, theobromine, think tank, thymine, thyroxine, tie-break, tinnitus, T-lymphotropic, TOEFL, toilet, tonkin creeper, toolbelt generation, topping, tortured poet, tough, tour guide, tourmaline, trail, transcription, translation, trap boy, trek, trickle down, triclinia, troponin, Trump show, tuktuk, turkey, twist, TWNK, twopenny hangover, ultra-processed, underground, Uracil, urban mining, utopia, UTR, UV, UVB, variety, vernonia amygdalina, vibrant, video cassette, video clip, Vietnamese pancake, vinyl, VIP, viscosity, vivianite, wake turbulence, weight, white chocolate, woke, workshop, world wide web, xylitol, xylophone, YA, yoga, zero, zero-click search, zero-trust, zettabyte, Zilebesiran, zingiberaceae

APPENDIX B

DISTRIBUTION OF 919 ENGLISH BORROWINGS ACROSS 13 THEMATIC SUBSETS

Distribution across above 5 themes (7): USD, AI, euro, video, top, web, CEO

Distribution across 5 themes (12): carbon, chip, email, fan, GDP, gen Z, gene, marketing, pizza, podcast, vitamin, website

Distribution across 4 themes (15): camera, CD, chatbot, gram, hot, online, polymer, pop, protein, robot, tour, won, yen, oxygen, ADN

Distribution across 3 themes (30): app, AUD, bestseller, carbohydrate, cholesterol, clip, dopamine, file, FOMO, glucose, golf, hormone, insulin, KPI, laptop, laser, LGBT, lithium, lithium ion, logic, logistics, menu, R&D, rupee, salad, show, start-up, streaming, teen, tweet

Distribution across 2 themes (73): acid, album, Alzheimer, baht, bar, blog, carbon dioxide, carbonic, cassette, chat, chocolate, click, cocktail, code, container, content, copy, cotton, decouple, detox, DNA, domino, drone, enzyme, fact check, fair use, fanpage, FDI, gas, gout, GPS, hashtag, hip-hop, IT, lactose, lipid, livestream, lobby, machine learning, macro, micro, microRNA, mini, miso, monitor, mozzarella, mRNA, Parkinson, PET, piano, polyester, rap, rapper, ringgit, RNA, SAT, series, sheet, shipper, smartphone, sofa, spa, taco, tatami, taxi, TV, type, UAV, umami, view, watermark, yogurt

Distribution within 1 theme (782): 3D, accounting clerk, ACE, acetic, acid acetic, acid asparagusic, acid chlorogenic, acid lactic, acid palmitic, acid stearic, adenine (A), adenosine, ADIZ, admin, adrenaline, advanced heart failure, affirmative action, AGI, AI agent, AI washing, air pillow, alarm fatigue, aldehyde, Aldosterone, alligator pear, alphabet, American-styled, amplitude, amylase, amyloid, amyloid-beta, analog, angiotensinogen, anime, Anopheles, anti-establishment, anti-fan, antioxidants, APC, aphanus, aphanus rolandi, archive, arena, aroma, art house, artistcentric, Asparagaceae, asparagus, asparagus urine, aspartame, aspidistra sonlaensis, aspirin, assistant professor, ATACMS, atherosclerosis, ATM, auteur, autosomal, aviary, avocado, avocado pear, baby, bakery, ballad, ballet, baroque, bass, BBQ, BESS, beta, beta amyloid, beta-glucan, better than before, bibliotherapy, big data, big tech, billiards, biogenic iron, biometrics, biryani, bismuth, bland, blogger, bluegrass, BNP, BNPL, board, bombardier beetle, box, box farm, boxing, broadcast, brom, brown, buddy, buffet, bungalow, burger, buttered popcorn index, cabin, cacao, cacao liquor, cadaverine, cadmium, caffeine, caffeol, Calcitriol, calcium, call center, callithrix jacchus, calorie, camellia velutina, campus, cappuccino, caramel, carb, carbon monoxide, carbon offset, carbon, carson valley monkeyflower, carton, catharsis, CBT, cent, center of learning, central dogma of molecular biology, cents, CEP, cervello, cetuximab, ceviche, CGRP, champagne, check in, cheese, chemsex, chewing gum, chili pepper, chill, chilli crisp, chiropractic, chlorogenic, chocolate liquor, cholecalciferol, choline, chronological age, cider, cinematherapy, cinephile, cisgender, clean eating, clear-air turbulence, climate medicine, clinker, cloud services, coban, coca, coddled, coddled egg, Coenzym Q10, coffee essential oil, cognitivism, collection, combo, comfort food, comment, communion, compost, concert, confessional poetry, confluence, confluence dancing, coolie, corn syrup, corticoid, cortisol, corydalis ambigua, cosplay, counter-cyclical, cozy fiction, CPI, crepe, croissants, cross-sectional study, crouton, CRP, Crypto, crypto stablecoin, cubicula, culture industry, cupper, curcuma pygmaea, curcuma vitellina, cURL, Custom Layout, CV, cyborg, cytosine, dark chocolate, dark web, D-dimer, DDoS, deal, decaBDE, decabromodiphenyl ether (decaBDE), decaf, decoder, deep learning, deepfake, degrowth, DEI, delta, de-risking, Design Verification, designer, detox foot pad, dextrin, DFR, dichocarpum hagiangense, diesel, digital trade deficit, disco, discrete emotions theory. disposable pod, ditans, diva, do not train, DOI, drama, drap, due diligence, dull, dupe, dupe destination, durability, Dyke, dykette, dystopia, E.coli, El Nino, electroceutical, electrophysiology, elite, emoji, emotivism, endorphin, engage, engagement, epigenetic clock, ergocalciferon, ERP, erythranthe carsonensis, erythritol, Erythromycin, ester, estrogen, etanol, ETF, ethanol, eureka, expected goal, extractive institution, F&B, F.nucleatum, Fab, fake quote, FBI agent, FDC, FEC, feelings of common humanity, fibraurea tinctoria, finger food, fishpaste-phobia, flavonoids, flavor, fluoride, foamy, font, foul, fourpenny coffin, fragrant, franc, free and reduced meals, freeze frame, frequency, friend, friendshoring, FTA, fungi, furfuryl alcohol, futon, game, gas chromatograph, Gel, gene tox, generative AI, gepants, germanium, gesneriaceae, gigabyte, GIS, Glamping, globulin, glucagon, glutamate receptor, gluten, gluten-free, glycaemic load, GNH, goethite, goiter belt, grandmaster, graphene, GRDP, greenwash, Greenwashing, grunge, guacamole, guanine, hallucination, hamburger, happy cake, headliner, healing design, heatwave, Helicobacter Pylori, hematite, hemicrania, hertz, histamin, hit, home composter, homestay, homo, Homo sapiens, hormone GLP-1, hospital gown, host, hot girl, house, hova lockii, hova longipedunculata, HRC, human factor, humus, HVAC, hydrogen, hydrophone, hyperscale, hyperscale data center, IC, ICBM, icon, ID Internet, idol, IELTS, imperial presidency, in line, inbound, inclusive institution, incorrectly believe, index, Indie, indie rock, industry, influencer, influencer fatigue, insomnia, interleukin-1, interval, invalide, ion, IP, iPSC, IQ, ISO, jazz, jet stream, Jody, judo, jump cut, kale, kali,

karate, katharsis, keffiyeh, kickboxing, killer app, kilogram, kilowatt, kinase, king of fake quote, kojikin, kokumi, KOL, kopek, K-pop, KYC, lab, lac, lactase, lactoferrin, lectus cubicularis, lectus lucubratorius, LED, leftover, leisure sickness, leontopithecus chrysopygus, LGBTO, LGFV, libero, Like, lin-14, lin-4, link, literature review, live, liveaction, lively, liveness, living wage, LLM, log, logo, loop, lukaku miss, lutein, lympho, M&A, Mab, macrogol, made in ASEAN, made in Vietnam, magnesium, maillard, mainstream, maltitol, Man flu, manga, mangan, marathon, marmalade, marmoset, matcha, mayo, MBM, megawatt, melancholia, meme, mentalizing, mere exposure effect, metadata, metformin, methane, methyl, MFN, Mic, MICE, migraine, milk chocolate, millennial, mindfulness, mining, miR-124, miR-134, miR-199b-3p, miR-34a, misconception, MMR, model, modern-art, modernism, morphine, MRI, MRX34, mTOR, multi-voice, MWIR HIS, nano, nanogram, nanoString, NCD, ncRNA, neck cracking, net zero, neuron, newsletter, nickel, niken, NIR, No.1 best-seller, noise, non-binary, norepinephrine, NT-proBNP, nucleotid, Nut free, observative study, ocher (ochre, ocre, ocker...), oesophagostomum stephanostomum, oleic, olflaction, oligosaccharides, omega-3, omelette, open access, opera, ophiopogon muongnhensis, orchidaceae, organoid, oscillation, oscilloscope, otaku, Ounce, outsource, outsourcing, oxygen, oxytocin, ozone, PAD, palladium, panic attack, pansy, pansy viola arvensis, partner, patin, PDF, pectin, PEF, Pence, penicillin, pentosan, pentose, pepper, pepperoni, peptide, per se, perchlorate, perfume, peso, phenyl, phone, phone farm, phosphate, Physical Implementation, phytochemical, pickleball, picnic, PIN, pipe, pixel, Plasmodium, playlist, play-off, poets, poker, polyol, polyp, polyphenol, positrom, post-holiday blues, post-transcriptional regulation, potassium, PR, preservation instance, pressing, private-equity, professional service, progesterone, prolactin, prompt, Propranolol, PTSD, punk, putrescine, pyroglutamate amyloid beta, PYY, QR, queer, quinoa, R&B, racial harmony day, Radar, radio, ramdon, RDC, real-world proximity, REM, Remternetug, reset, residency, residente temporal, resort, risky reboot, RM, road, robotics, rock, rock n'roll, roller, root exudation, rotten, rowing, RTL Coding Layout, rubella, runner, rupiah, sainfoin, salad guacamole bowl, sample, sandwich, sandwiches, savon, schema, schematic diagram, scoping review, screen time, script to screen, second hand, self-compassion, self-fulfilling prophecy, self-kindness, semaglutide, seminar, separation anxiety disorder, serine, serotonin, serum, server, SGLP2, sharp, shellac, ship, shots, show don't tell, shut down, sight, silicon, silvorchis, silvorchis vietnamica, simian, siRNA, site, size, sleepcation, slow cinema, slow motion, smart, smartwatch, snapshot, snooker, soda, sodium, SOHLH2, soju, sonde, songwriting, sorbitol, spaghetti, spandex, spanakopita, species, spermaceti, spin, Spread, spreadsheet, SPS, stadium rock, stand by, start listening, steak, STEM, stent, stereotype, steroid, sterol, stock, stream, stress, strontium, student accommodation, studio, sub4, sugar alcohols, sulfur, surimi, swicy, symbol, synap, synapsin, synaptotagmin, synthetic identity fraud, taekwondo, tag questions, tamari, tango, tannin, tart, taste, taste receptor, taurine, taxonomy, tayra, team, telephoto lens, tennis, tenured, tequila, test, testing, testosterone, text, textual proximity, texture, theaceae, theobromine, think tank, thymine, thyroxine, tie-break, tinnitus, T-lymphotropic, TOEFL, toilet, tonkin creeper, toolbelt generation, topping, tortured poet, tough, tour guide, tourmaline, track, trail, transcription, translation, trap boy, trek, trend, trickle down, triclinia, troponin, Trump show, tuktuk, turkey, twist, TWNK, twopenny hangover, ultra-processed, underground, Uracil, urban mining, utopia, UTR, UV, UVB, VAR, variety, vernonia amygdalina, vibrant, video cassette, video clip, Vietnamese pancake, vinyl, VIP, viral, visa, viscosity, vivianite, wake turbulence, weight, white chocolate, Woke, workshop, world wide web, xylitol, xylophone, YA, yoga, zero, zero-click search, zero-trust, zettabyte, Zilebesiran, zingiberaceae

APPENDIX C

SEMANTIC GROUPINGS OF 919 ENGLISH BORROWINGS IN VIETNAMESE MAGAZINES

Biological & chemical concepts (210): acetic, acid acetic, acid asparagusic, acid chlorogenic, acid lactic, acid palmitic, acid stearic, acid, adenine (A), adenosine, ADN, adrenaline, alcohol, aldehyde, aldosterone, amplitude, amylase, amyloid, amyloid-beta, angiotensinogen, Anopheles, antioxidants, APC, asparagaceae, asparagus, aspidistra sonlaensis, autosomal, aviary, beta amyloid, beta, beta-glucan, biogenic iron, biometrics, bismuth, brom, cacao liquor, cadmium, caffeine, caffeol, calcium, callithrix jacchus, calorie, carb, carbohydrate, carbon, carbon dioxide, carbon monoxide, carbon offset, carbonic, central dogma of molecular, CGRP, cholecalciferol, cholesterol, choline, clinker, coca, Coenzyme Q10, compost, corn syrup, cytosine, D-dimer, decaBDE, decabromodiphenyl ether (decaBDE), decaf, dextrin, epigenetic clock, erythritol, ester, etanol (ethanol), ethanol, fibraurea tinctoria, flavonoids, fluoride, fungi, furfuryl, gas, Gel, gene, germanium, gesneriaceae, glucagon, glucose, gluten, glycaemic load, goethite, graphene, guanine, hematite, homo, Homo sapiens, hormone, hoya lockii, hoya longipedunculata, HRC, humus, hydrogen, ion, iPSC, kali, kinase, kojikin, lac, lactase, lactoferrin, lactose, leontopithecus chrysopygus, lin-14, lin-4, lipid, lithium, lutein, lympho, Mab, macrogol, magnesium, maillard (Maillard reaction), maltitol, manganese, marmoset, methane, methyl, microRNA, miR-134, miR-199b-3p, miR-34a, mRNA, nanoString, NCD (Noncommunicable diseases), ncRNA, neuron, nickel, niken, norepinephrine, NT-proBNP, nucleotid, ocher (ochre, ocre, ocker...), oesophagostomum stephanostomum, oleic, oligosaccharides, omega-3, ophiopogon muongnhensis, orchidaceae, organoid, oxygen, oxytocin, palladium, pansy viola arvensis, patin, pectin, PEF, pentosan, pentose, peptide, perchlorate, phenyl, phosphate, phytochemical, Plasmodium, polyester, polymer, polyol, polyp, polyphenols, potassium, progesterone, prolactin, protein, putrescine, pyroglutamate amyloid beta, PYY, RNA, serine, serotonin, serum, SGLP2, shellac, silvorchis vietnamica, silvorchis, simian, siRNA, sodium, sonde, species, spermaceti, steroid, sterol, strontium, sulfur, synap, synapsin, synaptotagmin, taste, receptor, taxonomy, tayra, testosterone, theaceae, thymine, thyroxine, T-lymphotropic, tonkin creeper, troponin, Uracil, UTR, vernonia amygdalina, vitamin, vivianite, zingiberaceae.

Technology & computing (106): 3D, ACE, admin, AGI, AI agent, AI prompt, AI Washing, AI, analog, app, big data, big tech, box farm, camera, chat, chatbot, chip, click, clip, cloud services, code, confluence, container, content, copy, Crypto, cURL, custom layout, cyborg, decoder, decouple, decoupling, DFR, digital trade deficit, drone, email, emoji, ERP, fair use, file, font, generative AI, GIS, GPS, hydrophone, hyperscale data center, hyperscale, IC, ID Internet, index, IP, ISO, IT, killer app, laptop, laser, LED, lithium-ion, LLM, log, logic, loop, machine learning, macro, metadata, micro, mining, monitor, MWIR HIS, nano, noise, online, outsource, outsourcing, PDF, phone, phone farm, pod, QR, Radar, real-world proximity, reset, robot, robotics, RTL Coding Layout, schema, schematic diagram, server, shut down, silicon, smart, smartphone, smartwatch, snapshot, spreadsheet, start listening, synthetic identity fraud, telephoto lens, testing, text, textual proximity, Type, UAV, VAR, zero-click search, zero-trust

Art, music & entertainment (96): album, anime, anti-establishment, anti-fan, arena, art house, artist-centric, auteur, ballad, ballet, baroque, bass, bluegrass, cassette, CD, cinephile, comment, concert, confluence dancing, cosplay, culture industry, designer, disco, diva, dyke, dykette, dystopia, freeze frame, game, glamping, grandmaster, grunge, headliner, hip-hop, hit, icon, idol, indie rock, indie, jazz, jump cut, katharsis, keffiyeh, KOL, K-pop, live, live-action, liveness, lukaku miss, manga, menu, model, modern-art, modernism, No.1 best-seller, opera, otaku, piano, picnic, pixel, playlist, podcast, poker, pop, pressing, punk, R&B, racial harmony day, radio, rap, rapper, risky reboot, rock n' roll, rock, screen time, script to screen, series, shots, show, sleepcation, slow cinema, slow motion, snooker, stadium rock, stream, streaming, studio, symbol, tango, texture, trend, Trump show, TV, video, video cassette, video clip, watermark, xylophone.

Health, medications & treatments (88): advanced heart failure, alarm fatigue, Alzheimer, asparagus urine, aspirin, atherosclerosis, cadaverine, alcitriol, catharsis, CBT, cetuximab, chemsex, chiropractic, chronological age, cinematherapy, climate medicine, coban, corticoid, cortisol, CRP, detox foot pad, detox, ditans, DNA, dopamine, E.coli, electroceutical, endorphin, enzyme, ergocalciferon, Erythromycin, estrogen, F.nucleatum, fishpaste-phobia, gene tox, gepants, globulin, glutamate receptor, goiter belt, gout, Helicobacter pylori, hemikrania, histamin, hormone GLP-1, hospital gown, insomnia, insulin, interleukin-1, invalide, leisure sickness, man flu, elancholia, metformin, migraine, miR-124, MMR, morphine, MRI, MRX34, mTOR, neck cracking, NIR, nut free, olfaction, PAD, panic attack, Parkinson, penicillin, PET, positrom, post-holiday blues, post-transcriptional regulation, propranolol, PTSD, REM, Remternetug, rubella, semaglutide, separation anxiety disorder, SOHLH2, SPS, stent, tinnitus, ultra-processed, UV, UVB, wake turbulence, weight, Zilebesiran.

Beverages, food & ingredients (83): alligator pear, aspartame, avocado pear, avocado, bakery, biryani, bland, burger, buttered popcorn index, cacao, cappuccino, caramel, carton, ceviche, champagne, cheese, chewing gum, chili pepper,

chilli crisp, chocolate liquor, chocolate, cider, cocktail, coddled, coddled egg, coffee essential oil, combo, crepe, croissants, crouton, cupper, dark chocolate, finger food, flavor, foamy, fragrant, gluten-free, guacamole, hamburger, happy cake, kale, kokumi, liquor, marmalade, matcha, mayo, milk chocolate, miso, mozzarella, omelette, pepper, pepperoni, pizza, quinoa, ramdon, rotten, salad, salad guacamole bowl, sandwich, savon, soda, soju, sorbitol, spaghetti, spankopita, steak, sugar alcohols, surimi, swicy, taco, tamari, tannin, tart, taste, taurine, tequila, theobromine, topping, umami, Vietnamese pancake, white chocolate, xylitol, yogurt.

Everyday life & lifestyle (78): aphanus rolandi, aphanus, aroma, baby, better than before, box, brown, buddy, campus, chill, cisgender, clean eating, collection, comfort food, communion, coolie, cotton, CV, domino, drama, drap, dull, durability, eureka, fan, frequency, friend, gen Z, hashtag, healing design, home composter, hot girl, hot, human factor, HVAC, influencer fatigue, influencer, jody, lectus cubicularis, lectus lucubratorius, leftover, LGBT, LGBTQ, lively, livestream, logistics, meme, mic, multi-voice, newsletter, non-binary, per se, perfume, PIN, pipe, play-off, queer, second hand, sharp, sheet, show don't tell, site, size, sofa, spa, spread, tag questions, team, teen, tie-break, toilet, toolbelt generation, top, utopia, variety, vinyl, VIP, viscosity, zero.

Business, economics & finance (58): accounting clerk, affirmative action, ATM, BESS, BNP, BNPL, call center, CEO, CEP, counter-cyclical, CPI, crypto stablecoin, deal, degrowth, DEI, delta, de-risking, diesel, due diligence, ETF, extractive institution, Fab, FDC, FDI, FEC, free and reduced meals, friendshoring, FTA, GDP, GNH, GRDP, industry, KPI, KYC, LGFV, living wage, logo, M&A, made in ASEAN, made in Vietnam, mainstream, marketing, MBM, MFN, partner, PR, preservation instance, private-equity, professional service, RDC, residency, seminar, ship, shipper, startup, stock, tenured, trickle down, urban mining.

Travel & tourism (50): air pillow, American-styled, bar, BBQ, board, buffet, bungalow, cabin, check in, clear-air turbulence, disposable, dupe destination, dupe, elite, F&B, futon, homestay, host, hotel, house, inbound, interval, lobby, MICE, mini, residente temporal, resort, road, roller, sample, sight, stand by, stereotype, stress, tatami, taxi, tour guide, tour, trail, tourmalinetrap boy, trek, triclinia, tuktuk, turkey, twopenny hangover, underground, view, visa.

Sports & fitness (22): billiards, boxing, do not train, expected goal, foul, golf, judo, karate, kickboxing, libero, marathon, pickleball, rowing, runner, spandex, Sub4, taekwondo, tennis, tough, track, twist, yoga.

Psychological, emotional & behavioral concepts (18): cervello, cognitivism, discrete emotions theory, emotivism, engage, engagement, feelings of common humanity, FOMO, hallucination, incorrectly believe, mentalising, mere exposure effect, mindfulness, self-compassion, misconception, self-fulfilling prophecy, self-kindness, woke.

Communication & media (18): broadcast, dark web, DDoS, deepfake, fact check, fake quote, fanpage, king of fake quote, like, link, spin, think tank, tweet, vibrant, viral, web, website, world wide web.

Environment, plants & natural phenomena (17): bombardier beetle, camellia velutina, carson valley monkeyflower, chlorogenic, corydalis ambigua, curcuma pygmaea, curcuma vitellina, dichocarpum hagiangense, El Nino, erythranthe carsonensis, greenwash, greenwashing, heatwave, net zero, ozone, root exudation, sainfoin.

Currencies (15): AUD, baht, cent, euro, franc, kopek, pence, peso, ringgit, RM, rupee, rupiah, USD, won, yen

Literary & creative concepts (15): bestseller, bibliotherapy, blog, blogger, confessional poetry, cozy fiction, cubicula, fourpenny coffin, pansy, poet, songwriting, tortured poet, transcription, translation, YA

Scientific research (14): archive, cross-sectional study, design verification, DOI, electrophysiology, gas chromatograph, lab, literature review, observative study, open access, oscillation, oscilloscope, physical implementation, scoping review

Education (14): alphabet, assistant professor, center of learning, deep learning, IELTS, IQ, millennial, R&D, SAT, STEM, student accommodation, test, TOEFL, workshop

Measurement & units (9): gigabyte, gram, hertz, kilogram, kilowatt, megawatt, nanogram, ounce, zettabyte **Political, military, & geopolitical concepts** (8): ADIZ, ATACMS, FBI agent, ICBM, imperial presidency, in line, inclusive institution, jet stream.