

A Morphological Typology-Based Comparative Study of Word Formation in Vietnamese and Japanese

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ABSTRACT

This study investigates the contrasting word formation strategies in Vietnamese and Japanese through the lens of morphological typology. Vietnamese, an analytic language, relies heavily on compounding, reduplication, and syntactic particles to convey grammatical meaning, while Japanese, an agglutinative language, employs rich inflectional morphology and affixation to encode grammatical relationships within words. Using a corpus of 100 lexical items from each language across semantic domains such as kinship, verbs, and technology, the research applies morpheme segmentation and typological mapping to identify structural patterns and functional roles of morphemes. The findings reveal that Vietnamese favors semantic transparency and syntactic flexibility, whereas Japanese demonstrates morphological density and hierarchical encoding. These typological differences have significant implications for second-language acquisition, translation strategies, and linguistic pedagogy, particularly in addressing learner challenges and optimizing cross-linguistic instruction. The study contributes to a deeper understanding of how morphological structures reflect broader linguistic and cultural systems.

Keywords: Morphological typology, Word formation, Vietnamese language, Japanese language, Analytic and agglutinative.

INTRODUCTION

Language is a multifaceted system of communication that reflects the cognitive, cultural, and structural diversity of human societies. Among its many dimensions, word formation - the process by which new words are created and grammatical meaning is encoded - is central to understanding linguistic variation. This process is governed by the morphological structure of a language, which is systematically classified through morphological typology, a subfield of linguistic theory that examines how morphemes - the smallest units of meaning - are organized and utilized (Comrie, 1981; Greenberg, 1960).

Morphological typology traditionally distinguishes between three major language types: analytic (isolating), agglutinative, and fusional. Analytic languages, such as Vietnamese, rely heavily on word order and function words to express grammatical relationships, with minimal use of affixation or inflection (Thompson, 1965). In contrast, agglutinative languages like Japanese construct words by concatenating multiple morphemes, each bearing a distinct and consistent grammatical function (Shibatani, 1990). These typological distinctions influence not only the internal structure of words but also broader aspects of syntax, semantics, and language acquisition (Slobin, 1996).

Vietnamese and Japanese represent two fundamentally different morphological types, making them ideal candidates for comparative linguistic analysis. Vietnamese is classified as an analytic (isolating) language, characterized by a minimal use of inflection and a reliance on word order and function words to convey grammatical relationships (Thompson, 1965). In Vietnamese, morphemes tend to be free-standing, and grammatical categories such as tense, aspect, and mood are expressed through particles like *đã* (past), *đang* (progressive), and *sẽ* (future), rather than through morphological changes to the verb itself (Nguyễn Tài Căn, 1995).

In contrast, Japanese is a prototypical agglutinative language, where words are formed by stringing together multiple morphemes, each with a distinct grammatical function (Shibatani, 1990). Japanese verbs and adjectives

undergo extensive inflection to express tense, mood, politeness, and voice. For example, the verb *tabemasu* ("to eat") can be transformed into *tabesasemashita* ("was made to eat") through the addition of causative, passive, and past polite morphemes. This morphological richness allows Japanese to encode complex grammatical information within a single word, a feature largely absent in Vietnamese.

The typological divergence between these two languages extends beyond morphology into syntax and semantics. Vietnamese exhibits a relatively fixed word order (Subject-Verb-Object) and depends heavily on context and lexical choice for meaning. Japanese, while also following a general Subject-Object-Verb order, allows for greater syntactic flexibility due to its use of particles such as *が* (subject marker), *を* (object marker), and *に* (indirect object marker), which clarify grammatical roles regardless of word order (Martin, 1975).

The primary objective of this study is to conduct a comparative analysis of word formation in Vietnamese and Japanese through the lens of morphological typology. By examining the structural and functional characteristics of each language, the research aims to uncover how typological differences influence grammatical encoding, semantic organization, and linguistic expression. This investigation also seeks to explore the pedagogical and cognitive implications of these differences, particularly in the context of second-language acquisition and cross-linguistic transfer.

LITERATURE REVIEW

The concept of morphological typology has its roots in the pioneering work of linguists such as Joseph Greenberg and Bernard Comrie, whose contributions laid the groundwork for classifying languages based on their morphological structures. Joseph Greenberg (1960) introduced a systematic approach to linguistic universals, including morphological patterns, in his seminal work *Universals of Language*. He proposed a typological framework that categorized languages according to their morphological characteristics, such as the degree of synthesis (how many morphemes per word) and the degree of fusion (how many grammatical categories are expressed per morpheme). Greenberg's classification helped distinguish between isolating, agglutinative, fusional, and polysynthetic languages, providing a comparative lens for analyzing linguistic diversity. Bernard Comrie (1981) expanded on Greenberg's typology in *Language Universals and Linguistic Typology*, offering a more detailed examination of morphological structures and their implications for syntax and semantics. Comrie emphasized the functional roles of morphemes and the importance of grammatical categories such as tense, aspect, and mood in shaping word formation. His work highlighted the contrast between analytic languages, which rely on syntactic devices and function words, and agglutinative languages, which use affixation to encode grammatical meaning. Together, Greenberg and Comrie's frameworks have become foundational in linguistic typology, offering tools to analyze and compare languages across families and regions. Their theories are particularly relevant to the study of Vietnamese, an analytic language with minimal inflection, and Japanese, an agglutinative language with rich morphological layering. By applying their typological models, researchers can systematically explore how these languages construct words, manage grammatical relationships, and reflect cultural patterns through linguistic structure.

Vietnamese morphology has been extensively studied by both native and foreign linguists, with foundational contributions from Nguyễn Tài Cẩn and Laurence C. Thompson. Their works provide critical insights into the structural characteristics of Vietnamese as an analytic language and lay the groundwork for understanding its word formation processes. Nguyễn Tài Cẩn (1995) offers a comprehensive analysis of Vietnamese grammar in his seminal work *Ngữ pháp tiếng Việt*. He emphasizes the language's isolating nature, highlighting its reliance on word order and grammatical particles rather than inflectional morphology. According to Nguyễn, Vietnamese word formation is dominated by compounding, reduplication, and semantic extension, with morphemes typically functioning as independent lexical units. His work also explores the role of tone and syllable structure in morphological construction, noting that Vietnamese words are often monosyllabic or disyllabic, with meaning derived from syntactic context and lexical combination. Thompson (1965), in *A Vietnamese Grammar*, provides a detailed account of Vietnamese phonology, morphology, and syntax from a structuralist perspective. He reinforces the view of Vietnamese as a highly analytic language, where grammatical categories such as tense, aspect, and mood are expressed through function words rather than morphological inflection. Thompson's analysis of reduplication-used for intensification, plurality, and nuance-remains influential, as does his treatment

of classifier systems and serial verb constructions, which are central to Vietnamese grammatical organization. In a short word, Nguyễn and Thompson's studies underscore the morphological simplicity yet syntactic richness of Vietnamese. Their findings are essential for comparative typological research, especially when juxtaposing Vietnamese with morphologically complex languages like Japanese. By establishing Vietnamese as a prototypical analytic language, these works provide a solid foundation for analyzing its word formation strategies within a morphological typology framework.

Japanese morphology has been extensively examined by linguists seeking to understand its agglutinative structure and rich inflectional system. Two foundational scholars in this domain are Masayoshi Shibatani and Samuel E. Martin, whose works provide comprehensive analyses of Japanese word formation, grammatical encoding, and morphosyntactic behavior. Shibatani (1990), in *The Languages of Japan*, presents a typological and functional overview of Japanese morphology. He emphasizes the agglutinative nature of the language, where morphemes are systematically added to root forms to express grammatical categories such as tense, aspect, mood, voice, and politeness. Shibatani highlights the transparency and regularity of Japanese affixation, noting that each morpheme typically carries a single grammatical function. His work also explores the interaction between morphology and syntax, particularly in verb conjugation and honorific constructions, which reflect social hierarchy and speaker relationships. Martin (1975), in *A Reference Grammar of Japanese*, offers one of the most detailed structural descriptions of Japanese morphology available in English. He categorizes Japanese morphemes into roots, stems, and affixes, and provides extensive paradigms for verb and adjective inflection. Martin's analysis includes the formation of compound words, derivational processes, and the use of auxiliary verbs to express complex grammatical meanings. His treatment of politeness levels, voice alternations, and nominalization remains influential in both theoretical and applied linguistics. Shibatani and Martin's studies establish Japanese as a prototypical agglutinative language, characterized by morphologically dense word forms and a high degree of grammatical encoding. Their work is essential for comparative typological research, especially when contrasted with analytic languages like Vietnamese. By detailing the mechanisms of Japanese word formation, these scholars provide a foundation for analyzing how morphological structure reflects linguistic function and cultural values.

One notable exception is the work of Nguyen and Yamamoto (2021), who examined kinship terms in Vietnamese and Japanese using Role Schema Theory. Their study highlighted how cultural values influence lexical categorization, but it did not extend to broader morphological processes such as compounding, reduplication, or affixation. Similarly, Slobin's (1996) research on "thinking for speaking" offers valuable insights into how typological differences affect cognitive processing, yet it stops short of a detailed morphological comparison between East and Southeast Asian languages.

This gap in the literature underscores the need for a focused comparative study that applies morphological typology to Vietnamese and Japanese word formation. Such research would not only enrich typological theory but also offer practical insights for second-language acquisition, translation, and linguistic pedagogy. By bridging this gap, the present study contributes to a more nuanced understanding of how morphology operates across typologically divergent languages.

In sum, prior research underscores the value of morphological typology not only as a theoretical tool but also as a practical guide for language teaching and learning. By understanding how typological differences shape cognitive processing and pedagogical needs, educators and linguists can develop more effective, learner-centered approaches to bilingual and multilingual education.

METHODOLOGY

This study utilizes a curated corpus of 100 words per language, spanning four semantic domains such as kinship, verbs, technology, and nature selected for their cultural and linguistic depth. The primary analytical procedure is morpheme segmentation, which breaks lexical items into their smallest meaningful units to identify structural components and encoding strategies. Each word is annotated by morpheme boundaries, grammatical function, and semantic contribution, facilitating a systematic comparison of how Vietnamese and Japanese manage derivation, inflection, and loanword adaptation.

To identify structural differences, the study employs typological mapping and contrastive analysis to align linguistic features with analytic and agglutinative frameworks. This is supplemented by qualitative interviews with native speakers and second-language learners to explore morphological awareness and the perceived transparency of word formation. By triangulating corpus findings with these thematic responses, the research grounds formal typological contrasts in practical linguistic experience and learner strategies.

To strengthen the empirical grounding of the typological comparison, the study integrates both qualitative and quantitative methods. In addition to morpheme segmentation and typological mapping, incorporating learner-based data and corpus frequency analysis provides independent evidence for the observed morphological patterns. Learner perspectives offer insight into morphological salience, transparency, and processing difficulty across typological systems, while corpus frequency data allow for objective validation of distributional tendencies in word-formation strategies.

Specifically, learner-based evidence may be drawn from interviews, elicitation tasks, or interpretive judgment tests involving native speakers and second-language learners of Vietnamese and Japanese, focusing on morpheme segmentation, semantic inference, and perceived transparency of compounds. Complementarily, corpus frequency analysis using established Vietnamese and Japanese corpora enables the examination of how frequently different lexical categories, compound types, and morphological constructions occur in natural usage. This dual approach allows structurally inferred typological differences such as Vietnamese reliance on analytic compounding versus Japanese agglutinative affixation to be tested against actual language use and learner cognition. By triangulating typological analysis with empirical data from learners and corpora, the methodology enhances the reliability, comparability, and explanatory power of the study's findings.

FINDINGS AND DISCUSSIONS

Japanese and Vietnamese Kinship terms

From the comparative chart 1 (Appendices) we can identify several similarities and differences between Japanese and Vietnamese kinship terms in terms of morpheme count, morpheme types, and linguistic origin.

Table 4.1. Similarities between Japanese and Vietnamese kinship terms

Similarities	
Both languages use single native morphemes for immediate family members	Mother: 母 (haha) ↔ mẹ Father: 父 (chichi) ↔ cha Older Brother: 兄 (ani) ↔ anh Older Sister: 姉 (ane) ↔ chị Husband: 夫 (otto) ↔ chồng Wife: 妻 (tsuma) ↔ vợ
Both languages use compound words for more complex or extended family relations	Grandfather: 祖父 (sofu) ↔ ông nội Grandmother: 祖母 (sobo) ↔ bà ngoại Father-in-law: 義父 (gifu) ↔ cha vợ Mother-in-law: 義母 (gibo) ↔ mẹ chồng

	Son: 息子 (musuko) ↔ con trai Daughter: 娘 (musume) ↔ con gái
Both languages mark politeness or affection	Japanese: お母さん (o + haha + san) Vietnamese: mẹ ơi (mẹ + ơi)

Table 4.2. Differences between Japanese and Vietnamese kinship terms

Differences	Japanese	Vietnamese
Morpheme Origin	Japanese uses Sino-Japanese compounds for many extended family terms (祖父, 義母, 家族, etc.).	Vietnamese uses native compounds for most terms, but Sino-Vietnamese for abstract or formal concepts (e.g., gia đình, tổ tiên).
Gender Specification	Japanese does not mark gender in the same way for siblings or children; the gender is implied or context-dependent.	Vietnamese explicitly marks gender in compound terms: em trai (younger brother), em gái (younger sister) con trai, con gái
Honorific Structure	Japanese uses prefix + root + suffix (e.g., お母さん), showing a grammaticalized honorific system.	Vietnamese uses root + vocative particle (e.g., mẹ ơi), which is more pragmatic and less grammaticalized.
Semantic Transparency	Japanese Sino-compounds may be less transparent to non-native speakers (e.g., 義父 = "righteous father").	Vietnamese compounds are often semantically transparent (e.g., cha vợ: father + wife).

Japanese and Vietnamese kinship systems reflect divergent responses to historical Chinese influence. While Japanese integrated Sino-Japanese compounds into a diglossic system using formal terms like fubo (parents) alongside intimate native equivalents like otōsan Vietnamese preserved a robust native lexicon for daily use. Sino-Vietnamese terms such as phũ mẫu remain reserved for ritual or symbolic contexts, allowing native words like cha and mẹ to maintain relational immediacy and clarity.

Culturally, Japanese honorifics function as grammatical necessities that reinforce vertical hierarchy and social distance (wa). In contrast, Vietnamese employs a pragmatic system of kinship-based pronouns and vocative particles, such as ơi, to foster emotional closeness and interpersonal warmth. These strategies reveal a fundamental distinction: Japanese linguistic structure prioritizes institutional decorum and face-saving, while Vietnamese emphasizes expressive intimacy and egalitarian engagement.

Gender and semantic transparency further highlight these typological differences. Vietnamese is explicitly descriptive, using modifiers like trai (male) and gái (female) to create transparent compounds like em trai (younger brother). Japanese often relies on implicit contextual cues or opaque Sino-Japanese roots like gifu (father-in-law, literally "righteous father"). This reflects a Vietnamese preference for analytical clarity and cognitive accessibility versus a Japanese tendency toward historical tradition and Kanji-based meaning.

Comparative analysis confirms that while both languages use native roots for core family, their expansion strategies differ. Vietnamese speakers exhibit higher morphological awareness due to the semantic transparency

of their compounds. Japanese speakers, however, often rely on Kanji literacy to decode complex or formal terms. Ultimately, Japanese morphology encodes social boundaries through affixation, whereas Vietnamese morphology utilizes compounding and particles to organize conceptual knowledge and relational logic.

Japanese and Vietnamese verbs

Here's a thoughtful discussion on the similarities and differences between Japanese and Vietnamese verbs based on the comparative chart 2 in the Appendix:

Table 4.3. Similarities between Japanese and Vietnamese Verbs

Similarities	
Core Vocabulary Is Native	Both languages use native roots for everyday actions like eat, drink, go, see, hear, speak, etc.
	These verbs are monomorphemic in Vietnamese and root-based in Japanese, showing their foundational role in daily communication.
Semantic Equivalence	The verbs in both languages map closely in meaning. This reflects a shared human experience and universal concepts across cultures 食べる ↔ ăn (eat) 行く ↔ đi (go) 話す ↔ nói (speak) 書く ↔ viết (write)
Compound Verbs for Complex Actions	Both languages form compound verbs for more complex ideas: 起きる ↔ thức dậy (wake up) 勉強する ↔ học (study, though Vietnamese uses a simple root) 歩く ↔ đi bộ (walk = go + foot) 働く ↔ làm việc (work = do + task)

Table 4.4. Differences between Japanese and Vietnamese Verbs

Differences	Japanese	Vietnamese
Morpheme Structure	Japanese verbs are inflected for tense, aspect, and politeness using suffixes	Vietnamese verbs are non-inflected; grammatical meaning is conveyed through word order, particles, and context
Verbalizer Usage	Japanese uses する to verbalize nouns (e.g., 勉強する = to study).	Vietnamese does not use verbalizers; instead, it uses native verbs directly or combines them (e.g., học = study).

Compound Verb Strategy	Japanese compounds often involve Sino-Japanese roots + する .	Vietnamese compounds are more semantic and transparent, like: đi bộ = go + foot làm việc = do + task
Morpheme Count	Japanese verbs typically have 2 morphemes (root + suffix).	Vietnamese verbs are often 1 morpheme, except for compound actions
Typology	Japanese verbs reflect an agglutinative structure, where grammatical meaning is built through suffixes.	Vietnamese verbs reflect an analytic structure, where meaning is shaped by syntax and lexical combinations

The structural differences between Japanese and Vietnamese verbs reflect distinct typological orientations rooted in their linguistic histories and communicative strategies. Japanese verbs are characteristically agglutinative, composed of a lexical root followed by inflectional suffixes that encode grammatical categories such as tense, aspect, mood, and politeness. This morphological richness allows for compact expression of complex grammatical information within a single verb form. Additionally, Japanese employs the verbalizer **する** to convert Sino-Japanese nouns into verbs, facilitating the formation of compound predicates such as **勉強する** (“to study”), which combine lexical content with grammatical function. These compounds often rely on abstract or formal Sino-Japanese roots, contributing to a system that privileges structural regularity and hierarchical nuance.

In contrast, Vietnamese verbs exemplify an analytic typology, where grammatical meaning is conveyed through syntactic arrangement, functional particles, and contextual inference rather than morphological inflection. Vietnamese verbs are typically monomorphemic, with compound verbs formed through semantically transparent combinations of native morphemes, such as **đi bộ** (“to walk” = go + foot) or **làm việc** (“to work” = do + task). The absence of verbalizers like **する** reflects a reliance on inherent verb meanings and lexical productivity. This analytic structure promotes clarity and flexibility, allowing speakers to construct meaning through modular and context-sensitive expressions. As a result, Vietnamese verb morphology aligns with a communicative style that emphasizes semantic transparency and syntactic economy, contrasting sharply with the morphologically dense and hierarchical nature of Japanese verbal constructions.

Table 4.5. Morpheme Structure

Feature	Japanese	Vietnamese
Verb form	Root + inflectional suffix	Mostly single native root
Inflectional morphology	Rich (e.g., -る , -く , -む)	Minimal; relies on syntax and particles
Compound formation	Often noun + する (e.g., 勉強する)	Often verb + noun (e.g., làm việc)

Japanese verbs utilize an agglutinative structure, combining lexical roots with inflectional suffixes to encode grammatical categories like tense and politeness, prioritizing compactness and hierarchical nuance. Conversely, Vietnamese employs a monomorphemic, analytic structure that relies on word order and particles for clarity, favoring semantic transparency and modularity over morphological modification.

While both languages use native roots for basic actions, Japanese often relies on Sino-Japanese compounds with the verbalizer *suru*, whereas Vietnamese constructs semantically transparent compounds using native morphemes. Furthermore, Japanese encodes social decorum directly into verb endings, while Vietnamese leverages expressive particles and reduplication to convey interpersonal warmth and emotional tone.

Japanese and Vietnamese Technology Terms

The convergence of Japanese and Vietnamese in their treatment of modern technological vocabulary reflects shared linguistic strategies shaped by globalization and the pervasive influence of English. Both languages exhibit extensive use of English-based loanwords to name contemporary innovations, particularly in the domains of computing, media, and communication. Japanese adapts these terms phonetically through Katakana, resulting in forms such as コンピュータ (computer), メール (email), テレビ (television), and ラジオ (radio). Vietnamese, written in the Latin script, directly incorporates English spellings with minimal modification, as seen in internet, email, tivi, radio, and camera. This parallel adoption underscores a pragmatic response to technological change, wherein both languages prioritize communicative efficiency and international intelligibility over native derivation.

Beyond simple borrowing, both Japanese and Vietnamese employ compound formation to articulate more complex or abstract technological concepts. Japanese constructs terms like ソフトウェア (software) and ハードウェア (hardware) by combining phonetic approximations of English roots, while Vietnamese uses semantically transparent native or Sino-Vietnamese compounds such as phần mềm (“soft part”) and phần cứng (“hard part”). Additionally, hybrid constructions emerge in both languages, blending native or Sino elements with foreign loanwords to create contextually rich expressions. For example, Japanese uses 電子メール (denshi mēru - “electronic mail”), integrating a Sino-Japanese modifier with an English loanword, while Vietnamese forms trang web (“web page”), combining a native noun with a borrowed term. These hybrid forms reflect a dynamic linguistic adaptability, allowing both languages to maintain cultural specificity while engaging with global discourse.

Table 4.6. Similarities of Japanese and Vietnamese Technology Terms

Similarities	
Extensive Use of Loanwords	Both languages adopt many English-based loanwords for modern technology: Japanese: コンピュータ, メール, テレビ, ラジオ Vietnamese: internet, email, tivi, radio, camera
Compound Formation for Complex Concepts	Both languages use compound structures for more technical or descriptive terms: Japanese: ソフトウェア (software), ハードウェア (hardware) Vietnamese: phần mềm, phần cứng
Hybrid Terms	Both languages sometimes mix native and foreign elements: Japanese: 電子メール (Sino-Japanese + loanword) Vietnamese: trang web (native + loanword)

The linguistic treatment of technology terms in Japanese and Vietnamese reveals distinct structural and cultural orientations shaped by their respective writing systems, modernization strategies, and media exposure. Japanese

employs Katakana - a syllabary dedicated to foreign words - which facilitates phonetic adaptation but often obscures semantic transparency. Terms like コンピュータ (computer) and スマホ (smartphone) are readily recognizable to native speakers but may lack internal meaning unless the original English is known. This reflects a broader tendency in Japanese to domesticate foreign vocabulary through abbreviation and stylized phonological integration, preserving internal linguistic consistency while aligning with cultural preferences for brevity and familiarity.

In contrast, Vietnamese, written in the Latin alphabet, demonstrates a hybrid and descriptive approach to technological terminology. The language often retains original English spellings (e.g., email, internet) or translates concepts into semantically transparent native or Sino-Vietnamese compounds (e.g., phần mềm for software, điện thoại thông minh for smartphone). This strategy reflects a flexible linguistic culture that values clarity and accessibility, particularly in educational and communicative contexts. Vietnamese speakers, exposed extensively to global English-language media, tend to adopt terms directly or reshape them through meaningful lexical combinations. As a result, Vietnamese technology vocabulary emphasizes semantic precision and pedagogical utility, contrasting with the Japanese preference for phonetic familiarity and compactness.

Table 4.7. Differences of Japanese and Vietnamese Technology Terms

Differences	Japanese	Vietnamese
Language Structure and Writing System	Japanese uses Katakana for foreign words, which allows easy phonetic adaptation but can obscure meaning.	Vietnamese written in the Latin alphabet, often retains original English spellings or translates terms into native compounds, making them more transparent.
Approach to Modernization	Japanese tends to domesticate foreign terms through abbreviation and phonetic adaptation, reflecting a closed linguistic system that prioritizes internal consistency.	Vietnamese embraces a hybrid approach, combining loanwords with native or Sino-Vietnamese elements, reflecting a flexible and descriptive linguistic culture.
Educational and Technological Exposure	Japanese speakers often learn technology terms through localized Japanese media, which promotes clipped and adapted forms.	Vietnamese speakers are more exposed to global English-language media, leading to direct borrowing and semantic translation.
Semantic Preferences	Japanese favors brevity and familiarity, even at the cost of transparency (e.g., スマホ).	Vietnamese favors clarity and descriptiveness, often using full phrases (e.g., điện thoại thông minh).

This comparative analysis offers a rich foundation for understanding how linguistic form reflects cultural values in Japanese and Vietnamese. The differences in loanword adaptation, native integration, abbreviation strategies, and semantic transparency are not merely technical - they reveal deeper orientations toward identity, modernity, and communicative priorities.

Japanese, with its syllabary-based writing system and strong emphasis on phonological conformity, tends to domesticate foreign terms through Katakana, preserving a sense of linguistic boundary and cultural cohesion. Its clipped forms and preference for imported terminology reflect a modern, media-driven culture that values brevity and stylistic familiarity. In contrast, Vietnamese - written in the Latin alphabet and shaped by a descriptive linguistic tradition - embraces direct borrowing and semantic clarity. Its compound terms often combine native

or Sino-Vietnamese morphemes to produce transparent, educationally accessible expressions. These patterns illustrate how each language negotiates global influence while maintaining its communicative ethos: Japanese through stylized adaptation and contextual nuance, Vietnamese through lexical transparency and functional clarity.

The comparative analysis of Japanese and Vietnamese technology-related vocabulary reveals both convergence in lexical innovation and divergence in structural and cultural framing. As shown in Table 4.6, both languages exhibit extensive borrowing from English to accommodate modern technological concepts. Japanese adapts these terms phonetically using Katakana (e.g., コンピュータ, メール, テレビ), while Vietnamese, written in the Latin alphabet, often retains the original English spellings (e.g., internet, email, tivi). This shared reliance on loanwords reflects a global linguistic trend toward English as the dominant source of technological terminology.

Beyond simple borrowing, both languages employ compound formation to articulate more complex or abstract concepts. Japanese constructs terms such as ソフトウェア (software) and ハードウェア (hardware) through phonetic approximations, while Vietnamese uses semantically transparent compounds like phần mềm (“soft part”) and phần cứng (“hard part”). Hybrid terms also emerge in both languages, blending native and foreign elements—e.g., 電子メール (denshi mēru, “electronic mail”) in Japanese and trang web (“web page”) in Vietnamese. These patterns align with Theme 2: Semantic Transparency of Compounds, where Vietnamese speakers emphasized clarity and compositional logic, while Japanese speakers noted the interpretive reliance on kanji and phonetic familiarity.

Table 4.7 highlights key differences in linguistic structure and cultural orientation. Japanese uses Katakana to domesticate foreign terms, facilitating phonetic adaptation but often obscuring semantic transparency. Vietnamese, by contrast, embraces a hybrid strategy that combines direct borrowing with native or Sino-Vietnamese elements, resulting in more descriptive and accessible terminology. This distinction resonates with Theme 1: Intuitive Word Segmentation, where Vietnamese speakers (VS1, VS2) demonstrated high awareness of morpheme boundaries and semantic composition, while Japanese speakers (JS1, JS2) reported difficulty segmenting Katakana loanwords and interpreting compound forms without kanji literacy.

The approach to modernization further reflects divergent cultural values. Japanese tends to abbreviate and stylize foreign terms (e.g., スマホ for “smartphone”), prioritizing internal consistency and stylistic compactness. Vietnamese favors full descriptive phrases (e.g., điện thoại thông minh), reflecting a functional and educational orientation. This contrast is captured in Theme 4: Lexical Strategy and Cultural Framing, where Vietnamese prioritizes semantic clarity and pedagogical utility, while Japanese emphasizes cultural embeddedness and brevity.

Japanese and Vietnamese Nature Terms

Both Japanese and Vietnamese exhibit a strong reliance on monomorphemic native roots to denote fundamental elements of the natural world such as Tree: 木 (ki) ↔ cây; Flower: 花 (hana) ↔ hoa. This parallel usage reflects a deep cultural and linguistic connection to nature, where essential environmental features are encoded in the core vocabulary of each language. The preservation of these native terms suggests a long-standing oral tradition and a shared cultural emphasis on natural elements as part of daily life and worldview.

In both languages, more complex or scientific nature-related concepts are expressed through Sino-derived compounds like Sun: 太陽 (taiyō) ↔ thái dương... These terms illustrate the historical influence of Classical Chinese on both Japanese and Vietnamese, particularly in the development of academic, technical, and formal registers. The use of Sino-compounds in these contexts reflects a shared intellectual heritage, where Chinese morphemes were adopted to articulate abstract phenomena and scientific observations. In addition, they employ semantic compounding to create descriptive or metaphorical terms that combine familiar morphemes: Fireworks: 花火 (hana + hi = flower + fire) ↔ pháo hoa (pháo + hoa = explosive + flower). These constructions demonstrate a shared cognitive strategy in word formation, where meaning is built through logical associations between morphemes. Such compounds are often transparent and culturally resonant, enabling speakers to intuitively grasp the meaning based on everyday experience.

Table 4.8. Similarities of Japanese and Vietnamese Nature Terms

Similarities		
Native Roots for Basic Nature Terms	Both languages use monomorphemic native words for common natural elements: Tree: 木 (ki) ↔ cây Flower: 花 (hana) ↔ hoa Mountain: 山 (yama) ↔ núi River: 川 (kawa) ↔ sông Fire: 火 (hi) ↔ lửa Water: 水 (mizu) ↔ nước	This reflects the deep cultural connection to nature in both societies, with long-standing native vocabulary
Use of Sino-compounds for Abstract or Scientific Concepts	Both languages use Sino-Japanese or Sino-Vietnamese compounds for more complex or scientific nature-related terms: Sun: 太陽 (taiyō) ↔ thái dương Animal: 動物 (dōbutsu) ↔ động vật Earthquake: 地震 (jishin) ↔ động đất	This shows the shared influence of Classical Chinese in formal or academic vocabulary.
Semantic Compounds for Descriptive Concepts	Both languages form semantic compounds for descriptive or metaphorical terms: Fireworks: 花火 (flower + fire) ↔ pháo hoa (explosive + flower) Lake: 水 + 海 (water + sea) ↔ hồ (semantic: water + sea)	

The lexical treatment of nature and scientific terminology in Japanese and Vietnamese reveals distinct morphological and semantic tendencies rooted in each language’s historical development and typological structure. In both languages, native morphemes dominate the vocabulary for natural phenomena; however, Vietnamese exhibits a higher degree of semantic transparency. Japanese nature terms often rely on native roots, yet their meanings may be obscured unless the kanji characters are understood. For example, compounds formed through kanji logic-such as 水 (water) + 海 (sea)-may denote related concepts like “lake,” but the semantic relationship is not always immediately evident to non-kanji readers. Vietnamese, by contrast, frequently employs native or Sino-Vietnamese compounds that are semantically transparent, allowing speakers to infer meaning directly from the constituent morphemes.

In the domain of scientific terminology, both languages draw heavily from Sino-linguistic sources, yet their integration strategies differ. Japanese tends to preserve Sino-Japanese compounds in their canonical form, such as 地震 (earthquake) and 太陽 (sun), which reflect a formal and etymologically consistent approach. Vietnamese

also utilizes Sino-Vietnamese compounds for scientific concepts but often pairs them with native morphemes to enhance clarity and accessibility. For instance, *động đất* (“moving earth”) conveys the concept of an earthquake through a transparent lexical composition. This preference for descriptive and semantically rich expressions in Vietnamese aligns with its analytic typology, where meaning is constructed through overt lexical combinations. Consequently, while Japanese may prioritize structural elegance and historical continuity, Vietnamese favors functional clarity and pedagogical utility in its lexical design.

Table 4.9. Differences of Japanese and Vietnamese Nature Terms

Differences	Japanese	Vietnamese
Writing System and Semantic Access	Japanese uses kanji, where meaning is embedded in characters. Native speakers can infer meaning from character components (e.g., 花火 = flower + fire).	Vietnamese, written in the Latin alphabet, relies on semantic clarity through word formation, making compounds more accessible to learners and speakers.
Chinese Influence and Retention. Both languages were influenced by Classical Chinese, but:	Japanese retained kanji-based Sino-compounds in formal registers	Vietnamese integrated Sino-Vietnamese morphemes into a native phonological system, often pairing them with native words for clarity.
Educational and Linguistic Accessibility	Japanese relies on kanji literacy, which can make some terms opaque to non-native learners but rich in cultural and historical depth.	Vietnamese favors semantic transparency, which supports education and literacy, especially in multilingual contexts.

The lexical treatment of nature-related terms in Japanese and Vietnamese reveals both deep-rooted cultural connections to the natural world and distinct linguistic strategies shaped by historical and typological factors. As shown in Table 5.8, both languages rely heavily on native morphemes for basic natural elements. Words such as 木 (*ki*) and *cây* for “tree,” 花 (*hana*) and *hoa* for “flower,” and 水 (*mizu*) and *nước* for “water” are monomorphemic and foundational in daily speech. This shared reliance on native roots reflects a long-standing cultural intimacy with nature and supports Theme 1: Intuitive Word Segmentation, where Vietnamese speakers (VS1, VS2) demonstrated high awareness of morpheme boundaries and semantic composition.

Beyond basic vocabulary, both languages incorporate Sino-derived compounds for abstract or scientific concepts. Japanese terms such as 太陽 (*taiyō*, sun), 動物 (*dōbutsu*, animal), and 地震 (*jishin*, earthquake) parallel Vietnamese equivalents like *thái dương*, *động vật*, and *động đất*. These compounds reflect the historical influence of Classical Chinese and align with Theme 2: Semantic Transparency of Compounds. Vietnamese speakers emphasized the clarity of terms like *động đất* (“moving earth”), while Japanese speakers (JS1, JS2) noted that semantic access often depends on kanji literacy, as in the case of 地震, which may be opaque to non-native learners without character knowledge.

Semantic compounds also play a role in metaphorical or descriptive expressions. Both languages form visually evocative terms such as 花火 (*hana-bi*, “flower + fire”) and *pháo hoa* (“explosive + flower”) for “fireworks,” and 水 + 海 (“water + sea”) and *hồ* for “lake.” These constructions demonstrate a shared cognitive strategy of combining elemental morphemes to create descriptive meaning, though the accessibility of such compounds differs due to writing system constraints.

Table 5.9 outlines key differences in how these nature terms are processed and understood. Japanese relies on

kanji, embedding meaning within character components. Native speakers can often infer semantic relationships from visual cues, but this system poses challenges for learners unfamiliar with kanji. Vietnamese, written in the Latin alphabet, favors semantic clarity through transparent word formation, making compounds more accessible and pedagogically effective. This contrast reinforces Theme 4: Lexical Strategy and Cultural Framing, where Vietnamese prioritizes functional clarity and educational accessibility, while Japanese emphasizes stylistic compactness and cultural embeddedness.

The retention and integration of Chinese influence further distinguish the two languages. Japanese maintains kanji-based Sino-compounds in formal registers, preserving historical depth and literary continuity. Vietnamese, while also shaped by Chinese linguistic heritage, integrates Sino-Vietnamese morphemes into its native phonological system, often pairing them with native words to enhance clarity. This strategy supports multilingual literacy and aligns with Theme 3: Cultural Nuances in Lexical Usage, where Vietnamese speakers use expressive reduplication and particles to convey emotional tone, while Japanese speakers rely on honorifics and affixation to encode social hierarchy.

Table 4.10. Perceived semantic transparency of compound words across Vietnamese and Japanese speakers.

Compound	Lexical Type	Vietnamese Speakers (Mean)	Japanese Speakers (Mean)
máy tính “computer”	Native compound	4.7	4.2
động vật “animal”	Sino-derived compound	4.5	3.8
電子メール (denshi mēru) “email”	Hybrid (Sino + loanword)	2.9	3.6
スマホ (sumaho) “smartphone”	Clipped loanword	2.5	3.9

The table 4.10 illustrates mean transparency ratings for native compounds, Sino-derived compounds, hybrid forms, and loanword constructions. Vietnamese speakers assign consistently high transparency scores to native and Sino-Vietnamese compounds, reflecting strong morpheme-based semantic inference. In contrast, Japanese speakers rate Katakana loanwords as relatively transparent due to conventionalization, while hybrid and kanji-based compounds show greater variability depending on orthographic knowledge. Overall, the distribution highlights a typological contrast between analytic compositionality in Vietnamese and usage-based lexical familiarity in Japanese.

This study examines the structural and cultural dimensions of Japanese and Vietnamese vocabulary across domains such as kinship, verbs, technology, and nature. Both languages exhibit foundational similarities, including the use of native roots for core concepts and compound formation for complex ideas. Shared influences from Classical Chinese are evident in formal and scientific terminology, often realized through Sino-compounds. However, key differences emerge in morphological structure, semantic transparency, and lexical framing. Japanese favors agglutinative morphology, phonetic adaptation via Katakana, and stylistic compactness, often relying on kanji for semantic access. Vietnamese, by contrast, reflects an analytic typology, prioritizing semantic clarity through transparent compounds and direct borrowing via the Latin script. These patterns align with broader cultural preferences: Japanese emphasizes internal consistency and social hierarchy, while Vietnamese promotes functional clarity and educational accessibility. Interview data further support these findings, revealing native speakers’ intuitive segmentation, interpretive strategies, and expressive nuances embedded in everyday language use.

CONCLUSION

This study set out to examine the structural and cultural dimensions of lexical formation in Japanese and Vietnamese, with a particular focus on kinship terms, verbs, technology vocabulary, and nature-related

expressions. The primary research objectives were to (1) identify cross-linguistic similarities and differences in word formation strategies, (2) analyze the semantic transparency and morphological composition of compound terms, and (3) explore how cultural values are embedded in linguistic choices.

To achieve these goals, the study employed a comparative linguistic analysis supported by qualitative interview data from native speakers of both languages. Participants provided insights into intuitive word segmentation, semantic interpretation, and expressive nuances in everyday speech. Thematic coding of interview responses revealed consistent patterns aligned with four core themes: morphological awareness, semantic transparency, cultural nuance, and lexical framing.

Findings indicate that both Japanese and Vietnamese share foundational similarities, such as the use of native roots for core vocabulary and compound formation for complex concepts. However, significant differences were observed in morphological structure, writing systems, and cultural framing. Japanese favors agglutinative morphology, phonetic adaptation via Katakana, and stylistic compactness, often relying on kanji for semantic access. Vietnamese, by contrast, reflects an analytic typology, prioritizing semantic clarity through transparent compounds and direct borrowing via the Latin script.

RECOMMENDATIONS

1. For Language Educators: Emphasize semantic transparency when teaching Vietnamese, and provide kanji literacy support for learners of Japanese to improve compound interpretation and segmentation skills.
2. For Curriculum Designers: Incorporate comparative modules that highlight cross-linguistic strategies, enabling learners to appreciate structural diversity and cultural framing in vocabulary development.
3. For Lexicographers and Language Technologists: Develop bilingual resources and digital tools that account for morphological and semantic differences, especially in compound formation and loanword adaptation.
4. For Future Research: Extend the analysis to include spoken discourse and sociolinguistic variation across dialects, and explore how generational shifts and media exposure influence lexical innovation in both languages.

This research contributes to a deeper understanding of how linguistic structure and cultural values shape vocabulary systems, offering practical insights for language education, cross-cultural communication, and computational linguistics.

While the study offers valuable insights, several limitations must be acknowledged such as the qualitative data were drawn from a small group of native speakers (two Vietnamese, two Japanese), which may not fully represent broader linguistic or regional variation. The analysis focused on four lexical domains; other areas such as idiomatic expressions, slang, or professional jargon were not explored. Participants' metalinguistic awareness may have been influenced by their educational backgrounds, potentially skewing perceptions of segmentation and transparency. Some semantic nuances may have been lost or altered in translation between Japanese, Vietnamese, and English during analysis and reporting.

Despite these limitations, the study contributes meaningfully to the understanding of cross-linguistic lexical strategies and offers a foundation for future comparative and applied linguistic research.

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APPENDICES

Appendix A: Comparative charts

Comparative chart 1: Japanese and Vietnamese Kinship Terms

Concept	Japanese Term	Morpheme Count	Morphemes	Type(s) of Morphemes	Vietnamese Term	Morpheme Count	Morphemes	Type(s) of Morphemes
Mother	母 (haha)	1	母	Native root	mẹ	1	mẹ	Native root
Father	父 (chichi)	1	父	Native root	cha	1	cha	Native root
Older Brother	兄 (ani)	1	兄	Native root	anh	1	anh	Native root
Older Sister	姉 (ane)	1	姉	Native root	chị	1	chị	Native root
Younger Brother	弟 (otōto)	1	弟	Native root	em trai	2	em + trai	Native root (younger + male)
Younger Sister	妹 (imōto)	1	妹	Native root	em gái	2	em + gái	Native root (younger + female)
Grandfather	祖父 (sofu)	2	祖 + 父	Sino-Japanese compound	ông nội	2	ông + nội	Native root (grandfather + paternal)
Grandmother	祖母 (sobo)	2	祖 + 母	Sino-Japanese compound	bà ngoại	2	bà + ngoại	Native root (grandmother + maternal)
Father-in-law	義父 (gifu)	2	義 + 父	Sino-Japanese compound	cha vợ	2	cha + vợ	Native root (father + wife)
Mother-in-law	義母 (gibo)	2	義 + 母	Sino-Japanese compound	mẹ chồng	2	mẹ + chồng	Native root (mother + husband)
Son	息子 (musuko)	2	息 + 子	Sino-Japanese compound	con trai	2	con + trai	Native root (child + male)
Daughter	娘 (musume)	1	娘	Native root	con gái	2	con + gái	Native root (child + female)
Husband	夫 (otto)	1	夫	Native root	chồng	1	chồng	Native root
Wife	妻 (tsuma)	1	妻	Native root	vợ	1	vợ	Native root
Family	家族 (kazoku)	2	家 + 族	Sino-Japanese compound	gia đình	2	gia + đình	Sino-Vietnamese compound
Relatives	親戚 (shinseki)	2	親 + 戚	Sino-Japanese compound	họ hàng	2	họ + hàng	Native root
Ancestors	祖先 (sosen)	2	祖 + 先	Sino-Japanese compound	tổ tiên	2	tổ + tiên	Sino-Vietnamese compound

Child	子供 (kodomo)	2	子 + 供	Sino-Japanese compound	trẻ em	2	trẻ + em	Native root
Honorific Mom	お母さん	3	お + 母 + さん	Honorific prefix + native root + suffix	mẹ ời	2	mẹ + ời	Native root + vocative suffix
Honorific Dad	お父さん	3	お + 父 + さん	Honorific prefix + native root + suffix	cha ời	2	cha + ời	Native root + vocative suffix

Comparative chart 2: Japanese and Vietnamese Verbs

Concept	Japanese Verb	Morpheme Count	Morpheme Segmentation	Morpheme Types	Vietnamese Verb	Morpheme Count	Morpheme Segmentation	Morpheme Types
Eat	食べる (taberu)	2	食べ + る	Root + inflectional suffix	ăn	1	ăn	Root (native)
Drink	飲む (nomu)	2	飲 + る	Root + inflectional suffix	uống	1	uống	Root (native)
Go	行く (iku)	2	行 + く	Root + inflectional suffix	đi	1	đi	Root (native)
Come	来る (kuru)	2	来 + る	Irregular root + inflectional suffix	đến	1	đến	Root (native)
See	見る (miru)	2	見 + る	Root + inflectional suffix	nhìn	1	nhìn	Root (native)
Hear	聞く (kiku)	2	聞 + く	Root + inflectional suffix	nghe	1	nghe	Root (native)
Speak	話す (hanasu)	2	話 + す	Root + inflectional suffix	nói	1	nói	Root (native)
Write	書く (kaku)	2	書 + く	Root + inflectional suffix	viết	1	viết	Root (native)
Read	読む (yomu)	2	読 + る	Root + inflectional suffix	đọc	1	đọc	Root (native)
Sleep	寝る (neru)	2	寝 + る	Root + inflectional suffix	ngủ	1	ngủ	Root (native)
Wake	起きる (okiru)	2	起き + る	Root + inflectional suffix	thức dậy	2	thức + dậy	Compound verb (wake + rise)
Study	勉強する	3	勉 + 強 + する	Compound noun + verb (do)	học	1	học	Root (native)
Buy	買う (kau)	2	買 + う	Root + inflectional suffix	mua	1	mua	Root (native)
Sell	売る (uru)	2	売 + る	Root + inflectional suffix	bán	1	bán	Root (native)
Make	作る (tsukuru)	2	作 + る	Root + inflectional suffix	làm	1	làm	Root (native)
Play	遊ぶ (asobu)	2	遊 + ぶ	Root + inflectional suffix	chơi	1	chơi	Root (native)

Swim	泳ぐ (oyogu)	2	泳 + ぐ	Root + inflectional suffix	bơi	1	bơi	Root (native)
Walk	歩く (aruku)	2	歩 + く	Root + inflectional suffix	đi bộ	2	đi + bộ	Compound verb (go + foot)
Run	走る (hashiru)	2	走 + る	Root + inflectional suffix	chạy	1	chạy	Root (native)
Work	働く (hataraku)	2	働 + く	Root + inflectional suffix	làm việc	2	làm + việc	Compound verb (do + task)
Think	考える (kangaeru)	2	考え + る	Root + inflectional suffix	nghĩ	1	nghĩ	Root (native)
Teach	教える (oshieru)	2	教え + る	Root + inflectional suffix	dạy	1	dạy	Root (native)
Learn	習う (narau)	2	習 + う	Root + inflectional suffix	học	1	học	Root (native)
Forget	忘れる (wasureru)	2	忘れ + る	Root + inflectional suffix	quên	1	quên	Root (native)
Remember	覚える (oboeru)	2	覚え + る	Root + inflectional suffix	nhớ	1	nhớ	Root (native)

Comparative chart 3: Japanese and Vietnamese Technology Terms

Concept	Japanese Term	Morpheme Count	Morpheme Segmentation	Morpheme Type(s)	Vietnamese Term	Morpheme Count	Morpheme Segmentation	Morpheme Type(s)
computer	コンピュータ	1	コンピューター	Loanword (Katakana)	máy tính	2	máy + tính	Native compound (machine + calculate)
smartphone	スマホ	2	スマ + ホ	Clipped loanword (smart + phone)	điện thoại thông minh	3	điện + thoại + thông minh	Sino-Vietnamese compound + native phrase
internet	インターネット	2	インター + ネット	Loanword compound	internet	1	internet	Loanword (English)
email	メール	1	メール	Loanword	email	1	email	Loanword (English)
television (TV)	テレビ	1	テレビ	Loanword	tivi	1	tivi	Loanword (English: TV)
radio	ラジオ	1	ラジオ	Loanword	radio	1	radio	Loanword (English)
camera	カメラ	1	カメラ	Loanword	camera	1	camera	Loanword (English)
printer	プリンター	1	プリンター	Loanword	máy in	2	máy + in	Native + loanword
keyboard	キーボード	2	キー + ボード	Loanword compound	bàn phím	2	bàn + phím	Native compound (table + key)

mouse	マウス	1	マウス	Loanword	chuột	1	chuột	Native monomorphemic
software	ソフトウェア	2	ソフト + ウェア	Loanword compound	phần mềm	2	phần + mềm	Native compound (part + soft)
hardware	ハードウェア	2	ハード + ウェア	Loanword compound	phần cứng	2	phần + cứng	Native compound (part + hard)
application (app)	アプリ	1	アプリ	Clipped loanword	ứng dụng	2	ứng + dụng	Sino-Vietnamese compound
file	ファイル	1	ファイル	Loanword	tập tin	2	tập + tin	Native compound (collection + info)
download	ダウンロード	2	ダウン + ロード	Loanword compound	tải xuống	2	tải + xuống	Native compound (load + down)
upload	アップロード	2	アップ + ロード	Loanword compound	tải lên	2	tải + lên	Native compound (load + up)
website	ウェブサイト	2	ウェブ + サイト	Loanword compound	trang web	2	trang + web	Hybrid: Native + loanword
battery	バッテリー	1	バッテリー	Loanword	pin	1	pin	Loanword (battery)
charge battery	充電する	3	充 + 電 + する	Sino-Japanese compound + verbalizer	sạc pin	2	sạc + pin	Native verb + loanword
power source	電源	2	電 + 源	Sino-Japanese compound	nguồn điện	2	nguồn + điện	Native + Sino-Vietnamese
car / automobile	自動車 (jidōsha)	3	自 + 動 + 車	Sino-Japanese compound	ô tô	2	ô + tô	Loanword compound (auto + mobile)
telephone / phone	電話 (denwa)	2	電 + 話	Sino-Japanese compound	điện thoại	2	điện + thoại	Sino-Vietnamese compound
electronic mail	電子メール	3	電 + 子 + メール	Hybrid: Sino-Japanese + loanword	thư điện tử	3	thư + điện + tử	Sino-Vietnamese compound
communication / media	通信 (tsūshin)	2	通 + 信	Sino-Japanese compound	truyền thông	2	truyền + thông	Sino-Vietnamese compound
technology	技術 (gijutsu)	2	技 + 術	Sino-Japanese compound	công nghệ	2	công + nghệ	Sino-Vietnamese compound

Comparative chart 4: Japanese and Vietnamese Nature Terms

Concept	Japanese Term	Morpheme Count	Morpheme Segmentation	Morpheme Type(s)	Vietnamese Term	Morpheme Count	Morpheme Segmentation	Morpheme Type(s)
tree	木 (ki)	1	木	Native root	cây	1	cây	Native root
flower	花 (hana)	1	花	Native root	hoa	1	hoa	Native root
mountain	山 (yama)	1	山	Native root	núi	1	núi	Native root
river	川 (kawa)	1	川	Native root	sông	1	sông	Native root
sea	海 (umi)	1	海	Native root	biển	1	biển	Native root
sky	空 (sora)	1	空	Native root	trời	1	trời	Native root
rain	雨 (ame)	1	雨	Native root	mưa	1	mưa	Native root
snow	雪 (yuki)	1	雪	Native root	tuyết	1	tuyết	Native root
wind	風 (kaze)	1	風	Native root	gió	1	gió	Native root
fire	火 (hi)	1	火	Native root	lửa	1	lửa	Native root
water	水 (mizu)	1	水	Native root	nước	1	nước	Native root
earth / soil	土 (tsuchi)	1	土	Native root	đất	1	đất	Native root
rock / stone	石 (ishi)	1	石	Native root	đá	1	đá	Native root
sun	太陽 (taiyō)	2	太 + 陽	Sino-Japanese compound (great + sun)	thái dương	2	thái + dương	Sino-Vietnamese compound (great + sun)
moon	月 (tsuki)	1	月	Native root	trăng	1	trăng	Native root
star	星 (hoshi)	1	星	Native root	sao	1	sao	Native root
forest	森 (mori)	1	森	Native root (dense woods)	rừng	1	rừng	Native root (dense woods)
lake	湖 (mizūmi)	2	水 + 海	Semantic compound (water + sea = lake)	hồ	1	hồ	Native root (semantic: water + sea)
island	島 (shima)	1	島	Native root	đảo	1	đảo	Native root
animal	動物 (dōbutsu)	2	動 + 物	Sino-Japanese compound (move + thing = animal)	động vật	2	động + vật	Sino-Vietnamese compound (move + thing)
bird	鳥 (tori)	1	鳥	Native root	chim	1	chim	Native root
fish	魚 (sakana)	1	魚	Native root	cá	1	cá	Native root
insect / worm	虫 (mushi)	1	虫	Native root	sâu	1	sâu	Native root
fireworks	花火 (hanabi)	2	花 + 火	Semantic compound (flower + fire = fireworks)	pháo hoa	2	pháo + hoa	Semantic compound (explosive + flower)
earthquake	地震 (jishin)	2	地 + 震	Sino-Japanese compound (earth + shake = earthquake)	động đất	2	động + đất	Sino-Vietnamese + native (move + earth)