



## A LEXICAL SUBSYSTEM FRAMEWORK: BRIDGING THEORY AND PRACTICE IN TEACHING MOROCCAN HERB VOCABULARY

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### Abstract:

This paper presents a framework for analyzing and teaching the English vocabulary of Moroccan herbs, synthesizing theoretical and instructional perspectives to enhance lexical competence. Anchored in Nation's form-meaning-use framework, it explores the formal, semantic, and syntactic dimensions of herb-related nouns, verbs, adjectives, and adverbs within the culturally rich context of Moroccan herbs, addressing the scarcity of research on this herb vocabulary in the Moroccan context. By conceptualizing vocabulary as an integrated subsystem rather than isolated units, the framework addresses the pedagogical challenge of fostering multidimensional proficiency. The analysis examines phonological, orthographic, and morphological properties, alongside semantic networks and pragmatic functions. It underscores the value of contextualized instruction, leveraging the culinary, medicinal, and aesthetic significance of Moroccan herbs to promote linguistic accuracy, communicative competence, and intercultural engagement based on the students' needs. The study proposes evidence-based strategies for integrating these linguistic properties into classroom practice, tailored for teachers and instructors. The framework is designed to enhance pedagogical relevance and learners' linguistic precision, particularly in a professional context. Implications for instruction include a structured approach that bridges linguistic theory with practical application, offering scalable strategies to navigate dialectal variations, contextual nuances, and syntactic flexibility. By fostering a holistic understanding of the lexical subsystem, the framework enriches language teaching methodologies, enabling educators to cultivate learners' ability to engage with specialized vocabulary and its cultural significance, thus contributing to innovative practices in vocabulary instruction.

**Keywords:** lexical subsystem, Moroccan herbs, form-meaning-use framework, vocabulary instruction, linguistic competence

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## 1. Introduction

Vocabulary learning is a fundamental pillar of language proficiency, underpinning effective communication in both first and second language (L2) contexts (Nation, 2022). Although some scholars draw a distinction between "learning" as a conscious process and "acquisition" as a subconscious one (Krashen, 1982), in this study, the two terms are treated synonymously to refer broadly to the process of developing and consolidating lexical knowledge. The multifaceted nature of lexical competence, as outlined in Nation's (2022) form-meaning-use framework, requires learners to master a word's phonological and orthographic structure (form), its denotative, connotative, and associative meanings (meaning), and its grammatical, collocational, and pragmatic applications (use). Within this framework, herb-related vocabulary in the Moroccan context serves as a culturally rich and linguistically complex lexical subsystem, ideal for examining these dimensions. However, despite its cultural and pedagogical significance, scholarly literature on herb-related vocabulary specific to the Moroccan context is notably lacking, representing a critical gap in applied linguistics research.

Drawing on Nation's framework and integrating perspectives from Laufer (1996), Qian and Schedl (2004), and Barcroft (2015) on vocabulary breadth and depth, this paper provides a descriptive analysis of Moroccan herb-related vocabulary, focusing on its formal, semantic, and syntactic-pragmatic dimensions. The analysis explores how herb nouns, verbs, adjectives, and adverbs function within a cohesive lexical subsystem, highlighting phonological, morphological, and contextual features. Furthermore, the paper proposes evidence-based instructional strategies that should address diverse learner needs through differentiated and inclusive practices, offering educators a replicable framework for teaching specialized vocabulary as interconnected subsystems rather than isolated items. Using Moroccan herb-related terms as a case study, the approach bridges theory and practice, fostering deep, contextualized, and functional lexical proficiency that can be adapted to other lexical domains to strengthen overall language learning.

## 2. Literature Review

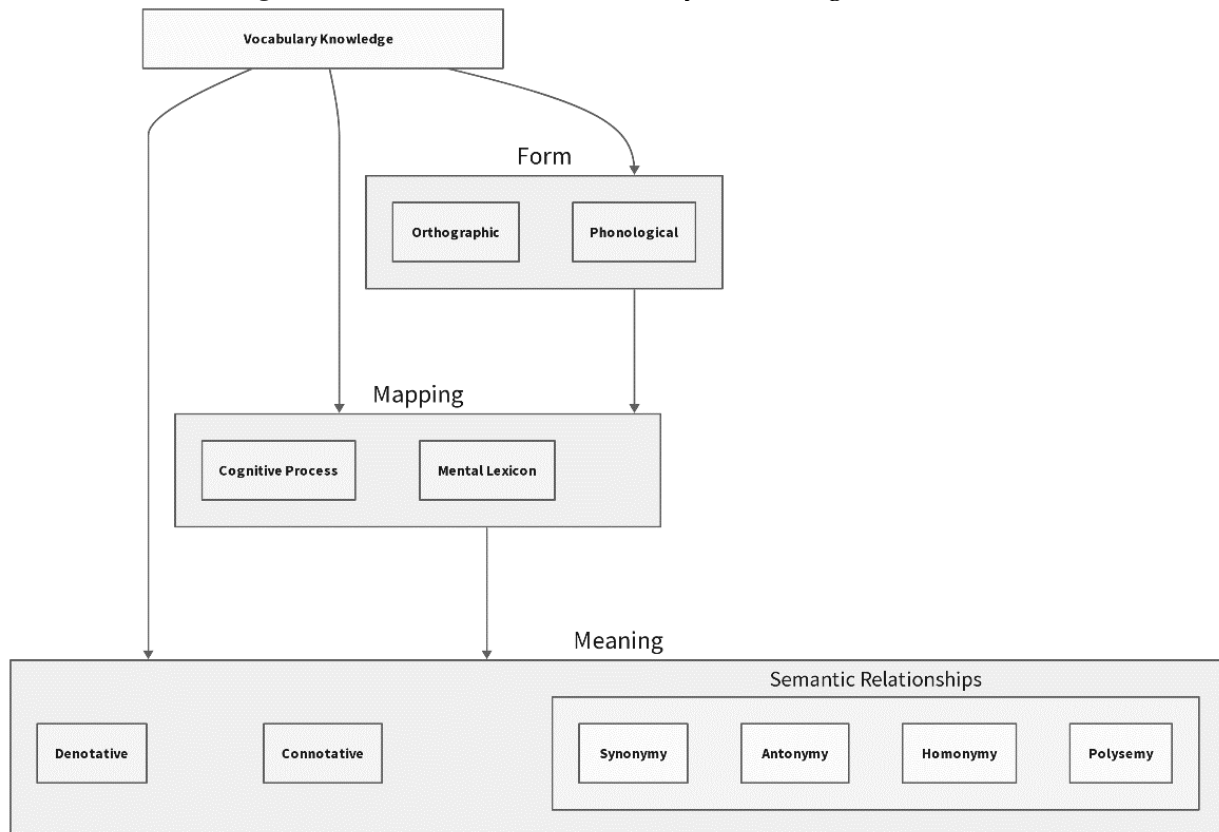
The learning of vocabulary constitutes a foundational element of language proficiency, underpinning both first and second language development. Scholarly inquiry into vocabulary knowledge has increasingly adopted a multidimensional perspective, recognizing its complexity and dynamic nature. Effective lexical competence demands not only recognition of word forms but also a nuanced understanding of their meanings and contextual applications. Errors in lexical selection, as Thornbury (2002) articulates, can precipitate miscommunication, necessitating a comprehensive approach to vocabulary learning. Thornbury delineates several critical competencies for mastery, including establishing precise connections between form and meaning, distinguishing between semantically proximate words, employing vocabulary accurately within diverse

contexts, amassing a sufficiently extensive lexicon for comprehension and production, retaining words over time, and developing strategies to navigate unfamiliar lexical items. Laufer (1996) underscores the centrality of vocabulary knowledge to successful second language (L2) reading comprehension, identifying three primary lexical challenges: limited vocabulary size, misleading familiarity with certain words (e.g., false friends or idioms), and ineffective guessing strategies due to insufficient contextual cues or interference from prior knowledge. Laufer contends that vocabulary size is the most robust predictor of reading proficiency, surpassing the influence of syntactic structures or general comprehension strategies. A substantial lexicon enhances overall understanding, mitigates errors, and facilitates the interpretation of unfamiliar words through contextual analysis, thereby reinforcing the critical role of lexical breadth in language learning.

This emphasis on vocabulary size prompts a broader examination of the construct of vocabulary knowledge, as elucidated by Qian and Schedl (2004) and Milton (2009). These scholars distinguish between two interdependent dimensions: breadth, referring to the quantity of words known, and depth, encompassing the richness of understanding and ability to use those words effectively. Both dimensions are integral to comprehensive language proficiency, particularly in L2 contexts. Qian and Schedl (2004) advocate for a multidimensional model, positing that breadth and depth are distinct yet interrelated facets of lexical knowledge, each contributing uniquely to linguistic competence. Conversely, Vermeer (2001) proposes a unidimensional perspective, suggesting that word knowledge essentially involves linking concepts with their linguistic forms, culminating in *“a rather one-dimensional understanding of such knowledge on a continuum ranging from receptive to productive”* (p. 217). In this view, repeated exposure to words simultaneously expands the lexicon and deepens understanding of meaning, usage, and associations.

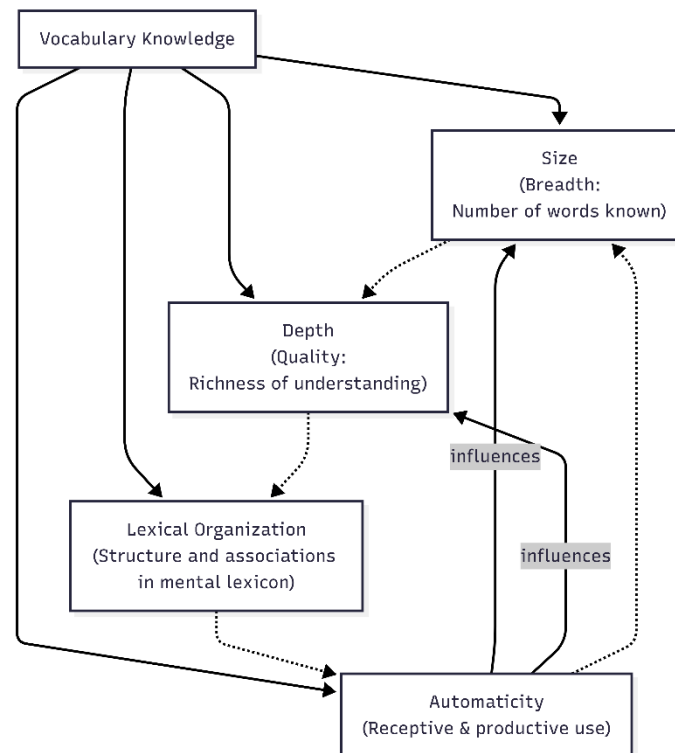
Barcroft (2015) notes that *“vocabulary is uniquely situated at the place where form meets meaning in human language”* (p. 6) and further refines this conceptualization by identifying three foundational components of vocabulary knowledge: form, encompassing the orthographic and phonological representations of a word; meaning, which includes denotative and connotative dimensions alongside semantic relationships such as synonymy, antonymy, homonymy, and polysemy; and mapping, the cognitive process that links form to meaning within a distributed, network-oriented mental lexicon. This triadic framework illustrates the dynamic interplay of these components, wherein recognition of a word’s form facilitates access to its nuanced meanings, consolidated through cognitive mapping.

**Figure 1: Barcroft (2015) Vocabulary Knowledge Framework**



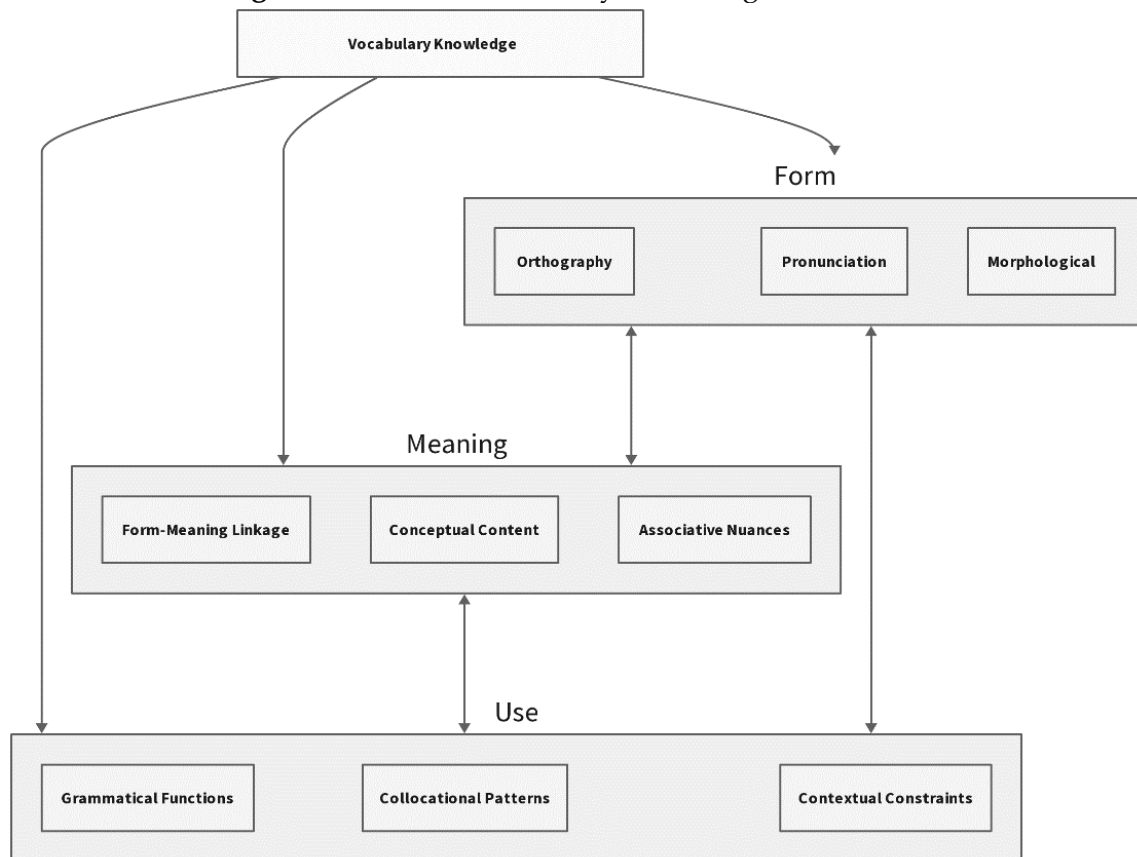
Extending this perspective, Laufer and Goldstein (2004) argue that lexical proficiency transcends mere form-meaning connections, requiring a sophisticated understanding of usage, collocations, and multiple meanings. Henriksen (1999) emphasizes the need for specificity in conceptualizing lexical competence, stating, “I see a need for being more specific and suggest three dimensions as a balanced position between the global and the separate trait view” (p. 304), and accordingly proposes a three-dimensional model of lexical competence, encompassing the progression from partial to precise word knowledge, the depth of understanding (including usage and collocational patterns), and the continuum from receptive to productive mastery. Building on this foundation, Qian (2002) further delineates four interconnected dimensions: vocabulary size, depth of knowledge, lexical organization within the mental lexicon, and automaticity in both receptive and productive use. Importantly, he stresses that “the four dimensions are intrinsically connected and interact closely with one another in all fundamental processes of vocabulary use and development” (p. 516). Together, these frameworks collectively underscore the multifaceted and dynamic nature of vocabulary knowledge, integrating quantitative and qualitative dimensions essential to linguistic proficiency.

**Figure 2:** Qian (2002) Four Dimensions of Vocabulary Knowledge



Nation (2022) synthesizes these perspectives into a comprehensive model, providing a structured framework for analyzing lexical competence. This model organizes word knowledge into three core components: form, meaning, and use. The form component addresses the structural aspects of a word, including its written representation (orthography), phonological articulation (pronunciation), and morphological elements (prefixes, suffixes, and roots). The meaning component encompasses the linkage between form and core meaning, the conceptual and referential content a word denotes, and its associative nuances across contexts. The use component focuses on practical application, including grammatical functions, collocational patterns, and constraints governed by contextual, stylistic, or pragmatic factors. Nation's model emphasizes the interconnectedness of these components, asserting that true lexical competence requires not only recognition and understanding but also the ability to employ words accurately within appropriate grammatical and pragmatic contexts.

**Figure 3:** Nation's Vocabulary Knowledge Framework



The theoretical perspectives discussed converge on the multidimensional nature of vocabulary knowledge, yet they diverge in their conceptualizations and emphases. Laufer (1996) prioritizes lexical breadth as the primary driver of reading comprehension, highlighting practical obstacles such as false friends and ineffective guessing strategies. In contrast, Qian and Schedl (2004) and Milton (2009) emphasize the interplay between breadth and depth, advocating a balanced approach that acknowledges both quantitative and qualitative dimensions. Vermeer's (2001) unidimensional perspective challenges this dichotomy, suggesting that breadth and depth are inherently linked through exposure, a view that aligns with Nation's (2022) integrative model but contrasts with the more segmented frameworks of Qian (2002) and Henriksen (1999).

Barcroft's (2015) triadic model of form, meaning, and mapping complements Nation's framework by emphasizing cognitive processes, while Laufer and Goldstein (2004) and Henriksen (1999) focus on the progression toward precise and productive use. Qian's (2002) four-dimensional model expands this further by incorporating lexical organization and automaticity, offering a more granular analysis. Nation's (2022) model synthesizes these perspectives, providing a comprehensive framework that integrates form, meaning, and use while addressing their subcomponents in a structured manner. This synthesis underscores the necessity of a holistic approach to vocabulary instruction, moving beyond rote memorization to foster deep, contextualized, and functional lexical competence. For educators, these insights provide a robust foundation for designing

instruction that addresses the complexities of vocabulary knowledge, ensuring learners achieve proficiency in both academic and practical contexts.

In conclusion, vocabulary knowledge is a complex, dynamic construct that extends beyond mere lexical size to encompass depth, organization, and contextual application. The theoretical frameworks proposed by Henriksen (1999), Qian (2002), Barcroft (2015), and Nation (2022) highlight the intricate interplay of form, meaning, and use in lexical development. These insights provide a robust foundation for educators, informing the analysis of any vocabulary set and the design of instructional strategies that foster deep, contextualized, and functional vocabulary learning, thereby enhancing overall language proficiency.

### **3. Herb-Related Vocabulary Analysis Through Paul Nation's Form, Meaning, and Use Model**

Vocabulary learning is a cornerstone of language proficiency, and a deep understanding of individual words extends far beyond mere definition. Paul Nation's influential framework, which categorizes word knowledge into 'Form,' 'Meaning,' and 'Use,' provides a robust lens through which to analyze and teach vocabulary comprehensively (Nation, 2022). This paper applies Nation's model to herb-related vocabulary, a specialized yet rich semantic domain, to illustrate how a holistic approach to lexical items can enhance both recognition and productive mastery. By dissecting the phonological, orthographic, morphological, semantic, and pragmatic dimensions of these words, we aim to provide a detailed pedagogical blueprint for language learners and educators.

#### **3.1 The Form of Herb-Related Vocabulary**

The 'Form' aspect of vocabulary refers to the physical characteristics of a word—how it sounds when spoken, how it appears when written, and its internal structure or constituent parts. Mastering these formal properties is foundational for accurate word recognition, pronunciation, and spelling, forming the bedrock of lexical competence.

##### **3.1.1 Spoken Form: Pronunciation and Dialectal Variations**

The spoken form of words, particularly within a specialized domain like culinary herbs, often reveals fascinating phonological nuances and dialectal variations that are crucial for effective communication. These variations necessitate explicit instruction to ensure learners can both comprehend and produce words accurately in diverse English-speaking contexts.

One of the most prominent examples is the noun "herb" itself. In British English, the 'h' is typically pronounced, leading to the pronunciation /hɜːrb/. Conversely, in American English, the 'h' is usually silent, resulting in /ɜːrb/ (sounding like 'erb'). This seemingly minor difference has broader implications, influencing article choice (e.g., "a herb" in British English vs. "an herb" in American English) and potentially causing momentary confusion if learners are unaware of the distinction. Similarly, the

pronunciation of "basil" varies significantly: /'bæz.əl/ is common in British English, while /'beɪ.zəl/ is frequently heard in American English, reflecting differences in vowel quality and stress placement (Celce-Murcia *et al.*, 2010). Further complexities arise with words like "chamomile," pronounced /'kæm.ə.mail/ in both major dialects, but requiring attention to the voiceless /k/ sound rather than an anticipated /tʃ/. The herb "thyme" also presents a common pronunciation challenge, as it is pronounced /'taɪm/ with a /t/, often mistakenly pronounced as /'θaɪm/ with a /θ/ sound (like the word "three"). These examples underscore the importance of targeted pronunciation practice, including minimal pair exercises (e.g., contrasting "herb" /hɜːrb/ vs. /ɜːrb/) and dictation tasks, to reinforce correct articulation and spelling (Thornbury, 2002).

Beyond nouns, verbs related to herb preparation also exhibit phonological rules tied to their spoken form. Regular verbs, such as "chop" or "rinse," take the -ed ending for past tense and past participle forms. However, the pronunciation of this -ed ending is context-dependent: it is pronounced /t/ after voiceless consonants (e.g., "rinsed" /rɪnst/), /d/ after voiced consonants (e.g., "rolled" /rould/), and /ɪd/ after /t/ or /d/ sounds (e.g., "extracted" /ɪk'stræk.tɪd/ and "added" /'æd.ɪd/). Explicit instruction on these phonological rules is vital to prevent errors in spoken production (Celce-Murcia *et al.*, 2010). Even adverbs, such as "often," display dialectal variations in pronunciation (/ˈɒf.tən/ with a pronounced /t/ in British English vs. /ˈɑːf.ən/ with a silent /t/ in American English), further emphasizing the need for dialectal awareness in pronunciation training (Celce-Murcia *et al.*, 2010).

The spoken form of herb-related adjectives also presents notable pronunciation challenges and variations. For example, "aromatic" (/ˌærə'mætɪk/) contains a secondary stress that learners might overlook, potentially mispronouncing it as /æ'rə'mætɪk/. Similarly, "fragrant" (/ˈfreɪgrənt/) may be challenging due to the consonant cluster /gr/ in the middle of the word, which some learners might simplify to /ˈfreɪrənt/. The adjective "medicinal" (/mə'dɪsɪnl/) poses challenges with its syllable structure, particularly the /sɪnl/ ending, which might be mispronounced as /mə'dɪsənəl/ by some learners. Dialectal variations also affect adjectives. For instance, "pungent" is pronounced /ˈpʌndʒənt/ in American English but sometimes as /ˈpʌnʒənt/ in British English, with a softer /dʒ/ sound. The adjective "savory" (describing herbs with a non-sweet flavor) is pronounced /ˈseɪvəri/ in American English and British English, reflecting the /r/ differences.

Adverbs derived from herb-related adjectives follow specific pronunciation patterns but can still present challenges. For example, "finely" (/ˈfamli/) requires maintaining the diphthong /aɪ/ from the base adjective "fine" (/faɪn/) while adding the /li/ suffix. Learners might incorrectly pronounce it as /ˈfɪnli/ or /ˈfaməli/. Similarly, "gently" (/ˈdʒentli/) involves the consonant cluster /ntli/, which some learners might simplify to /ˈdʒenli/ or /ˈdʒentəli/. The adverb "roughly" (/ˈrʌfli/) presents an interesting case where the spelling does not directly indicate the pronunciation, particularly the silent 'gh' and the vowel sound /ʌ/, which might be misread as /ʊ/ or /oo/. Another example is "freshly" (/ˈfreʃli/), where the /ʃl/ cluster might be challenging for learners whose native languages do not have this consonant combination, potentially leading to pronunciations like



/ˈfrɛsli/ or /ˈfrɛʃəli/. Dialectal variations in adverbs are less common but still exist. For instance, "coarsely" (as in "coarsely ground herbs") is typically pronounced /ˈkɔːrslɪ/ in American English and /ˈkɔːsli/ in British English, reflecting differences in vowel length. Table 1 summarizes the key pronunciation challenges and dialectal variations in herb-related vocabulary, highlighting common errors that learners should avoid.

**Table 1: Pronunciation Challenges and Dialectal Variations in Herb-Related Vocabulary**

Aspect	Key Points	Potential Challenges/Mistakes
<b>Noun:</b> "herb"	BrE: /hɜːrb/ (with 'h'); AmE: /ɜːrb/ (silent 'h')	Using wrong pronunciation in respective dialect; incorrect article choice ("a herb" in AmE or "an herb" in BrE)
<b>Noun:</b> "basil"	BrE: /ˈbæzəl/; AmE: /ˈbeɪ.zəl/	Mispronouncing vowel quality and stress placement; confusion between dialects
<b>Noun:</b> "thyme"	Correct: /ˈtaɪm/ not /ˈθaɪm/ regardless of dialectal variation	Common error: /ˈθaɪm/ (with /θ/ sound); spelling-pronunciation disconnect
<b>Verb: -ed endings</b>	/t/ after voiceless consonants; /d/ after voiced; /ɪd/ after /t/ or /d/	Overgeneralizing to one pronunciation (e.g., all /ɪd/); applying rules incorrectly
<b>Adverb:</b> "often"	BrE: /ˈɒf.tən/ (with /t/); AmE: /ˈɑːf.ən/ (silent /t/)	Unawareness of dialectal differences; inconsistent pronunciation
<b>Adjective:</b> "aromatic"	/ˌærəˈmætɪk/ (secondary stress)	Overlooking secondary stress; pronouncing as /ærəˈmætɪk/
<b>Adjective:</b> "fragrant"	/ˈfreɪɡrənt/ (consonant cluster /gr/)	Simplifying cluster to /ˈfreɪrənt/; syllable deletion
<b>Adjective:</b> "medicinal"	/məˈdɪsɪnəl/	Mispronunciation as /məˈdɪsənəl/; vowel epenthesis
<b>Adverb:</b> "finely"	/ˈfaɪnli/ (maintaining diphthong)	Incorrect pronunciation as /ˈfɪnli/ or /ˈfaɪnəli/; diphthong reduction
<b>Adverb:</b> "gently"	/ˈdʒentli/ (consonant cluster /ntl/)	Simplification to /ˈdʒenli/ or /ˈdʒentəli/; cluster reduction
<b>Adverb:</b> "roughly"	/ˈrʌfli/ (silent 'gh', vowel /ʌ/)	Misreading as /ˈrʊfli/ or /ˈroʊfli/; grapheme-phoneme mismatch

### 3.1.2 Written Form: Spelling and Orthographic Conventions

The written form of vocabulary encompasses its spelling and adherence to orthographic conventions. Accurate written production is as critical as spoken fluency, particularly in contexts such as recipe writing, culinary documentation, or academic discourse on herbal medicine. Variations in spelling, often linked to dialectal differences, and consistent application of spelling rules are key components of this aspect of 'Form'. A classic example of orthographic divergence is the verb "to flavor" (American English) and "to flavour" (British English). This difference, involving the presence or absence of the 'u', extends to many other words in English (e.g., 'color/colour', 'honor/honour') and reflects distinct orthographic traditions. While these spelling variations generally do not impede mutual intelligibility, familiarity with them enhances linguistic precision and ensures consistency in written communication, especially in professional culinary or medicinal contexts where precision is paramount. The written form of herb-related nouns follows specific spelling patterns and conventions that learners must master. One notable aspect

is the variation between American and British English spellings for certain herb names. For example, "cilantro" (American English) vs. "coriander" (British English) when referring to the leaves of the *Coriandrum sativum* plant. Similarly, "dill weed" (American English) might simply be referred to as "dill" (British English).

While the pluralization of herb nouns generally follows standard English rules—adding **-s** (*basil* → *basils*, *mint* → *mints*) or **-es** for words ending in *-s*, *-sh*, *-ch*, *-x*, or *-z* (*ash* → *ashes*)—these plurals are rarely used in everyday contexts. This is because most herb names function as uncountable mass nouns when referring to the substance in general (*I need some basil. We grow parsley*). Plural forms usually appear only when talking about different varieties (*three basil: Thai, sweet, and lemon*) or individual plants/bunches (*two mints were planted in the pot*). For herb names ending in consonant + *y*, the *y* changes to *-ies* (*bay* → *bays*), while those ending in vowel + *y* simply take *-s* (*parsley* → *parsleys*—again, typically only in variety or plant-counting contexts). Irregular plurals are rare in herb vocabulary, with most following regular patterns. Another orthographic consideration is the use of compound nouns in herb terminology, such as "herb garden," "herb tea," or "lemon balm." These can be written as separate words, hyphenated ("herb-garden"), or as a single word ("herbgarden"), with usage varying between style guides and contexts. For instance, in culinary contexts, "herb butter" is typically written as two words, while in botanical contexts, "herbaceous" is always a single word.

Adjectives related to herbs follow standard spelling rules but have some specific patterns worth noting. Comparative and superlative forms generally follow regular patterns: adding *-er* and *-est* for short adjectives (e.g., "fresh" → "fresher" → "freshest") and using "more" and "most" for longer adjectives (e.g., "aromatic" → "more aromatic" → "most aromatic"). Spelling changes occur in some adjectives when forming comparatives and superlatives. For example, adjectives ending in *-y* preceded by a consonant change to *-ier* and *-iest* (e.g., "salty" → "saltier" → "saltiest"). Adjectives ending in *-e* typically drop the *e* before adding *-er* or *-est* (e.g., "rare" → "rarer" → "rarest").

When forming adverbs from adjectives by adding *-ly*, specific spelling rules apply. Adjectives ending in *-y* preceded by a consonant change to *-ily* (e.g., "crunchy" → "crunchily"). Adjectives ending in *-le* typically drop the *e* and add *-y* (e.g., "gentle" → "gently"). Adjectives ending in *-ic* usually add *-ally* (e.g., "medicinal" → "medicinally"). Adverbs related to herb preparation and usage generally follow predictable spelling patterns when derived from adjectives. The most common pattern is adding *-ly* to the adjective form (e.g., "fresh" → "freshly," "gentle" → "gently," "coarse" → "coarsely"). However, several spelling rules and exceptions apply. Some adverbs have irregular forms or are identical to their adjective counterparts. For example, "fast" (as in "fast-growing herbs") functions as both an adjective and an adverb without adding *-ly*. Similarly, "hard" (as in "hard-packed herbs") remains unchanged in its adverbial form.

Another significant orthographic rule, particularly relevant for verbs describing food preparation, is the consonant doubling rule when adding suffixes like *-ed* or *-ing*. This rule applies to monosyllabic verbs ending in a consonant-vowel-consonant (CVC) sequence (e.g., 'chop' → 'chopped', 'chopping') and to polysyllabic verbs where the final

syllable is stressed and ends in a CVC sequence (e.g., 'infuse' → 'infused' - no doubling as it's not CVC; 'stir' → 'stirred', 'stirring'). This principle ensures the preservation of the original vowel sound and maintains phonetic and morphological integrity. Proficiency in this rule is indispensable for accurate orthography, preventing common spelling errors in written recipes and culinary instructions. Table 2 outlines the spelling patterns and orthographic conventions in herb-related vocabulary, noting potential challenges and common mistakes.

**Table 2: Spelling and Orthographic Conventions in Herb-Related Vocabulary**

Aspect	Key points	Potential challenges/mistakes
<b>AmE/BrE spelling differences</b>	"flavor" (AmE) vs. "flavour" (BrE)	Inconsistent usage; mixing spellings within one text; using wrong regional variant
<b>Noun pluralization</b>	Regular: add '-s'/'-es'; '-y' → '-ies' only if preceded by a consonant	Overgeneralization (e.g., "marjoramies"); irregular plural formation
<b>Compound nouns</b>	"herb garden" (separate), "herb-garden" (hyphenated), "herbgarden" (one word)	Uncertainty about correct form; inconsistency within texts
<b>Adjective: comparatives/superlatives</b>	Short: '-er'/'-est' (fresh → fresher → freshest); Long: "more"/"most" (aromatic → more aromatic)	Incorrect formation; irregular forms (good → better → best); spelling changes (salty → saltier)
<b>Adverb formation from adjectives</b>	'-y' preceded by consonant → '-ily' (crunchy → crunchily); '-le' → drop 'e' add '-y' (gentle → gently); '-ic' → '-ally' (medicinal → medicinally)	Incorrect application of rules; irregular forms (fast → fast; hard → hard)
<b>Verb: consonant doubling</b>	CVC monosyllables: double final consonant (chop → chopped); polysyllables with stressed final CVC (stir → stirred)	Overapplication (infuse → infussed not infused); Underapplication (chop → choped not chopped)
<b>Verb: irregular forms</b>	grind → ground (past)	Overgeneralization of regular patterns; memorization challenges

### 3.1.3 Word Parts: Morphology and Derivational Processes

Understanding the internal structure of words—their morphology—is a powerful tool for vocabulary expansion and for inferring the meaning of unfamiliar terms. This involves recognizing prefixes, suffixes, and root words, and understanding how they combine to form new lexical items. Many words within the herb-related domain are products of derivational morphology, allowing for a richer and more nuanced expression.

The morphology of herb-related nouns encompasses various derivational processes that expand the lexicon and provide nuanced meaning. One common process is the addition of suffixes to create new nouns or modify existing ones. For instance, the suffix '-ery' can be added to "herb" to form "herbery," referring to a place where herbs are

grown or a collection of herbs. Similarly, the suffix '-ist' can be added to form "herbalist," or "herborist" (the old-fashioned word), denoting a person who specializes in herbs. Compounding is another productive morphological process in herb vocabulary. Compound nouns combine two or more words to create a single concept, such as "herb garden," "herb tea," "herb butter," or "herbaceous border." These compounds can be written as separate words, hyphenated, or as a single word, depending on usage and convention. Another important morphological aspect is the distinction between countable and uncountable herb nouns. Many herb names can function as both countable and uncountable nouns, with a shift in meaning. For example, "parsley" as an uncountable noun refers to the substance in general, while as a countable noun it can refer to individual plants or specific quantities (e.g., "three parsleys" meaning three types of parsley). This dual countability requires learners to understand the grammatical and semantic implications of each usage.

Derivational prefixes also play a role in herb-related vocabulary. For example, the prefix 'over-' can be added to create "overdried," describing herbs that have been dried excessively, potentially losing flavor or medicinal properties.

- **Derivation of Adjectives from Nouns:** A common process involves forming adjectives that describe qualities or characteristics from nouns. For instance, 'aromatic' is derived from 'aroma,' 'fragrant' from 'fragrance,' and 'spicy' from 'spice.' These transformations enable speakers to describe sensory attributes of herbs and dishes with greater precision, moving beyond simple noun usage to more descriptive language. Similarly, adjectives like 'flavorful' are formed by adding the suffix '-ful' to the noun 'flavor,' indicating a quality of being full of flavor.
- **Derivation of Adverbs from Adjectives:** Adverbs, which typically modify verbs, adjectives, or other adverbs, are frequently formed by adding the suffix '-ly' to adjectives. Examples pertinent to culinary contexts include 'finely' (from 'fine,' as in 'finely chopped herbs') and 'gently' (from 'gentle,' as in 'gently simmered broth'). These adverbs add precision to descriptions of manner, frequency, or extent in cooking instructions.
- **Inflectional Morphology of Verbs:** While derivational morphology creates new words, inflectional morphology modifies existing words to fit grammatical contexts (e.g., tense, aspect, number). Herb-related verbs like "chop," "infuse," and "grind" undergo inflectional changes. Regular verbs append '-ed' for past tense and past participle forms (e.g., "chopped," "rinsed"). Irregular verbs, such as "grind" (past: "ground"), defy these predictable patterns. The morphological complexity of verbs, due to their inflectional paradigms and syntactic roles (e.g., transitive vs. intransitive), requires explicit teaching as part of the herb vocabulary subsystem.
- **Participles as Adjectives:** A notable morphological process in this domain is the use of past participles (often ending in -ed) and present participles (ending in -ing) as adjectives. For example, "chopped" (from the verb 'chop') and "dried" (from

'dry') function as adjectives to describe the state of herbs (e.g., "chopped parsley," "dried basil"). Similarly, "steaming" (from 'steam') can describe a dish (e.g., "steaming hot soup"). Understanding these derivational processes is crucial for learners to expand their lexical repertoire and to interpret complex descriptions (Bauer, 2001).

Table 3 presents the morphological processes in herb-related vocabulary, illustrating how word parts combine to create meaning.

**Table 3: Morphological Processes in Herb-Related Vocabulary**

Aspect	Key points	Potential challenges/mistakes
<b>Noun suffixation</b>	'-ery' → "herbery"; '-ist' → "herbalist"	Overgeneralization of suffixes; incorrect application to base words
<b>Compound nouns</b>	"herb garden", "herb tea", "herb butter"	Uncertainty about spelling (separate, hyphenated, one word); inconsistent usage
<b>Countability shifts</b>	"parsley" (uncountable) vs. "three parsleys" (countable plants)	Using uncountable nouns in plural form without quantifier; incorrect partitive constructions
<b>Prefixation</b>	'sub-' → "subshrub"; 'over-' → "overdried"	Misunderstanding prefix meanings; incorrect word formation
<b>Adjective derivation</b>	'aroma' → 'aromatic'; 'fragrance' → 'fragrant'; 'flavor' → 'flavorful'	Incorrect suffix selection; misunderstanding meaning changes
<b>Adverb derivation</b>	'fine' → 'finely'; 'gentle' → 'gently'; 'crunchy' → 'crunchily'	Spelling rule errors (e.g., 'crunchy' → 'crunchly' instead of 'crunchily')
<b>Verb inflection</b>	Regular: chop → chopped; Irregular: grind → ground	Overgeneralization of regular patterns to irregular verbs; incorrect past tense forms
<b>Participles as adjectives</b>	Past: "chopped parsley"; Present: "steaming soup"	Confusion between -ed and -ing forms; incorrect usage as adjectives

By systematically analyzing the spoken form, written form, and morphological structure of herb-related vocabulary, learners can develop a robust foundational knowledge that supports both receptive and productive language skills. This detailed understanding of 'Form' prepares them for a deeper engagement with the 'Meaning' and 'Use' aspects of these words.

### 3.2 The Meaning of Herb-Related Vocabulary

The 'Meaning' aspect of vocabulary delves into the conceptual and semantic dimensions of words, exploring what a word represents, its relationship to other concepts, and the associations it evokes. For herb-related vocabulary, understanding meaning goes beyond simple dictionary definitions to encompass denotative, connotative, and associative layers, often organized within cognitive frameworks like semantic networks.

#### 3.2.1 Concept and Reference: Denotation and Hierarchical Organization

At its most fundamental level, the meaning of a word refers to the concept or idea it represents. For herb nouns, this involves their denotative meaning—the literal, explicit

reference to specific plants. For example, "cilantro," "thyme," and "rosemary" each denote distinct botanical entities. These individual herb names are not isolated concepts but are organized hierarchically under the hypernym "herb." This hierarchical structure, where "herb" is the superordinate category and specific herb names (e.g., "basil," "mint," "parsley") are its hyponyms, facilitates cognitive organization and retrieval (Cruse, 2004). This hyponymic framework serves as a cognitive scaffold, enabling learners to rapidly and systematically access, identify, comprehend, and retain nouns pertinent to herbs. For instance, knowing that "basil" is a type of "herb" immediately provides a broad category of characteristics (e.g., typically green, used in cooking, often aromatic). This contrasts with other noun categories, such as concrete objects (e.g., "table") or abstract concepts (e.g., "freedom"), which may have different organizational principles. While "table" is consistently countable, and "freedom" is typically uncountable, herb nouns often exhibit dual countability (e.g., "parsley" as a substance vs. "three bunches of parsley"), adding a layer of contextual meaning that learners must grasp (Quirk *et al.*, 1985).

Verbs also carry specific denotative meanings related to actions. For example, "chop" denotes the action of cutting into small pieces, "infuse" refers to steeping to extract flavor, and "grind" means to reduce to powder or small fragments. Understanding these precise denotations is crucial for following recipes and accurately describing culinary processes. The verb "to flavor" (or "to flavour") denotes the act of adding taste or seasoning, such as with Moroccan herbs. Despite orthographic and phonetic divergences between American and British English, the semantic core of this verb remains consistent, ensuring mutual intelligibility (Celce-Murcia *et al.*, 2010).

Adjectives related to herbs carry specific denotative meanings that describe qualities, states, or characteristics of herbs or their usage. For example, "fresh" denotes herbs that have been recently harvested and not dried, typically characterized by vibrant color and strong aroma. In contrast, "dried" denotes herbs that have undergone a dehydration process, often resulting in a more concentrated flavor but different texture and appearance. The adjective "aromatic" denotes herbs that produce a strong, pleasant smell due to their essential oil content. "Medicinal" denotes herbs used for healing purposes or having therapeutic properties, while "culinary" denotes herbs primarily used in cooking for flavor enhancement. "Perennial" and "annual" denote the life cycle of herb plants, referring to those that live for multiple years versus those that complete their life cycle in one year, respectively. These adjectives can be organized hierarchically based on the aspects of herbs they describe. For instance, under the broader category of "herb qualities," we might find subcategories like "state" (fresh, dried, wilted), "sensory attributes" (aromatic, fragrant, pungent, colorful), "usage" (culinary, medicinal, ornamental), and "growth characteristics" (perennial, annual, biennial, hardy).

Adverbs related to herb usage and preparation modify verbs, adjectives, or other adverbs to provide additional information about manner, degree, time, or frequency. For example, "finely" denotes a high degree of fineness in the cutting or processing of herbs, as in "finely chopped basil." "Freshly" denotes recentness in time, as in "freshly picked mint." The adverb "medicinally" denotes purpose or manner related to healing or health,

as in "medicinally infused chamomile tea." "Culinarily" denotes purpose or manner related to cooking, as in "culinarily speaking, rosemary is versatile." "Abundantly" denotes a large quantity or degree, as in "abundantly growing herbs in the garden." These adverbs can be organized hierarchically based on the aspects they modify. Under the broader category of "herb preparation adverbs," we might find subcategories like "degree of processing" (finely, coarsely, roughly), "manner of application" (gently, thoroughly, carefully), "timing" (freshly, recently, immediately), and "purpose" (medicinally, culinarily, ornamentally). Table 4 displays the denotative meanings and hierarchical organization in herb-related vocabulary, showing how concepts are structured categorically.

**Table 4:** Denotative Meanings and Hierarchical Organization in Herb-Related Vocabulary

Aspect	Key points	Potential challenges/mistakes
<b>Noun hierarchy</b>	Hypernym: "herb"; Hyponyms: "basil", "mint", "parsley"	Difficulty categorizing herbs correctly; misunderstanding hierarchical relationships
<b>Dual countability</b>	"parsley" (uncountable substance) vs. "three bunches of parsley" (countable)	Incorrect use of countable/uncountable forms; missing partitive constructions
<b>Verb denotations</b>	"chop" (cut into pieces); "infuse" (steep to extract flavor); "grind" (reduce to powder)	Confusion between similar action verbs (e.g., "chop" vs. "dice" vs. "mince")
<b>Adjective denotations</b>	"fresh" (recently harvested); "dried" (dehydrated); "aromatic" (strong smell); "medicinal" (for healing)	Using adjectives inappropriately (e.g., "medicinal" for culinary herbs without medicinal properties)
<b>Adjective hierarchy</b>	Categories: state (fresh/dried), sensory (aromatic/fragrant), usage (culinary/medicinal), growth (perennial/annual)	Difficulty organizing adjectives into meaningful categories; limited descriptive range
<b>Adverb denotations</b>	"finely" (high degree of fineness); "freshly" (recent in time); "medicinally" (for healing purposes)	Misplacement of adverbs in sentences; using wrong adverb for context
<b>Adverb hierarchy</b>	Categories: degree (finely/coarsely), manner (gently/thoroughly), timing (freshly/recently), purpose (medicinally/culinarily)	Difficulty categorizing adverbs by function; limited adverbial repertoire

### 3.2.2 Associations: Connotation and Semantic Networks

Beyond denotation, words carry connotations—the emotional or cultural associations they evoke—and are interconnected within semantic networks. These networks illustrate how words relate to each other through various semantic relationships, enriching a learner's understanding and facilitating recall (Schmitt, 2010).

For herb nouns, connotations often stem from cultural uses and traditions. For example, "mint" can connote refreshment, particularly in the context of Moroccan tea ceremonies, where it plays a central cultural role. "Rosemary" might evoke associations with memory or Mediterranean cuisine. These cultural and sensory associations add depth to the lexical item beyond its literal botanical definition.

Semantic networks provide a structured way to map these associations. A semantic map for "herb" might connect it not only to its hyponyms (e.g., "thyme," "basil") but also to attributes (e.g., "green," "aromatic," "culinary," "medicinal") and related concepts (e.g., "spice," "cooking," "garden"). For example, a network might link "herb" to:

- Culinary Herbs: (e.g., "thyme," "basil," "parsley") – linked to attributes like 'flavoring,' 'garnish,' 'fresh,' 'dried.'
- Medicinal Herbs: (e.g., "chamomile," "thyme") – linked to attributes like 'calming,' 'healing,' 'tea,' 'remedy.'
- Aromatic Herbs: (e.g., "rosemary," "mint") – linked to attributes like 'fragrant,' 'scent,' 'essential oils.'

These nodes can further branch out to specific uses, sensory qualities, or even geographical origins, creating a rich web of interconnected knowledge. This approach helps learners build a more robust and flexible mental lexicon, allowing them to navigate the nuances of meaning and make appropriate word choices based on their level and learning needs.

Verbs related to herb preparation and usage carry connotative meanings that extend beyond their basic denotations. These associations often reflect cultural practices, sensory experiences, and emotional responses. For example, "infuse" connotes patience, extraction, and transformation—suggesting a slow process of drawing out flavors or medicinal properties from herbs into a liquid medium. This verb is often associated with traditional practices, healing rituals, and the creation of something special from simple ingredients. The verb "crush" connotes intensity, release, and immediate impact—suggesting a forceful action that breaks down herb structures to release their aromatic compounds. This action is often associated with immediacy, potency, and the transformation of herb form to maximize sensory impact. In contrast, while "tear" denotes rip something apart, usually by force, it also connotes gentleness, respect for the herb's structure, and a more delicate release of flavors—often associated with handling delicate herbs like basil to prevent bruising and preserve their essential oils. "Harvest" connotes timing, care, and the culmination of growth—suggesting a thoughtful process of gathering herbs at their peak of potency. This verb is often associated with cycles of nature, sustainability, and the connection between human activity and plant growth. "Preserve" connotes longevity, care, and intention—suggesting methods of extending the usability of herbs beyond their fresh state, often associated with traditional knowledge and resourcefulness. These verb associations can be mapped in a semantic network that connects them to related concepts. For instance, "infuse" might connect to "patience," "extraction," "transformation," "tea," "oil," and "tradition." "Crush" might connect to



"intensity," "release," "immediacy," "mortar," "pestle," and "aroma." Such networks help learners understand the rich connotative landscape of herb-related verbs.

Adverbs related to herb preparation and usage carry connotative meanings that reflect cultural practices, sensory experiences, and attitudes toward herbs. For example, "gently" connotes care, respect, and delicacy—suggesting a mindful approach to handling herbs that preserves their integrity and maximizes their beneficial properties. This adverb is often associated with traditional wisdom, careful preparation, and a reverence for natural ingredients. The adverb "thoroughly" connotes completeness, diligence, and effectiveness—suggesting a comprehensive approach to herb preparation that ensures no aspect is overlooked. This adverb is often associated with precision, expertise, and the desire to achieve optimal results. In contrast, "lightly" connotes restraint, subtlety, and respect for the herb's natural qualities—suggesting a minimal intervention approach that preserves the herb's essential characteristics. These adverb associations can be mapped in a semantic network that connects them to related concepts. For instance, "gently" might connect to "care," "respect," "delicacy," "tradition," and "preservation." "Thoroughly" might connect to "completeness," "diligence," "effectiveness," "precision," and "expertise." Such networks help learners understand the rich connotative landscape of herb-related adverbs. Table 5 illustrates the connotations and semantic networks in herb-related vocabulary, demonstrating how words connect through associations.

**Table 5:** Connotations and Semantic Networks in Herb-Related Vocabulary

Aspect	Key points	Potential challenges/mistakes
<b>Noun connotations</b>	"mint" (refreshment, Moroccan tea); "rosemary" (memory, Mediterranean cuisine)	Lack of cultural knowledge leading to misunderstanding; missing cultural references
<b>Semantic networks for nouns</b>	"herb" → hyponyms ("thyme", "basil"), attributes ("green", "aromatic"), related concepts ("spice", "cooking")	Difficulty building or navigating semantic networks; limited vocabulary connections
<b>Verb connotations</b>	"infuse" (patience, transformation); "crush" (intensity, release); "tear" (gentleness, respect)	Using verbs without understanding connotative meanings; inappropriate tone
<b>Semantic networks: verbs</b>	"infuse" → "patience", "extraction", "transformation", "tea", "oil", "tradition"	Limited verb associations; difficulty connecting verbs to related concepts
<b>Adverb connotations</b>	"gently" (care, respect); "thoroughly" (completeness, diligence); "lightly" (restraint, subtlety)	Misusing adverbs by not considering connotative implications; inappropriate tone
<b>Semantic networks for adverbs</b>	"gently" → "care", "respect", "delicacy", "tradition", "preservation"	Limited adverb associations; difficulty connecting adverbs to related concepts
<b>Cultural associations</b>	Herbs linked to specific cultural practices and traditions	Cultural insensitivity; missing cultural references in communication

### 3.2.3 Nuances in Meaning: Synonyms, Antonyms, and Contextual Shifts

Understanding the subtle differences between seemingly similar words, as well as how word meanings can shift based on context, is crucial for advanced vocabulary proficiency. This involves exploring synonyms, antonyms, and the context-dependent nature of lexical meaning.

While true synonyms are rare, many herb-related words have near-synonyms or terms that are often used interchangeably but carry subtle distinctions. For instance, "cilantro" and "coriander" refer to the same plant, but their usage differs regionally and by plant part: "cilantro" typically refers to the leaves in American English, while "coriander" refers to the seeds (and sometimes the leaves) in British English. This distinction is not applicable to many other nouns (e.g., "book"), highlighting the unique contextual sensitivity of herb vocabulary.

Verbs also exhibit nuances in meaning. While "wash" and "rinse" both involve cleaning with water, "rinse" specifically implies removing soap or residue, often with flowing water, making it a more precise term in culinary contexts (e.g., "rinse the parsley under cold water"). Similarly, phrasal verbs introduce significant semantic complexity, as their meanings are often idiomatic and non-compositional, meaning the meaning cannot be deduced from the individual words (Schmitt, 2010). For example, "shake off" (e.g., removing excess moisture from mint) conveys a specific action distinct from the base verb "shake." Other examples include "strip off" (detaching aged thyme leaves), "dip in" (immersing basil leaves), "dry up" (desiccating rosemary), "roll up" (coiling mint leaves), and "pick off" (selectively removing unwanted parsley stems). Mastery of these constructions requires apprehending their holistic semantic import and deploying them judiciously across various registers.

Adjectives like "fresh" and "dried" represent a clear antonymous pair, denoting opposite states of herbs. Understanding such pairs helps learners grasp the full spectrum of descriptive possibilities. The countability of nouns, as discussed under 'Form', also represents a contextual shift in meaning: "parsley" as an uncountable substance versus "a sprig of parsley" as a countable unit. This flexibility requires learners to develop pragmatic sensitivity to how meaning is conveyed through grammatical choices.

Adverbs related to herb preparation and usage exhibit nuanced meanings through synonymy, antonymy, and contextual shifts. While true synonyms are rare, many herb-related adverbs have near-synonyms that carry subtle distinctions in meaning or usage. For example, "finely", and "minutely" both describe a high degree of smallness in herb processing, but "finely" is more commonly used in culinary contexts and suggests a uniform, delicate result, while "minutely" is more technical and suggests extreme precision, often used in scientific or medicinal contexts. Similarly, "gently" and "delicately" both describe careful handling of herbs, but "gently" implies a general approach of care, while "delicately" specifically suggests handling something fragile or easily damaged. Antonymous pairs in herb-related adverbs provide clear contrasts in meaning. "Finely" and "coarsely" represent opposite degrees of processing, with "finely" indicating very small pieces and "coarsely" indicating larger, more irregular pieces.

"Freshly" and "stalely" (though "stalely" is rarely used) represent opposite states of herb freshness, with "freshly" indicating recent preparation and "stalely" indicating loss of freshness over time. "Medicinally" and "culinarily" represent opposite primary purposes, with the former focusing on healing properties and the latter on flavor enhancement. Contextual shifts significantly impact the meaning of herb-related adverbs. For instance, "lightly" can mean "with a small amount" when referring to application ("lightly sprinkle herbs") or "with minimal force" when referring to handling ("lightly crush the herbs"). Similarly, "thoroughly" can mean "completely" when referring to cleaning ("thoroughly rinse the herbs") or "carefully and in detail" when referring to preparation ("thoroughly mix the herbs").

This contextual sensitivity requires learners to develop pragmatic awareness of how adverb meaning shifts based on the verbs and nouns they modify. Table 6 highlights the nuances in meaning, including synonyms, antonyms, and contextual shifts in herb-related vocabulary.

**Table 6:** Nuances in Meaning: Synonyms, Antonyms, and Contextual Shifts

Aspect	Key points	Potential challenges/mistakes
<b>Near-synonyms (nouns)</b>	"cilantro" (AmE, leaves) vs. "coriander" (BrE, seeds or leaves)	Using the wrong term in the given dialect; confusion over plant parts
<b>Near-synonyms (verbs)</b>	"wash" (general cleaning) vs. "rinse" (remove residue with flowing water)	Using verbs interchangeably when they have specific meanings
<b>Phrasal verbs</b>	"shake off", "strip off", "dip in" (idiomatic meanings)	Literal interpretation leading to misunderstanding; incorrect usage
<b>Antonyms (adjectives)</b>	"fresh" vs. "dried" (states of herbs)	Not recognizing antonymous pairs; limited descriptive range
<b>Contextual shifts (nouns)</b>	"parsley" (uncountable) vs. "a sprig of parsley" (countable)	Failing to adjust the meaning based on grammatical context
<b>Near-synonyms (adverbs)</b>	"finely" vs. "minutely" (degree of processing); "gently" vs. "delicately" (handling)	Using near-synonymous adverbs interchangeably without understanding subtle differences
<b>Antonyms (adverbs)</b>	"finely" vs. "coarsely"; "freshly" vs. "stalely"; "medicinally" vs. "culinarily"	Not recognizing antonymous pairs; imprecise descriptions
<b>Contextual shifts (adverbs)</b>	"lightly" (small amount or minimal force); "thoroughly" (completely or carefully); "recently" (harvested vs. planted)	Misinterpreting meaning based on context; inappropriate usage

By exploring denotative and connotative meanings, mapping semantic networks, and discerning subtle nuances, learners can develop a deep and flexible understanding of herb-related vocabulary, moving beyond surface-level recognition to a rich conceptual grasp. This comprehensive understanding of 'Meaning' then informs the appropriate 'Use' of these words in various communicative contexts.

### 3.3 The Use of Herb-Related Vocabulary

The 'Use' aspect of vocabulary focuses on how words function in different contexts, encompassing their grammatical roles, typical co-occurrence patterns (collocations), and the pragmatic constraints that govern their appropriate deployment. Mastering the 'Use' of words is essential for producing natural, accurate, and contextually appropriate language.

#### 3.3.1 Grammatical Functions: Roles and Syntactic Behavior

Understanding the grammatical functions of words—how they behave syntactically within sentences—is fundamental to using them correctly. This involves knowing whether a word acts as a noun, verb, adjective, or adverb, and how its form might change to fit its role.

Nouns related to herbs exhibit diverse grammatical functions that learners must master for accurate production. Beyond basic subject and object functions, herb nouns can serve as complements, appositives, and parts of prepositional phrases. For example, in "Parsley, a versatile herb, enhances many dishes," "parsley" functions as the subject, while "a versatile herb" serves as an appositive providing additional information. The countability of herb nouns significantly impacts their grammatical behavior. Many herb nouns can function as both countable and uncountable nouns with shifts in meaning. For instance, "basil" as an uncountable noun refers to the substance in general ("Basil is essential in Italian cooking"), while as a countable noun it can refer to individual plants or varieties ("I grow three basil in my garden: sweet basil, Thai basil, and lemon basil"). This dual countability requires learners to understand the grammatical and semantic implications of each usage.

Partitive constructions are essential for quantifying uncountable herb nouns. These structures use "of" to connect a measure word to the herb noun, enabling precise communication of quantities. Common partitives for herbs include "a sprig of" (for small stems with leaves, as in "a sprig of rosemary"), "a bunch of" (for grouped stems, as in "a bunch of cilantro"), "a pinch of" (for small amounts of dried herbs, as in "a pinch of oregano"), and "a handful of" (for informal measurements, as in "a handful of mint leaves"). These constructions are particularly important in culinary contexts where precise quantities affect the outcome of recipes.

Verbs related to herb preparation and usage exhibit diverse syntactic behaviors that learners must master. Transitive verbs like "chop," "crush," and "plant" require direct objects ("Chop the basil," "Crush the mint," "Plant the rosemary"). Intransitive verbs like "grow," "wilt," and "flourish" do not take direct objects ("The herbs grow quickly," "The mint wilted in the sun," "The thyme flourishes in well-drained soil"). Some herb-related verbs can function as both transitive and intransitive with shifts in meaning. For example, "steep" can be transitive ("Steep the herbs for ten minutes") or intransitive ("The herbs steep in hot water"). Similarly, "dry" can be transitive ("Dry the herbs thoroughly") or intransitive ("The herbs dry in the sun"). Phrasal verbs related to herbs introduce additional syntactic complexity. For example, "pick off" is separable ("Pick the leaves off")

or "Pick off the leaves"), while "grow on" is inseparable ("The herbs grow on me" meaning I'm developing a liking for them, not "The herbs grow me on"). Some phrasal verbs require specific prepositions, such as "infuse with" ("Infuse the water with herbs") rather than simply "infuse the water herbs." The imperative mood is commonly used with herb-related verbs in recipes and instructional contexts ("Chop the herbs finely," "Add the basil at the end," "Steep for five minutes"). This usage typically omits the subject and uses the base form of the verb, creating concise instructions.

Adjectives related to herbs function in various syntactic positions that learners must master. Attributive adjectives precede the nouns they modify ("fresh basil," "dried oregano," "aromatic rosemary"). Predicative adjectives follow linking verbs like "be," "seem," or "become" ("The basil is fresh," "The oregano seems dried," "The rosemary became aromatic"). Comparative and superlative forms of herb-related adjectives follow standard patterns but require attention to spelling and usage. For short adjectives, comparatives typically add "-er" and superlatives add "-est" ("fresh" → "fresher" → "freshest"). For longer adjectives, comparatives use "more" and superlatives use "most" ("aromatic" → "more aromatic" → "most aromatic"). Some adjectives have irregular forms ("good" → "better" → "best," as in "good quality herbs" → "better quality herbs" → "best quality herbs"). Adjectives can also function as postmodifiers in noun phrases, particularly when they form part of a compound or when they have complementation. For example, in "herbs fresh from the garden," "fresh from the garden" functions as a postmodifier providing additional information. Similarly, in "herbs suitable for medicinal use," "suitable for medicinal use" functions as a postmodifier.

Adverbs related to herb preparation and usage exhibit diverse syntactic behaviors that learners must master. Adverbs of manner, such as "finely," "gently," and "thoroughly," typically follow the direct object in transitive constructions ("Chop the herbs finely," "Handle the leaves gently," "Rinse the basil thoroughly"). However, they can sometimes be placed before the verb for emphasis ("Finely chop the herbs"). Adverbs of frequency, such as "often," "rarely," and "sometimes," typically precede the main verb ("I often use fresh herbs," "She rarely grows mint," "They sometimes dry their herbs"). However, they follow forms of "be" ("Herbs are often used in Mediterranean cooking"). Adverbs of time, such as "freshly," "recently," and "immediately," have flexible placement depending on emphasis. They can appear at the beginning of sentences ("Recently, I started growing herbs"), before the main verb ("I recently started growing herbs"), or at the end of sentences ("I started growing herbs recently"). Adverbs can modify other adverbs, creating more precise descriptions. For example, in "very finely chopped herbs," "very" modifies "finely" to indicate an extreme degree of fineness. Similarly, in "extremely gently crushed leaves," "extremely" modifies "gently" to emphasize the delicacy of the action. Negative adverbs like "never" and "rarely" require affirmative verbs to avoid double negatives ("I never use dried herbs" rather than "I don't never use dried herbs"). These adverbs also affect word order, typically preceding the main verb ("She rarely waters her herbs") but following forms of "be" ("Herbs are rarely used in this dish"). Table

7 details the grammatical functions and syntactic behavior of herb-related vocabulary, outlining common patterns and potential errors.

**Table 7:** Grammatical Functions and Syntactic Behavior in Herb-Related Vocabulary

Aspect	Key points	Potential challenges/mistakes
<b>Noun functions</b>	Subject, object, appositive, prepositional phrase	Difficulty identifying or using nouns in different syntactic roles
<b>Partitive constructions</b>	"a sprig of rosemary", "a bunch of cilantro", "a pinch of oregano"	Omitting partitives; using incorrect partitives for uncountable nouns
<b>Verb transitivity</b>	Transitive: "chop" (requires object); Intransitive: "grow" (no object); Both: "steep"	Using transitive verbs without objects; using intransitive verbs with objects
<b>Phrasal verbs</b>	Separable: "pick off" → "pick the leaves off"; Inseparable: "grow on"	Incorrect separation of particles; using wrong prepositions
<b>Imperative mood</b>	Base form, no subject: "Chop the herbs finely"	Using subjects or incorrect verb forms in imperatives
<b>Adjective positions</b>	Attributive: "fresh basil"; Predicative: "The basil is fresh"	Using adjectives in wrong position; confusion between attributive and predicative use
<b>Comparative/ Superlative</b>	Regular: "fresher"/"freshest"; Irregular: "better"/"best"	Incorrect formation; spelling errors; irregular form mistakes
<b>Adverb placement</b>	Manner: after object or before verb; Frequency: before main verb, after 'be'; Time: flexible	Misplacing adverbs; awkward or ambiguous sentences
<b>Adverb modification</b>	Modifying verbs, adjectives, other adverbs: "very finely chopped"	Overusing adverbs; inappropriate modification
<b>Negative adverbs</b>	"never", "rarely" (require affirmative verbs)	Double negatives ("I don't never use herbs"); incorrect word order

### 3.3.2 Collocations and Phrasal Verbs

Collocations are words that frequently co-occur, forming natural-sounding phrases. Mastering these typical word pairings is crucial for fluency and idiomatic language production. Phrasal verbs, a specific type of collocation involving a verb and one or more particles (prepositions or adverbs), are particularly prevalent and often idiomatic in meaning.

In the context of herb-related vocabulary, common collocations include verb-noun pairings like "sprinkle parsley," "chop cilantro," "infuse tea," or "grind spices." Adjective-noun collocations are also frequent, such as "fresh basil," "dried oregano," "aromatic rosemary," or "finely chopped mint." These fixed or semi-fixed expressions are learned as single units of meaning rather than individual words, contributing significantly to native-like proficiency.

Adverbs form important collocational patterns with herb-related vocabulary, contributing to natural and idiomatic language use. Adverb-verb collocations are particularly common in culinary and medicinal contexts involving herbs. For example,

"finely" typically collocates with processing verbs like "chop," "mince," or "grind" ("finely chop the herbs," "finely mince the garlic," "finely grind the spices"). Similarly, "gently" collocates with handling verbs like "stir," "mix," or "crush" ("gently stir in the herbs," "gently mix the ingredients," "gently crush the leaves").

Adverb-adjective collocations also play a significant role in describing herb qualities. For instance, "highly" collocates with adjectives like "aromatic," "medicinal," or "prized" ("highly aromatic herbs," "highly medicinal plants," "highly prized varieties"). "Exceptionally" collocates with adjectives like "fresh," "fragrant," or "rare" ("exceptionally fresh basil," "exceptionally fragrant rosemary," "exceptionally rare herbs").

Adverb-noun collocations, though less common, still contribute to precise descriptions. For example, "finely" can collocate with nouns like "chopped herbs" or "ground spices" to indicate the degree of processing ("finely chopped herbs," "finely ground spices"). "Freshly" collocates with nouns like "picked herbs" or "brewed tea" to indicate recentness ("freshly picked herbs," "freshly brewed tea").

These collocational patterns are often language-specific and require memorization as chunks rather than individual words. For instance, while English speakers say "finely chopped herbs," other languages might use different constructions. However, the collocation "gently stir" is idiomatic in English non-culinary contexts; it could mean to initiate change subtly, as in "she gently stirred the conversation toward more serious topics," or to evoke memories or emotions, as in "the fragrance of rosemary gently stirred old memories of his childhood."

Phrasal verbs constitute a pivotal component of herb-related discourse in English, characterized by their often idiomatic semantic profiles that resist literal interpretation from their constituent elements (Schmitt, 2010). Illustrative examples include:

- shake off: (e.g., removing excess moisture from mint prior to chopping),
- strip off: (e.g., detaching aged thyme leaves from their stems),
- dip in: (e.g., immersing basil leaves with care into a liquid),
- dry up: (e.g., desiccating rosemary under solar exposure),
- roll up: (e.g., coiling mint leaves for slicing into thin ribbons).
- pick off: (e.g., selectively removing unwanted parsley stems or individual leaves)

These phrasal verbs introduce syntactic complexity (e.g., requiring a direct object, as in "She shook off the excess water from the parsley") and semantic opacity, necessitating nuanced comprehension. Mastery requires learners to discern their syntactic composition (verb + particle), apprehend their holistic semantic import, and deploy them judiciously across various registers. Table 8 presents the collocations and phrasal verbs in herb-related vocabulary, showing how words typically co-occur.

**Table 8: Collocations and Phrasal Verbs in Herb-Related Vocabulary**

Aspect	Key points	Potential challenges/mistakes
<b>Verb-noun collocations</b>	"sprinkle parsley", "chop cilantro", "infuse tea", "grind spices"	Using unnatural combinations (e.g., "grind tea" instead of "grind spices")
<b>Adjective-noun collocations</b>	"fresh basil", "dried oregano", "aromatic rosemary", "finely chopped mint"	Using inappropriate adjectives with nouns (e.g., "fresh dried basil")
<b>Adverb-verb collocations</b>	"finely chop", "gently stir", "thoroughly rinse"	Using wrong adverb with verb (e.g., "gently chop" instead of "finely chop")
<b>Adverb-adjective collocations</b>	"highly aromatic", "exceptionally fresh"	Overusing intensifiers; using them inappropriately
<b>Adverb-noun collocations</b>	"finely chopped herbs", "freshly picked herbs", "freshly brewed tea"	Unnatural combinations; incorrect word order
<b>Phrasal verbs</b>	"shake off", "strip off", "dip in", "dry up", "roll up", "pick off"	Literal interpretation; incorrect separation of particles; wrong prepositions
<b>Idiomatic meanings</b>	Phrasal verbs often have non-compositional meanings in non-culinary contexts	Difficulty understanding or remembering idiomatic meanings; L1 interference

### 3.3.3 Constraints on Use: Register, Frequency, and Contextual Appropriateness

Beyond grammatical correctness and typical co-occurrence, the 'Use' of vocabulary is governed by pragmatic constraints, including register (formality), frequency of use, and overall contextual appropriateness. Recognizing these restrictions ensures that words are not only used accurately but also effectively in real-world communication.

Register considerations significantly influence the choice of herb-related vocabulary in different contexts. While much of the herb-related vocabulary is relatively neutral in register, some terms or expressions might be more common in formal culinary texts (e.g., "infuse," "blanch") versus informal conversational settings (e.g., "throw in some herbs"). Register considerations significantly influence the choice of herb-related adjectives in different contexts. In formal culinary or botanical contexts, adjectives like "aromatic," "medicinal," "ornamental," and "herbaceous" are commonly used to convey precise meanings with technical accuracy. In contrast, informal conversational contexts might favor simpler adjectives like "smelly," "healthy," "pretty," or "leafy" to describe similar qualities.

#### 3.3.3.1 Frequency

The frequency with which words appear influences their salience and the priority given to their learning. Common herb names like "parsley," "basil," and "mint" are high-frequency words within the culinary domain, whereas more specialized or less common herbs might be lower frequency. Similarly, common verbs like "chop" or "add" are used more frequently than "desiccate" or "macerate." Nation's frequency lists and principles of vocabulary selection emphasize prioritizing high-frequency words for initial learning (Nation, 2022). Frequency differences among herb-related adjectives affect their salience and learning priority. High-frequency adjectives like "fresh," "dried," "green," and "small"



are commonly used across various contexts involving herbs and should be prioritized in early vocabulary learning. Lower-frequency adjectives like "carminative," "vulnerary," or "emollient" (describing specific medicinal properties) are more specialized and typically acquired later, often by learners with specific interests in herbal medicine or botany. Frequency differences among herb-related adverbs affect their learning priority and usage patterns. High-frequency adverbs like "well," "finely," "freshly," and "gently" are commonly used across various contexts involving herbs and should be prioritized in vocabulary learning. Lower-frequency adverbs like "medicinally," "culinarily," "ornamentally," or "botanically" are more specialized and typically acquired later, often by learners with specific interests or professional needs.

### 3.3.3.2 Contextual Appropriateness

The most critical aspect of 'Use' is employing words appropriately within a given context. This includes understanding the context-dependent countability of nouns (e.g., "parsley" as uncountable substance vs. countable "bunches of parsley"), which reflects pragmatic intent. The appropriate use of verbs in recipes, often in the imperative mood (e.g., "Chop the garlic," "Add the herbs"), is another example of contextual appropriateness. Mispronouncing "herb" as /h3:rb/ in an American context or using /'bæz.əl/ in a British setting might signal non-native proficiency, highlighting the importance of dialectal awareness for contextual appropriateness. Contextual appropriateness governs the selection of herb-related adjectives based on the specific situation and communicative purpose. For example, in a culinary context, adjectives like "flavorful," and "dried" are appropriate for describing herbs' sensory qualities and states. In a medicinal context, adjectives like "therapeutic," "healing," "potent," and "soothing" would be more appropriate. In a gardening context, adjectives like "perennial," "fast-growing," and "shade-tolerant" would be most relevant.

The choice between synonymous or near-synonymous adjectives often depends on contextual appropriateness. For example, "aromatic" and "fragrant" both describe pleasant-smelling herbs, but "aromatic" is more commonly used in technical or culinary contexts, while "fragrant" might be preferred in more poetic or descriptive contexts. Contextual appropriateness governs the selection of herb-related adverbs based on the specific situation and communicative purpose. In culinary contexts, adverbs like "finely," "lightly," "generously," and "freshly" are appropriate for describing herb preparation and usage. In medicinal contexts, adverbs like "medicinally," "therapeutically," and "regularly" would be more appropriate. In gardening contexts, adverbs like "abundantly," "regularly," "carefully," and "strategically" would be most relevant. Table 9 summarizes the register, frequency, and contextual appropriateness considerations for herb-related vocabulary, highlighting factors that influence word choice in different situations.

**Table 9:** Register, Frequency, and Contextual Appropriateness in Herb-Related Vocabulary

Aspect	Key points	Potential challenges/mistakes
<b>Register differences</b>	Formal: "infuse", "blanch"; Informal: "throw in some herbs"	Using overly formal language in casual contexts or vice versa
<b>Dialectal variations</b>	"cilantro" (AmE) vs. "coriander" (BrE)	Using wrong term for particular dialect or region
<b>Frequency priorities</b>	High-frequency: "parsley", "basil", "chop", "add"; Low-frequency: "desiccate", "macerate"	Overusing low-frequency terms when high-frequency ones suffice; missing high-frequency items
<b>Contextual appropriateness (nouns)</b>	"parsley" (uncountable) vs. "bunches of parsley" (countable)	Failing to adjust usage based on context
<b>Adjective register</b>	Formal: "aromatic", "medicinal"; Informal: "smelly", "healthy"	Using inappropriate adjectives for context; sounding overly technical or too simplistic
<b>Adverb register</b>	Formal: "minutely", "judiciously"; Informal: "well", "carefully"	Using overly formal or informal adverbs in wrong context
<b>Adjective frequency</b>	High-frequency: "fresh", "dried"; Low-frequency: "carminative", "vulnerary"	Using low-frequency adjectives when simpler ones would be more appropriate
<b>Adverb frequency</b>	High-frequency: "well", "finely"; Low-frequency: "medicinally", "culinarily"	Using low-frequency adverbs unnecessarily
<b>Contextual appropriateness (adjectives)</b>	Culinary: "flavorful", "aromatic"; Medicinal: "therapeutic", "healing"; Gardening: "hardy", "perennial"	Using adjectives from one domain in another inappropriately
<b>Contextual appropriateness (adverbs)</b>	Culinary: "finely", "generously"; Medicinal: "medicinally", "cautiously"; Gardening: "abundantly", "regularly"	Using adverbs from one domain in another inappropriately
<b>Dialectal variations (adverbs)</b>	"culinarily" vs. "in cooking"	Using dialect-specific forms that might not be understood

By systematically analyzing herb-related vocabulary through Paul Nation's 'Form, Meaning, and Use' model, this paper has demonstrated a comprehensive approach to lexical knowledge. Understanding the spoken and written forms, the morphological structure, the denotative and connotative meanings, the semantic relationships, and the grammatical, collocational, and pragmatic uses of words provides a robust framework for vocabulary acquisition. This holistic perspective moves beyond rote memorization, enabling learners to develop a deep, flexible, and contextually appropriate command of specialized vocabulary, ultimately enhancing their overall language proficiency. This framework can be applied to any specialized domain, ensuring that vocabulary learning is thorough, effective, and geared towards real-world communication.

## 4. Instructional Strategies and Classroom Implementation

The instructional strategies outlined in this model are designed to operationalize the form-meaning-use framework, drawing on research-based principles to foster effective vocabulary learning. Each strategy is tailored to the Moroccan herb subsystem, leveraging its cultural and functional relevance to enhance learner motivation.

### 4.1 Teaching Form

Mastering the form of herb-related vocabulary requires developing phonological accuracy, orthographic proficiency, and morphological awareness. To address phonological competence, educators can employ targeted listening exercises inspired by Celce-Murcia *et al.* (2010), who emphasize the role of auditory discrimination in pronunciation training. For instance, minimal pair exercises contrasting "herb" (/ɜ:rb/ British, /ɜ:b/ American) or "often" (/ˈɒf.tən/ British, /ˈɑ:f.ən/ American) help learners distinguish dialectal variations. These exercises involve listening to audio recordings and identifying the correct pronunciation, reinforcing auditory processing skills. Pronunciation drills, focusing on stress patterns in words like "chamomile" (/ˈkæm.ə.maɪl/) or consonant sounds like /t/ in "thyme," can be conducted through repetition, ensuring learners internalize correct articulation. Feedback is another key factor in the development of learner's auditory and pronunciation competences. Lee *et al.* (2015) show that explicit pronunciation instruction is highlighted as a key factor that can enhance the effectiveness of L2 pronunciation development. Meta-analyses show that treatments providing feedback—often part of explicit instruction—tend to yield larger effects on pronunciation improvement, especially when combined with longer durations and controlled outcome measures. Saito and Plonsky (2019) further support this approach, demonstrating that structured phonological training significantly improves L2 pronunciation accuracy through systematic auditory discrimination exercises.

Spelling instruction targets spelling accuracy, a critical skill for written production. Following Nation's (2022) emphasis on explicit form-focused instruction, educators can teach spelling rules, such as consonant doubling in "chopping" or the variable -ed endings in "chopped" (/t/), "added" (/ɪd/), and "infused" (/d/). Worksheets with guided practice on these rules, alongside exceptions like "grind" (ground), help learners internalize patterns. Explicit instruction in spelling rules—especially when combined with practice, strategy training, and meaningful context—consistently outperforms implicit or incidental approaches. This method benefits all learners, including those with learning disabilities and those learning a new language (Kemper *et al.*, 2012; Graham & Santangelo, 2014; Cordewener *et al.*, 2015). The cover-copy-compare method (Murphy *et al.*, 1990; Becker *et al.*, 2017) supports spelling and memorization: students write a target word (e.g., cilantro), cover it, rewrite it from memory, and check for accuracy. This technique has proven particularly effective for spelling mastery.

Morphological awareness enhances learners' ability to manipulate word forms. Drawing on Bauer (2001), Sukying (2020), and Nation and Bauer (2023) works on

morphology, educators can teach affixation, such as the derivation of "herbal" from "herb" or "finely" from "fine." Exercises where learners dissect words into morphemes (e.g., "flavorful" = flavor + -ful) deepen understanding of word formation. Additionally, mapping word families, such as "flavor," "flavored," "flavoring," and "flavorful," encourages learners to expand their lexical repertoire, aligning with Nation (2022) advocacy for vocabulary breadth and depth. Nation and Bauer (2023) established that morphological training significantly enhances vocabulary depth and word recognition skills.

Peer collaboration, such as paired quizzes on words like lush, chop, or vibrant, enhances both accuracy and fluency through social interaction, a strategy supported by Vygotsky's sociocultural theory (1978). Topping (2009) confirmed that peer interaction improves accuracy through structured feedback protocols. Writing tasks that require integrating new vocabulary—for instance, crafting a short narrative about visiting a Moroccan herb farm using five nouns, three verbs, two adjectives, and one adverb—encourage generative use of language (Swain, 2005), deepening retention and mastery.

Technology tools like Quizlet and Kahoot facilitate interactive learning through flashcards with images, pronunciations, and example sentences—e.g., "The lush cilantro elevates the salad's flavor"—which align with Mayer (2001) principles of multimedia learning. Godwin-Jones (2016) demonstrated that digital tools enhance individualized practice and vocabulary retention. A systematic teaching sequence, starting with high-frequency nouns and simple verbs (e.g., add, chop), and moving toward complex adjectives and adverbs (e.g., vibrant, delicately), scaffolds learning and supports long-term vocabulary learning (Graves, 2006). Schmitt (2008) showed that gradual complexity improves mastery through structured progression.

## 4.2 Teaching Meaning

Effective practices and strategies for teaching the meaning of herb-related vocabulary involve integrating rich contextual frameworks, multimodal sensory engagement, semantic mapping, and iterative exposure within meaningful contexts. Instruction should commence with comprehensible input. According to Krashen (1981, 1982), we learn language when we understand what we hear and read—the essence of the "comprehension" or input hypothesis. Supporting this claim are method-comparison studies showing that, at the beginning level, classes providing more comprehensible input consistently yield higher scores on communicative tests and equal or superior scores on grammar-based tests (Krashen, 1982). Laufer (2005) demonstrated that context enhances vocabulary retention, while Ellis and Shintani (2014) confirmed that comprehensible input facilitates acquisition through meaningful exposure. Providing comprehensible input, such as culturally relevant scenarios like Moroccan tea ceremonies or traditional recipes, facilitates learning of word meanings. For instance, presenting "mint" within the context of Moroccan tea preparation, accompanied by visual aids, tactile interaction with fresh herbs, or tasting sessions, enhances comprehension and retention.

Semantic mapping elucidates interconnections, such as "mint → tea → fresh" or "Safran → Tanjia → add," fostering deeper understanding. Richards and Rodgers (2014) showed that mapping improves vocabulary organization, while Schmitt (2010) emphasized the role of semantic networks in vocabulary retention. Both semantic mapping and memorization can effectively support vocabulary learning. Semantic mapping may offer advantages for long-term retention and deeper understanding, especially for advanced learners (Margosein, *et al.*, 1982; Zahedi & Abdi, 2012), while memorization remains a practical and efficient option in some contexts (Khoii & Sharififar, 2013). The choice of strategy should consider learner level and agency, goals, and available instructional time.

Repeated exposure across diverse modalities—spoken discourse, written tasks, and communicative activities—promotes robust retention, as supported by Stahl and Fairbanks (1986), who found that combining definitional and contextual information significantly improves word retention and comprehension compared to isolated definitions. Repeated exposure significantly enhances vocabulary acquisition, with distinct outcomes based on exposure type and context. Intensive, frequent exposure yields substantial immediate vocabulary gains, whereas spaced exposure promotes superior long-term retention (Koval, 2019). Even minimal exposures, as few as two, in multimodal contexts (e.g., text combined with visuals or audio) can produce measurable vocabulary improvements, with the most significant gains occurring early. Frequent exposures and deeper engagement, such as through varied activities or elaborating on word meanings, further strengthen both initial learning and retention, though additional exposures yield diminishing returns (Eckerth & Tavakoli, 2012). Webb (2007) found that spaced exposure enhances retention through varied contexts.

Multimodal sensory engagement incorporates tactile, olfactory, and visual experiences, such as touching mint or smelling rosemary, to make meanings concrete, aligning with Paivio (1986) dual coding theory and supported by Gardner (1993) theory of Multiple intelligences. Research by Shams and Seitz (2008) shows that multisensory input enhances meaning acquisition by creating stronger memory traces. Conducting tasting sessions where students describe herbs (e.g., "sprinkled parsley" as "fresh") links sensory input to meaning, also, students might view images of herbs, hear pronunciations, touch rosemary, or simulate chopping motions to reinforce meaning.

Collocation and phrasal verb focus teaches collocations like "sprinkle parsley" or phrasal verbs like "pick off" (leaves), as Nation (2022) underscored chunk learning for fluency. Durrant (2014) showed that collocation training improves naturalness. Matching tasks to pair verbs with nouns (e.g., "garnish" with "herbs") or adverbs with verbs (e.g., "finely chop") enhance fluency through error analysis activities.

Understanding the meaning of herb-related vocabulary involves mastering denotative, connotative, and associative dimensions, organized within semantic networks. Semantic mapping, as described by Richards and Rodgers (2014), facilitates conceptual organization by visually representing relationships. For example, educators can guide learners to create graphic organizers with "herb" as the central node, branching

into hyponyms like "parsley," "rosemary," and "mint," with attributes such as use (culinary, medicinal) or sensory qualities (aromatic, bitter). This approach helps learners internalize hierarchical structures, as supported by Schmitt (2010), who emphasizes the role of semantic networks in vocabulary retention.

Contextualized learning, a cornerstone of communicative language teaching (Richards & Rodgers, 2014), embeds vocabulary in authentic scenarios. Presenting herbs in recipes ("Add chopped parsley to the salad") or herbal remedy descriptions ("Steep chamomile for relaxation") allows learners to infer meanings from context clues, as advocated by Laufer (1996). Visual aids, such as images or videos of herbs in culinary settings, reinforce denotative meanings while stimulating discussions about connotative associations, such as "mint" evoking freshness. Highlighting the cultural significance of Moroccan herbs, such as mint in tea ceremonies, fosters intercultural competence, aligning with Byram's (1997) model of intercultural communicative competence.

### 4.3 Teaching Use

Effective vocabulary instruction relies on pedagogical practices that support both the comprehension and production of lexical items in context. Explicit instruction is foundational for enhancing vocabulary acquisition among secondary ESL students (Tahir, Albakri, Adnan, & Karim, 2020). Teaching herb-related words—such as mint as a noun in "I added mint to the tea," or carefully as an adverb in "She carefully chopped the parsley"—clarifies syntactic roles and helps learners recognize appropriate usage. Research by Nation (2001) emphasizes that vocabulary teaching should include information on word forms, meanings, and grammatical behavior, enabling students to understand not only what words mean but how they function in discourse. Stahl and Fairbanks (1986) recommended explicit teaching of syntactic roles, while Norris and Ortega (2000) demonstrated that explicit grammar instruction improves accuracy. Furthermore, Research confirms that explicitly teaching vocabulary learning strategies not only improves immediate performance but also supports long-term retention and productive use of vocabulary in both writing and speaking (Mizumoto & Takeuchi, 2009). Compared to traditional or incidental approaches, explicit instruction consistently results in greater gains in vocabulary size and depth across diverse age groups and learning contexts.

Contextual learning further reinforces word meaning by embedding vocabulary in authentic scenarios. Presenting herb words within culturally meaningful contexts—such as Moroccan tea ceremonies or traditional recipes—exposes students to natural syntax and pragmatic use. As Schmitt (2008) asserts, contextualized input promotes inferencing skills and retention, particularly when learners engage with language that reflects real-life communication. Nation (2001) advocated contextualized learning for effective transfer, while Lightbown and Spada (2013) showed that context enhances transfer to new situations. Additionally, Research shows that students exposed to vocabulary through contextual means—such as storytelling, real-life simulations, or micro-lessons—not only recall words more effectively but also apply them more

accurately in communication (Fengyu, 2023; Liu *et al.*, 2023). For example, hearing "Mint is used in Moroccan tea to create a refreshing drink" within a cultural discussion enables students to grasp both the semantic and pragmatic dimensions of the word. Moreover, contextualized instruction becomes even more effective when combined with engaging media. Animated videos that depict the daily use of herbs in meals or remedies increase learners' motivation (Minalla, 2024). For example, in the sentence "She gently boiled rosemary leaves to make a soothing drink," "rosemary" is a noun, "boiled" is a verb, "soothing" is an adjective modifying "drink," and "gently" is an adverb describing the manner of boiling. Similarly, in "He adds fresh mint to the salad for a refreshing flavor," "mint" is a noun, "fresh" and "refreshing" are adjectives, and "adds" is a verb.

Interactive activities, such as role-plays or games like Vocabulary Bingo, provide opportunities for learners to engage with vocabulary actively; incorporating interactive tools and engaging tasks not only enhances vocabulary acquisition but also boosts learner motivation and confidence, which in turn positively influences their grasp of grammar (Khalid & Aziz, 2022). These methods align with communicative language teaching principles, where learning is facilitated through social interaction and meaningful use (Richards & Rodgers, 2014). Cornillie *et al.* (2012) showed that games increase engagement, while Rinvolucri (2002) demonstrated that playful learning improves retention. For instance, simulating a market exchange to buy herbs encourages students to construct sentences, negotiate meaning, and apply vocabulary in spontaneous conversation. Communicative practice is essential for reinforcing vocabulary (its use and meaning) in productive use. One-way tasks, such as writing a recipe," and two-way tasks, such as interviewing a chef, promote output and negotiation of meaning—both of which are crucial for consolidating vocabulary knowledge (Swain, 2005). Gass and Mackey (2007) showed that interaction improves fluency through negotiation of meaning.

Multiple exposures across modalities—reading, writing, listening, and speaking—are vital for long-term retention. Repeated encounters with vocabulary in diverse contexts help learners develop both breadth and depth of word knowledge. Webb (2007) found that incidental vocabulary learning is significantly enhanced when learners engage with words multiple times across various formats. Schmitt (2008) demonstrated that varied contexts improve retention through multimodal exposure. For example, discussing herb usage in class and then writing a blog entry on the medical and/or culinary usage of herbs allows learners to internalize vocabulary through reinforced, contextualized practice.

Collocation and phrasal verb instruction teaches collocations like "sprinkle parsley" and phrasal verbs like "shake off" (leaves), as Nation (2022) emphasized chunk learning for fluency. Ellis (2008) showed that error analysis improves accuracy through identification of incorrect collocations. Matching tasks to correct errors, e.g., identifying "pour parsley" as incorrect versus "sprinkle parsley," and constructing sentences with correct collocations, e.g., "She finely chopped the parsley," enhance fluency through guided practice.

Spaced repetition revisits vocabulary systematically over time to enhance retention, as Milton and Meara (1995) demonstrated, spaced learning improves long-term memory. Cepeda *et al.* (2006) showed that spacing effects are robust for vocabulary retention. Using spaced learning schedules, learners can first be introduced to a set of nouns in week one, followed by a set of verbs in week two, then a set of adjectives in subsequent weeks, and later a set of phrases. With periodic review and reinforcement tasks, such as rewriting sentences that incorporate these items, digital platforms can strengthen retention and support long-term mastery.

Functional practice emphasizes real-world application. Imperative tasks, where learners write or speak instructions ("Rinse the sage thoroughly"), reinforce culinary discourse, as supported by Harmer (2007). Phrasal verb exercises, focusing on separable versus inseparable structures ("Shake the parsley off" vs. "Shake it off"), ensure syntactic precision. Analyzing herb-related texts, such as recipes or herbal guides, allows learners to identify syntactic patterns and apply them to original writing, promoting discourse competence (Celce-Murcia *et al.*, 2010).

Furthermore, to ensure effective vocabulary instruction and vocabulary expansion, as in the context of herb vocabulary, educators should adopt a *comprehensive learning process* that integrates input, competency building, and engagement. As emphasized by Baaqili (2023) and Elkhatri (2024), meaningful language learning occurs when instruction moves beyond isolated word instruction and exposure to include a subsystem and structured input, competency building, and engagement practices (Communicative Acts), all within a comprehensive and discursive learning process. This model ensures that students not only understand the meaning, form, and use of vocabulary items but are also able to know and use them as a subsystem confidently in contextually appropriate ways.

Most importantly, all these practices—whether repetition, cultural embedding, multimodal exposure, or spaced instruction—must be tailored to the learners' proficiency level, background knowledge, and communicative needs. Instruction should be differentiated to meet learners where they are, building upward in complexity while remaining comprehensible and relevant. When vocabulary instruction is deliberately designed with learner profiles in mind, it not only maximizes uptake but also fosters autonomy, confidence, and real-world communicative competence.

#### 4.4 Assessment and Feedback

Assessment methods evaluate learners' mastery of form, meaning, and use, drawing on Nation's (2022) emphasis on comprehensive evaluation. For form, a pronunciation test involves recording sentences like "I rinse the basil" for phonological accuracy assessment. A spelling quiz uses multiple-choice or fill-in-the-blank formats to test orthography, such as "liquorice" versus "licorice." A morphology task requires transforming words, such as "chop" to "chopped" or "chopping," in given sentences.

Meaning assessments include a semantic association quiz matching herbs to attributes ("mint" to "refreshing") or synonyms ("infuse" to "steep"). A contextual analysis



task asks learners to explain word meanings in recipe excerpts, identifying denotative and connotative layers. A collocation test evaluates correct pairings, such as "sprinkle parsley" versus "pour parsley," aligning with Schmitt's (2010) focus on lexical patterns. Assessments involve sentence correction tasks, where learners revise errors like "She never don't use thyme" to "She never uses thyme." A writing task requires composing a recipe or herbal remedy description, evaluated for grammatical accuracy and pragmatic appropriateness. An oral presentation, where learners describe a herb's uses, assess fluency and correct word class usage, as recommended by Harmer (2007).

Feedback strategies ensure effective learning. Targeted feedback highlights specific errors, such as incorrect adverb placement, with clear corrections. Peer feedback, using provided rubrics, fosters collaborative learning, as supported by Richards and Rodgers (2014). Formative feedback during activities corrects pronunciation or grammar in real-time, while summative feedback on major assessments links performance to learning objectives, suggesting next steps.

#### **4.5 Considerations for Diverse Learners**

The model accommodates diverse learner profiles to ensure inclusivity. For proficiency levels, beginners focus on high-frequency herbs and basic forms, using visuals and simplified tasks. Intermediate learners tackle complex forms like phrasal verbs and nuanced meanings, while advanced learners explore stylistic variations and rare vocabulary, such as "motherwort." Learning styles are addressed through visual aids (images, videos), auditory exercises (recordings, drills), kinesthetic activities (handling herb samples), and reading/writing tasks (recipe creation), aligning with Gardner's (1993) theory of multiple intelligences.

Cultural and linguistic backgrounds are considered by connecting Moroccan herbs to learners' experiences, such as comparing mint tea to local beverages, as suggested by Byram (1997). L1 interference, such as Arabic trilled /r/ affecting English /ɹ/ in "parsley," is addressed through targeted pronunciation practice. Inclusivity is ensured by using diverse materials and avoiding assumptions about prior knowledge. For learners with special needs, visual impairments are accommodated with audio descriptions or tactile samples, hearing impairments with written instructions, and cognitive challenges with scaffolded tasks, as recommended by Richards and Rodgers (2014).

### **5. Conclusion**

This paper has presented a comprehensive framework for analyzing and teaching the English vocabulary of Moroccan herbs, integrating theoretical perspectives with practical applications. Through a systematic examination of the lexical subsystem of Moroccan herbs, we have demonstrated how vocabulary extends beyond isolated lexical items to form an interconnected network of formal, semantic, and functional dimensions. The literature review established the theoretical foundation, highlighting the multidimensional nature of vocabulary knowledge and the importance of frameworks

like Nation's (2022) form-meaning-use model. This theoretical grounding revealed that vocabulary learning requires not only recognizing word forms but also understanding their meanings and appropriate usage in context, with scholars like Laufer (1996), Qian and Schedl (2004), and Barcroft (2015) contributing to our understanding of vocabulary breadth, depth, and the cognitive processes involved in lexical development.

The descriptive analysis of herb-related vocabulary through Nation's model provided insights into the formal, semantic, and pragmatic dimensions of this specialized lexical subsystem. The analysis of form revealed significant phonological challenges, including dialectal variations in pronunciation and complex orthographic patterns. The semantic examination uncovered rich hierarchical relationships and connotative associations that link herbs to cultural practices, particularly within Moroccan contexts. The pragmatic analysis highlighted the importance of collocations, phrasal verbs, and register variations in appropriate language use. This systematic analysis demonstrated how herb-related vocabulary functions as a cohesive subsystem rather than isolated words, with each dimension—form, meaning, and use—interacting to create a complex lexical network that requires comprehensive instruction.

Building on this descriptive foundation, the instructional strategies and classroom implementation section provided evidence-based approaches for teaching herb-related vocabulary. These strategies operationalized the form-meaning-use framework through targeted techniques for each dimension: explicit pronunciation instruction and morphological awareness for form; semantic mapping and contextualized learning for meaning; and communicative practice and collocation instruction for use. The culturally grounded approach leveraged the significance of Moroccan herbs in culinary, medicinal, and cultural contexts, making vocabulary learning personally meaningful and pedagogically sound. The strategies incorporated multimodal engagement, peer collaboration, technology integration, and differentiated instruction to address diverse learner needs, aligning with principles from scholars such as Byram (1997), Celce-Murcia *et al.* (2010), and Nation (2022), and the assessment and feedback mechanisms, along with considerations for diverse learners, ensured that the instructional model was both comprehensive and inclusive.

The comprehensive learning process presented and recommended above offers a framework that extends beyond vocabulary instruction to other domains of language learning. Future research is invited to explore the application of this model to other language components—such as grammar, pragmatics, and discourse—and to adapt it for teaching various languages and subjects. The model's emphasis on form, meaning, and use provides a versatile structure that can be tailored to different linguistic contexts and educational settings. Researchers are encouraged to investigate how this framework might be effectively implemented in teaching specialized vocabulary to proficient levels across different domains, from academic and professional terminology to cultural and technical lexicons.

Furthermore, the model's integration of theoretical principles with practical applications makes it particularly valuable for developing advanced language

proficiency. Future studies could examine how the model might be refined to address the challenges of teaching specialized vocabulary at higher proficiency levels, where nuanced understanding and appropriate usage become increasingly critical. The model's emphasis on cultural relevance and contextualized learning also opens avenues for research into how specialized vocabulary instruction can be optimized across different cultural contexts and for diverse learner populations.

By bridging theoretical insights with classroom practice, this study contributes to innovative approaches in language education. The comprehensive language learning model (Baaqili, 2023; Elkhatri, 2024) offers a foundation for continued exploration and refinement, inviting researchers and educators to adapt and extend this model to new contexts, languages, and subjects. Such research will not only advance our understanding of language learning components but also enhance our ability to develop effective instructional approaches that foster language proficiency across diverse learning environments.

### Conflict of Interest Statement

The authors declare no conflicts of interest.

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**Dr. Youssef Baaqili** is a researcher and English instructor, specializing in Applied Linguistics. With over a decade of experience in teaching English as a Second and Foreign Language (ESL/EFL), he has worked with learners across a wide spectrum—from middle and junior school students to university-level learners. Dr. Baaqili teaches English for Specific Purposes (ESP), English for General Purposes (EGP), and Communicative English, equipping students with both academic and professional language skills. His research interests center on language learning and teaching, with a particular focus on instructional design. Drawing on his strong theoretical expertise and practical classroom experience, Dr. Baaqili also contributes to teacher education, training aspiring instructors to become effective practitioners in the field of English language teaching.

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