What is a Noun , and What is a Verb in Chinese, Japanese, and Arabic? Examining Functional Morphological Form Classes as Alternatives to Standard Grammatical Categories

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Abstract

The linguist Benjamin Whorf in a classic article, "Grammatical Categories" presents a general theory of grammatical categories independent of the Indo-European Latin and Greek model categorization of "form classes" (e.g. Noun, Verb, Adjective, Adverb, Preposition). Whorf suggested three contrasting dimensions of form variation: overt, covert, and isosemantic. Each of these three was further divided into "selective" and "modulus" categories. The need for a more flexible view of form class was also promulgated by John R. (Haj) Ross in suggesting that linguistic analysis should emphasize 'nouniness" and "verbiness" rather than rigid form class categorization.

In this paper I will explore Whorf's system, and Ross' call for form class flexibility in three non-Western languages, Chinese, Japanese, and Arabic, whose morphosyntactic systems are not easily analyzed using the form classes of Indo-European languages. In Chinese, individual "words" 词 cí, can be seen simultaneously as "nouns," "verbs," or "adjectives." For example the morpheme 长 (cháng, zhǎng) can be classified as a noun, a verb, an adjective or an adverb indicating "length" among numerous other meanings.

Chinese and many Japanese "compound words" generally consist of two or more character-morphemes that can be interpreted semantically as "phrases," for example, in Chinese 买卖 (lit. buy-sell) has the meaning "business."

Japanese has several other grammatical structures that do not fit easily into Western form class systems. One example is the "adjectival verb" (形容詞 keiyōshi) in which no formal distinction exists between "verbs" , and "adjectives" in that both can be "conjugated," for example, 赤い (akaii)"red," 赤だった (akadatta) "was red."

Arabic has a system of differentiating form classes by creating 15 (10 in common use) separate structural categories based on triliteral consonant roots which transcend strict classification into Western grammatical form classes. The Arabic word conventionally translated as "noun" in English, ▯▯ pl. ▯▯▯▯▯ , ism pl. asmaa' is equivalent in function to a range of Western form classes: nouns, pronouns, adjectives , and adverbs. In most cases asmaa' are derived from structures that also yield equivalent verbs, for example, ▯▯▯▯▯ ▯▯▯▯ yaktub kitabanaan "he writes a book," where both words are based on the same triliteral root, ▯ ▯ ▯ k-t-b denoting "writing."

In this paper I maintain that it is more accurate to look at the grammatical form classes in these non-Western languages by examining their specific functions within their respective languages rather than trying to forcibly analyze them through the lens of structures dictated by Western languages. Taking Ross' notion of flexibility in form classes and Whorf's more universal typological proposal, I will show how a more universal form class analysis can provide a more accurate picture of form class, one that might productively be applied to a revised analysis of Western languages as well.

Keywords: Chinese, Japanese, Arabic, form class, morphology, grammatical categories, John R. Ross, Benjamin Whorf, nouniness, verbiness,

Introduction—Nouns, Verbs and Adjectives as Artifacts of Western Language Analysis

The linguistic anthropologist, Del Hymes, in his classic work, *Foundations in Sociolinguistics: An Ethnographic Approach* (Hymes 1974) established a distinction between structural and functional approaches to linguistics. Structural approaches, he claims, prioritize "analysis of code" prior to "analysis of use," whereas functionalist approaches prioritize "analysis of use" over "analysis of code" (Ibid: 79).

Nowhere is this distinction starker than in the analysis of the most fundamental categories of linguistic phenomena, the "parts of speech." It is a basic assumption in linguistics that there are Platonic objects in language that are fundamental units of analysis, by which I mean assumed natural objects that have a reality outside of their patterns of use, like the chemical elements of the periodic table, or light waves.

These linguistic objects have been derived from centuries of linguistic analysis based almost entirely on Western languages, particularly models derived from Greek and Latin. Based on this model, linguists have analyzed non-Western languages using these objects. Rather than looking at *use* of linguistic objects in these languages, they have tried to categorize them in terms of these Platonic forms. Chief among them are the fundamental "building blocks" of language:

"noun," "verb," "adjective, and "adverb." These concepts derive directly from Greek and Latin grammar. For example, "noun" derives from the Latin *nomen* and more distantly *onoma* in Ancient Greek a *nāman* in Sanskrit.

In this paper I will show the difference between looking at three of the most basic of these assumed grammatical objects: nouns, verbs, and adjectives, and show how these analytical objects fail to adequately account for the use of linguistic phenomena when used to analyze three non-Western languages: Chinese, Japanese, and Arabic. When these languages are analyzed in terms of use patterns, it can be shown, I contend, that the Western categories noun, verb, and adjective fail to account adequately for regular patterns of use in these languages. In short, the notion that these are universal categories fails when analyzing non-Western languages.

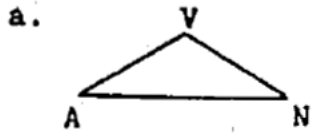
Nouniness, Verbiness, Grammatical Categories: Functional and Cognitive Approaches

The firm belief that nouns, verbs, adjectives, and adverbs are definable categories is virtually unquestioned in contemporary linguistics. Even Langacker in his monumental *Foundations of Cognitive Grammar*, which purports to redefine these categories in cognitive, not structural term (Langacker 1987: 189), cannot give up on the notion of these grammatical objects ass concrete phenomena. As he writes: "Contrary to received wisdom, I claim that basic grammatical categories such as **noun, verb, adjective,** and **adverb** are semantically definable" (Langacker 1987:189), even though in Volume 2 of his work he maintains: "there is no structural element or configuration displayed by every nominal in English, let alone for all languages" (Langacker 1991: 142).

The fundamental question regarding the Platonic existence of these linguistic element may rest on the distinction between whether these linguistic elements are semantically definable or formally definable. The semantic question was raised significantly by John R. (Haj) Ross in his now classic paper "The Category Squish: Endstation Hauptwort," and his more recent paper: "Nouniness" (Ross 1972; Ross 2004). Ross claims that the distinction between noun, verb and adjective is not a categorical one. The functions that we ascribe to these linguistic forms exist, rather, in a continuum, or a "squish" as illustrated in the diagram below through which verbs can be seen to become "noun-y" by stages.

Verb> Present Participle> Perfect Participle> Passive Participle> Adjective> Preposition> "adjectival noun" (e.g. fun, snap)> Noun

Schematically this can be shown as:



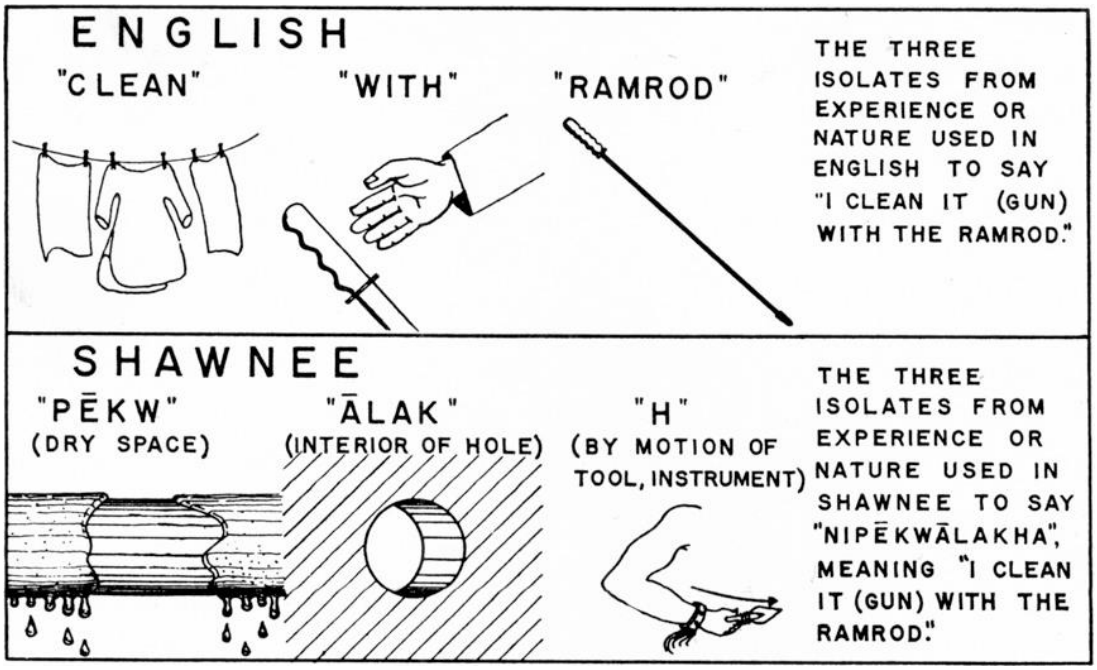
b. V > A > N
c. A > N > V
d. N > V > A

(Ibid: 316)

Ross claims in his analysis that he would prefer the lower schema to describe the "squish," but he has not been successful in finding a sequence that either reverses the "squish" process, or that moves from Noun to Verb. I will have more to say about this later in this discussion.

The second question regarding the Platonic reality of these conventional linguistic categories has to do with the overt markers that identify them in various languages. Once again, I n Latin, Greek and most Western languages, overt markers frequently designate a word as either a noun, a verb, or an adjective—most frequently a dedicated affix or an obligatory article as in German: *Du gibst dem Mann den Apfel des Kindes,* "You give the man the child's apple." Where *-st* is the second person singular ending for the verb, -m is the dative ending for the indirect object, and -en is the accusative ending for the direct object.

The linguist Benjamin Whorf, who worked with American Indian languages was concerned with the fact that many of the linguistic structures with which he dealt did not fit easily into noun, verb and adjective categories. He provides an example from Shawnee shown below:



(Whorf 1940: 229)

Whorf's work was inspired by his mentor, Edward Sapir, who also realized that Western language categories were not adequate to describe the American Indian languages he encountered. Here Sapir writes about Nootka, a North American Northwest Coast language:

> In the Nootka language the combined impression of a stone falling is quite differently analyzed. The stone need not be specifically referred to, but a single word, a verb form, may be used which is in practice not essentially more ambiguous than our English sentence. This verb form consists of two main elements, the first indicating general movement or position of a stone or stone-like object, while the second refers to downward direction. We can get some hint of the feeling of the Nootka word if we assume the existence of an intransitive verb "to stone," referring to the position or movement of a stone-like object. Then our sentence, "the stone falls," may be reassembled into something like "it stones down." In other words, while Nootka has no difficulty whatever in describing the fall of a stone, it has no verb that truly corresponds to our "fall." (Sapir 1924: 155)

A posthumous paper by Whorf, "Grammatical Categories" posits a general theory for the classification of words, obviously influenced by his American Indian Language work. He begins his discussion by advising that all conceptions of categorization of linguistic elements are to be avoided when approaching a new language. Only when an inventory of linguistic elements has been completed can functions be assigned to each element. (Whorf 1945: 1).

Whorf claimed that language elements can be divided into Overt categories, or Phenotypes; and Covert categories, or Cryptotypes. He points out that in contrast to most European languages where categories like "noun" and "verb" are phenotypic, many American Indian languages make no overt distinction between these categories (Ibid: 6). He identifies two important linguistic processes as *verbation*, that is, converting reference to a concrete "object" into a reference to "action;" and the reverse process of *stativation.*

When we see the fluidity referenced by Ross and Whorf, it calls into question whether we are caught in a classificatory trap where we are forced to talk about absolute categories of "noun," "verb," "adjective," (and "adverb)," describing fluidity as a "shift" from noun to verb to adjective, when the reality appears to be that it is actually the fluid process that is the normal state of language usage, not shifting between fixed categories. I will illustrate this below with Chinese, Japanese and Arabic. These languages, as is well known, come from three separate language families, so I would maintain that the similarity of grammatical processes between these languages may speak more to the universality of functional flexibility in all human languages rather than anything specific to any one language.

Chinese

Non-native students learning Chinese are often confused about the nature of Chinese words. When they look in a dictionary, they often find entries like the following:

经(prep.) through, after, past; (n.) warp, channel, deformation classics; sacred book; scripture, warp (textile), longitude, menstruation, (v.) pass through, undergo, endure, bear, manage, stand; (adj.) regular immanent, ordinate, abiding, constant, changeless, scheduled

In fact, there are thousands of Chinese words (词 cí) that "emerge" as "nouns," or "verbs"(Clark and Clark 1979) when analyzed according to Western grammatical categories. Here is a brief list

"NOUN"	"VERB"
磅 bang4 'a scale (that weighs 磅in avoirdupois)' (from 磅 'pound (lb.)' (Eng.))	bang4 'to weigh'
包 bao1 'a pack, package'	包 bao1 'to pack/wrap up'
鉋 bao4 'a plane'	鉋 bao4 'to plane (wood)' (刨)
抱 bao4 'an armful (of s.t.)'[2]	抱 bao4 'to embrace'
錛 ben1 'an adze'	錛 ben1 'to adze'
畚 ben3 'a scoop'	畚 ben3 'to scoop'
鞭 bian1 'a whip'	鞭 bian1 'to whip'
濱 bin1 'bank, shore'	濱 bin1 'to border on (sea)'
冰 bing1 'ice'	冰 bing1 'to put on ice, freeze'

(after Chan and Tai 1994: 51)

However, the flexibility in Chinese words goes further. Some words must be translated not only as "nouns" and "verbs," but also as "adjectives," "adverbs," "counters," and "grammatical particles"

> 长 cháng, zhǎng—length, long, forever, always, constantly, to grow
> 多 duō—many, much, more, multi-, and more, have an amount

The confusion for non-Chinese speakers increases when they begin to encounter "two-character" words such as

> 帮忙 bāngmàng—to help (v.); help (n.)

A teacher will tell the student that this is a verb. But then the student asks, "what about this other two-character word meaning "help":

帮助 bāngzhù –to help (v.); help (v.)

Both of these words are simultaneously nouns and verbs, and they are synonyms. But then the teacher must explain that in the case of 帮忙 bāngmàng, the second character is a "noun," but actually either character can be either a noun, or in the case of 忙 it can also be an adverb meaning "busy, occupied" but in the case of 帮助 bāngzhù, both of the characters are actually verbs, except that the two character combination can serve either as a noun, a verb, or an adjective.

Oceans of ink have been spilled over the apparent problem of word classification in Chinese. Because Chinese consists entirely of cryptotypes in Whorf's classificatory system. Words have no markings to indicate what function they serve in a sentence, and using Western classificatory systems as basic as noun, verb, etc. provides no guidance. There are native words that translate as "noun," "verb" and "adjective" in English. These are 名词 *míngcí* "noun," 动词 dòngcí "verb," and 形容词 *xíngróngi* "adjective."[1] But these words are, I believe, often misused by non-Chinese speakers. Interpreting the individual characters, they emphasize "naming," "movement," and "description or form" respectively.

Many writers twist themselves in pretzels trying to force Chinese into the Procrustean Bed of Western grammar by maintaining rigid classificatory designations for these words making up algorithms to try and explain the varieties and transformations of these elements. An example comes from the brilliant work of Jerome Packard (Packard 2000; Packard 2015), whose cataloging of Chinese morphology is a definitive work. Packard, working from a long scholarly tradition analyzes Chinese morphological elements by "form class." He points out the frequent discrepancy between Chinese and English "form-classes"

> (T)he part of speech of the English gloss for an entry will not always agree with the part of speech indicated for Chinese. This is because the part of speech a word best translates as in English is often different from its form class as indicated by its use in Chinese. We permit this surface discrepancy in order to allow form class to be determined by the distribution and use of the morphemes in Chinese, rather than having it be influenced by English translation (Packard 2000 Kindle Edition location 529-531).

In other words, Packard classifies a word as a "noun" or a "verb" based on its syntactic realization in a sentence rather than by any innate marker or form for the word.

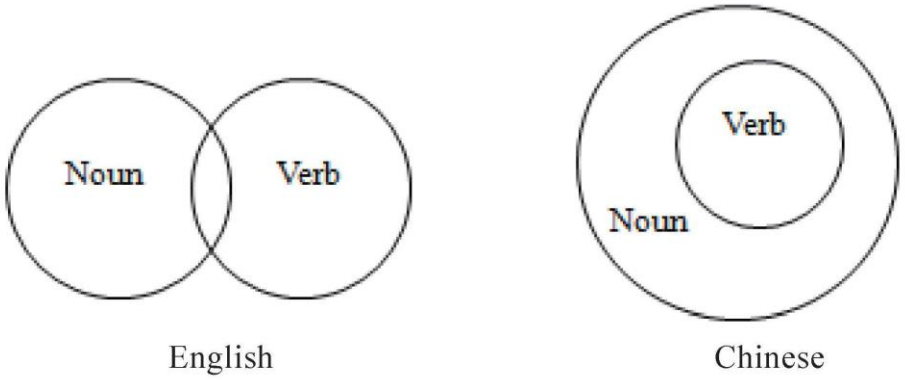
In an efficient summary, he shows that compound two-character words can consist, using Western categories, of noun-noun, noun-verb, verb-noun, or verb-verb. Any of these compounds may then function as nouns, verbs, adjectives, or adverbs. Here are two examples

买卖 mǎi(v.) mài (v.)— “buy” (v.)- “sell” (v.) business (n.)
画画 huà huà— “picture” (n.) “picture” (n.) draw, paint (v.)

Because the form of these compound words, whether seen as nouns or verb is the same, as in the 帮忙 bāngmàng and 帮助 bāngzhù examples provided above, the only way one can distinguish their functions is by knowing the language as an educated speaker and through various syntactic “tests.” There are a syntactic markers and structures that provide clues, indicating that the interpretation of Chinese linguistic elements must always, at least, be fully morphosyntactic. This conclusion is underscored when one realizes the extent to which Chinese words (词 cé) are highly flexible as well, especially in written Chinese, since many of them serve both as grammatical particles and independent words.

One of many examples would be the character 着 zhe, which is an aspectual particle indicating ongoing action, but can also have, via three additional pronunciations, translations of “to touch,””to wear,” “outstanding,” or “a chess move.” It also can be used to mean “all right!” The apparent ambiguity in classification arises only if one insists on the Western classificatory system of analysis.

Shen, cognizant of these classificatory difficulties, draws an interesting conclusion: ”all the verbs are verbal nouns in Chinese. In other words, nouns in Chinese constitute a super-noun category which includes verbs” (Shen 2017: 228)[2]. Shen draws his conclusion partly from the history of Chinese poetics where the fluidity in meaning of Chinese words is an artistic resource for the poet. He shows the contrast between English and Chinese in the diagram below:



Shen also points out that other structures assumed to be “universal” in Chomskyian formal linguistics are not required in Chinese, in particular the requirement that a “sentence” have both a subject and a predicate. As he states: “sentences without a subject or a predicate are normal in Chinese, and the relation between subject and predicate can be very loose” (Shen 2017: 234; see also Chao 1968).

He quotes from the Buddhist scriptures: The Heart of Paramita Sutra:

> 色不异空， 空不异色；色即是空，空即是色
> Sè bù yì kōng, kōng bù yì sè; sèjíshìkōng, kōngjíshìsè
> Form does not differ from emptiness: Emptiness does not differ from form.
> Form itself is emptiness: emptiness itself is form.

In the above example there is no clear subject and predicate, though this structure can be imposed in translation. But rendering the Chinese expression in English requires forcing it into a structure that is not present in its original form.

I applaud Shen's formulation, which he elaborates further in several of his writings (cf. Shen 2016), but I will propose a further set of suggestions for bypassing the Western nomenclature to arrive at a much clearer functional picture of how Chinese, and the other languages I deal with in this paper can be approached without reference to Western analytic categories.

As I will suggest below, the best solution to understanding Chinese morphology may be to adopt the broad categories that Chinese grammarians themselves use, distinguishing between content words, lit. "real words" (实词 shí cí), and function words lit. "false, or empty words" (虚词 xū cí), "false" because they are operational with no specific semantic content.

Japanese

Japanese is also difficult to analyze using Western grammatical categories. Consider the Japanese (also Chinese) character: 食 which has many possible readings in Japanese: *kuu, shoku, ta (-be)*. At base, all words incorporating this character refer to eating or food. In this way, this character in Japanese is classified, according to Western grammatical structures as either a "noun" or a "verb." There is nothing in the character itself that indicates its function. It will be read differently depending on grammatical particles that are paired with it. Some examples are below.

Word	**English Translation**
食ベル—taberu	to eat
食う—ku'u	to eat (vulgar)
食事—shokuji	Meal
食べ物—tabemono	Food
食の好み—shoku no konomi	food preferences

Another example is the word 行 iku, which can be translated as “going” but can also be pronounced gyō where it would be translated as “line, row, or verse.” These examples are not idiosyncratic. They are core structures in Japanese. Part of the challenge for learners of Japanese is dealing with this variety of meaning.

Another feature of Japanese that has been labeled as ambiguous when viewed through the filter of Western grammatical categories is the distinction between “nouns,” “verbs” and “adjectives.” It is a credible assertion that Japanese has no syntactic form that is equivalent to “adjective” in Western grammatical terminology. Japanese grammarians have borrowed Chinese terminology for words translated as “noun” and “verb” in English. These use the same Kanji characters used in Chinese, albeit the traditional, rather than simplified characters: 名詞 *meishi*”noun”and 動詞 “*dōshi* “verb.” The word translated as “noun” as in Chinese indicates “naming” and the word translated as “verb” indicates “movement.”

The Japanese grammatical term conventionally used for “adjective” is 形容词 *keiyōshi*. These are also the same characters used for the Chinese word for “adjective” (pronounced *xíngróngcí*). Its English translation is “form-content-word,” or “descriptive word.” However, a Japanese *keiyōshi* does not function like an adjective in Western languages. It is “conjugated” in the same manner that Japanese words classified in Western terminology as “verbs” are conjugated. Formally, a *keiyōshi* is indistinguishable from a verb from a Western perspective.

Japanese	**English Translation**
暑い atsui	Hot
暑かった—atsukatta	It was hot
白い—shiroi	white
白かった	it was white

A second form of “adjective” has the Japanese label: 形容動詞 *keiyōdōshi* or descriptive movement word. This is classified by grammarians as the equivalent of a Western “noun.” It is linked to nouns with the particle な *na*, but it also functions like a “verb” (see Namai 2002).

Japanese	English Translation
大きな男 ōkinaotoko	a big man
男は大きかった otoko wa ōkidatta	the man was big
必要な雨 hitsuyōna ame	needed rain
雨が必要だった ame ga hitsuyōdatta	rain was needed
必要性 hitsuyō-sei	Necessity

Some grammarians also identify constructions with の *no*, a word which is generally used to indicate possession (e.g 男の本 *otoko no hon* "the man's book), as *keiyōdōshi.* These constructions can be translated either as "adjectives" or "nouns" using Western nomenclature, once again underscoring the inapplicability of Western grammatical categorizations for these words.

Japanese	English Translation
少し sukoshi	little, a little
少しの食べ物 *sukoshi no tabemono*	a little food
真実 shinjitsu	true, truth
真実の愛 shinjitsu no ai	true love

Japanese also has a structure which renders "verbs" into a form which could variously be classified as a "noun," an "adjective," or an "adverb." This is a construction often associated with honorifics, involving になる—to become. For example

a. Gakusei-ga Mary-o matu. (学生がメアリーを待つ)
   student-NOM Mary-Acc wait
   'The student waits for Mary.'
b. Sensei-sama-ga Mary-o o-mati ni naru. (先生様がメアリーをお待ってになる)
   teacher-honorable-NOM Mary-Acc honorific-wait-ing –(ly) become
   'The teacher waits for Mary.' (after Namai 2000: 170; quoting Kuno 1973)

As a final note, grammarians of Japanese freely admit that Japanese has no distinct recognizable category of "adverb." Words that translate as adverbs in English are indistinguishable from adjectives. Adverbs can be "rendered" into words that can be translated as adverbs in English with the addition of particles such as く *ku*. For example, 速く *haya-ku*, "quick" is derived from the adjective form quick, or 速い *haya-i.* But a full examination of grammar shows that the negative form of adjectives must always substitute the particle く-ku

for い-I, making the formal distinction between “adjective” and “adverb” an artifact of Western grammatical classification.

> Kuruma-wa haya (-i) 車は速い。
> The car-NOM fast (-i)
>
> Kuruma-wa haya(-ku) nai 車は速くない
> The car fast (-ku) not

Arabic

Arabic is a Semitic language in which virtually all word forms are derived from two, three, four, or five element root structures. The vast majority of Arabic words are based on three element (triliteral) roots. These root structures are then modified with prefixes, suffixes, and interspersed vowels to create the bulk of Arabic vocabulary. As with Chinese (and all languages) there is a contrast between “content” words that carry specific semantic reference to identifiable phenomena and “function” words that serve to organize the elements of speech without independent semantic referential meaning.

The study of Arabic grammar is an exhaustive (and exhausting) enterprise. In this discussion I am focusing, as with Chinese and Japanese, on the suitability or unsuitability of Western linguistic categories to describe the linguistic phenomena and usage in Arabic. Just as with Chinese and Japanese, I will maintain that the categorization of words in Arabic using Western terminology does not adequately explain how the words are used in the language, and as in the other examples, I am focusing on the classification of words in to “noun,” “verb,” “adjective,” and “adverb.”

The Arabic words that translate as “noun, “ “verb,” and “adjective” are اسم ، فعل ، صفة, ‘ism, f’el, sifa, which translate roughly as “name”, “do” and “describe” implying action rather than static form. As I posit below the entire Arabic linguistic system focuses on dynamic action rather than static classification.

One reason that traditional Western classificatory categories do not work well for Arabic is the morphological structure of the language based on the aforementioned root structures. Karen Ryding, one of the most prominent experts on Arabic grammar states that

> The root is said to contain lexical meaning because it communicates the idea of a real-world reference or general field denotation (such as “writing”). It is useful to think of a lexical root as *denoting a semantic field* [emphasis mine-WB] because it is within that field that actual words come into existence, each one crystalizing into a specific lexical item. The number of lexical roots in Arabic has been estimated between 5,000 and 6,500 (Ryding 2005: 47-48).

Ryding provides a unique formulation of morphology. Whereas traditional morphology posits that morphemes are individual concrete lexemes, primarily words and affixes as in those in a word like English “unactionable” --un+action+able. Ryding’s somewhat novel analytic theory posits that Arabic morphemic construction consists of a morpheme “root” plus a morpheme “pattern” through which the root manifests itself. She calls this “root/pattern morphology” (Ryding 2014: 55). This combination of root and pattern yields up to 15 different form classes—forms 11-15 being rather rare. Each form then has both “declensions,” making them look like “verbs,” but also forms using a range of nomenclature such as “verbal noun,” “active participle” and “passive participle,” that, when translated, would be classified as “nouns” or “adjectives” in Western-based grammatical analysis.

An example below shows some derivations for the root k-t-b, which constitutes a semantic field involving “writing.

Forms derived from the triliteral root k-t-b

Arabic Word	**Meaning**	**Template**
Kataba	he wrote	CaCaCa
Yaktub	he writes	yaCCuC
Kttaba	he made someone write	CaCCaCa
Kitaab	book	CiCaaC
Kutub	books	CuCuC
Katib	writer	CaCiC
kuttaab	writers	CuCCaaC
maktab	desk/office	maCCaC
makaatib	offices	maCaaCiC
maktaba	library, bookstore	maCCaC
maktabaat	libraries	maCCaCaat
mukaatib	correspondent, reporter	muCaaCiC

(adapted from Ali Ahmed Qasem 2019: 51) See Appendix 1 below for a full expansion of k-t-b

The form classes in Arabic grammar are all identified by grammarians as “verb forms,” and traditional grammar classifies “nouns” and “adjectives” as deriving from the 15 form classes (Alhawary 2011: 237-259). Of particular interest are the rare forms 11-15 which are translated

as “adjectives” expressing color or physical state the translations of which would be: “to become red, to be dark brown, lasting long, being dark, to be strong” (Ryding 2005: 296-298).

Arabic grammar is far more complex than I have presented in this brief sketch, which has a specific focus, and that is the flexibility in Arabic word form-classes. This flexibility in semantic understanding is obscured when Arabic is viewed through a Western grammatical lens. The Western classificatory forms “noun,” “verb,” “adjective,” and “adverb” seemingly blur and merge into each other.

But there is a more elegant approach to understanding Arabic grammar, and that is to see it entirely in its own terms where states of being, movement, and the concretization of those states are fluid and understood as such—the “semantic fields” that Ryding has identified.

English

I cited Jerome Packard notation in his monumental work on Chinese morphology the discrepancy between English and Chinese form classes, but he also points out

> It turns out that Mandarin and English are strikingly similar in the structure of their words . . .but they differ inasmuch as in English certain word subparts parts (grammatical affixes) must 'pay attention to' other parts of the sentence, i.e., those subparts are required to match the 'number' or 'person' characteristics of other members of the sentence. It is quite fascinating that Mandarin and English may in fact be quite similar in the formation and structure of their words, with one difference being that grammatical agreement or paradigmaticity are relevant for English but irrelevant for Mandarin. (Packard 2000 Kindle Edition location 986-988)

Indeed, once we begin to look at English through the lens of Chinese, Japanese, and Arabic we see that English does indeed resemble Chinese in many respects. The form-classes of English are themselves not very rigid in many cases. This brings us back to John R. (Haj) Ross and Benjamin Whorf’s original questioning of the existence of rigid grammatical categories such as “noun,” “verb,” “adjective,” and “adverb.” On reflection, the same flexibility that we see in the three languages featured in this discussion also applies to English. Ross and Whorf were calling into question the universality of these categories by providing analytic frameworks such as Ross’ “squish” and Whorf’s phenotypes and cryptotypes that lead us away from rigid grammatical categories to more accurately descriptive semantic processes.

Clark and Clark in a now classic paper: “When Nouns Surface as Verbs” (Clark and Clark 1979) point out what every English speaker knows intuitively, namely that most nouns in English can be used as verbs, and most verbs can be “substantivized” to use Whorf’s term either directly

with no morphological change (e.g. beat: “to hit”; beat: “a rhythmic sound resulting from hitting”; flower: “a plant”; flower: “to bloom) or through the creation of the kind of verbal substantive (beating, flowering).

Clark and Clark show that this process is productive in English with many easily accepted innovations in language: “He wristed the ball over the net.” “When you’re starting to Sunday School members, then I think you’re going too far” and a quote from author James Thurber: “'Let us cease to sugar-coat, let us cease to white-wash, let us cease to bargain-counter the Bible!' the speaker implored us.” (Clark and Clark 1979:767-768)

But there are thousands of polysemic words in English that, like in Chinese, serve both as “nouns,” “verbs,” and “adjectives.” Words such as *cook, will, bat, set, can,* are only properly understood when they are morphosyntactically differentiated, much as they are in Chinese. However, even with proper syntax the interpretation of these words can be ambiguous. The title of Lynne Truss’ famous book on punctuation, *Eats, Shoots & Leaves,* illustrates this in an amusing manner (Truss 2004). This raises the question as to whether categories like “noun” and “verb” serve well even when thinking about English.

Conclusion—Platonic linguistic morphology, Western analytic dominance and real-world languages

The Platonic existence of rigid categories has been virtual doctrine in linguistics forever, and in this discussion I have tried to show that it is an artifact of Western models of linguistic analysis. In the rise of the theory of universal grammar posited by Chomsky and elaborated by others, the basic form-class units of syntactic structure have been assumed and remain largely unquestioned.

I fully support the idea that humans have universal capacity to learn any language, due to universal brain structures, and I also fully support the Chomskian tenet that morphosyntactic intuition is a universal feature of language capacity. However, I am calling into question the idea that the specific morphological units of language widely embraced as universal are really how individuals process the language they use. Universal grammar processes may be far more fluid than putting words in rigid classificatory “boxes” and moving items from box to box as they are realized in syntactic structures.

Langacker, Packard, Shen, and many others have also felt the inadequacy of these fixed categories of morphological classification in moving toward cognitive grammar, cognitive semantics and other accommodations. Rather than trying to analyze pragmatic linguistic behavior as a series of Ptolemaic epicycles showing how words jump from one fixed category to

another, I propose that the assumption of cognitive fluidity in semantic usage should be the operative principle in understanding language usage.

Shen, George Lakoff and Mark Johnson (Lakoff and Johnson 1980), and many others have evoked the process of metaphorical construction to show how such fluid functions could work. Ross, although he does not deal explicitly with poetics, shows how flexible language usage can be for speakers. However, poetics provides us with a way both to understand flexibility in language use and uphold the principal of universal innate capacity to understand syntactic structures.

As an example, consider the famous e.e. cummings[3] poem, *anyone lived in a pretty how town*, the first three stanzas are presented here.

> *anyone lived in a pretty how town*
>
> e.e. cummings
>
> anyone lived in a pretty how town
> (with up so floating many bells down)
> spring summer autumn winter
> he sang his didn't he danced his did.
>
> Women and men(both little and small)
> cared for anyone not at all
> they sowed their isn't they reaped their same
> sun moon stars rain
>
> children guessed(but only a few
> and down they forgot as up they grew
> autumn winter spring summer)
> that noone loved him more by more . . .

cumming's poem is interpretable by any speaker of English, even though he forces words into unusual syntactic relations to each other, causing the reader to reclassify the functions of the words in each stanza.

Based on an examination of Chinese, Japanese, Arabic, and other languages including English, taking a new look at Western languages using the following filters;

1. Instead of trying to assign words to form classes such as noun, verb, and adjective, assign them instead to semantic fields.
2. Show how people manipulate these semantic fields to create meaning
3. Accept fluidity of word use as normal.

4. Focus on processes of the kind suggested by Whorf to show ***substantivation, verbiation***
5. Focus on syntactic processes in interaction to disambiguate polysemic meaning.
6. Accept Dell Hymes' view that an approach to language start with use rather than formal classification
7. Expect that humans speaking any language will do so with creativity, including using words in unexpected ways

Bibliography

Alhawary, Mohammad T.
2011 Modern Standard Arabic Grammar: A Learner's Guide. Malden, MA: Wiley-Blackwell.

Ali Ahmed Qasem, Fawaz
2019 The Strong Continuity Hypothesis: Evidence from Arabic-Speaking Children Data. Macrolinguistics 7(11): 48–71.

Chan, Marjorie KM, and James HY Tai
1994 From Nouns to Verbs: Verbalization in Chinese Dialects and East Asian Languages. *In* Sixth North American Conference on Chinese Linguistics. NACCL-6. Graduate Students in Linguistics (GSIL), USC, Los Angeles Pp. 49–74. Citeseer.

Chao, Yuen Ren
1968 A Grammar of Spoken Chinese. University of California Press.

Clark, Eve V., and Herbert H. Clark
1979 When Nouns Surface as Verbs. Language 55(4): 767.

Hymes, Dell H.
1974 Foundations in Sociolinguistics; an Ethnographic Approach. , Book, Whole. Philadelphia: University of Pennsylvania Press.

Kuno, Susumu
1973 The structure of the Japanese language. Current studies in linguistics series, 3. Cambridge, Mass.: MIT.

Lakoff, George, and Mark Johnson
1980 Metaphors We Live By. , Book, Whole. Chicago: University of Chicago Press.

Langacker, Ronald W.
1987 Foundations of Cognitive Grammar. Vol. 1: Theoretical Prerequisites, vol.1. Nachdr. Stanford, Calif: Stanford University Press

1991 Foundations of Cognitive Grammar, Vol. 2: Descriptive Application, vol.2. Stanford, CA: Stanford University Press. https://books.google.com/books?id=j8GLzQEACAAJ.

Namai, Kenichi
2000 Subject Honorification in Japanese. Linguistic Inquiry 31(1). The MIT Press: 170–176.
2002 The Word Status of Japanese Adjectives. Linguistic Inquiry 33(2). The MIT Press: 340–349.

Packard, Jerome L.
2015 Morphology: Morphemes in Chinese. *In* The Oxford Handbook of Chinese Linguistics. William S-Y. Wang and Chaofen Sun, eds. Oxford University Press. http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780199856336.001.0001/oxfordhb-9780199856336-e-45, accessed October 13, 2020.

Packard, Jerome Lee
2000 The Morphology of Chinese: A Linguistic and Cognitive Approach. Cambridge, UK ; New York, NY, USA: Cambridge University Press.

Ross, John R.
1972 The Category Squish: Endstation Hauptwort. Papers from the Eighth Regional Meeting of the Chicago Linguistics Society April 14-16, 1972 8: 316–328.
2004 Nouniness. *In* Fuzzy Grammar: A Reader. Annotated Edition. Bas Aarts, David Denison, Evelien Keizer, and Gergana Popova, eds. Pp. 351–422. Oxford ; New York: Oxford University Press.

Ryding, Karin C.
2005 A Reference Grammar of Modern Standard Arabic. New York: Cambridge University Press.
2014 Arabic: A Linguistic Introduction. Cambridge, United Kingdom ; New York: Cambridge University Press.

Sapir, Edward
1924 The Grammarian and His Language. American Mercury 1: 149–155.

Shen, Jiaxuan
2016 Mingci He Dongci 名词和动词 (Nouns and Verbs). Beijing 北京: Shangwu Yinshuguan 商务印书馆.
2017 Nouns and Verbs: Evolution of Grammatical Forms/ 论汉语的名词和动词. 语法形式的演化. Journal of Chinese Linguistics Monograph Series(27). [The Chinese University of Hong Kong Press, Project on Linguistic Analysis]: 222–253.

Truss, Lynne
2004 Eats, Shoots & Leaves: The Zero Tolerance Approach to Punctuation. New York: Gotham Books.

Whorf, Benjamin Lee
1940 Science and Linguistics. Technology Review 42: 229–239.
1945 Grammatical Categories. Language 21(1): 1–11.

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Appendix 1. Derived forms of k-t-b (ك ت ب) in Arabic

Verbs and verbal derivatives

- **Form I**: كَتَبَ (kataba, "to write")
  - Verbal noun: كَتْب (katb, "writing, script"), كِتَاب (kitāb, "writing, script"), كِتَابَة (kitāba, "writing, script")
  - Active participle: كَاتِب (kātib, "writing, writer, scribe")
  - Passive participle: مَكْتُوب (maktūb, "written, letter, recorded, destined")
- **Form II**: كَتَّبَ (kattaba, "to make write")
  - Verbal noun: تَكْتِيب (taktīb)
  - Active participle: مُكَتِّب (mukattib)
  - Passive participle: مُكَتَّب (mukattab)
- **Form III**: كَاتَبَ (kātaba, "to correspond with")
  - Verbal noun: مُكَاتَبَة (mukātaba, "correspondence, note")
  - Active participle: مُكَاتِب (mukātib, "correspondent, reporter")
  - Passive participle: مُكَاتَب (mukātab)
- **Form IV**: أَكْتَبَ (ʾaktaba, "to dictate to")
  - Verbal noun: إِكْتَاب (ʾiktāb)
  - Active participle: مُكْتِب (muktib)
  - Passive participle: مُكْتَب (muktab)
- **Form VI**: تَكَاتَبَ (takātaba, "to correspond with each other")
  - Verbal noun: تَكَاتُب (takātub)
  - Active participle: مُتَكَاتِب (mutakātib)
  - Passive participle: مُتَكَاتَب (mutakātab)
- **Form VII**: اِنْكَتَبَ (inkataba, "to subscribe")
  - Verbal noun: اِنْكِتَاب (inkitāb)
  - Active participle: مُنْكَتِب (munkatib)
  - Passive participle: مُنْكَتَب (munkatab)
- **Form VIII**: اِكْتَتَبَ (iktataba, "to copy, to subscribe (*money*)")
  - Verbal noun: اِكْتِتَاب (iktitāb)
  - Active participle: مُكْتَتِب (muktatib, "subscriber")
  - Passive participle: مُكْتَتَب (muktatab)
- **Form X**: اِسْتَكْتَبَ (istaktaba, "to dictate to")
  - Verbal noun: اِسْتِكْتَاب (istiktāb, "dictation")
  - Active participle: مُسْتَكْتِب (mustaktib)
  - Passive participle: مُسْتَكْتَب (mustaktab)

Nouns and adjectives[edit]

- كِتَاب *m* (kitāb, “book”); plural كُتُب (kutub)
  - كِتَابِيّ (kitābiyy, “written, literary”)
  - كُتَيِّب *m* (kutayyib, “booklet”)
  - كِتَابْخَانَة *f* (kitābḵāna), كُتُبْخَانَة *f* (kutubḵāna, “library, bookstore”)
  - كُتُبِيّ *m* (kutubiyy, “bookseller”)
- مَكْتَب *m* (maktab, “desk, office”)
  - مَكْتَبِيّ (maktabiyy, “office (in compounds)”)
- مَكْتَبَة *f* (maktaba, “library”)
- مِكْتَاب *m* (miktāb, “typewriter”)
- كَتِيبَة *m* (katība, “battalion”)
- كُتَّاب *m* (kuttāb, “Qur'an school”)

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Notes

[1] As will be seen below, Japanese has borrowed these grammatical terms from Chinese using the same characters in traditional, rather than simplified form.

[2] Shen cites Langacker’s assertion that nouns and verbs demonstrate cognitive asymmetry (Langacker 1987:299-300)

[3] cummings never capitalized his name or his initials. The punctuation in the poem below is as he wrote it.