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框架語意學與語言文化：漢語和英語的植物固定語式
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本刊編委會
框架語意學與語言文化：
漢語和英語的植物固定語式
Frame Semantics and Languaculture:
Plant Fixed Expressions in Mandarin Chinese and English

謝菁玉**葉蓬娜**
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摘要

本文探討漢語和英語的植物固定語式來觀察語言差異性及其與語言共同性的互動。我們集中討論花、草、果、根四種植物喻體，以框架語意的理論 (Fillmore and Atkins, 1992) 來檢視它們的核心意義，隨後從書面語意看出語意的獨立性和特殊的文化特徵。根據這個研究結果，最後我們提出一個認知模式的機制。

植物固定語式在語意的發展在於大自然界，然而隨後的發展卻隨語言文化的不同而異。我們所探討的四種植物喻體各有其語言框架，其構成的核心語意在漢語和英語亦大半不同（比如：漢語「果」表「後代」，英語「fruit」表「皮帶」）。書面語意有時相同（如：根、草），有時是同一上位詞的下義詞（如：花）。大自然提供給各語言使用者相同的題材，在其語言中加分，卻因不同的文化和生活經驗創造出有趣的語言差異，認知模式的機制乃以語言共同性為一穩定的

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cultural features, and (6) the closing remarks. The frame semantic in section 3 and its further discussion of semantic primes in section 4 are to reveal concepts expressed by the respective languages. The plant vehicle groups in section 5 give cultural features via semantic dependencies.

2. Research framework

Mandarin Chinese (hereafter Mandarin) refers to the official languages in Taiwan and in China. Most of our raw data are collected from the *Academia Sinica Ancient Chinese Corpus, Academia Sinica Balanced Corpus of Mandarin Chinese, Oxford English Dictionary* (OED), and *Merriam-Webster OnLine*. The spoken data were gathered from conversations with native speakers over the past two years. The raw data were then categorized according to vehicles (plant names) and compiled in alphabetical order in Microsoft Excel for analysis.

Fixed expressions are what we wanted to investigate. A fixed expression, or phraseology, is traditionally defined as a string of words behaving as a unitary lexical item. Various terms are used to describe fixed expressions, such as freezes, binomials, and frozen locutions (Koonin, 1972; Pinker and Birdsong, 1979; McCarthy, 1990; Landsberg, 1995; Moon, 1998). According to Moon (1998, p. 2), who proposes a broader approach to fixed expressions, they include metaphors, similes, proverbs, sayings, frozen collocations, grammatically ill-formed collocations, and routine formulae.

The present study examines fixed expressions that contain at least one plant vehicle, for example, *in one's flowers* 'the state or condition of greatest eminence',

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2 There are linguistic differences between both regions, through a large overlapping of the language variants, see for example, Yao (1992) and Tang (2001).
and *cao-bao 草包*, 'grass-sack = a blockhead'. We have collected 4842 Mandarin, and 1305 English plant fixed expressions. Their distributions are given in Table 1.

Table 1. The top ten plant vehicles in Mandarin and English (cf. Hsieh, Lien & Meier 2005, p. 116)

<table>
<thead>
<tr>
<th>rank</th>
<th>Mandarin</th>
<th>numbers</th>
<th>English</th>
<th>numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>flower</td>
<td>789</td>
<td>wood</td>
<td>177</td>
</tr>
<tr>
<td>2</td>
<td>grass</td>
<td>392</td>
<td>leaf</td>
<td>168</td>
</tr>
<tr>
<td>3</td>
<td>wood</td>
<td>323</td>
<td>root</td>
<td>121</td>
</tr>
<tr>
<td>4</td>
<td>root</td>
<td>195</td>
<td>rose</td>
<td>122</td>
</tr>
<tr>
<td>5</td>
<td>thorn</td>
<td>118</td>
<td>tea</td>
<td>107</td>
</tr>
<tr>
<td>6</td>
<td>fruit</td>
<td>109</td>
<td>tree</td>
<td>82</td>
</tr>
<tr>
<td>7</td>
<td>tree</td>
<td>102</td>
<td>flower</td>
<td>81</td>
</tr>
<tr>
<td>8</td>
<td>rice</td>
<td>98</td>
<td>reed</td>
<td>54</td>
</tr>
<tr>
<td>9</td>
<td>leaf</td>
<td>95</td>
<td>straw</td>
<td>47</td>
</tr>
<tr>
<td>10</td>
<td>willow</td>
<td>90</td>
<td>thorn</td>
<td>42</td>
</tr>
</tbody>
</table>

Table 1 shows that *flower* is the favorite plant vehicle in Mandarin. There are 789 fixed expressions and they take 16.3% in our Mandarin corpus. *Grass* also occupies a great amount (392 expressions, 8.10%) and ranks the second. We discuss four popular vehicles in Mandarin together with their English counterparts. They are *hua 花* ‘flower’, *cao 草* ‘grass’, *gen 根* ‘root’, and *guo 果* ‘fruit’. We do not discuss *wood*
and thorn for the following reasons: mu 木 ‘wood/tree’, shu 樹 ‘trees’, and lin 林 ‘woods’ are often polysemous extensions of one another. For example, the common ‘tree’ can be expressed either with shu 樹 or mu 木, and the juxtapose of shu 樹 and lin 林 — shu-lin 樹林 — is the woods. Thus, a detailed distinction between these three vehicles should be presented before getting into a discussion. As for thorn, we avoided it because of the ambiguous identification of the vehicle. For example, one might argue whether the ci 刺 in expressions like gu-ci 骨刺 ‘bone-thorn = spur’ or cî-cî 刺耳 ‘thorn-ear = sharp or noisy sounds’ are derived from the plant vehicle thorn or the animal vehicle fishbone. In English, the top four vehicles are not corresponding with those of Mandarin, but flower, grass, root, and fruit also rank high in the list, root ranks fourth, flower seventh, fruit eleventh.

The theoretical framework of this study is frame semantics and languaculture. Minsky (1975, p. 212) presented frame as a cover term for “a data-structure representing a stereotyped situation” in artificial intelligence. Fillmore (1968) adapted frame for the needs of linguistics. His frame semantics (1976, p. 28) takes as a goal a uniform representation for the meanings of words, sentences, and texts.

Fillmore and Aktins (1992) propose that the meaning of a word can be understood only against a background frame of experience, beliefs, or practices that “motivate the concept that the word encodes” (1992). They give this set of verbs as an example: buy, sell, charge, pay, cost, and spend. To understand any of these verbs needs the understanding of a complete ‘commercial transaction frame’ in which one person acquires control or possession of something from a second person, by agreement, as a result of surrendering to that person a sum of money. The needed background requires an understanding of property ownership, a money economy, implicit contract, and a great deal
more. (Fillmore and Atkins, 1992, p. 78)

In other words, this frame is a complex yet compact linguistic base for words such as buy, sell, and charge in a given society. People who do not have this linguistic frame in mind will have difficulty understand the meaning of buying and selling real estate. Peoples in some areas of Africa, Asia, and the Americas, for example, would have such difficulty. Stated otherwise, by means of the compositionality of the concepts in the related words and the background knowledge of the society, we comprehend the words and expressions that we use in our daily life. Likewise, to understand the vehicle of flower, grass, root, and fruit in Mandarin and English requires a complete ‘linguistic frame’ in speakers’ minds.

Languaculture is a new theory that covers language plus culture (Agar, 1994). It tries to overcome some limitations of frame semantics; for example, it considers a frame to be insufficient to describe human concepts in all their peculiarities, including cultural ones. According to the traditional definition of a concept in cognitive linguistics, it is a unit of some informational structure, reflecting knowledge and experience of a person in the consciousness of a personality (Kubryakova, 1996, p. 90-94). In languaculture, the concept is treated not as an instrument of cognition, but as a real and functioning form of existence of a cultural phenomenon. It is important that concepts are “translated (transmitted)” into different spheres of human life, such as language, art, religion, etc. Languaculture tends to regard a frame as either a type of mental representation along with schemes, scripts, scenarios, gestalts, prototypes, and propositional structures (Boldyrev, 2001, p. 36-38) or an element of a concept. Slyshkin (2000) and Karasik (2002) propose that a cultural concept is a multidimensional unit. Frames can be used to make models of concepts, but they are not sufficient to reflect all the peculiarities of cultural concepts. According to
Jackendoff (1990, p. 10), one's stock of lexical concepts is constructed from an innate basis of possible concepts, modulated by the contribution of linguistic and nonlinguistic experience.

Sapir-Whorf hypothesis (see e.g., Carroll, 1977) already stated that it is the nature of a particular language that influences the habitual thought of its speakers. This idea challenges the possibility of representing the world perfectly with language, because it acknowledges that the mechanisms of any language affect its users. Weisberger (2004) supported Sapir-Whorf hypothesis in the conception of language as an intermediate world, situated between reality and consciousness. But the hypothesis of linguistic determinism needs re-examination, taking into account ideas of cognitive linguistics and languacultural approach. According to Wierzbicka (1980), "a native vision of the world" is represented in the lexis of a language, but language itself doesn't reflect the world, it reflects only the way of conceptualization of the world by the national language personality. Languaculture focuses on the interaction of language, which is regarded as "a translator" of cultural information, and a human being, who creates culture, using language (Maslova 2001, p. 36). The most valuable source of information about the culture and mentality of a nation are set expressions like fixed expressions, because they contain elements of beliefs, myths, legends, and customs. Telia (1996, p. 9) compares the phraseological layer of a language to a mirror in which a languacultural community identifies its self-consciousness. Fixed expressions are closely connected to background knowledge of people and their practical experience, thus reflecting cultural and historical traditions of people speaking the given language (Vereshchagin & Kostomarov, 1980, p. 34). Fixed expressions, as they are the result of the particular nation's introspection and reflection of the most important concepts, demonstrate the originality of their language behavior (Kolshansky, 1990, p. 108). For example, Vervaeke and Kennedy research (1996, p.
278-79) on *Metaphors and Thought* says that “... a core concept of people controls and guides our selection and generation of metaphors to suit the fleeting purposes of the moment.” This core concept defines the use of metaphors and presents speaker’s minds in a concise way. Culture is encoded in idiomatic fixed expressions that mirror and shape the way we think.

3. The linguistic frames of the top four plant vehicles

In this section, the top four productive vehicles *hua* 花 (flower), *cao* 草 (grass), *gen* 根 (root), and *guo* 果 (fruit) in Mandarin along with their English counterparts will be presented in their respective frames. An array of core meanings forms a semantic frame for each vehicle. We first propose the frame and then give examples for the purpose of looking into the interlexical relationships and cultural features later.

3.1 Flower

The linguistic frames of *hua* 花 ‘flower’ in Mandarin and *flower* in English as well as other vehicles are formed through the compositionality of the respective core meanings. A core meaning is a unit of the frame and it is decided by the semantic properties accessed to through the following ways:

1. Unit A (compounds and shorter morphosyntactic unit), e.g., *cao-bao* 草包 ‘grass-sack’ means ‘a blockhead’, therefore, the Mandarin vehicle *cao* contains the semantic property ‘unlearned’ people.

2. Unit B (phrases), e.g., *to put out to grass* ‘allow to eat grass on the
pasture instead of working, force someone to retire’, the English vehicle 
glass holds the semantic property ‘undesirable dismissal’.

3. Unit C (sentences and longer morphosyntactic unit), e.g., in while the grass 
grows, the steed starves ‘to not waste time by delaying doing something’, 
the vehicle grass contains ‘develops very slowly’.

Furthermore, the semantic property will be identified as a core meaning to form 
the frame only when it is used repeatedly in different fixed expressions of the same 
plant vehicle. As a result, the frames of Mandarin hua 花 ‘flower’ and English flower 
are as below:

Hua is the quintessence of anything. The blossomy flower looks expansive. This 
most showy part of the plant can denote flourishing, dishonesty, or blurriness. It 
also represents a girl, a woman, and even a prostitute to Mandarin speakers. 

Flower is the best time of human development. Flower is brilliant but brief. 

Flower is the best part or product of something. Flower is a decoration or 
embellishment. Referring to people, flower is the choicest individual of 
individuals, an attractive girl, and a hippie.

The frames express speakers’ multiplex concepts of hua and flower. They are 
rooted in the native speakers’ minds, and are expressed in various hua and flower 
fixed expressions. We give one example for each core meaning in these two frames 
below:

Hua 花 is the quintessence (mo-dai-wu-hua-kong-zhe-zhu 莫待無花空折枝 ‘don’t-
wait for-no-flowers-empty-snap-branches = don’t wait until you have no more flowers 
to snap; cherish the moment, enjoy fun on the spot’) of anything (you-xin-zai-hua-
hua-bu-fa 有心栽花花不發 'has-intention-plant-flower-flower-no-sprout = what you plan to do often does not get accomplished'). The blossomy flower looks expansive (huo-hua 火花 'fire-flower = sparkle'). This most showy part (hua-qiao 花俏 'flower-handsome = fancy') of the plant can denote flourishing (miao-bi-sheng-hua 妙筆生花 'wonderful-pen-produce-flower = ingenious writing'), dishonesty (tian-hua-huan-zhuet 天花亂墜 'sky-flower-careless-fall = to say whatever he wants; to talk through one's hat'), or blurred vision (lao-hua-yan 老花眼 'old-flower-eye = presbyopia; disoriented eyesight, sometimes with the implication of being bedazzled'). It also represents a girl (ru-hua-si-yu 如花似玉 'as-flower-like-jade = beautiful as the flower and fine as the jade'), a woman (nu-ren-si-shi-yi-zhi-hua 女人四十一枝花 'women-forty-one-flower = women are the most stunning and charming at the age of forty'), and even prostitute (xun-hua-wen-liu 尋花問柳 'flower-street-willow-alley = the red light district, brothels') to Mandarin speakers.

In English, flower is the best time of human development (in the flower of one's youth; in one's flowers 'the state or condition of greatest eminence, fame, prosperity, etc.'). Flower is brilliant, but brief (flower-time). Flower is the best part or product of something (the flowers of something). Flower is a decoration or embellishment (flower of the speech). Referring to people, flower is the choicest individual of individuals (flower of chivalry 'the pick'), an attractive girl (flower), and a hippie (flower child).

Mandarin hua and English flower show different core meanings with only the tendency to describe 'a woman' and 'the best part/product of something' (Mandarin 'flourishing').

3.2 Grass
The frames of Mandarin *cao* 草 ‘grass’ and English *grass* are given below:

Mandarin *cao* are common people, provincial people, unlearned people, or incapable people. When *cao* refers to something, it can be simple and humble, a trifling, a wasteland, but it can also be a protection. *Cao* involves doing things in an informal, casual, or careless way, and thus brings in disorder.

English *grass* is common and ordinary. *Grass* develops very slowly, thus it becomes boring. *Grass* is an undesirable dismissal. *Grass* also represents an informer and a married woman whose husband is away.

*Cao* are common people (*cao-ming* 草民 ‘grass-people = a humble way for the people to call themselves when they greeted officials [in ancient days]’), provincial people (*a-cao* 阿草 ‘Mister-grass = criticizing an ignorant person or a clodhopper’), unlearned people (*cao-bao* 草包 ‘grass-sack = dullard’), or incapable people (*na-cao-gun-er chuo-lao-hu-de-bi-zi-yen-er* 拿草棍兒戳老虎的鼻子眼兒 ‘take-grass-stick-poke-tiger-de [morphosyntactic particle, possessive]-nose-eyes = to take a grass stick to poke the nose and eyes of a tiger = not to know one’s own limitations’). When *cao* refers to something, it can be simple and humble (*cao-yi-mu-shi* 草衣木食 ‘grass-cloth-wood-food = simple clothing and food; being poor’), a trifling (*cao-jie* 草芥 ‘grass-mustard = trivial matter’), a wasteland (*huang-yen-man-cao* 荒煙蔓草 ‘waste-smoke-tendrilled vine-grass = unworked acres’), but it can also be protective (*da-cao-jing-xie* 打草驚蛇 ‘beat-grass-startle-snow = frighten away thieves by raising a scare; put enemy on guard by premature action’). *Cao* involves informal (*cao-tu* 草書 ‘grass-script = cursive script; marked by tendency to join strokes and economy of lines’), doing things in an informal, casual way (*cao-shu* 草書 ‘cursive script’) or careless way (*liao-cao* 潦草 ‘without care-grass = rough’), and thus brings in disorder.
(cao-shuai 草率 ‘grass-rash = without due care’).

English grass is common and ordinary (grass roots ‘ordinary people; the rank and file of an organization, especially a political party’). Grass develops very slowly (while the grass grows, the steeed starves), thus it becomes boring (to be like watching grass grow). Grass is an undesirable dismissal (to put out to grass [to pasture], i.e., allow to eat grass instead of working; ‘to force someone to retire’). Grass also represents an informer (supergrass ‘an informer’) and a married woman whose husband is away (grass widow).

Comparing the frames of English grass and Mandarin cao, we see that they do not share many concepts. However, we will show later that the underlying semantic prime—common or no value—is the same in these two languages.

3.3 Root

The linguistic frames of Mandarin gen 根 ‘root’ and English root are given below:

Mandarin gen is the base and groundwork. Gen is at the bottom or lower part of something. Gen represents our family/hometown, and country. It is someone to lean upon. It is also our senses, our lineage/descendants. Gen is the source, the truth and represents thoroughness.

English root is the base and the groundwork. Root is at the bottom or lower part of something. It is a family/hometown and an ancestor. Root denotes cause, origin, source and truth. Root is immovable. Root is completeness and thoroughness.3

3 Gen 根 also is also a classifier, e.g., yi-gen-chang-zhong-duo-di 一根腸子通到底 ‘one-gen[classifier]-intestine-reach-bottom = to be very direct’.
Gen is the base (gen-ji 根基 ‘root-base = foundation’) and groundwork (gen-ju 根據 ‘root-evidence = a basis’). Gen is at the bottom (shan-gen 山根 ‘mountain-root = foothill’) or lower part of something (qiang-gen 檔根 ‘wall-root = the foot of the wall’). Gen represents our family/hometown (huo-ye-gui-gen 落葉歸根 ‘what comes from the soil will return to the soil’), and country (wu-gen-de-yi-dai 無根的一代 ‘no-root-one-generation = a migrating generation that has difficulty in identifying with the new culture, while also having lost their homeland’). It is someone to lean upon (wu-gen-wu-di 無根無蒂 ‘no-root-no-stalk = something that is based on nothing’). It is also our senses (wu-gen-qing-jing 五根清靜 ‘five-roots-quiet = the five basic senses are quiet [and thus allow one to adjust one’s powers when dealing with troubles]’), our lineage/descendants (duan-gen-jue-zhong 斷根絕種 ‘cut off-root-exterminate-seeds = to exterminate and inhibit all progeny’). Gen is the source (xun-gen 尋根 ‘search-root = looking for the sources of something’), the truth (zhui-gen-jiu-di 追根就底 ‘chase-root-probe-base = to trace and investigate the origins of a matter’) and represents thoroughness (gen-zhi 根治 ‘find a basic cure for [disease]’).

English root is the base (the idea roots ‘the idea is based on something’; rooting interest is ‘the basic interest’) and the groundwork (to root around ‘to search, to find the ground’). Root is a bottom (root of a mountain) or lower part (root of a hair) of something. It is a family/hometown (to go to the roots back; to be rootless ‘to not have a home’) and an ancestor (to search for one’s roots; root of the title). Root denotes cause, origin (to get to the roots of the problem ‘to find the cause of the problem’), source and truth (the root of the matter ‘the source of the matter’). Root is immovable (rooted to the spot ‘unable to move’). Root is completeness and thoroughness (to the roots; by the roots).

English root shares many concepts with Mandarin gen ‘root’. The basic underlying
concepts are base, groundwork, etc. Root and gen are also the bottom or lower part of something, family/hometown, ancestors and source and truth. Both root and gen can be applied to animate and inanimate objects and can carry concrete and abstract denotations.

3.4 Fruit

The frames of Mandarin guo 果 ‘fruit’ and English fruit are given below:

As the pleasant outcome of a plant, guo is food for people. It is the result of an event and the completion of a religious pursuit. People make efforts and achieve a feat or get it wrong and deserve it. When guo refers to a person, that person is a bringer of joy.

English fruit is a result, often pleasant. Fruit denotes consequences or offspring. Fruit is a reward. Fruit is a man: a fellow, an eccentric or insane person, and a male homosexual. Fruit is also an elite group.

As the pleasant outcome of a plant, guo is food for people (mi-guo 米果 ‘rice-fruit = a kind of biscuit made from peng-lei rice’). It is the result of an event (cheng-guo 成果 ‘complete-fruits = result’) and the completion of a religious pursuit (xie-cheng-zheng-guo 修成正果 ‘work-become-upright-fruits = to accomplish achievements, success’). People make efforts and achieve a feat (sha-di-zhi-guo 殺敵致果 ‘kill-enemy-get-fruits = killing enemy bravely and performing marvelous feat’) or get it wrong and deserve it (zi-shi-er-guo 自食惡果 ‘self-eat-bad-fruits = you get what you deserve’). When guo refers to a person, that person is a bringer of joy (kai-xing-guo 開心果 ‘open-heart-fruits = someone who has a tendency to create a happy atmosphere...
and cheer others up)

English *fruit* is a result, often pleasant (*first fruit*). *Fruit* denotes consequences or offspring (*the tree is known for its fruit*). *Fruit* is a reward (*he that would eat a fruit must climb the tree*). *Fruit* is a man: a fellow (*old fruit*), an eccentric or insane person (*fruit*), and a male homosexual (*fruit*). *Fruit* is also an elite group (*the fruit of Islam*).

English *fruit* and Mandarin *guo* have the same salient meaning of ‘result’. All the other concepts are different. Both English *fruit* and Mandarin *guo* convey abstract and concrete denotations. But English *fruit* is more often used to denote people. Nevertheless, a single semantic prime is operating in these two different frames that will be discussed in the next section.

Thus the core meanings of the above discussed four plant vehicles are for the most part different. Table 2 lists them for comparison.

Table 2. The core meanings of the favorite plant vehicles in Mandarin and English

<table>
<thead>
<tr>
<th>Plant vehicles</th>
<th>Mandarin core meanings</th>
<th>English core meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>flower</em></td>
<td>nice person/things,</td>
<td>the best time of human</td>
</tr>
<tr>
<td></td>
<td>pattern/design, a woman, girl,</td>
<td>development, brilliant but brief,</td>
</tr>
<tr>
<td></td>
<td>prostitute, expansive, showy</td>
<td>the best part/product of</td>
</tr>
<tr>
<td></td>
<td>part, quintessence, flourishing,</td>
<td>something, decoration or</td>
</tr>
<tr>
<td></td>
<td>dishonesty, blurred vision</td>
<td>embellishment, the choicest</td>
</tr>
<tr>
<td></td>
<td></td>
<td>individual of individuals,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>attractive girl, hippie</td>
</tr>
<tr>
<td><strong>grass</strong></td>
<td>informal, do things in a casual/careless way, common people, trifling, people, provincial people, unlearned people, incapable people, in disorder, protection, wasteland</td>
<td>common and ordinary, developing slowly, boring, undesirable dismissal, informer, married woman whose husband is away</td>
</tr>
<tr>
<td><strong>root</strong></td>
<td>Base, groundwork, source, truth, sense, lineage/descendant, lower part, family/hometown, country, someone to lean upon, thoroughness, measurement</td>
<td>base, groundwork, family/hometown, ancestor, cause, origin, source, truth, immovable, completeness, thoroughness, bottom or lower part of something</td>
</tr>
<tr>
<td><strong>fruit</strong></td>
<td>pleasant outcome, food, joy maker, feat, completion, deserved fate/just punishment</td>
<td>pleasant result, consequences, offspring, reward, elite group, fellow, eccentric or insane person, male homosexual</td>
</tr>
</tbody>
</table>

4. The semantic primes of the four vehicles

We showed, using frame semantics, that each of the favorite plant vehicles has an array of core meanings that compose a unique frame for that specific vehicle. Nevertheless, there is an underlying semantic prime among these core meanings in each frame. The prime is an intralexical or interlexical relationship that links the core meanings together, that is, most of the core meanings of a vehicle are directly derived
from the specific prime.

The semantic prime of Mandarin gen 根 ‘root’ is base. It pictures a plant root that grows underground and provides botanic life. Almost all Mandarin root expressions involve this prime. For example, ‘bottom or lower part of an object’ is the base, ‘truth’ is the base of a fact, ‘sense’ is the basis of being organic, and ‘family’ is the basis of interpersonal relations. Even when gen’s core meaning is ‘someone to lean upon’, we see the support of human emotion. A metaphorical extension is operating when gen is applied to the lower part of an object or to the base of interpersonal relations. English root also possesses the prime base. Again, ‘bottom or lower part of something’ is the base and family is the base of interpersonal relations. The base is usually the most stable or the strongest part of the bulk, and only when the base is set up is a completion possible.

Grass also shares the same prime in Mandarin and English. Its being common and ordinary has to do with the fact that grass is a herbaceous plant, not woody but soft, and that some type of grass grows almost anywhere there is land and water. Mandarin focuses more on the metonymic extension of the prime in which the countryside offers more land for grass to grow. Grass is thus a metonym for ‘provincial’, which describes both the place and the people from a rural area. In its turn, it leads to a metaphorical extension and entails the quality of provincial people’s being simple and not having the experience of urbanites. In English, ‘developing slowly’ is common and ‘boring’. They are hyponyms of the same hypernym “the feeling of an impatient person”. The core meaning ‘married woman whose husband is away’ is a figurative development that focuses on the fact that, when a woman’s husband is always far away, it makes the wife ‘common’ and apparently unimportant to her husband. The core meaning ‘informant’ is used in the expression supergrass, which means a person, usually a criminal, who informs the police of other criminals’ activities. This is
derived from the sense that the ‘informer’ pretends to be common, does not behave
differently from his fellow gangsters, and does not show that he is in fact the one who
is betraying them.

Mandarin hua ‘flower’ in essence gives the prime charming. Florescence is the
period before the outcome (fruit) and is expected when all efforts and labor are
devoted to preparing for the fruit. The event in question can involve a change of state;
it can either be positive-oriented or negative-oriented, e.g., ‘nice person’ versus
‘dishonest person’, ‘a beautiful woman’ versus ‘a prostitute’. For this reason, the
vehicle flower in Mandarin is rendered as ‘charming’ but not ‘pretty’. For an English
speaker, the prime of flower is the best and is a decoration. It shows ‘the best time of
human development’, ‘the best part of something’, and ‘the choicest individual of
individuals’. It is taken from the splendor of the florescence and also the function of
flowers—embellishments for interior design. Both Mandarin and English pay
attention to the outer appearance and growth characteristics of the flower, but with, to
some extent, different focal points.

Similar to flower, Mandarin and English fruit also have primes of the same
hyponym but different focal points. Mandarin guo denotes the result and completion;
for instance, the ending of evil-doing is a ‘just punishment’, the completion of crops is
being a ‘food’ source, the completion of joining a battle is performing a ‘feat’. In
English, the result of the family system is an ‘offspring’, the result of an endeavor is a
‘reward’, and an ‘elite group’ is an expected fruitful result of training or educating
people. In other words, English fruit and Mandarin hua are autoantonyms, words that
can take two opposite meanings. Mandarin hua denotes a ‘nice person’ but also
‘dishonesty’, while English fruit carries ‘elite group’ as well as ‘insane person’.

Furthermore, when comparing flower and fruit in Mandarin and English, we can
see that, while English flower possesses the best of something, and Mandarin flower is
either positively or negatively oriented, the vehicle fruit is the other way around. That is, English fruit implies a change of state, whereas Mandarin fruit points to a completion. The completion is a neutral finish line; it completes where it ends. But with English fruit, after the best stage (flower) has passed, the next is free from restraint. As a result, English fruit generates either a positive (‘elite group’) or negative connotation (‘insane person’). Due to lexical competition between synonyms, English flower came to mean the prime, the best, and Mandarin fruit, the completion.

To sum up, root and grass share the same semantic primes in Mandarin and English. Fruit in both languages has very close semantic primes. Both fruit and guo share the prime completion, stressing the end of a process in Mandarin, and its change of state in English. Mandarin flower denotes charming. English flower represents the highest degree of charm, its prime being the best. Table 3 lists the semantic primes.

Table 3. Semantic primes of the top Mandarin and English vehicles

<table>
<thead>
<tr>
<th>vehicles</th>
<th>Mandarin primes</th>
<th>English primes</th>
</tr>
</thead>
<tbody>
<tr>
<td>root</td>
<td>base</td>
<td>base</td>
</tr>
<tr>
<td>grass</td>
<td>common</td>
<td>common</td>
</tr>
<tr>
<td>fruit</td>
<td>completion/end</td>
<td>completion/result</td>
</tr>
<tr>
<td>flower</td>
<td>charming</td>
<td>the best, decoration</td>
</tr>
</tbody>
</table>

5. Plant-vehicle groups and cultural features
In the previous sections we showed that semantic primes illustrate language universality and that the whole sets of examined core meanings illustrate language diversity, explained by the cultural specifics of Mandarin and English plant names. This section presents fixed expressions that contain more than one plant vehicle, i.e. plant-vehicle groups in order to show the specific life philosophies of each cultural group. We also give examples of plant vehicles other than the popular four in order to provide wider range of culture pictures.

Language and cultural diversity is clearly seen in plant-vehicle groups. Our Mandarin data show 7.54% plant-vehicle groups but English only 1.30%, which is to say that Mandarin has about six times as many such expressions than does English. It is interesting to note that Mandarin has a lot of fixed expressions with two or more high-ranking plant vehicles, and English has only one: *grass root*, meaning ‘ordinary people’ as the basis, main body of any membership.

Mandarin plant-vehicle groups give more obvious linguistic and cultural features. Specific core meanings of the vehicles are highlighted through such collaboration of vehicles in an expression. Let us take only *gen* ‘root’ and *hua* ‘flower’ as examples.

Many *gen* expressions appear in connection with *cao* ‘grass’, the examples in (7) below show the simplicity of rural folk. The collocations of *gen* and *cao* also indicate that *gen* ‘root’ is the source of *cao* ‘grass’, as (8) exemplifies. When *gen* and *shu* 樹 ‘tree’, *hua* 花 ‘flower’, or *di* 蕾 ‘the stalk of the fruit or flower’ are juxtaposed, the combination tends to underscore that the *gen* is the source and base. The semantic prime ‘base’ of *gen* stands out, as the examples in (9) demonstrate.

(7) a. *cao-gen* 草根 ‘grass-root = the rural side of a person’s nature’
    b. *cao-gen-xing* 草根性 ‘grass-root-nature = local-natured’
c. cao-gen-da-shi 草根大使 ‘grass-root-big-ambassador = ambassadors sent to the rural areas of foreign countries to promote fellowship and learn about agricultural skills’

(8) a. zhan-cao-bu-chu-gen chun-feng-chui-you-sheng 斬草不除根，春風吹又生 ‘chop-grass-no-eradicate-root-spring-wind-blow-again-grow = one should resolve problems starting from the fundamentals to effectivelly and truly solve the problem’

b. zhi-cao-wu-gen 茎草無根 ‘ganoderma-grass-no-root = the dead wood on which ganoderma lucidum (a medicinal wood fungus) lives on does not have roots; outstanding accomplishments are achieved by one’s own efforts’

(9) a. pao-shu-yao-xun-gen 刨樹要尋根 ‘shave-tree-should-find-root = one should search for the original causes when a problem occurs’

b. hua-gen-ben-yan 花根本豔 ‘flower-root-original-colorful = everything has its own nature and origins’

c. gen-shen-di-gu 根深蒂固 ‘root-deep-stalk-firm = deeply or firmly rooted’

Hua 花 is a favorite partner for collocations. It can also be combined with shu 樹 ‘tree’, liu 柳 ‘willow’, ye 葉 ‘leaf’, zhi 枝 ‘branch’, etc. When hua goes with shu ‘tree’, flower as an outcome is stressed, as in (10). Hua’s most common combination is with liu ‘willow’ where hua symbolizes woman and liu symbolizes man, as in hua-hong-liu-lu 花紅柳綠 ‘flower-red-willow-green = a profusion of garden flowers or pretty ladies’. A large number of hua and liu combinations tend to imply that hua is a prostitute and liu is a male prostitute or the prostitute’s client, as in (11). The contrast also calls out the unpredictable future and everlasting hope, as in (12).
(10) *shu-shang-kai-hua* 樹上開花 ‘tree-top-open-flower = to make a profit by using one’s capital to invest’

(11) a. *xun-hua-wen-lu* 尋花問柳 ‘search-flower-require-willow = go round the singsong houses/visit the brothels’
   b. *hua-jie-liu-xiang* 花街柳巷 ‘flower-streets-willow-alleys = red light district’
   c. *hua-liu-bing* 花柳病 ‘flower-willow-disease = venereal disease’
   d. *hua-liu* 花柳 ‘flower-willow = brothel’

(12) a. *liu-an-hua-ming-you-yi-cun* 柳暗花明又一村 ‘willow-dark-flower-bright-another-one-village = to be saved at a crucial moment, to survive a crisis’

Cultural features, such as customs and life philosophy, are also revealed in plant fixed expressions. In Chinese culture, a mother should have a proper month-long postpartum rest and recuperation, hence *zuo-cao* 坐草 ‘sit-grass = month-long postpartum rest’. *Cao-shu* 草書 ‘grass-script’ is the cursive script that is marked by a tendency to join strokes and an economy of lines. *Chu-cao* 出草 ‘exit-grass’ is the head-hunting custom of Taiwanese aborigines in the old days. Example (13) gives some other PFEs with cultural features.

(13) a. *san-cun-jin-lian* 三寸金蓮 ‘three-inch-golden-lotus = the bound feet of
Chinese women, in allusion to their Chinese designation *kin-leen* "golden water-lilies"

b. shi-nian-shu-mu bai-nian-shu-ren 十年树木，百年樹人 ‘ten-year-tree-wood hundred-year-tree-person = it takes ten years to grow a tree and a hundred years to bring up a generation of good men = a long-term plan’

c. liang-qin-ze-mu-er-qì 良禽择木而棲 ‘good-birds-choose-wood-to-perch = good birds choose their roosts; the able ones choose their leaders’

The life philosophy of the Chinese is expressed with PFEs too. *Cu-nao-chun-hui* 寸草春徽 ‘itch-grass-spring-light = parents’ great love is not for children to pay back’ indicates the importance of filial piety. *Yu-zai-shan-er-cao-mu-run* 玉在山而草木潤 ‘jade-at-mountain-and-grass-wood-moist = the jade stored within the mountains makes the plants rich and splendid’ implies that if one gentleman has good virtues, it will help to improve morality in the world. Expressions in (14) are used as aphorisms.

(14) a. tian-ya-he-chu-wu-fang-cao 天涯何处无芳草 ‘sky-end-where-no-fragrant-grass = there are nice plants and flowers everywhere; one doesn’t need to be excessively obsessed with someone or something’

b. tu-zi-hu-chi-wo-bian-cao 兔子不吃窝边草 ‘rabbits-don’t-eat-nest-side-grass = rabbits do not eat the grass near their lair to protect their home from being seen; one does not harm his close ones or neighbors’

c. mo-dai-wu-hua-kong-ze-zhi 莫待无花空折枝 ‘not-wait for-no-flower-empty-snap-branch = one should enjoy instant, spontaneous pleasures’

d. qin-shi-yao-qian-shu jian-shi-ju-bao-pen 勤是摇钱树，俭是聚宝盆 ‘diligent-is-shake-money-tree frugal-is-assemble-treasure-basin = hardworking is a money-spinning-tree, being frugal is a treasure-
collecting-bowl, one must be hardworking and frugal at the same time to be able to accumulate wealth.

e. *siu-yu-jing-er-feng-bu-zhi zi-yu-yang-er-qin-bu-zai* 樹欲靜而風不止，子欲養而親不待，
'tree-desire-stillness-yet-wind-not-stop son-desires-raise-yet-parents-not-remain = a son’s regret at not being able to serve parents in their old age’

As mentioned, plant-vehicle groups are rather rare in English. They can be divided into two categories. The first and smaller category comprises plant names and names of plant parts. *Grass roots* is an example. *Olive branch* stands for ‘children’. *A grain of mustard seed* denotes ‘a small thing capable of fast development’. The second and larger group is proverbs and sayings, for example, *He that would eat the fruit must climb the tree* ‘He who wants to reap has to sow’.

Most English group-vehicle expressions are based on the principle of contrast, just as in Mandarin. When two different plants are compared, it is to make the expression more vivid and easier to comprehend and remember. Because the main function of proverbs and sayings is to preserve folk (the people’s) wisdom, and to explain what is right and what is wrong, all PFEs with two plant vehicles in English are related to the sphere of human relationships and prescribe appropriate human behavior. The expressions in (15) are some examples.

(15) a. *When the oak is before the ash, then you will only get a splash, when the ash is before the oak, then you may expect a soak* ‘a traditional way of predicting whether the summer will be wet or dry on the basis of whether the oak or the ash is first to come into leaf in the spring.

b. *A cherry year, a merry year; a plum year, a dumb year* ‘a good harvest of
cherries or plums predicts good or bad harvest of basic crops and, hence, a good or a bad year.'

c. *Beware of an oak; it draws the stroke; avoid the ash, it courts the flash* 'advice on where to shelter from lightning during a thunderstorm.'
d. *Creep under the thorn, it can save you from harm* 'advice on where to shelter from lightning during a thunderstorm.'
e. *Great oaks from little acorns grow* 'said about organizations or plans which start off very small or simple and become extremely large or successful.'
f. *A reed before the wind lives on; while mighty oaks do fall* 'great and small; strength and weakness.'

Thus, comparison of plant-vehicle groups in Mandarin and English verifies the postulate of Languaculture that fixed expressions are the unique source of information about the culture and mentality of a nation, because they contain elements of beliefs, myths, legends, and customs. Plant-vehicle groups demonstrate the originality of the language behavior, as they reflect cultural and historical traditions of people speaking Chinese and English, being the result of the particular nation’s introspection and reflection of the most important concepts.

6. Closing remarks

This study starts with the PFEs of four favorite plant vehicles, *root*, *grass*, *flower*, and *fruit*, in Mandarin and their corresponding vehicles in English. Specific linguistic frames of these plant vehicles are proposed in both languages with their core meaning in order.

At the level of selection, therefore, the spelling of the species, flowers, and complex of the plant are presented, as it is common in the results.

The phrase includes, therefore, a plant as *flower* in Mandarin and *fruit* vehicle. According to the human being, information...
meanings. From the core meanings, we extracted the semantic primes of the vehicles in order to look into the interlexical relationships that link the core meanings together. At the end, we list PFEs of more than one vehicle in order to present some linguistic and cultural features.

The research described here shows that the semantic primes basically reflect the characteristics or functions of the plant or parts of the plant—a nature-dependent selection: from root comes a botanic being; root is the source and base of a plant, and therefore the meanings that are derived from the semantic prime of root is base. For the speakers of Mandarin, flowers are at the stage before bearing fruit. Though the flowers are pretty, the result is not promised yet. Once the fruit is at hand, the completion is warranted. Therefore, the vehicle fruit has the semantic prime completion. For English, a nature-dependent selection is also operating; thus, root is the base of a plant and fruit is the result. The difference is that in English the presentation of the florescence is much more appreciated than in Mandarin; therefore, it is considered to be part of the result, while in Mandarin fruit is the representation of the result.

The nature-dependent selection decides the generating point of the plant fixed expressions, but the developments vary with specific languages and cultures. Therefore, although both the English and Mandarin flower take the florescence of the plant as a starting point, English flower signifies the best of something and Mandarin flower is an autoantonym that carries both a positive and a negative meaning. The fruit vehicles in these two languages have exactly opposite developments, namely, Mandarin fruit denotes completion, but English fruit became an autoantonym.

According to language culture, which focuses on the interaction of language and a human being, who creates culture, language is regarded as “a translator” of cultural information (Maslova 2001). Nature provides the same linguistic material to speakers
of different languages, who then project their own cultures and life experiences to create interesting linguistic differences.

The discussion about vehicle groups shows different semantic dependencies in different languages, i.e., particular collocations of vehicles are responsible for specific meanings and culture features. On the other hand, the same section further demonstrates the linguacognition that while Mandarin-speakers have a collective mode of thinking, English-speakers have an individualistic one, because Mandarin has a great many such proverbs and sayings (7.54%) to express meanings that stress cooperation, but English has only a few (1.30%). ^4 Also social behaviors of both cultures give light to the different modes of thinking. When recording the date in Mandarin, *minguo jiushí nian ba yue ershi ri xíngqì* (民國九十一十七八月二十日星期一 (2002, August 20th, Monday – Monday, 20th August, 2002)) use the year-month-day order, leading with the larger time span—a holistic and collective way of thinking. Day-month-year order is written in English ‘Monday, 20.08.2002’: the individual part is indicated first. The same format as above is used when writing addresses. MCh speakers write in the order of city-road-lane-number with the larger area mentioned first, e.g., *taibei shi daming lu ershi ba xiang ershi hao* 台北市大明路28巷20號 (Taipei City, Da-ming Road, 28 Lane, 20 Number – Number 20, Lane 28, Da-ming Road, Taipei City), while a English speaker uses the opposite format.

At this point, we may propose a special construct of the linguacultural concept, one which combines both frame semantics and languaculture, to interpret PFEs in Mandarin and English (see Figure 1). The common central element of our model is the semantic prime of a frame, which demonstrates the general universality in the Mandarin and English images of the world. The left and right parts of the construct

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^4 The issue of the Chinese holistic mode of thinking and the English individualistic perspective has been discussed in detail in Hsieh & Chiu (2004) that deals with tree fixed expressions.
plant fixed expressions

linguistic diversity

semantic primes

universality

linguistic diversity

Figure 1. The dynamic cognitive model of plant fixed expressions.

comprise culture-specific PFEs. Some representatives of cognitive linguistics oppose the use of frames, schemes, scenarios, and other forms of scientific description of the representation of reality (Zalevskaya, 2005, p. 234). Our model, with its universal stable core element (semantic prime of a frame) and unstable periphery reflecting languacultural specifics, can be regarded as a dynamic cognitive model of one of the possible forms of representation of the plant world in Mandarin and English. Thus, this model of a languacultural concept overcomes some of the limitations of frame semantics.
References


Zalevskaya, A. A., 2005. National-cultural specificity of the image of the word