Presumption of Prefabricated Memes and Controllable Exploration of Meme Variations in the ESL Writing Teaching

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Abstract
The semantic entities which are able to exist independently may serve as language memes according to the user’s intention. As language memes, the imitation or variation are influenced by human values and may be controlled and designed according to human objective. This paper proposes supposition of prefabricated writing meme, considering English as a second language(referred to as ESL) in the context of teaching writing, teacher as the authorities of meme spreading may construct with intended destination and spread the ESL writing memes with the characteristic of replication factor, which is constructed as the minimum unit of input, memory, storage and output. This paper also investigates the strategies of Attention, ‘i+1’ Input and Memeplexes to stabilize the variation of prefabricated writing memes and hence to avoid the negative impact of first language thinking in writing mode.

Key words: ESL writing teaching; Meme; Imitation; Variation; Strategy

English writing skill is the output skill of second language acquisition, which is the comprehensive reflection of the level of students' cognitive and English skills. However, the English writing status of non-English majors is not optimistic recently. Teachers feature all kinds of rhetorical examples and explain vocabulary analysis chapters, but it is only with little effect. Most of the students are by means of first language thinking to perform translation in writing, it results in poor and empty content, words and sentences do not meet the English habit (Ye, 2002; Guo & Jiang, 2009, Xiao, 2011). How to solve the problem of inefficiency in English writing teaching is an important subject of scholars and English teachers in China. Mr He Ziran (2005, p. 55) examines the language and its related phenomena from the view of memetics and proposes language meme concept, he believes that language itself is a meme which can manifested in the levels of words, phrases, sentences and even the chapters. Language memetics inspiring us can use the characteristic of meme replication and spreading in writing teaching to construct the ideal unit of ESL writing teaching - prefabricated English writing memes. This paper intends to explore the input strategy and its possible variation range of prefabricated memes in teaching context, which is designed to provide new ideas for foreign language writing teaching and research under meme theoretical guidance.

1. MEME THEORY AND ITS REVELATION IN ENGLISH WRITING TEACHING

1.1 Language Meme Theory
In order to explain the many of the same strain and similar phenomena in the cultural generations dissemination and geographical spread, British zoologist, Richard Dawkins (1976) modeled on gene and proposes meme hypothesis, he believes that culture acquisition and
heritage is achieved via the imitation, and the basic unit of imitation is meme. Gene is only the life replication factor of vertical transmission between generations. Meme as the cultural replication factor is not only intergenerational but also imitate each other in the same generation and infection to spread rapidly. Any things can get through imitation and pass from person to person, which is a meme. This sense of meme includes all the vocabularies you mastered, every stories you know, all the skills and habits you learnt, all kind of games you liked, every songs you be able to sing and all rules you complied with, etc. (Blackmoore, 2001, p.12). Meme as a metaphor concept can be a general term for all things that lead to imitation. Any language expression levels of morphemes, words, phrases, sentences, chapters and the information, thoughts and beliefs they conveying are likely to be imitated and disseminated because of a certain pragmatic purposes. Relatively, gene is DNA molecular fragments with specific genetic effects, language memes may be any units of language expression.

“Wine bar” and “coffee bar” entering Chinese were translated as “酒吧(Jiu Ba)” and “咖啡吧(Kafei Ba)”, “吧(ba)” originally is the transliteration of English word “bar”, it is widely replicated and disseminated after being assigned to the English word meaning of “Counters, hut” and appears a series of new words “internet bars, Taoba, book bars”, etc. The “bars” morpheme acts as a meme which is the basic elements of appearing similar traits parental in “bars series” collection. The whole Texts can also act as a meme, such as “Lou Shi Ming” from Liu Yuxi in Tang Dynasty, which is often as a imitative writing from college students, and it is a very popular way in school desks literature. The following were its studious edition and weariness edition.

a. If intelligence is not high, hardworking will be fine. If knowledge is not much, trying hard will be the victory. Although it is a hard thing, only I’m willingly. Knowledge is infinite, which should learn sooner than later. Assignments heap as a mountain, examination resultant. For example:

b. Marks shouldn’t be high, pass is fine. Learning shouldn’t be deep, cheating is great. Although it is a classroom, only I’m relaxed. It can watch fictions fast, read magazines hard. Pondering chess, thinking for movies. It can draw comics, write letter. Ears without noise, it’s only the form of desks. Leaning in happy, it should remember not to stop. Your humble servant asked: “Why bother it?”

1.2 The Inspiration of SPreading Characteristics of Language Meme to ESL Writing Teaching

In the history of human evolution, genes and memes complement each other which jointly become the driving force of evolution (Dawkins 1998:188). Regardless gene or meme both alike to change as survival cornerstone in order to adapt to environment, abiding by basic evolutionary rules of staying, mutation and selection (Distin, 2005, p. 68-70; Blackmoore, 2007, p. 365). However, gene is formed by natural selection of the living body, which faithfully replicate their own to maintain biological basic characteristics; Gene mutation is the heritable variation of genetic material, normally it is an occasional spontaneous random process, so that organisms can be selected as the most suitable natural individual in natural selection, while human cannot control it; Mutant gene will replace the original gene. Meme is the artificially selected winners, its replication, spread and variation is via the screening of its value to enter the real world; After the replication, imitation or variation process, meme body did not change. Although, meme body has the traits of “parental”, it is a new resultant. For example:

“The Yellow Crane Terrace”
by Cui Hao
Where long ago a yellow crane bore a sage to heaven,
Nothing is left now but the Yellow Crane Terrace.
The yellow crane never revisited earth,
And white clouds are flying without him for ever.
Every tree in Hanyang becomes clear in the water,
And Parrot Island is a nest of sweet grasses;
But I look toward home, and twilight grows dark
With a mist of grief on the river waves.

“On Phoenix Terrace at Jingling”
by Li Bai
Phoenixes that played here once, so that the place was named for them,
Have abandoned it now to this desolate river;
The paths of Wu Palace are crooked with weeds;
The garments of Qin are ancient dust. 
Like this green horizon halving the Three Peaks, 
Like this Island of White Egrets dividing the river, 
A cloud has arisen between the Light of Heaven and me,  
To hide his city from my melancholy heart.

Compared to two poems can be described as the skill is equal, they both are the ancient masterpieces: "The Yellow Crane Terrace” is open artistic conception with great boldness of vision, while "On Phoenix Terrace at Jingling” worrying for the country with intention of far-reaching. Meme body "The Yellow Crane Terrace” has no gene variation similar to body change because of the memes imitation "On Phoenix Terrace at Jingling” appearing. "The Yellow Crane Terrace" by Cui Hao still is the "The Yellow Crane Terrace" by Cui Hao, Li Bai is then based on his intentions and values imitating the style of "The Yellow Crane Terrace" by Cui Hao, Li Bai is then based on his intentions and values imitating the style of "The Yellow Crane Terrace" by Cui Hao.

When certain meme is deemed as valuable by the brain, the brain will make it as a replication factor. It will perform selective imitation and spread via mental activity such as emotion, experience, comparing, reasoning, etc. The selection of organic world and cultural world is operating with the same standard -- which is absolutely the adaptability as a standard -- also these two kind of selections complement each other (Blackmoore, 2001, p. 60). It can clearly be seen that, the survival adaptability of meme runs through the adjustment of human behavior and psychological, memetic selection is determined from human cognitive levels and mental activity. Meme that serving language, its replication, imitation and variation in the final analysis is human proactively and purposefully introducing changes on something in order to adapt to the environment, so that it mutates as the intended purpose. The whole process is a departure from the purpose, and finally it comes down to the expected purpose (Huang, 2007).

Language meme replication, imitation and variation is a pointing as the user's intention, this inspires us to artificially construct ESL writing language meme according to the teaching purposes in the ESL writing teaching context. Specifically, the purpose is to improve English writing skills, selecting and identifying the semantic entities “containing specific genetic information” in the language meme. Then, it can determine the strong meme priority infections from the status of meme spread authorities of teachers. New meme host (students) via the selected meme in different forms, means and level of imitating, it infer the imitation with parental similarity related to meme body in specific aspect. It is in the mode of interaction and language that, writing as purposes to construct language meme via imitation, memory, expression and eventually internalized into the hosts’ (students) part of the writing knowledge structure. When the storage of writing meme in the students’ brain each a certain amount, it must reshape the brain with an specific order, the writing imitation ability should be also increased correspondingly (Xia, 2011, p. 134), so that it achieves the expected purpose of improving students’ ESL writing level.

2. THE RELATIONSHIP BETWEEN MEME UNIT UNCERTAINTY AND ESL PREFABRICATED WRITING MEME VARIATION

Meme selection process includes four phases of assimilation, retention, expression, transmission and perform cycle to cycle. Each phase has its different selector respectively and put forward specific requests to meme in that phase, survival of the fittest. Meme based on the imitation, the writing teaching activities under the view of memetics, which is the process of a second language information transmitting via imitation and in the form of language meme to store in the learners’ (host) brain. During this process, teachers and students both have to consider and determine the vocabulary, sentence structure, grammar, ideas, what is being imitated? How to imitate as success or similar? After determining the aspects of imitating meme, brain must complete a conversion task, it also needs a nerve directive from visual or auditory impression to guidance of writing output behavior. For this information handling process (Gass, 1988), we can illustrate as below:

(1) Input: Teachers input the expected purposes of meme information to host population (learner);
(2) Infection: (Part of) meme will be noted and understood by learners;
(3) Ingestion: Balancing the rules of target language information input and learners’ original cognitive schemata;
(4) Integration: Storing (memory) in the host of cognitive schemata as tacit knowledge;
(5) Output: Converting the input information from memory mode in the form of meme imitation that can be perceived to output.

Compared to language evolution environment, the language meme of ESL writing teaching environment from emergence, imitation, spread to final formation is a unnatural process. In this such unnatural process, the growth meme is how to have a successful meme of general characteristic of fidelity, prolific and longevity, so that as a effective prefabricated writing meme to occupy a place in the brain resources?
According to cognitive psychology, the meme formation process in the writing teaching context can be understood as a meme evolution process under the joint action of anthropogenic selection and natural selection. During this evolution process, the existed writing cognitive structure “a” in students’ brain and new meme knowledge “A” interaction, its result is producing the memeplexes "A’a”, instead of mechanical combination Aa. Not only the new meme writing knowledge acquired a meaning, the original cognitive structure also obtained the inspection, addition and amendment. Each meme either is the replication and inheritance of old meme, or produces variation or innovation during the replication and spread process, in order to survive and develop. Therefore, controlling the variation in meme transmission is the key of improving the students’ writing skills.

In order to clearly illustrate the language meme variation, we can call the language information source that can be imitated as language meme stripe, the fragment that carry genetic information in language meme stripe is language meme. A meme stripe can include many language meme, but not every language meme carried genetic information will be expressed in the language meme imitation. Different context, different use of individual can express a different language meme unit from genetic information. Below, we use real examples to illustrate the uncertainty of language meme unit in the meme replication and transmission:

Meme stripe: I am looking forward to hearing from you.
Meme 1: look forward to(Verb phrase as imitation units)
Meme 2: hear from(Verb phrase as imitation units)
Meme 3: I am looking forward to hearing from you. (Whole sentence as imitation units):
Meme 4: polite formula of the letter at the end(Discourse structure as imitation units):
Meme 5: …

As the DNA molecule, some fragments carry genetic information and some do not. Genetic mutation appears in the fragment of DNA without carrying genetic information. This kind of mutation does not contain the genetic effects and it won’t lead to changes in traits. Similarly, in the replication and transmission of meme stripe, meme is the basic genetic units of control traits, via the guiding of meme imitation combining to express its carrying genetic information, so that controlling the traits expression of meme imitation. The meme transmission under the teaching context, we encourage the meme variation without traits change, its meaning is:

1. The replication of meme unit should be accurate
2. Variation occur in the fragment of meme stripe without carrying genetic information
3. Variation in the effective amplitude of semantics, syntax, or texts, that’s meme imitation cannot change the traits.

Teaching effectiveness in the writing teaching context expresses as, the prefabricated writing meme not only can replicate and multiply their own accurately, but also combine with the new and old materials temporarily. it can re-combine each materials into all shapes. As long as different nature of things formed different overall shape and place into different position, it will produce different functions of semantic, syntactic or texts construction. During the process of meme imitating production, meme is needed to be replicated the genetic information accurately, which fragments without carrying genetic information, which is the using part of students’ creativity, it is also the part of encouraging innovation. Compared to meme stripe of “I am looking forward to hearing from you”, similar to the meme innovation or variation of “Here are a dozen things to look forward to in 2011” is always a writing behavior of praise worthy. The similarity of prefabricated meme copies is belongs to the part of language conventions, which has a common opinion or judgment standard. Correct syntax, semantic integrity, rigorous logic, which is always the only standard of variable acceptability in the inspection of writing teaching context during the meme transmission.

The recent researches shown, the English writing characteristic in China is: students’ writing syntax is monotonous, first language thinking participates in the whole process of second language writing, text pattern is affected by first language and the characteristic is significant. How to control the variation extent in meme transmission, so that prefabricated meme tends to solve the negative effect of first language thinking in writing, to improve the students’ second language writing skills? Factors like second language level, first language writing skill, writing task and condition, writing practice frequency, emotion can greatly influence whether the host can replicate prefabricated meme accurately and then achieve the positive innovation of prefabricated meme. Currently, although we cannot control the detailed variation of prefabricated meme, via the above handling process of meme information and the analysis of meme imitation producing process, the key of optimizing meme imitation is the quality of prefabricated meme input and meme output. We can start with the research results of input and output psychology to pin down its variation and improve the stability of variation.
3. STABILIZING THE VARIATION OF PREFABRICATED WRITING MEME, ELIMINATING THE NEGATIVE IMPACT OF FIRST LANGUAGE THINKING WRITING MODE

3.1 Attention Strategy
Schmidt (1993) in the attention theory proposes that, not all input are equally important, only those input for special attention are able to be intake and processed effectively. Attention is an internal mechanism of information processing, the basic role is that select and adjust behavior on information (Li Wei 1998:103). Our limited capacity of nerve cannot perceive all external stimulation completely, so that attention resources is limited and with selective.

Inherent expectations founded on first language and the basis of the target language have the subconsciously context limiting effect to the noted content (Schmidt 1990), that is the expectations of learner can increase the attention possibility of information input. Therefore, the default task guidelines in teaching context is extremely effective attention strategy, which can help learners to discover and pay attention to the carried replication factor in meme stripe. Via the task guidelines to change the expectations of learner, it can make the learners to pay attention to input content accurately and improve the learners to aware of specific thinking process or possibility of specific language form. When learners aware of the input information and their needs of related information, they will try to verify or correct the original cognitive schemata. As soon as finding the balancing point of target language information input and original cognitive schemata rule, the prefabricated writing meme will occupy the brain resources of learners in the form of accurate replication or variation.

Attention strategy under the task guidelines make learners to focus the attention to the form and meaning of input information, which help learners to always use the emphasized meme unit as the directive information to combine the meme imitation, so that it can control the traits of meme imitation and assure the stability of imitation variation. Much of expressed acquired traits are explore issues of rich content, rigorous structure, in line with the rules of syntax and semantics, and store in the writing resources base in the brain in the form of two languages meme “replication factor”, which can enter the students’ cognitive system.

3.2 i + 1 Input Strategy
Krashen (1985) proposes the principles of comprehensible input: An important condition of language acquisition is that learners understanding the language input i + 1 which is slightly higher than the current language skill level. “i” is the current language knowledge status of the learner, “i + 1” is the further phase of language development, “1” is the separation distance of the current language knowledge status with the language status of next phase. When learners come into contact with the language input with the “i + 1” characteristics, the newly learned materials and the existed knowledge in his brain has a logic relationship, after interaction it activates the language acquisition device, it makes the learners acquire language and expand second language cognitive structure according to the “natural order”. Host noted that existed new information in the form of two languages meme “replication factor”, it does not mean that he can assimilate the new two languages meme into his own cognitive schemata. Meme has selective, the chance of assimilating by host with the compatible new meme of existed cognitive system is higher, the selector in this meme development phase needs the comprehensible input of language factor. When students can link up the learned prior knowledge in the new knowledge and cognitive structure with a certain way, so that it can have meaningful learning, the potential meme can be activated and infect the students’ brain, it can enter the students’ cognitive system.

In the ESL writing teaching activities, the determination of i + 1 input amount is the key of whether teachers can as the authoritative identity to lead the comprehensible ESL writing meme replication and transmission. How many students are noted with your teaching performance, then you can spread how much copies of replica. Performance is intentional, but the replication and transmission of meme may not be expected (Castlefranci, 2001). Regardless the creator of meme stripe or the meme itself is not expected to view the creation of a kind of new meme result, it also cannot avoid the creation process of another new meme. However, with the meme stripe with i + 1 input amount can effectively control the variation amplitude of the meme via with the characteristics of “successful example”. Non-comprehensible meme is meaningless in terms of host, it won’t be replicated and transmitted. The understood correspondence of language and form is possible to be selected as independent memes individual, and it is possible to have a chance to stay in the brain of host and assimilate as a part of implicit knowledge. Slightly higher than the current language level of learners will not constitute its information input of understanding of deviation and bias of i + 1 value, which can activate students’ existing writing cognitive schemata, it can facilitate the new reconstruction of writing schema of related language and cultural structure. This is an evolutionary process via the selection and being produced orderly. While in the evolutionary process, the produced
effect visualized as a kind of foreseen - a foreseen of more complicated word systems or chapter structure that exceeding old cognitive icon. This kind of foreseen checks and balances the meme variation range via the pressure applied on the genetic prefabricated writing meme, forcing meme variation expressed as generating a language of more stringent i + 1 value rule system of vocabulary, grammar, sentence or discourse structure.

3.3 Memeplexes Strategy
Meme exists a large selection pressure in the evolution process (Blackmoore 2001:133), only the meme that staying in the memory of host for a long time can have the survival competitive. The information with the characteristics of easy to be noted, easy to remember, easy to spread is able to successfully be replicated from a human brain to another one. How the preset writing meme can be bulk replicated and stay in the students’ memory for a long time in the students population? Research of psycholinguistics shows that, the brain performs storage and processing on language, and the unit is lexical chunks. Language communication are mainly from fixed or semi-fixed lexical chunk structure to achieve. The combination structure of lexical chunks is a prefabricated multi-word unit with a certain structure, expressing certain meaning. The memory storage is in the whole form and extracted entirely in the instant communication, without syntax generation and analysis (Wray, 2000).

Meme observation also shows that, similar memes are mutual benefit, its complex has a strong vitality. Memeplexes is a kind of structure system with self-organizing nature, self-protection ability, it can also attract and protect those other memes that can be mutual integrated with this structure system, at the same moment it can also excludes those other memes that incompatible with this structure system in nature (Blackmoore, 2001, p. 423). Therefore, the meme that complex as a unit can serve as the border of variable amplitude of meme or the filter of variable validity of meme. Based on the prefabricated writing meme of memeplexes can be a larger vocabulary chunk, it also can be a sentence frame or the entire sentence, or even be the sentence groups or discourse. Among, not only contains the double restriction of grammatical structure and semantics match, but also combines syntactic relationship between the various components and pragmatic rules. When memeplexes are integrated into the brain of host, it can be as the memory unit of the precast to be entirely stored, it can also be entirely extracted during the execution of writing output behavior, so that it has a strong exclusivity. However, this kind of exclusivity makes the host that increasing the automation degree of second language expression, without consciously paying attention to the grammatical structure, so that it can reduce the burden of processing language code in brain. It can effectively curb the invalid meme variation, assure the smoothly and accurately writing language expression. Moreover, the stored information in the form of memeplexes helps the role of memory “chunk effect”, reducing memory burden, increasing memory accurateness, so that it can stabilize the variation of prefabricated writing meme, which leads the learners to achieve an approximate native diction capability, overcoming the negative transfer of first language in writing.

CONCLUSION
For the artificially constructed ESL writing meme that has the replication factor characteristics, which is a language semi-product of covering syntax, semantics, and context, it can be learnt entirely and stored in the memory (Xia, 2011, p. 136). Being extracted entirely from the brain meme base as a preformed information unit during execution of writing behavior, not only can effectively improve the efficiency of language information processing, but also can improve the output quality of language and expression accurateness. The hypothesis of “teacher as the authorities of meme spreading may construct with intended destination and spread the ESL writing memes with the characteristic of replication factor” in the ESL writing teaching has a strong feasibility, but different input and imitation strategy can be the extent to control the variation and its variation amplitude in the meme transmission, so that it can effectively increase the level of students’ English writing in China. This is the next issues that being illustrated via the concrete empirical research.

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