The Linearity of Thought Patterns: A Misconception

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Abstract

Kaplan perceived the English thought patterns as constrained by the Aristotelian syllogism and thus characteristically linear, in contrast to the non-linear foreign patterns constrained by their different logics. Insightful as his perspective is, this conception of linearity contains serious flaws: it is logically absurd, referentially unsubstantiated, and conceptually misleading and confusing. It actually prevents researchers from discerning and delineating the complex and subtle discourse features in EFL composition or any text. It is suggested that the construct of linearity currently invoked in contrastive rhetoric be abandoned, and that more sophisticated theoretical constructs be explored for to replace it in research design.

Keywords: contrastive rhetoric, linearity, logic, semantic structure, thought pattern
Introduction

When Kaplan (1966) published his seminal “Cultural Thought Patterns in Intercultural Communication”, his main concern was to come to grips with discourse problems produced by foreign students, particularly by Asian students, as he wrote, “Foreign students who have mastered syntactic structures have still demonstrated inability to compose adequate themes. ‘The material is all here, but it seems somehow out of focus,’ or ‘Lacks organization,’ or ‘Lacks cohesion’” (p. 3).

At that time, it was common to assume that EFL students could write well in English if they had memorized the basic grammar rules and the vocabulary needed. Kaplan pointed out, however, that the students would also need to master the English thought patterns which, constrained by the Aristotelian syllogism, are linear in contrast to the non-linear foreign patterns — the “doodles” (Severino 1993) — constrained by their own logics. Kaplan (1967, 1968, 1976, 1984, 1987, 1988, 1990) consistently reiterated these conceptions of patterns, helping thus set off the train of studies that is known as contrastive rhetoric.

Ever since then, Kaplan’s conception of the linear thought patterns against which the other dichotomous ones are delineated, has been and is still being taken for granted as a valid construct by scholars and teachers alike, particularly those whose research focuses on the Asian ESL/EFL students (Bloom 1981; Cai 1993; Coe and Hu 1989; Cole and Scribner 1974; Eggington 1987; Fagan and Cheong 1987; Hinds 1976, 1980, 1987, 1990; Malcom and Pan 1989; Matalene 1985; Ramsay 2000; Scollon 1991; Scollon and Scollon 1997; Shen 1989; Tsao 1983; Yong 1994). Even those who have doubts about Kaplan’s general hypothetic thinking have not seriously questioned the validity of the concept of the linear thought pattern as defined by Kaplan (Cahill 2003; Connor 1996; Kirkpatrick 1995, 1997; Liu, J. J. 2007; Liu, L. 2005; Mohan and Lo 1985; Taylor and Chen 1991; Wang 1992; Wong 1988; Yang and Cahill 2008). On the other hand, a textbook series published as recently as 2008 (Boardman and Frydenberg 2008) still presents those “doodles” to EFL students and teachers about composing “linear” paragraphs (p. xvi).

In retrospect, Kaplan treated thought patterns as isomorphic of rhetorical patterns, which reflects his understanding of the Sapir-Whorf Hypothesis (Ying 2000), a highly controversial proposition to begin with. As an EFL writing teacher, I have been struggling to help my students compose proper English discourse, hoping to give them more enlightening directions than practical corrections. But I have never been convinced that their inadequate performance can be explained away in these sweeping diagrams delineated by Kaplan; on the contrary, I think the conception of the
so-called *linear paragraph* as a thought pattern is logically absurd, referentially unsubstantial, and conceptually confusing and misleading, which keeps researchers from discerning and delineating the complex and subtle rhetorical features of English or any language, particularly when applied to analysis of full-compositions. And it always strikes me as odd that this seriously flawed notion of *linearity* should have been taken for granted for so long as a well-formed theoretical construct. In the following sections, I will present a critique of the construct of the so-called *linear* thought pattern as is invoked in publications on contrastive rhetoric, and my thoughts have evolved around three major questions:

1. Is the Aristotelian syllogism uniquely intrinsic to English and the other Indo-European languages?
2. Does the Aristotelian syllogism constrain English to the extent of necessarily entailing the linear rhetorical patterns as defined by Kaplan?
3. Is Kaplan’s notion of linear rhetorical pattern well-formed in its own terms, irrespective of the Aristotelian syllogism?

And my thoughts have naturally led to a fourth question of concern:
4. What may possibly be put in place of Kaplan’s conception of thought patterns to address the unacceptable foreign-sounding discourse patterns produced by ESL/EFL learners?

I perceive the fourth question as a new challenge to all of those who share my concern and, while I will suggest a few potentially useful lexical-semantic constructs to begin with, I hope that we together will eventually build up a research paradigm constituted in more solidly defined and empirically operational constructs for research in contrastive rhetoric.

### The Aristotelian Syllogism and Languages

Kaplan (1966, 1967, 1968, 1976, 1987, 1988, 1990) entertained the proposition that rhetorical patterns reflect the thought patterns which are constrained by the logic of the language involved. That reflects his heuristic interpretation of the Sapir-Whorf hypothesis (Matsuda 2001; Ying 2000). Although he never defined what the other logics are, Kaplan consistently contended that the Aristotelian syllogism is the internal logic of the English language and, from that major premise, he proceeded to develop his conceptions of the linear versus the non-linear rhetorical patterns. Naturally the first question to be raised should be whether the Aristotelian syllogism is uniquely intrinsic to English and the other Indo-European languages.

In his 1966 article, Kaplan distinguished between *“logic per se...* the logician’s sense of the
word” and “logic in the popular sense of the word,” and that “logic per se is a cultural phenomenon... developed out of a culture; it is not universal” (p. 2). Through the voice of Mikel Dufrènne, Kaplan emphasized, “If Aristotle had been Mexican, his logic would have been different...” (p. 2). He further elaborated that language structures embody the structures of logical reasoning and that the English speakers would habitually reveal a “linear” sequential thought pattern in their discourse as typically illustrated in the structure of an expository paragraph, which contains normally “inductive and deductive reasoning” as the “integral part of any formal communication” between the English speakers (pp. 4-5).

Kaplan (1976) later modified his position by using the concept of “the internal logic of a given language,” which he recognized as an important topic addressed by many scholars—Aristotle, Augustine, Chomsky, Quine, Searle, Wittgenstein (p. 15). He argued alongside Goodenough that societies have different ways of manipulating the propositions of their logic and that “Rhetoric is merely the reflection, in the methods of manipulating chunks of language, of the internal logic of a given language” (p. 15). He (Kaplan 1990) further elaborated that the Aristotelian syllogism is an innate part of the Anglo-European mind while the nonnative speakers of English “may be logical in a different way” because they are “constrained by the logical system inherent in the language they speak. Those constraints appear in the basic grammar—in the way clauses may be related to each other—and in the ways in which text may be organized...” (p. 10). So Kaplan consistently maintained his position on the fundamental relationship between language and logical thinking, or thought, although he has never delineated any of the other non-Aristotelian logic systems, except assuming that they are embodied in the non-linear patterns.

This position is reminiscent of Benjamin Lee Whorf’s conception of linguistic relativity (Whorf 1956). Whorf on one occasion mentioned that there is no such a thing as pure universal reason or logic and that philosophy and symbolic logic are but extended systems of a given language (p. 208). But, as John Lucy (1992) pointed out, when Whorf spoke of logic, he was actually discussing “problems engendered by different premises or postulates underlying logic or discriminations about what constitutes an object in logic” (p. 43).

Further reading of Whorf’s works reveals, however, that his systematic thoughts on language and logic are actually different from Kaplan’s. Whorf considered language “a superficial embroidery upon deeper processes of consciousness” and the latter may “effect communication... without language’s and without symbolism’s aid.” He rejects the idea that “thinking is a matter of LANGUAGE” but maintains that “Thinking is a matter of different tongues,” and that underneath these various languages lie “something better—called ‘sublinguistic’ or ‘superlinguistic’... what we
now call ‘mental.’” (Whorf 1956: 239). Whorf further pointed out that such deeper mental processes constitute a universal aspect of human intelligence:

... that human beings are all alike in this respect. So far as we can judge from the systematics of language, the higher mind or “unconscious” of a Papuan Headhunter can mathematize quite as well as that of Einstein; and conversely, scientist and yokel, scholar and tribesman, all use their personal consciousness in the same dim-witted sort of way, and get into similar kinds of logical impasse. (Whorf 1956: 257)

Whorf in fact recognized the existence of the universal process in human reasoning irrespective of languages (p. 239).

Similarly, as he elaborated his notion of the internal logic of the English language, Kaplan seemed to be actually reiterating what Aristotle called “enthymeme,” or “the rhetorical syllogism.” (in Bizzell and Bruce 1990: 154). Aristotle also distinguished enthymeme as “a sort of syllogism” from “the syllogism of strict logic” (p. 152). He referred to the former as “really belongs to rhetoric” and the latter “really belongs to other arts and faculties,” and he further elaborated,

I mean that the proper subjects of dialectical and rhetorical syllogism are the things with which we say the regular or universal Lines of Argument are concerned; ...But there are also those special Lines of Argument which are based on such propositions as apply only to particular groups or classes of things. Thus there are propositions about natural science... (Bizzell and Bruce 1990: 156)

Aristotle distinguishes between the true logic of science and enthymeme in persuasion, but he holds enthymeme as “the universal Lines of Argument.”

Not only is Kaplan’s position on logic and language inconsistent with Whorf’s and Aristotle’s, it is also in conflict with findings from empirical studies. Galda (1979) investigated the use of the syllogistic reasoning in Yucatec Maya, an American Indian language used in southeastern Mexico. His study revealed strong evidence that this non-Indo-European language, though differing from English in its linguistic conventions, is adequately capable of expressing logical truths. Hamill (1979) studied the class inclusion reasoning patterns in taxonomic semantics in Mende, English, Ojibwa, and Navajo, which are respectively from four different language families – Mande-Kan, Indo-European, Algonkian, and Athapaskan (p. 481). He found that the patterns of reasoning of the four
languages are as consistent as they are syllogistic.

Scribner (1977) argued that since people in various communities do not actually communicate in syllogistic terms, the logical problems discussed as an academic subject should not be equaled to the forms of discourse. Her review article summarized a number of pioneering studies of how people in different sociolinguistic groups actually reason. The results of these studies generally indicate that, whereas there is noticeable difference in ways of reasoning between the educated and the non-literate populations within a culture, there is little variation between the educated populations across cultures (p. 486). In addition, even the errors made by the non-literate participants in solving the experimental problems are mostly due to the fact that they substituted their personal interpretations for the assumed premises, which in their own terms still reflect sound logical principles (pp. 487-488). These findings indicate that the speakers of the other languages are capable of the syllogistic reasoning. Moreover, they do not reveal any other definable logic systems as internal to those other languages.

On the contrary, a moment of reflection on the coinage of an English or Chinese word or expression for representing any category of phenomena shows that it is essentially based on inductive and deductive reasoning per se: we generalize and specify accordingly to generate and apply words. Illustrative evidence for the capability and competence of sound syllogistic reasoning in the Chinese learners is observed even in their errors due to their so-called “Chinese way of thinking.” For instance, once a student described something in writing as “skin-shallow,” a word-for-word translation of the Chinese equivalent, and she finally learned that the English word is “skin-deep” and remarked with a frown, “How can they call the human skin deep?” Very soon the similar questions were asked by several others as to “parkway or driveway” when one would not be supposed to park on the former or truly drive on the latter. It is unmistakable that the Chinese learners and the native-English speakers show different ways of generalizing concepts and nominating things, but the question is: Do they have different logics? These observations certainly better indicate the capability in the Chinese learners of resorting to the Aristotelian deductive reasoning.

Henceforth, it is not too far gone to say that the very generative nature of human languages is based on an instinct for the syllogistic reasoning, which is not uniquely intrinsic to English or the other Indo-European languages. It is, therefore, logically absurd to consider the syllogism the internal logic to the English language and proceed to conceptualize culturally constrained rhetorical patterns from that premise. And by the same token, since no other definable logic system has been reported, the non-linear patterns composed by EFL students have to be explained otherwise.
The Aristotelian Syllogism and the Rhetorical Patterns

That the syllogism is intrinsic to all languages does not automatically overturn the proposition that the Aristotelian syllogism typically entails the so-called linear thought patterns. However, since no other definable logic systems have been identified as being represented in the other patterns, it is highly questionable that the Aristotelian syllogism should entail nothing but the linear rhetorical patterns as delineated by Kaplan and not involve in the other ones.

What Kaplan (1966) perceived as the linear thought pattern is but an English expository paragraph, where sub-ideas grow out of a statement of the main topic and proceed “to prove something, or perhaps to argue something” (p. 5), and “While it is discursive, the paragraph is never digressive. There is nothing in this paragraph that does not belong here; nothing that does not contribute significantly to the central idea” (p. 6), and such a paragraph embodies “a Platonic-Aristotelian sequence, descended from the philosophers of ancient Greece and shaped subsequently by Roman, Medieval European and later Western thinkers” (p. 3). In this definition, thought patterns mingle with rhetorical patterns and the two become interchangeable. Kaplan never defined his conception of the linear thought in any other terms than of such a paragraph.

The paragraph model so delineated may be found in any English writing textbook or handbook. In this sense and to such an extent, it may be said that the native speakers of English seem to prefer such linear patterns than the speakers of the other languages (Kaplan 1987). Yet since the English speakers also compose the non-linear patterns so defined by Kaplan, it begs the question of how the non-linear patterns can be completely clear of the syllogistic reasoning, or be without any logic at all, as no other logic system has been identified.

In his classic Rhetoric (Bizzell and Bruce 1990: 151-194), Aristotle himself cited as many as 28 possible syllogistic lines of argument and seemingly syllogistic ones (pp. 185-194). He chose the term “lines of argument” to mean the rhetorical patterns, but that does not necessarily imply that these are equivalents to the linear patterns as defined by Kaplan. For other than the fact that Aristotle was referring to the full-text arguments, many of these listed by Aristotle sound more circular and digressive than linear and sequential. For instance, the very first one on Aristotle’s list reads, “One line of positive proof is based upon consideration of the opposite of the thing in question... ‘If war is the cause of our present troubles, peace is what we need to put things right again.’” (p. 185) Another one, the ninth on the list reads, “Another line is based upon logical division. Thus, ‘All men do wrong from one of three motives: A, B, or C— in my case A and B are out of the question, and even
the accusers do not allege C”’” (pp. 187-188). In this line of argument, the author actually lays out three lines of reasoning and concludes that none is relevant. Apparently, whatever patterns these may be called, they certainly do not sound like the linear pattern as defined by Kaplan himself. But all these are cited as possible rhetorical patterns for carrying out some essentially syllogistic arguments.

Apparently, Aristotle conceived his lines of argument as mainly applicable to longer stretches of discourse than paragraphs, be linear or nonlinear as it may, whereas Kaplan conceived his linear pattern in terms of paragraphs which, when applied to analysis of full texts of discourse, becomes referentially unsubstantial and ambiguous. Perhaps for that matter, it has become common practice to substitute the notion of the linear pattern with that of the direct approach in contrast to the indirect or digressive approach (Cahill 2003; Connor 1996; Eggington 1987; Fagan and Cheong 1987; Malcom and Pan 1989; Matalene 1985; Mohan and Lo 1985; Scollon and Scollon 1997; Taylor and Chen 1991; Tsao 1983; Wang 1992; Yang and Cahill 2008).

Another thing that is evident in Aristotle’s exposition is that the syllogistic reasoning does not directly correspond to any particular rhetorical pattern, and that is why he endeavored to delineate the varied lines of argument. In fact, Aristotle did not consider language and thought are isomorphic in a sentence-to-sentence fashion, which echoes with one leading scholar’s position on language and thought. Pinker (1995) questioned the validity of conceiving language and thought as of one object,

...We have all had the experience of uttering or writing a sentence, then stopping and realizing that wasn’t exactly what we meant to say. ...Sometimes it is not easy to find any words that properly convey a thought. When we hear or read, we usually remember the gist, not the exact words, so there has to be such a thing as a gist that is not the same as bunch of words. And if thoughts depended on words, how could a new word ever be coined ?... (Pinker 1995: 57-58)

According to Pinker, thought comes into being irrespective of any given language, Chinese or English. While his may not be considered the ultimate conclusion on the issue, it certainly reminds of the fact that even the capable writers have to brainstorm before they can produce any well-organized thoughts on paper, and brainstorming in general, which is almost an unavoidable stage for composition, is anything but a linear process, not to speak of how many times one has to revise a draft to be able to generate and manipulate thoughts into those paragraph modes. Even Kaplan (1987) himself once admitted that all the rhetorical patterns depicted in the 1966 article are possible in any language, but merely that some may be preferred more by certain cultures and languages
and therefore may occur more frequently wherein (p. 10). And that brings to another of Aristotle’s points concerning rhetorical patterns, namely, certain lines of argument—linear or non-linear—are preferred and chosen because they will be the most effective modes for addressing certain topics of concern. In other words, if the so-called linear rhetorical patterns are preferred for any cultural reasons, these reasons have to be in nature pragmatic rather than psycholinguistic. In reality, it is not hard to find evidence to bear this out. Take for example an advanced textbook, *Writing Arguments: A Rhetoric with Readings* (Ramage and Bean 2004), which presents a list of the commonly used argument genres with samples for each. Obviously, these genres of arguments are innovated for their effectiveness and convenience for ordering and communicating thoughts. So it is evident that the Aristotelian syllogism is not merely embodied in a single rhetorical genre perceived as linear by Kaplan, but may be actually represented in essentially varied full texts of argument, which renders Kaplan’s conception of the linear rhetorical pattern referentially unsubstantial and ambiguous. In addition, if in any case a so-called linear pattern is preferred by a speaker of any language at a time, it has to be a result of technical manipulations of language for pragmatic concern.

**Linearity of Rhetorical Patterns in Its Own Terms**

My critique so far has established that it is absurd to consider the expository English paragraph the only embodiment of the Aristotelian syllogism. But if irrespective of the Aristotelian syllogism, should the expository paragraph still be perceived as structurally linear and, if so, in what terms? An easier way to address this question is to start by examining the notion of linearity in its conventional sense and see how it possibly represents discourse patterns.

In pure geometrical terms, when one point moves to another, the shortest trajectory it moves through forms a straight line. Such a concept of a straight line, or linearity, is used metaphorically by linguists to represent a fundamental feature of human languages. Long before Kaplan’s conception of linearity as a rhetorical pattern, Saussure (1959) had used the notion to denote the time dimension of discourse production, “The signifier, being auditory, is unfolded solely in time... (a) it represents a span, and (b) the span is measurable in a single dimension; it is a line” (p. 70), and that in the case of written discourse, “spatial line of graphic marks is substituted for succession in time” (p. 70). Saussure was thus referring to the temporal feature of discourse production as linear, which has little to do with thought.

Pike (1981) referred to the succession of time as “the grammatical orders” of a language, which is distinct from “the referential orders,” the two being “potentially isomorphic” (p. 13) as in
a report of an event according to its chronological sequence. So according to Pike, if any rhetorical mode is potentially linear, it has to be the narrative mode. Similarly, Longacre (1976) delineated four essential types of “deep genres,” the narrative and procedural based on “chronological linkage” and the expository and hortatory based on “logical linkage,” and that the latter genres represent the non-linear patterns relative to “chronological” modes of ordering (p. 200). It is thus unmistakably plain that Longacre considered that any rhetorical arrangement embodying the syllogistic reasoning belongs to the non-linear category as contrasting with the chronological arrangement, which is inconsistent with Kaplan’s conception of what the linear rhetorical pattern is. And for that matter, it is technically awkward to simultaneously exercise in discourse analysis two notions of linearity defined differently. That is but one of the defects in conceiving the expository paragraph as linear in its own terms.

Another, a more primordial defect, is its circularity in definition. That is, the notion of linear rhetorical pattern is no other than an English model expository paragraph, and vice versa. This is typically a circular argument which is theoretically un-falsifiable for explaining which is the cause or the effect, thus violating a fundamental principle in theory building (Popper 1959). Firstly, this circular definition implies that a well-written English paragraph is naturally linear and anything slightly deviating from it should be considered either non-English or not well composed. But even within the English language, the expository writing is a general genre of genres whose organizational patterns are so diverse and complex that not all English paragraphs develop from a topic sentence or end at one (Braddock 1974). Clearly, if applied to varied modes of the English expository writing—definition, description, narration, process, persuasion, comparison and contrast, cause and effect, and classification, Kaplan’s conception of the linear rhetorical patterns again becomes referentially ambiguous for identifying and distinguishing the so-called linear from the non-linear patterns.

In addition, the circular definition renders itself overlapping those other notions already existing for rhetorical analysis: unity, coherence, and transition. A linear paragraph delineated by Kaplan is at the same time a unified and coherent paragraph, which demonstrates and thus embodies unity and coherence, and perhaps smoothness of transition as well. And to tell students to write linear paragraphs would be practically understood as to write unified and coherent paragraphs, except that it is not always self-evident that a coherent and unified paragraph appears linear at the same time, given the varied expository modes. Ironically, here Kaplan’s conception of linearity is not merely consistent with the notions of unity and coherence but so much so with the latter that they virtually overlap, which again creates referential ambiguity, or even conceptual confusion.

But the problem of referential ambiguity or conceptual confusion does not end here. For unity
and coherence are relative matters depending on the reader’s comprehension needs. According to Goodman (1994), if the writer underestimates the reader’s knowledge and includes more information than needed by the reader, the text would appear redundant and digressive to the particular reader; but when the reader’s knowledge falls short of the writer’s expectations, particularly when the background information is lacking, the text will appear incoherent and not unified. Clyne’s (1987) compared the English and German academic writing styles, where he found the German scholars tend to include more peripheral materials in their papers, and that such digressions are often “due to (obligatory) theoretical sections being not adequately integrated into an empirical paper, or vice versa” (p. 228). That is to say that such “extra” inclusions result from pragmatic and technical concerns of the writer which affect the reader’s perception of the relative degrees of unity and coherence of composition. Accordingly, the relative degrees in coherence and unity further add to the referential ambiguity and conceptual confusion in judging whether a text is linear or non-linear, leaving a lot room for heuristic interpretation.

So the model expository English paragraph is a poorly invoked embodiment of linear discourse patterns, which is not only awkward to exert in the presence of the several existing notions for linguistic and rhetorical analysis, but also leads to conceptual confusion. It would make more sense to promote composition in terms of unity or coherence or transition than in terms of the linear versus the non-linear patterns, unless one still entertains that it has to do with the internal logic of the speaker’s native language.

What Then Are the Thought Patterns?

My discussion so far has born the full measure of my thoughts on Kaplan’s conception of thought and rhetorical patterns in general and of linearity in particular. In its hindsight, it will not be too far gone to conclude that the Aristotelian syllogism is not a privilege to the English or any other Indo-European language; it does not confine the paragraph or any stretch of discourse to some like patterns in any language; and the so-called linear pattern of thought is simply not a well-formed construct for theoretical analyses of the diverse discourse patterns observed in composition by speakers of any language.

Nevertheless, that is not to deny the fact that there exist the phenomena of unacceptable discourse patterns as observed by Kaplan then and still observed by many ESL/EFL composition teachers from day to day. But the question of how to effectively address these excessively foreign-sounding patterns remains unanswered, and the cause of them has not been adequately discerned and
delineated through Kaplan’s theoretical lenses. My own observations suggest that the main cause of the these discourse problems truly lies in ESL/EFL learners’ incomplete knowledge of the lexical semantic structures of the English language that the native-speakers have.

It has been a common assumption that, if a relatively advanced ESL/EFL student, one who has internalized the basic orthographic, morphological, and syntactic structures of the English language, still cannot compose English essays well up to the native-speakers’ expectations, it is because he or she lacks the knowledge of the rhetorical patterns of the target language; so suggestion of anything below the level of a paragraph seems to be irrelevant to the issue. But the dilemma here is a false one, which arises from the habitual reference to the linguistic categories as if they were separate entities, piled up in the order of morphology-lexicon-syntax-discourse, which the ES/FL students climb from the bottom to the top; however, mastering a language does not happen that way in reality. As a matter of fact, many college or graduate students have to tackle academic papers even before they have mastered the basic syntactic and lexical structures. The following is a draft of the abstract from a Taiwanese graduate’s MA thesis, where an array of insinuations break through the surface of the lack of the competence that the native-speakers have in manipulating and integrating the lexical-semantic tenets involved in piloting her thoughts through:

This study is to establish a set of feasible model by the feature of forest fire problem. The model can both calculate the time of the weight of people between helicopter base and platform and choose the number of helicopter in the base to arrive [at] the scene of a fire in a short time. Over [than] 5 hectares forest fire in Taiwan from 1980 to 2006 is the main of the range. Data was analyzed by P-median problem. The results are calculated by LINGO program. Three B324 helicopters are located in RCYU, RCLG, RCFN and it takes the least time to fire service. The model can provide for the government and organization to plan the forest fire of the route by helicopters.

Apparently, this is one of the more comprehensible pieces composed by an EFL student since the writer has a fair working knowledge of the English syntax and is aware of the relevant rhetorical conventions as well (after all, this is an attract of a finished thesis which has laid out the line of thought already). Nonetheless, it is not an adequately meaningful abstract to the native-speakers. The problem here is due to the lack of competence in choosing the needed lexical items which contain the relevant semantic traits and integrating them into colloquial collocations, so that they would conveniently fall into places to form a coherent text. Despite her clear awareness of the rhetorical
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conventions, the student was only able to put down the key words in order and loosely link them up into a few SVO (Subject-Verb-Object) sentences which barely lined up to carry the main thought through to the end. Her incompetence to fully substantiate her thoughts prevents her from composing an adequately coherent and meaningful paragraph. Just imagine she would have composed something from the scratch.

The cause of the problems here is not just about the size of the student's repertoire of expressions; it is about the quality of her vocabulary knowledge, especially the tacit part that the native-speakers habitually resort to, which is not immediately apparent to the non-native speakers in reading or hearing it from any text—the lexical semantic structures of the English language (Croft and Cruse 2004; Cruse 1986; Lyons 1977, 1995; Saeed 1997). While it is beyond the scope of this discussion to present a complete survey of the related literature through today, I will suggest that a browsing through the following related works should be a good point of departure toward understanding the cause of the unintended foreign-sounding discourses in ESL/EFL composition, particularly given the fact that these works have virtually evolved from the long existing tradition of studies of cultural-linguistic relativism from which, Kaplan drew his inspiration to begin with.

**Semantic Fields.** The concept has been addressed in quite a number of publications (Croft and Cruse 2004; Cruse 1986; Kittay 1987; Lehrer 1974; Lehrer and Kittay 1981, 1992; Lyons 1977, 1995; Saeed 1997). A semantic field contains a certain “conceptual or experiential domain” (Lehrer and Kittay 1992: 3) and that the meanings of a word “must be understood, in part, in relation to other words that articulate a given content domain” (p. 3). The field approach is useful for comparing the corresponding lexical-semantic structures between the native and target languages to see how corresponding thoughts are shaped.

**Verb Argument Structures.** This is a more sophisticated approach to the concrete form-meaning relationships of verbal phrases (Levin 1993; Levin and Pinker 1992; Pinker 1989). This approach deals with verbs in terms of their incorporated senses (manner, path, position, etc.) and how they are reflected in the adverbs, prepositions, and other words with which they habitually collocate.

**Lexical Typology.** This concept deals with the lexicalization structures of a given language as to what conceptual elements (manner, path, etc.) are habitually incorporated in forming lexical expressions (Talmy 1980, 2000). For instance, the English word *carry* needs a prepositional phrase—such as on the back, on the head, under the arms, in the hand, etc.—to express a complete action, whereas in Chinese, the various manners of *carrying* are incorporated in the verbs (bei, ding, jia, ti). This concept enhances the sensitivity of the learner to the important senses of a word when related to other words.
Metaphor as Cognitive Model. A metaphor is defined as involving understanding one domain of experiences in terms of a different domain of experiences (Croft and Cruse 2004; Lakoff 1990; Lakoff and Johnson 1980; Lakoff and Kovecses 1987). Lehrer and Kittay viewed a metaphor thus defined as interaction between two semantic fields (Kittay 1987; Lehrer and Kittay 1981). Lakoff (1990) even argued that “Metaphorical mappings preserve the cognitive topology (this is, the image-schema structure) of the source domain” and that most cases of abstract reasoning are “actually metaphorical versions of spatial inferences” (p. 54). While this Invariance hypothesis still begs debate, recognizing more general metaphors as cognitive models is indispensable for making sense of idiomatic expressions of a foreign language.

In sum, if learning a second/foreign language is to a considerable degree learning to think or conceptualize in that language, that would mean to master these and other lexical semantic structures in a given language. Integrated with the grammatical systems, these structures are not immediately apparent to the learners without proper training. If a thought is compared to a jigsaw game, then the lexical semantic structures are the componential pieces, which vary in size, shape, and number from language to language for counterpart thought domains, assuming there would always be counterparts; only if the players should understand these variations well could they successfully piece them up together.

Conclusion

When Kaplan was faced with the foreign-sounding discourses in ESL/EFL students’ writing, he resorted to a cultural relativist approach to what he perceived as one of the issues of language and deduced his dichotomous conceptions of the linear versus the non-linear thought-rhetorical patterns. These conceptions were speculative and exploratory as well as insightful. As my critique indicates, his conception of the so-called linear English thought-rhetorical pattern is derived from the fallacious premise that the Aristotelian syllogism is the internal logic of the English language, which renders it absurd to apply to analysis of logical arguments in other languages. In addition, the linear rhetorical pattern defined in terms of the English expository paragraph contains several other flaws that are detrimental to its validity: it is referentially unsubstantial when applied to analysis of full texts of various rhetorical genres; it is circular and mingles language with thought, which is not only controversial but is unfalsifiable for explaining cause and effect; and it creates conceptual confusion in the presence of the other existing constructs for linguistic and rhetorical analyses and, particularly, when the notion of linearity as a linguistic feature has long been established and defined differently.
by Saussure and other linguists. These flaws have been preventing teachers and researchers from discerning and delineating the complex and subtle rhetorical features of English or any language.

On the other hand, the true value of Kaplan’s early work lies ironically in its speculative and exploratory nature. Inspired by his cultural relativist view of thought and language, Kaplan made a point of departure for research into the new depth of teaching of ESL/EFL composition. Nevertheless, neither Kaplan nor the other researchers have further exploited the source of his inspiration. It is therefore necessary to reflect critically upon the dichotomous conceptions of rhetorical patterns in contrastive rhetoric research and to explore the more recent studies on language and thought for better theoretical constructs for research design. Moreover, as contrastive rhetoric is expanding to cover multicultural research endeavors, the issue of effectively teaching ESL/EFL students to compose proper discourse should still remain as one of the great challenges in the focus of contrastive rhetoric research and should not be explained away in terms of legitimacy for defending the opening up to diverse multicultural phenomena.
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直線式思維：一個違背邏輯的概念

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摘要

在凱普蘭看來，英語因受亞力士多德邏輯影響而呈直線式思維的特性，與非西方語言的迥異邏輯思維方法呈現顯著差異。儘管凱氏對語言思維具獨到之見解，但其直線式思維概念的建立不僅違背語言形成的自身邏輯，且現實中無以查證，因而無助於對話與修辭的客觀準確觀察，甚至有誤導研究之嫌。本文解析了凱氏直線式思維概念的主要弊端，認為它阻礙了對比修辭及話語分析研究領域之實質性進步，遂建議探索更合理準確的理論概念以取而代之，從而促成真正意義上的對比修辭研究。

關鍵字：對比修辭、直線性、邏輯、語意結構、思維形式