TRANSFORMATIONAL GENERATIVE GRAMMAR AND BIBLICAL STUDIES

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Advanced Greek Grammar: GRK7610

30 April 2013

I. INTRODUCTION

Transformational Generative Grammar (TGG) is an approach to language that has had a substantial influence in the area of linguistics. It posits a deep structure and a surface structure to language which are related to one another by means of transformations. Many people within the area of biblical studies have adopted this approach to language. This paper will examine this linguistic approach and its application to the study of Scripture. It will argue that TGG is a helpful framework for understanding language as it applies to the study of the Bible, and will articulate a few of the benefits that it provides, as well as a few cautions about its use.

II. DESCRIPTION OF THE THEORY[1]

Noam Chomsky and the Search for Language Universals

Jean Aitchison says that "Noam Chomsky is, arguably, the most influential linguist of the century."[2] Aitchison describes the state of linguistics in the 40s and 50s as basically oriented by the understanding that languages were more different than similar. She attributes Chomsky's importance to the fact that he reoriented linguistics toward language universals – that is, things that languages have in common.[3] Chomsky thought that linguistics had gone wrong in the past because it had looked for things that were common in *all* languages. He thought that there were two aspects of language universals that linguists should focus on – finding a grammatical framework that works for all languages, and looking for things that "are *available* to all languages, whether or not they are employed."[4]

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[1] This is largely a summary of Jean Aitchison's discussion in Part 3 of her book, "Toward a Universal Grammar" in Jean Aitchison, *Linguistics* (New York: David McKay & Co. Inc., 1978), 95-140.

[2] Aitchison, 95.

[3] Ibid.

[4] Ibid., Italics mine.

Aitchison says that his suggestion was that there might be a "universal pool from which each language picks different elements, and which each language combines in different ways."[5] He also suggested that there might be universal constraints to language and that linguists should work to discover them. As Aitchison says, "Chomsky suggests that a linguist's primary aim should be to discover the universal bounds within which human language operates."[6]

Chomsky began by supposing that there might be two aspects to language universals. *Substantive universals* are those common elements from which languages are constructed.[7] There is a pool of sounds that the human mouth can make, and various languages "pick" from the various options available to come up with the actual sounds used in a language. Similarly, substantive universals would also include things like nouns and verbs and other grammatical elements. While there might be very few things that are *universal to* every language, there might be a very great number of universal elements *from which* every language is constructed.

The second aspect of language universals is what is called *formal universals*. Formal universals have to do with a common framework for constructing language, especially when it comes to how the parts of a grammar fit together.[8] It is with regard to this aspect that Chomsky made a real impression on linguistics. He believed that "the grammars of all human languages share a common framework, which he calls a transformational grammar."[9]

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[5] Aitchison, 95-96.

[6] Aitchison, 96.

[7] Ibid.

[8] Ibid.

[9] Ibid.

Something that Chomsky sees as significant in his study of language universals is the fact that humans can "produce and comprehend an indefinite number of novel utterances."[10] Added to this is the quality of human language called recursion. According to Aitchison,

> Recursion is the possibility of repeatedly re-using the same construction, so that there is no fixed limit to the length of sentences […]. It means that we can never make a complete list of all the possible sentences of any language. Instead we must work out the system of rules which underlie the sentences.[11]

Because of recursion, we can always make a sentence longer by connecting it with another sentence by means of conjunctions such as "and" or "or." We can also make a sentence longer by embedding another sentence inside it. This means that theoretically a sentence can go on indefinitely without end and still be considered grammatically correct and make sense.[12]

Because human language is endlessly able to create new utterances, it is clear that "no human being could possibly have built up his knowledge of language by painstakingly memorizing it sentence by sentence."[13] Rather, the speaker of a language has internalized the various rules by which a sentence can be formed. It is by means of these rules that a person knows how to produce a sentence that is grammatically correct, and it is by these rules that the person recognizes a sentence that is grammatically incorrect.[14] Elgin points out that we are largely unaware of these rules. While we subconsciously utilize these rules to produce language, this does not mean that we could express these rules.[15]

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[10] Aitchison, 97.

[11] Aitchison, 81.

[12] Aitchison, 79-81.

[13] Aitchison. 97.

[14] Ibid.

[15] Suzette Haden Elgin, *What Is Linguistics*? (New Jersey: Prentice-Hall, Inc., 1973), 21.

Chomsky calls the ability to recognize or produce grammatical sentences by means of internalized rules "competence," as opposed to whether or not the speaker actually *does* produce grammatically correct sentences (which he calls "performance").[16] In Transformational Generative Grammar, the word "grammar" refers to these internalized rules by which a language speaker can generate all and any of the sentences that can be considered grammatically correct in a language and none of the ones that are considered grammatically incorrect.[17] This can be seen in his book, *Language and Mind*, where Chomsky says, "The person who has acquired knowledge of a language has internalized a system of rules that relate sound and meaning in a particular way. The linguist constructing a grammar of a language is in effect proposing a hypothesis concerning this internalized system."[18] In other words, Chomsky was concerned with the universal mechanisms by which human beings produce speech despite the fact that they actually speak different languages. He was interested in understanding how language works.

Discovery of a Universal Grammar

If, as Chomsky supposed, the goal of linguistics is to discover how language universals operate, then it is necessary to have a way to discover how the universal grammar works. Aitchison illustrates Chomsky's methodology by demonstrating (in English) some unacceptable models for how humans produce language in order to show how Chomsky arrived at what he felt was a more accurate model.

She says that one simple (though clearly incorrect) hypothesis might be that "in a person's mind, words are linked together in long chains, with each chain triggering the next."[19]

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[16] Aitchison, 97.

[17] Ibid.

[18] Noam Chomsky, *Language and Mind* (New York: Harcourt Brace and World, Inc., 1968), 23.

The word "the" might be linked in a person's mind to a number of nouns (such as "person," "animal," "box"), which are in turn linked to a number of verbs ("ran," "fell," "sat"), etc. In this way language would operate like a slot machine display where each word is dependent on the one before it and must fall into place before the next can be chosen. But Aitchison says that this is very obvious not the way people produce language, because it is common for words to be closely related to other words that are nowhere near them.[20]

In addition, people who speak a language naturally sense that some words are more closely related than others.[21] In the sentence "She drew a picture," the words "a" and "picture" are more closely related than the words "drew" and "a." Even though these words are all next to one another, there is a different level of relationship between the various words that this theory fails to take into account. Since it doesn't account for all the data, this model has to be rejected.

The next model she suggests is the "phrase structure grammar." Aitchison says that "One might assume that a person has a mental list of a number of different sentence types, each possessing a number of different 'slots' which could be expanded in various ways."[22] For example, a sentence could be constructed in English by a noun phrase ("ducks") and a verb phrase ("quack"), forming the sentence "Ducks quack."[23] Both the noun phrase and the verb phrase could be expanded in a number of different ways, forming sentences such as "Those ducks quack horribly" and "Those fat ducks will quack horribly."

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[19] Aitchison, 99. Chomsky also has a more complex version of this. See Noam Chomsky, *Syntactic Structures*. (The Hague: Moulton, 1969), 19.

[20] For example, in the sentence "Either go to the store or help out at the neighbor's," the "either" and the "or" are closely related in the mind according to the intuitions of the native speaker but in terms of the sentence structure they are far from each other.

[21] The idea of native intuition about language is important to Chomsky, because it demonstrates the internalized rules that people have about language.

[22] Aitchison, 100.

[23] This example is fig. 39 in Aitchison, 100.

This model seems to be more accurate, but Aitchison says that according to Chomsky, there are two problems with it. The first problem is that in order for people to actually produce language using this method, a huge number of internalized rules are necessary to produce language this way. Since the model with the fewest number of rules needed to explain it will be most likely to be the correct model to explain the phenomena, this casts doubt on the phrase structure grammar in terms of its explanatory power.[24]

The second problem is that some sentences are "felt" by native speakers to be very different even though they fit the same pattern. As an example, Aitchison offers the two sentences: "Hezekiah is anxious to help" and "Hezekiah is difficult to help."[25] Both sentences consist of the same number of words (five), the same grammatical categories (noun phrase, verb, adjective, and infinitive), and are the same except for one word of difference – the adjective is changed from "anxious" to "difficult." Thus the sentences are the same in form but very different in meaning.

In addition to sentences that are the same in form but different in meaning there are other phenomena that need to be explained. Some sentences could have two distinct interpretations, such as "Hezekiah is ready to eat." This could mean that Hezekiah was hungry, or that someone was going to eat Hezekiah.[26] Another phenomenon that needs to be explained is the fact that sentences that mean essentially the same thing can have very different structural patterns. The sentence "To swallow safety pins is quite stupid" has essentially the same meaning as "It is stupid to swallow safety pins."[27] Aitchison says that the reason why Chomsky rejected this

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[24] Aitchison, 101.

[25] Ibid.

[26] Aitchison, 102.

[27] Ibid.

model is because "a grammar which provides only one structure for sentences which are felt to be radically different by native speakers, and different structures for sentences which are felt to be similar, is a bad grammar."[28] In other words, the phrase structure grammar doesn't adequately describe how people actually produce the sentences in any given language.

Chomsky's Deep and Surface Structures

The way Chomsky explained these phenomena was to suggest that there were two levels of structure to every human utterance.[29] Surface structures are the grammatical and syntactical structures as they are found in the actual sentence itself. But in addition, Chomsky argued that there is another level to language, that of deep structure. The deep structure is a more abstract level of the communication. The deep structure is implied by the surface structure. Aitchison argues that this can be seen by the fact that "certain elements which appear to be missing or 'understood' on the surface structure in fact exist at a deeper level."[30] As an example, notes that imperatives are said to have an "understood" subject, but that it is better to think of them as having a subject in the deep structure.[31]

It is this two-level approach that Chomsky uses to account for the above mentioned phenomena. For example, in the two sentences mentioned above, "Hezekiah is anxious to help," and "Hezekiah is difficult to help," Chomsky suggests that the reason why there is such a big difference between the meanings of the sentences with no difference between the forms of the sentence is that there are different deep structures to the sentence but the same surface structures to the sentence. The deep structure of the first sentence reveals that it means "Hezekiah is

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[28] Aitchison, 102.

[29] Aitchison, 102-103.

[30] Aitchison, 107.

[31] Ibid.

anxious for Hezekiah to help someone," while the second sentence means "For someone to help

Hezekiah is difficult."[32] Similarly, the sentence "Hezekiah is ready to eat," could mean

"Hezekiah is ready to eat something," or "Hezekiah is ready for someone to eat him." The

difference between the two meanings and the one sentence is explained by means of the

difference between the deep structure and the surface structure.

This raises the question of how the two levels of structure are related. Chomsky argued

that they are related by means of "transformations."[33] Aitchison explains that "a deep structure is

transformed into its related surface structure by the application of one or more

transformations."[34] Here, then, is the essence of Transformational Generative Grammar: the

distinction between deep and surface structure related by the process of transformations.

Transformations[35]

Since Chomsky's basic theory has been discussed, the next important subject is the basic

transformations that language can undergo in order to move from the deep to the surface

structure. This section will examine a few of them in order to understand how the theory works.

According to Traugott and Pratt, "Transformations are operations which add, delete, or permute

(that is, change order and sometimes also hierarchic relationships among) constituents."[36]

Transformations are the means of relating the deep structure of a sentence to the surface

structure. As the theory was originally proposed, transformations were supposedly not able to

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[32] Aitchison, 103. I have simplified her presentation here to leave out complicated formulas and technical data that would require detailed explanation.

[33] Aitchison, 104.

[34] Ibid.

[35] This section relies heavily on the discussion on transformations in Elizabeth Closs Traugott and Mary Louise Pratt, *Linguistics for Students of Literature* (New York: Harcourt Brace Jovanovich, Inc., 1980), 142-153.

[36] Traugott and Pratt. 142.

change meaning.[37] Aitchison says that transformations can do four basic things: "delete, copy, add and reorder."[38] Traugott and Pratt add that some transformations are necessary to form a grammatical sentence (these are called "obligatory"), while others are optional.[39] The following are some examples of some basic transformations that are common.[40]

Indirect object movement is "an optional transformation in English [that] is preferred in some contexts more than others."[41] As an example, take the sentence "I gave a book to the boy." This can be transformed into "I gave the boy a book" by deleting "to" and switching the order of "a book" and "the boy." Both sentences are grammatical, and one may be preferred to the other, depending on the context. This can be represented as follows:

ORIGINAL SENTENCE……………………….I gave a book to the boy.
DELETE "to"………………………………....I gave a book the boy.
REORDER "a book" and "the boy"…………….I gave the boy a book.
TRANSFORMED SENTENCE…………….…....I gave the boy a book.

Another common transformation is a passive transformation.[42] For example, "The man saw John" can be transformed into "John was seen by the man." In this case, the transformation is enacted by switching the order of the subject and object ("John" and "the man") and adding a form of the verb "be." The past tense is then attracted from the verb "saw" (becoming "seen") to

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[37] Aitchison, 116.

[38] Aitchison, 117.

[39] Traugott and Pratt, 142. They give as an example of an *obligatory* transformation "[Negative] I saw someone" → (the arrow indicates "is transformed to") "I didn't see anyone." It would be considered ungrammatical to say "I no saw someone." An example of an *optional* transformation is an active to passive transformation ("Bill saw Jeff" → "Jeff was seen by Bill"). It is *possible* to go from active to passive and form a grammatical sentence, but not *obligatory*.

[40] This discussion follows Traugott and Pratt, 142-167. I will use their examples unless otherwise noted.

[41] Traugott and Pratt, 144.

[42] Traugott and Pratt, 144-147.

the verb "be" (resulting in "was"). The preposition "by" is then added. This can be represented as follows:

ORIGINAL SENTENCE……The man saw John = The man [TENSE + see] John.[43]
REORDER "John" and "the man"……………….John [TENSE + see] the man.
ADD "be"………………………………………….John [be + TENSE] see the man.
ADD "by"………………………………………..John [be +TENSE] see by the man.
TRANSFORMED SENTENCE……………………John was seen by the man.

In the case of passive sentences, since the active is seen as the simpler of the two constructions, the passive is thought to be a transformation derived from the active.

Imperatives are also a form of transformation.[44] Aitchison shows this by demonstrating how in the English language a reflexive pronoun is required when the subject and object are the same (as in "You wash yourself"). Similarly, a reflexive pronoun can *only* be used when it actually refers back to something. So when we read the sentence "Wash yourself," the surface structure implies that there really is a "you" in the sentence that is found in the deep structure and is transformed by means of deleting the subject.[45]

ORIGINAL SENTENCE…………………………You wash yourself.
DELETE "you"…………………………………….Wash yourself.
TRANSFORMED SENTENCE………………………Wash yourself.

According to Traugott and Pratt, negation is another obligatory transformation.[46] If a person wants to express a negative, there are certain ways that the sentence must be transformed in order to be grammatical. In the sentence "John left" it is not enough to simply add a negative ("John not left") in order to produce a grammatical sentence, it must be transformed into "John

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[43] In transformations the tense often changes the verb it adheres to. In the above examples, TENSE represents the tense (in these examples it is the past tense), and the brackets and + indicate the word that the tense adheres to ([TENSE + be] means that the tense adheres to the verb "be").

[44] Traugott and Pratt, 147-148.

[45] Aitchison, 107.

[46] Traugott and Pratt, 148-150.

didn't leave." There must be an addition of the support word "do," and the addition of the

negative; the past tense then modifies the "do" to become "did," and ceases to modify "left"

which becomes "leave," resulting in "didn't leave."

> ORIGINAL SENTENCE…………………..John left = John [TENSE + leave].
> ADD "do"…………………………………………John [do + TENSE] leave.
> ADD "not"……………………………………John [do + TENSE] not leave.
> TRANSFORMED SENTENCE………………………..John didn't leave.

Questions also require transformations.[47] Some questions are "yes" or "no" questions,

such as "Is this the guitar you dropped?" Other questions are looking for an answer to the

questions "who," "what," "when," "where," "how," or "why." The most obvious transformation

in questions is the reordering of the sentence with the question word at the beginning. For

example, "*This* is the guitar you dropped" is transformed by moving the "is" to the front of the

sentence, as in "*Is* this the guitar you dropped?" Likewise, the sentence "You gave it to

someone," is transformed by the addition of a question word "who," which replaces the word

"someone." The whole phrase "to whom" is then placed at the beginning of the sentence; the

word "do" is inserted and the tense modifies it (becomes "did") instead of "gave" (becomes

"give"). The result is: "To whom did you give it?"

> ORIGINAL SENTENCE...You gave it to someone = You [TENSE + give] it to someone.
> DELETE "someone"
> ADD "who?"…………………………………………..You [TENSE + give] it to who?
> REORDER "to who"……………………………….To whom you [TENSE + give] it?
> ADD "do"……………………………………………To whom [do +TENSE] you give it?
> TRANSFORMED SENTENCE…………………………To whom did you give it?

Another common transformation that has already been demonstrated above is called the

"*do*-support" transformation.[48] According to Traugott and Pratt, the verb "do" often functions in

negative or interrogative sentences. They say that

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[47] Traugott and Pratt, 150-151.

When no other auxiliary verb is available in the surface form of negatives, questions, and also tag questions and contrastive emphatics, it is introduced to support the TENSE […] All negatives and questions have an auxiliary verb in the surface structure, whether or not they have an auxiliary verb […] in the deep structure. Where no deep structure auxiliary occurs, do occurs. [49]

This results in a change from "He bought a crowbar" to "He didn't buy a crowbar" or "Did he buy a crowbar?" A *do*-support resulting in a negative sentence would look something like this:

ORIGINAL SENTENCE………He bought a crowbar = He [TENSE + buy] a crowbar.
ADD "do"…………………………………………….He [do + TENSE] buy a crowbar.
ADD "not"………………………………………….He [do +TENSE] not buy a crowbar.
TRANSFORMED SENTENCE………………………….He didn't buy a crowbar.

A do-support resulting in a question sentence would look like this:

ORIGINAL SENTENCE………He bought a crowbar = He [TENSE + buy] a crowbar.
ADD "do"……………………………………………[do + TENSE] he buy a crowbar.
TRANSFORMED SENTENCE…………………………….Did he buy a crowbar?

These basic transformations in English give us a brief look at the kind of rules that govern transformations from the deep structure to the surface structure. While the size of this paper prevents us from examining these transformations in great detail, they will give us a basic understanding of what is going on between the deep and surface structures.

TGG and Semantics

Before moving on to examine the way that biblical scholars have adapted the theory of TGG, there is one more topic that needs to be addressed. Having examined the basic theory of TGG, one question that comes up is the relationship of TGG to semantics. In other words, where is meaning found in the context of deep and surface structures?

Cotterell and Turner state that in Chomsky's original proposal he purposefully left out the aspect of semantics from his theory, but linguists quickly realized that a system of grammar that

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[48] Traugott and Pratt, 151-153.

[49] Traugott and Pratt, 152.

omitted meaning was missing an important component.[50] According to Aitchison, Chomsky, in what has been called the standard theory, conceived of the semantic component as being related to the deep structure. According to this theory the transformations do not change meaning, so all of the meaning is present at the deep structure level before transformations take place.[51] The problem that many people have pointed out is that some transformations do appear to change the meaning of a sentence.[52]

This gave rise to different solutions. One group followed what is called the "extended standard theory" that affirms, like Chomsky's standard theory, that the semantic component is related to the deep structures. The theory is "extended," though, in that it sees that the semantic component is also related to the surface structure.[53] Another group followed a theory called "generative semantics." They rejected the extended standard theory and argued instead that the semantic component together with the deep structure forms the "underlying structure," which is then transformed to result in the surface structure.[54] While these two positions are not going to be explored in this paper, it is important to note that the place of semantics in TGG has been hotly debated.

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[50] Peter Cotterell and Max Turner, *Linguistics and Biblical Interpretation* (Downers Grove: InterVarsity Press, 1989), 37.

[51] Aitchison, 131.

[52] Aitchison, 131-132.

[53] Aitchison, 133-135.

[54] Aitchison, 135-139.

III. TGG AND BIBLICAL STUDIES[55]

Introduction

Having briefly studied the theory of TGG as it was developed in the field of linguistics,

the next step will be to examine the application of TGG to biblical studies. This section will

consist of an examination of the basic concepts of TGG as they have been adopted by biblical

scholars, as well as some of their methodology for applying the insights of TGG.

Multiple Levels of Communication

The most obvious place where TGG has touched the study and interpretation of the Bible

is in the understanding of the multiple levels of communication. As was seen above, one of the

most basic concepts of TGG is the observation that there is a surface structure and a deep

structure to language. This understanding of the multiple levels of communication has been

carried over into biblical scholarship.

One way that this concept has influenced biblical scholarship is in the understanding that

language is what Beekman and Callow call a "composite of form and meaning."[56] The formal

elements include "phonological, lexical, and grammatical structures."[57] These formal elements

are what they call "surface structure," and are basically equivalent to the concept of surface

structure as understood by Chomsky.[58] They are what allow us to make meaning known to one

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[55] This section is built on the analysis of several works which most clearly show the influence of TGG. They include Eugene A. Nida, *Signs, Sense, Translation* (Roggebaai: Bible Society of South Africa, 1984), Eugene A. Nida and Charles R. Taber, *The Theory and Practice of Translation* (Leiden: E. J. Brill [for the United Bible Societies], 1969), J. P. Louw, *Semantics of New Testament Greek* (Philadelphia: Fortress Press, 1982), John Beekman, John Callow and Michael Kopesec, *The Semantic Structure of Written Communication* 5th Rev. (Dallas: Summer Institute of Linguistics, May 1981), and Richard A. Young, *Intermediate New Testament Greek: A Linguistic and Exegetical Approach* (Nashville: Broadman and Holman Publishers, 1994).

[56] Beekman and Calow, 7.

[57] Beekman and Callow, 8.

[58] Ibid.

another. They say that "meaning is communicated (in language) only by means of perceptual

form, i.e. surface structure."[59]

The other part of language is meaning. According to Beekman and Callow, there are

three aspects to meaning, namely, referential meaning, situational meaning, and structural

meaning.[60] Structural meaning seems to be closely related to Chomsky's deep structure. They

say that

> "It is more or less taken as axiomatic that (surface) form is structured. […] But what about
> meaning? […] the assumption underlying this work is that meaning is also structured, and that
> this structure is amenable to linguistic analysis and theory. Indeed, the purpose of this
> presentation is to set forth a theory of the structure of meaning […]."[61]

They claim that there is a structure to meaning that can be discovered through the study of the

formal aspects of communication. Their book *The Semantic Structure of Written Communication*

was written as a guide to determining the "semantic structure" of a piece of communication.

Chomsky's multiple level approach can be seen in the work of other biblical scholars as

well. For example, in Nida's discussion of "Underlying Structure" in *Signs, Sense, Translation*

he distinguishes between the syntax, which seems to correspond to the surface structure, and the

semantic aspect.[62] This division mirrors Beekman and Callow's division between form and

meaning. His note that syntactically similar structures might be very different semantically is

also reminiscent of Chomsky's concern for a grammar that takes into account why that might be

so.[63]

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[59] Beekman and Callow, 13.

[60] Beekman and Callow, 8-9.

[61] Beekman and Callow, 13-14.

[62] Nida, 75. Nida's use of the term "underlying structure" in this context is, as far as the present writer is aware, unrelated to the concept of underlying structure developed by generative semanticists and discussed in page 12 of this paper.

[63] Nida, 75.

While an approach to language similar to Chomsky's has been adopted conceptually by many writers, there are many who have adopted even his terminology as a framework. Louw writes in his book *Semantics of New Testament Greek*, "[…] ambiguous constructions clearly show that a particular surface structure […] can be related to quite different deep structures. One of the important achievements of modern linguistics is its demonstration of the need to distinguish between these two levels in language."[64] Young similarly writes,

> The *surface structure* pertains to the actual spoken or written symbols of the language […]. There is a definite structure to the words and sentences we use. The discipline that studies the surface structure of a language is called a *grammar* (which includes morphology and syntax). The term *deep structure* refers in general to that which underlies the surface structure.[65]

These authors demonstrate that they consider the basic framework of TGG a viable understanding of language and an acceptable linguistic framework for the study of the New Testament.

While it has clearly been accepted that there are multiple levels to language, there are various understandings of how many levels there are. Young says that regarding deep structure, "Some recognize only one level of deep structure and equate it to meaning. Others see two (or more) levels of deep structure, equating only the deepest level with the full meaning of the communication act."[66]

Young himself accepts two levels of deep structure.[67] He says that the conceptual deep structure refers to the "total meaning of the communication act." He claims that this conceptual deep structure is "universal to everyone in the world."[68] This conceptual deep structure is

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[64] Louw, 75.

[65] Young, 5. Italics his.

[66] Ibid.

[67] Ibid.

communicated through the linguistic deep structure, which is "formed with the basic word order of the speaker's language in very simple patterns."[69] This in turn is related by transformations to the more complex grammatical constructions of the surface structure. In this way, the linguistic deep structure is a kind of halfway house between the conceptual deep structure and the surface structure. It is the simplest syntactical construction in the actual language of the speaker.

This seems to be a common view among these scholars. For example, Nida and Taber seem to equate the concept Young labels as "linguistic deep structure" with what they call "kernels," which are "the basic structural elements out of which the language builds its elaborate surface structures."[70] Similarly, they also recognize a concept that seems equivalent to Young's conceptual deep structure in that they posit an underlying deep structure below the kernel level.[71] However, they say that for the purpose of translating it is not helpful to go below the kernel level.[72]

While Louw only addresses two levels (a surface structure and a deep structure), what he calls the deep structure is really equivalent to Young's linguistic deep structure because he defines it as "the basic syntactic pattern in which meaning is expressed."[73] Beekman and Callow, while less obviously dependent on TGG, also seem to have a two level approach. While they never discuss whether there might be an abstract deep structure, they deal with the distinction of

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[68] Ibid., echoing Chomsky's focus on language universals.

[69] Ibid.

[70] Nida and Taber, 39-40. The sentence above says "seem to equate" because there is difficulty in comparing the various writers on these points due to the lack of common vocabulary.

[71] Nida and Taber, 39, f.n. 9.

[72] Nida and Taber, 40, f.n. 9. Nida (*Signs, Sense, Translation*, 98-99) also says that that at the conceptual deep structure level reduction takes place that results in loss of meaning. At a near kernel level, more of the rhetorical features of the text may be preserved.

[73] Louw, 73.

form and meaning. Under the heading of meaning, or semantics, they discuss the concept of

semantic classes which is similar to Nida and Taber's concept of "kernels." The various

distinctions and terminology that different scholars use can be correlated in this way:

Young[74]	Nida and Taber	Louw	Beekman and Callow
Surface structure[75]	Surface structure	Surface structure	Form (surface structure)
Linguistic deep structure	kernels	Deep structure	meaning (semantic structure)[76]
Conceptual deep structure	Deep structure[77]	---	---

While the terminology for the various levels is different, the various approaches utilizing TGG in

biblical studies is fairly uniform. Practically speaking none of the writers mentioned above

advocate going below the "middle" level in the analysis of a text. Whether they call this

"linguistic deep structure" as Young does, or "kernels" as Nida and Taber do, all of them are

studying the communication act as it might be found in the simplest syntactical construction of

the language, rather than reducing the communication into abstract code as practitioners of TGG

might traditionally have done.[78]

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[74] Young, probably building on the others, has had the benefit of their studies, and so is the clearest in terms of an overall framework and terminology.

[75] The Term "surface structure," being the most observable and least controversial aspect of this topic, is the most consistently used term.

[76] Beekman and Callow's semantic structure shares characteristics with both "linguistic deep structure" and "conceptual deep structure" (as Young calls them). On the one hand, they say that the deep structure is "near universal" (14, cf. Young's universal conceptual deep structure), but on the other hand their universal semantic classes are functioning like Nida and Taber's kernels, which are more like Young's linguistic deep structure (Beekman and Callow, 16).

[77] In Nida, 98, he uses the phrase "abstract deep structure."

[78] Nida and Taber (39-40, f.n.9) are explicit about this. Young, Beekman and Callow and Louw do not say this per se, but in practice they are working on the level that Nida and Taber are advocating.

One reason that all of these authors recognize various levels to language is because they are all aware that there are times when there is a mismatch between form and meaning. This is called *skewing*.[79] This happens, for example, when one kind of sentence is used in place of another, as when the future indicative is used in place of the imperative ("you will not…" instead of "do not…").[80]

Another similar example that Nida points out is the case of particular forms that can indicate a large number of relationships. He lists, for example, the genitive, the Hebrew construct and the "possessive" construction.[81] In each of these three cases, one surface structure form is used, but a large number of different relationships can be indicated by these constructions.[82] Likewise, as Louw notices, in the case of some ambiguous constructions, it is possible to relate one surface structure to more than one meaning, or deep structure.[83] These examples demonstrate that the surface structure and the deep structure of language can be mismatched, or at least lack a precise one-to-one correlation between form and meaning.

Kernel Analysis[84]

This appropriation of the multiple level TGG approach to language has also given birth to a particular methodology in biblical scholarship – that of kernel analysis. Since the surface structure of a particular communication act is seen to be derived from a more basic syntactical

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[79] Young, 3.

[80] Young, 4.

[81] Nida, 75-82. While these examples are not really examples of skewing, they do illustrate the lack of precise correlation between form and meaning.

[82] For example Wallace has 33 different uses of the genitive. Daniel B. Wallace, *Greek Grammar beyond the Basics: An Exegetical Syntax of the New Testament* (Grand Rapids: Zondervan, 1996), 72.

[83] Louw, 74-75. He gives the example "They are flying planes." This could be related to two different meanings: "They are causing planes to fly," and "They are planes that are flying."

[84] Also called "semantic analysis" in Nida (98), or "proposition analysis" in Young (255).

structure, it is posited that one way of analyzing a passage is to reverse the transformation process and move from the more complex surface structure to the simpler kernel sentences.[85] The effect is to detangle complex constructions and render the meaning in a way that makes implicit information explicit.

The first step in kernel analysis according to Nida and Taber is classifying the concepts in the surface structure according to semantic classes.[86] These semantic categories are different than grammatical ones. While very often a word that refers to a thing or object will be a noun and a word that refers to an action or event will be a verb, there are times when an event or action will be a noun.[87] This is another example of skewing between form and meaning – when the grammatical and semantic classes are different.

According to Nida and Taber, everything that we experience can be broken up into four categories: objects (O), events (E), abstracts (A), and relations (R).[88] While different languages have diverse grammatical categories, these four semantic categories are universal.[89] For example,

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[85] This process is called "back transformation." As was mentioned before, none of these scholars advocate moving all the way back to an "abstract deep structure." In traditional TGG, communication acts are reduced into strings of code by which the essential meaning of the utterance could be constructed into any language given the particular "grammar" of that language. For the purpose of biblical studies, kernel analysis was developed as a simplified version of this process.

[86] This elaboration of the process of kernel analysis will follow the five-step process outlined in Nida and Taber, 52-54.

[87] Beekman and Callow say that many events or actions are expressed as nouns (nominalized) because in a particular language the event or action serves as a topic for conversation (50). In other words, it is given a noun form because people want to say something *about* the event, and the noun form is most conducive to this.

[88] 37ff. In Beekman and Callow, the same concepts and utilized, but they instead use the terms thing (T), event (E), attribute (A) and relation (R) (16).

[89] Nida and Taber, 37. There are also a number of ways that these classes can be combined for structurally complex terms. For example, "O-E (The object element performs the event): *disciple* (one who learns), *player* (one who plays) […]. E-O (The object element is the goal of the event): *gift* (that which is given), […] *doctrine* (that which is taught or believed). E-A (the abstract qualifies the implied goal of the event): *sanctify* (to make holy), *justify* (declare innocent)," etc. (43).

in Ephesians 2:8a we find: "For by grace you have been saved through faith […]."[90] This sentence can be classified with the following semantic classes:

> For by grace you have been saved through faith […].
> R   R   E   O   E   R   E

Notice that the words "grace" and "faith" are classified as events, even though grammatically they are nouns. These are what Young calls "deeps structure event clauses" because "At the deep structure level they represent a kernel clause containing a subject and a verb."[91]

The second step in kernel analysis is to supply information that is implicit. Since language utilizes the principle of economy, information that is assumed or felt to be redundant is deleted in the transformation from the deep structure to the surface structure. Part of kernel analysis is to examine the elements of the sentence to see if there is implicit information that could be brought out and made explicit.

This is especially true of deep structure event clauses that have been formulated in the sentence by nouns. For example, in the sentence above, the noun "grace" is an event with an implicit subject ("God") and receiver ("you").[92] Thus the noun "grace" can be transformed back to a deep structure clause: "God showed you grace." The verb "saved" also has an implicit subject ("God"), and when the passive transformation is reversed, the event can be rendered: "God saved you." The last event kernel is "faith," which has the verbal idea "believe" or "trust," an implicit subject ("you"), and an implicit object of faith ("God"). Thus it can be restated as: "you trusted in God."

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[90] NKJV. This example is from Nida and Taber, 53-54.

[91] Young, 23.

[92] This example is almost completely from Nida and Taber (52-54), with just a few minor changes. In Nida and Taber, they analyze all of Eph. 2:8, but it was shortened for the sake of space here.

The third step of kernel analysis is to state the basic kernels that make up the text. In the text above, the three basic kernels are: 1. "God showed you grace," 2. "God saved you," and 3. "you trusted in God." The fourth step of kernel analysis is to try to understand the relationship between the kernels. In this example, kernel 2 is the central point.[93] Kernel 1 is the means by which kernel 2 comes to pass, and kernel 3 is the instrumentality through which it comes to pass. The fifth step in kernel analysis is "restatement on a near-kernel level."[94] Ephesians 2:8a could be restated on a near-kernel level as "God showed his grace to you, and in this way he saved you through your trusting in him […]."[95]

Young follows this basic approach as well.[96] Since he is not dealing with translation but instruction in Greek for exegesis, he admits that it may not be exegetically helpful to decode every clause back to its underlying kernels. In fact he says that the process could result in loss of "exegetically significant information."[97] Nevertheless, he says that it could be helpful "when the meaning of the surface structure is obscure."[98]

Bible Translation

TGG has also been adapted in the use of Bible translation. According to Nida and Taber, there are two ways to translate the Bible.[99] The first way is to set up "a series of rules which are

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[93] This is reflected in the surface structure. Kernel 2 is the only grammatical verb in the section.

[94] Nida and Taber, 52.

[95] Nida and Taber, 54.

[96] Young, 255-257. Louw as well follows this approach, although he integrates it into a colon analysis that deals with the overall structure of a passage (122). Beekman and Callow advocate Semantic Structure Analysis, and utilize a kind of kernel analysis where the sentence is rendered into English with the semantic classes and grammatical constructions matching – "all Events are verbal forms, Things are nouns or pronouns, Attributes are adverbs or adjectives, and Relations are conjunctions, prepositions, case markers or word order." (65).

[97] Young, 256.

[98] Ibid.

intended to be applied strictly in order and are designed to specify exactly what should be done with each item or combination of items in the source language so as to select the appropriate corresponding form in the receptor language."[100] This is a one step process from the surface structure of one language to the surface structure of another language.

The second way of translating the Bible which Nida and Taber advocate for is a three step process. This three step process consists of

> (1) analysis, in which the surface structure (i.e., the message given in [the original language]) is analyzed in terms of (a) the grammatical relationships and (b) the meanings of the words and combinations of words, (2) transfer, in which the analyzed material is transferred in the mind of the translator from [the original language] to [the receptor language], and (3) restructuring, in which the transferred material is restructured in order to make the final message fully acceptable in the receptor language.[101]

While this process involves much more than an appropriation of TGG, the relevant aspect is the fact that they are consciously moving away from a surface-structure-to-surface-structure translation. Rather, they are moving from the surface structure of the original language to the deep structure of the original language, and from the deep structure of the original language to the deep structure of the receptor language. From the deep structure of the receptor language the information is restructured into the surface structure of the receptor language.[102] The justification for this is found in the fact that "languages agree far more on the level of the kernels than on the level of the more elaborate structures. This means that if one can reduce grammatical structures to the kernel level, they can be transferred more readily and with a minimum of distortion."[103]

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[99] Nida and Taber, 33.

[100] Ibid.

[101] Ibid.

[102] Nida, 98.

[103] Nida and Taber, 39.

IV. EVALUATION OF THE USE OF TGG IN BIBLICAL STUDIES

Having discussed the basic concepts of TGG and elaborated on how it has been adopted by scholars in biblical studies, this section of the paper will attempt to discuss some of the benefits that TGG can bring to the study of the Bible. To begin with, it is important to be realistic about the benefits that TGG may provide for biblical studies. For one thing, the discussion in section II regarding the debated nature of TGG and semantics should be a warning that much of TGG is theoretical and subject to revision.

Because of this, a wise course of action is to utilize any insights that TGG can give without treating it as if is were a "magic bullet" that will solve all interpretive problems. As Young notes, "We must not be overly optimistic regarding the value of transformational grammar for exegesis. Different approaches do offer fresh insights, but […] no single grammatical approach is broad enough to cover the entire communication act."[104]

The Importance of the Surface Structure

Another point that is worth thinking about when one considers adopting the approach of TGG is the importance of the surface structure of the Bible. It is important to remember that the surface structure is the actual inspired text of the Bible – the very words of Scripture. Even when it comes to the deep structure of a text, there is no access to it apart from the surface structure. For this reason, at least one writer has been rightly uncomfortable with the ease with which the surface structure of the Bible is neglected, especially in the process of translation.[105] Louw says that at first, the new emphasis on the deep structure

> led to the assumption that the deep structure is the only level of meaning, and this led to the
> surface structure being ignored because it was considered only an external manifestation of the

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[104] Young, 205.

[105] Jacob Van Bruggen, *The Future of the Bible* (Nashville: Thomas Nelson, 1978). See especially Appendix I, pages 151-168.

deep structure. Consequently the thought was entertained that the surface structure contributed nothing to the meaning of the utterance but was only a mere bearer of the real expression lying hidden in the deep structure. […] In recent times it has been realized that although the semantic information is derived from the deep structure, it must not be interpreted apart from the surface structure. This conviction rests upon the fact that when something is said, every language presents a number of ways in which to say it. The *choice* of surface structures is in itself a semantic one.[106]

This highlights the fact that it is important to analyze the surface structure of the text to find out whether or how the author's choice of a particular surface structure contributes to the meaning.[107]

That the surface structure contributes to the meaning of the text can be demonstrated several ways. First, the surface structure contributes an aspect of focus. For example, when a sentence is transformed from active to passive, even if there is no change in the facts being communicated, there is a change in focus.[108] This is the case in any situation where something can be asserted in different ways in a language. The different ways of expressing it change the focus of what is being communicated.[109]

Another example of the contribution that the surface structure makes to meaning is in the case of marked prominence. According to Beekman and Callow, prominence in a discourse "is simply making one or more parts of a unit more important than the other parts."[110] Marked prominence occurs when the author uses "various devices in the surface structure to highlight portions of the discourse."[111] These devices can include things like word order, certain words,

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[106] Louw, 76. Italics his.

[107] In relation to the discussion in section II on TGG and Semantics, this discussion leans toward the "extended standard theory" stating that the semantic component is a function of both the deep and the surface structure.

[108] Louw, 67.

[109] Nida and Taber, 48-49.

[110] Beekmen and Callow, 24.

[111] Young, 263.

certain morphemes, repetition or other grammatical features.[112] These are all parts of the surface structure that contribute to the total meaning intended by the author.

These examples demonstrate that, in addition to being the only way to access the deep structure meaning, the surface structure does in fact convey additional meaning that is not conveyed by the deep structure. The analysis of a text should be a two pronged approach that studies the surface structure of the text along with the deep structure. An analysis of the surface structure should seek to discern whether the particular choice of surface structure has any unusual significance, or if it is simply the most ordinary way that the statement could be made in that particular language. If it is determined that the surface structure has some marked significance, the intended meaning of the surface structure devices must be taken as part of the total intended meaning of the passage.

Benefits of TGG

While there is a danger of underplaying the importance of the surface structure of language, there are some distinct benefits to utilizing TGG in studying the Bible. The first is that using TGG as a framework, the student of the New Testament can better understand how the surface structure conveys meaning. This is true because

> The surface structure shows the grammatical relations which are important to the meaning of the sentence, yet only a part of the meaning meets the eye, so to speak. A deep structure analysis will show even more clearly that semantics involves relationships rather than merely words and their meanings. That is to say, the real meaning of an utterance lies hidden in its deep structure to a large extent.[113]

Having this understanding gives the student of the New Testament access to an additional dimension of the text for study and analysis.

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[112] Ibid. One possible example of this is the abundant use of prefixed prepositions in the Gospel of Mark. While many of them don't actually change the meaning of the words they are prefixed onto, the combined effect of them is to create a vivid description of the narrative – something that would not be noticed with only a deep structure analysis.

[113] Louw, 75-76.

One particular way that this understanding of form and meaning is important is in texts in which the form and meaning are skewed. Young gives the example of several conjunctions which have a different function semantically than they do syntactically.[114] Similarly, Beekman and Callow show that while the grammatical forms of a language often correlate with the semantic classes of the language, there is often a mismatching there as well.[115] These phenomena can be helpfully explained by the existence of a deep structure and surface structure according to the framework of TGG.

A second benefit for students of the New Testament is the way the TGG can help "unpack" the language of Scripture. There are many places where the constructions in the original languages are so dense that they can often be hard to understand. The concepts may be abstract and hard to understand in their own right, and then the authors of Scripture pile them on top of one another in unfamiliar constructions.[116] The benefit of TGG is that through transformations and kernel analysis the meanings of the various constituents can be separated out from one another in order to analyze them with greater clarity.

In addition to analyzing dense constructions, TGG can help to "unpack" the language of Scripture by helping the exegete to uncover implied information in the text. Using TGG as a framework for language allows the exegete or translator to represent on the surface structure what is present on the deep structure without doing damage to the original message. In fact, translators have recognized for a long time that to do justice to the original intention of a text it is

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[114] Young, 179-180. For example, in analyzing Γαρ and οὖν, he concludes that "These observations lead us to the idea that there is not an exact correspondence between surface structure taxis (coordination and subordination) and deep structure prominence" (179-180).

[115] Beekman and Callow, 34. This page also contains a helpful chart that shows both correlation and mismatch between grammatical forms and semantic classes.

[116] Ephesians 1 is an example that both Nida and Taber (52-53) and Louw (87-89) highlight.

often necessary to supply elements that are omitted by ellipsis or considered unnecessary in the original language. TGG simply provides a linguistic framework that explains why this is legitimate. Both in the case of dense constructions and in the case of implied information, the benefit of TGG is an increase in both clarity and comprehension.

Particular Applications

Finally, it may be helpful to delineate some particular areas that may benefit from an adoption of TGG. First, TGG can enhance the student's understanding of how the Greek language is functioning and can aid in the teaching of Greek grammar. One book that has been referred to frequently in this paper is Richard A. Young's *Intermediate New Testament Greek: A Linguistic and Exegetical Approach*. His book is a good example of how TGG can be applied to the study of Greek grammar for the purpose of exegesis. As the title indicates, Young has adapted many concepts from linguistics such as speech act theory, discourse analysis and TGG, in order to facilitate a better understanding of the language of the New Testament.

Bible translation is another area that can benefit from the application of TGG. As Nida and Taber have pointed out, when the three step process of translation described in section III of this paper has been carried out, it allows the translation to occur on a deeper-level where the languages are more similar and lessens the risk of distortion.[117]

While this is true, there are a few reasons why the present writer cannot unreservedly commend this particular application of TGG. First, there is an element of subjectivity when it comes to kernel analysis and transformation into semantic classes.[118] That is to say, while there are probably many times when one can move from a grammatical unit to a semantic class without any meaning loss, it is by no means clear that this is always the case. For example, when

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[117] Nida and Taber, 39.

[118] Van Bruggen, 163-165.

Nida and Taber move from the "blood of Christ" to the kernel "Christ dies," how can we know that all of the denotative and connotative meanings have been transferred to the kernel?[119]

In addition, in the use of TGG to translate the Bible there an increased opportunity for the translator's theological presuppositions to be encoded into the translation.[120] The broad diversity of systematic theologies testifies to the fact that well studied godly people differ on "what the Bible means." In light of this, it is important to recognize that translations that utilize TGG concepts will necessarily be more "interpretive" translations than more formal equivalence translations. This carries the strength of being more clear and easy to understand and the weakness of having more human input into the process.[121]

Lastly, there are a number of places in the Bible where the expressions are ambiguous. While TGG can show why the passage is ambiguous and even help the translator think through the possible interpretive options, at the same time it is possible that the translator will choose the option that makes the most sense to him when there is more than one possible interpretation. The effect of this is to leave the readers of the translation closed off completely from the debate. When this happens, the readers are totally dependent on the translator's decision and left without the tools to think through it for themselves.

For these reasons the writer of this paper recommends a cautious adoption of TGG for Bible translation. The benefits can be incredibly helpful in helping people read and understand

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[119] Nida and Taber, 53, f.n. 19.

[120] Van Bruggen, 165-167.

[121] There is a tension between the uninterpreted text that is the pure Word of God, and the human interpretation that may be more or less pure. The uninterpreted text can have no impact on people and leaves people with no accessible meaning. On the other hand, we don't consider a work of pure interpretation like a Bible commentary or a systematic theology to be the Word of God. This means that different translations will have different strengths and weaknesses based on whether they are more or less interpretive. A translation that is more interpretive will have the strength of being clearer but the weakness of a greater likelihood of human misinterpretation. A translation that is less interpretive will have the weakness of being less clear but the strength of being less likely to include human misinterpretation. This author sees no solution to this tension other than to value highly the original languages and recommend diverse translations for those who cannot read Hebrew or Greek.

the Bible in their own language. The warning is to avoid meaning loss, over interpretation and abandonment of the text itself in an attempt to get "beyond" the text to the meaning of it.

Finally, the most profitable application of the concepts of TGG is probably with regard to exegesis. When studying a passage of Scripture to teach it to others, there are many passages that can be understood better in light of kernel analysis and an analysis of the deep structure of the text. This author unreservedly commends the principles discussed in this paper for this use.

V. CONCLUSION

This paper has explored Transformational Generative Grammar in terms of its original conception, its adaptation by biblical scholars, and the potential benefits and dangers of the approach to the study of the Bible. It has been shown that the main danger of TGG is the potential loss of meaning by underplaying the importance of the surface structure of language. The main benefit of TGG to biblical studies is the potential for increased comprehension of the meaning of the Bible by increasing understanding of the nature of language and by giving the exegete more tools by which the complex grammatical constructions and the implicit information of the text can be analyzed.

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