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## Dialectical Analysis of Kuanua & Tok Pisin Sentences

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### Abstract

In this paper, we will briefly review the main principles of dialectical linguistics, with particular focus on the method of *dialectical* syntactic analysis, a.k.a. Gnalysis (or *Generalizing* analysis). We will then demonstrate the effectiveness of this method in the practical analysis of Kuanua, Tok Pisin, and English sentences.

**Key words:** dialectical linguistic analysis, generalization, synthesis and analysis, universal principles, sentence structure, verbal thought, principles of human understanding

### Introduction

Modern linguistic theory is the product of a deeply rooted tradition of scientific analysis of observable and verifiable facts, which has dominated linguistic inquiry since Enlightenment and, particularly, in the past hundred years. Yet, Human Language is not just its observable physical structures; once broken into its smallest bits, the Humpty-Dumpty of Language cannot be put together again – the ‘Whole is more than the sum of its parts.’<sup>1</sup> Descriptive linguistics, while providing a wealth of detail, ‘misses the woods for the trees’ (Temple: 20013).

Dialectics views language as a complex Whole. To discover how a complex Whole works, the dialectical method identifies the smallest *functional unit* of the Whole and examines its properties, because they determine the behavior of units within the system and, ultimately, explain the behavior of the Whole (i.e., the behavior of water is caused by the properties of its smallest functional unit – the H<sub>2</sub>O molecule).

This method of analysis, so axiomatic in physical and natural sciences,<sup>2</sup> is still to be generally accepted in linguistics, despite numerous historic inquiries into the relationship between Language, Thought and Reality (most notably, by the philosophers of Ancient Greece and Mesopotamia, the modistae of Medieval Europe, the Solitaires of Port-Royal, and by the scholars of the past 250 years, such as Herder, Humboldt, Sapir & Whorf, Chomsky, Derrida, etc.). More recent work (Christiansen & Chater: 2008) suggests that all linguistic structures result from “general learning and processing biases” inherent in the very mechanism of human thought. Sakai Yuuko’s theory of universal sentence structure explains syntactic ‘universals’ through human perception of space-time reality (Sakai Yuuko: 2008).

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<sup>1</sup> Aristotle: Metaphysics Book I.

<sup>2</sup> The behavior of each chemical compound is determined by the properties of its *molecules*, and NOT by the properties of individual elements which make up the molecules.

**Lev Vygotsky** (1896-1934), acutely aware of language complexity by virtue of his being a psychologist, as well as linguist, first called for a major shift in our perspective on language. He proposed the ‘*Analysis into Units*’ method, arguing that it is best suited to the study of complex wholes (language), because “it combines the advantages of both synthesis and analysis in its approach” (Vygotsky: 1934).

The dialectical method of linguistic analysis, advocated since 2007 (Temple: 2009, 2011; 2012; 2013), is a synthesis of ideas put forth by David Hume, Lev Vygotsky, and Ferdinand de Saussure. This paper aims to demonstrate practical effectiveness of the dialectical method in the analysis of Kuanua, Tok Pisin, and English sentences.

### **Dialectical Linguistic Analysis: Main Principles**

Language is a *social means of verbal thought*; therefore,

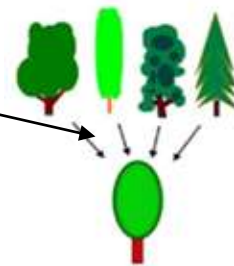
- Every word is already a *generalization* – an *act* of thought; it reflects reality as it is *understood* by each society in concrete space-time.
- *Word-meaning* is the smallest functional unit of language, because it has all its psycho-physical and socio-historical properties.

Example: A man’s behavior can be understood only in the context of all the interrelated aspects of his being (‘body & soul’ in concrete time-space). Likewise, word behavior (syntax) can only be understood in the context of all the interrelated aspects of ‘*wordness*’ – its ‘body’ (its physical form) and ‘soul’ (meaning) produced for the purpose of (and existing in the course of) communication by human minds, who live, think and communicate in concrete space-time.

- *Generalization* generates verbal thought through the ‘three universal principles of Human Understanding’<sup>3</sup> – associations by *resemblance*, *contiguity* in space-time, and *cause/effect*: thus, each word is a *contiguity* of concept, caused by perceived *resemblance* between concrete experiences, connected in the collective mind of each society:

Conceptualization occurs universally in the process of **synthesis & analysis**<sup>4</sup> of ideas in our minds; it varies only in the degree of abstraction and structural complexity.

- We create meaning (concepts) on two levels, social and individual:
  - Collectively, we create *social generalizations* (word-meanings, collocations and idioms) & grammars of all languages (‘units’ & ‘rules’).
  - Individually, we learn to make word-mosaics out of those collective generalizations (according to social rules and customs) thus creating our own, *personal generalizations* that are sentences.



<sup>3</sup> David Hume: An Enquiry Concerning Human Understanding, 1748.

<sup>4</sup> By resemblance, contiguity in space-time, and cause/effect

- Universal psycho-physical & socio-historical properties of words shape their behavior in the sentence, causing both **similarities** and **differences** in world languages (Temple: 2013). This insight helps us understand word behavior and provides us with a useful set of tools for analysis, namely: the concepts of ‘parts of speech,’ the ‘sentence,’ ‘clause’ and ‘phrase.’

**Similarities in Word Behavior across All Languages as Caused by Universal Word Properties:**

Because all words are born of mental *associations* in historically transient minds, compelled by existential social need to communicate, they by their very nature readily ‘associate’ with others, forming ‘chunks’ of meaning (phrases, clauses, sentences, etc.).

- We communicate in sentences, the generalizations of our individual minds. The ‘**sentence**’ is the smallest unit of ‘individualized’ meaning. Sentences are the mosaic patterns we make out of shared social generalizations, each ‘saying something *about* something’:

*Every thought tends to connect something with something else, to establish a relationship between things. Every thought moves, grows and develops, fulfills a function, solves a problem.*

(Vygotsky: 1934).



Grouper devouring a smaller fish. Ancient Roman mosaic, Tunis.

- Synthesis and analysis of ‘social’ word-meanings is a natural process of verbal thought, shaping all human understanding/structures of meaning; therefore, they are also the **two universal principles of sentence structure** in all languages:

- **Synthesis:** Every sentence-mosaic is a synthesis of what we talk about (S) & what we say about it (predicate: the Verb with all the words that go with it), forming the composite meaning of the whole S/V/C nexus:
  - **Subject** – ‘what the sentence is about’
  - **Verb** – what we say about the subject (this is verb *function* in the sentence): “A verb is that which, in addition to its proper meaning, carries with it the notion of time. ... It is a sign of something said of something else” (Aristotle: On Interpretation, Part 3).
  - **Compliment:** this ‘slot’ in the nexus may be left empty, but it can also be filled with direct/indirect objects (DO/IO), predicate nouns (PN), or predicate adjectives (PA).
- **Analysis** (recursion) puts the ‘meat’ on the ‘bones’ of the S/V/C nexus; it adds detail, color, *pixels* to the sentence mosaic, zooming in on the main nexus constituents, describing (or naming) them through associations by
  - Resemblance (metaphor)
  - Contiguity in space-time (metonymy)
  - Cause/effect.



- The **functions** of word-meanings in the sentence are universal: Despite the diversity of forms, the structures of all of world’s languages serve the same functions, shaped by the universal principles human understanding (‘parts of verbal *thought*’ = ‘parts of *speech*’).

To formulate/ communicate our thoughts about our 4D world, we use words to

- **Name** things (**noun**/pronoun function)
- **Comment**, say something *about* something (**verb** function)
- **Describe** things & actions (associations by resemblance – **adjective/adverb** of manner functions),
- **Place** them in space-time continuum (contiguity – **adverbs** of place/time),
- **Explain** them (adverbs of reason, consequence, condition, concession, etc. - cause/effect).

Words, thus used, form the ‘body’ of each word-mosaic, its ‘bones’ and ‘meat’ which are held together by the ‘connective tissue’ of **conjunctions** and **prepositions**.

**Interjections** are not part of the sentence – they are ‘thrown in’ to give the ‘body’ its ‘odor’ - or ‘fragrance’

It is because generalization (the mechanism of verbal thought) is universal that all humans, in all times and places, ask the same ‘journalistic’ questions (*indicators of word function* in the sentence):

*Who? What? Which? How? When? Where? Why?*

- **Functional groups** of words (phrases & clauses) are also universal. Born of mental associations, words naturally form ‘associations’ (chunks of meaning) to work in tandem, serving one purpose: to name, to describe, to place in space-time, or to explain; i.e.,



The difference between **phrases** and **clauses** is purely structural: if the group of words (that function together as one Adjective, Adverb, or Noun) has a nexus (S/V/C) of its own, it is a dependent clause; if it doesn’t, it is a phrase.

Opinions on how words/groups of words function in each sentence mosaic may vary, depending on individual perceptions of the relationships between them in the nexus (these may differ, due to many psychological, physical, social and historical factors).

### ‘Tools’ for Analysis

Dialectical syntactic analysis differs from descriptive in its aims and objectives: Descriptive linguistics attempts to accurately describe the kaleidoscope of diverse linguistic structures, a task which often

frustrates the energy put into it, for oral languages change faster than linguists can record (a paper presentation at the LSPNG 2012 conference in Ukarumpa comes to mind: young American researchers had documented a small language in the East Sepik province in 2002, only to return 10 years later and discover that the language villagers spoke was very different from the one they had documented earlier!).

The generalizations of dialectical analysis are based on the known psycho-physical and socio-historical properties of word-meanings of every language (these shape word behavior in the sentences of all languages and, as we have already stated, cause both differences and similarities between them). Instead of simply describing linguistic structures, Gnalysis attempts to explain how and why the structures were formed that way in the first place. Words are produced and used for a purpose by living, thinking people; Gnalysis seeks to identify that purpose, making generalizations about how the words and groups of words relate to each other in the sentence.

Gnalysis uses the natural way we all think – the mechanism of Generalization – to make sense of syntax, as well as a few simple ‘tools’ (the concepts of the sentence, phrase, clause, and ‘parts of speech’).



## Practical Gnalysis

### Three steps of Gnalysis:

**Step 1:** Identify all mosaic patterns (SVCs) in the sentence.

**Step 2:** Ask those ‘journalistic’ questions (*Who? What? Which? When? Where? Why?*), to discover what words/groups of words do in the sentence.

**Step 3:** Diagram and label the functions of all SVC patterns, using

- Squares for main clauses: 
- &
- Triangles for dependent clauses: 

Gnalysis ‘generalizes’ about the *functions* of words and groups of word-meanings in the sentence, about the logical relationships between words, phrases and clauses, molded by the practical, intended *purpose* of word use. Below is an example of a fun sentence-building exercise that many students find enjoyable, because it encourages creativity and humor (also see Table 1 on p. 81):

This ‘body-building’ exercise aims to ‘put meat’ on three ‘bare bones’ forming the skeleton of a nexus, S/V/C (‘synthesized’ by the 1<sup>st</sup> principle of universal sentence structure). This is done through zooming in on each ‘bone’ by **analysis**, the 2<sup>nd</sup> principle of universal sentence structure (recursion). Students, by turn, suggest words, phrases, and clauses performing the adjective, adverb, or noun function.

S V C(DO)

**/Men / create / meaning/**

Analysis of Subject: MEN	Analysis of Verb: CREATE	Analysis of Compliment: MEANING
<b>Which</b> men? (resemblance)	<b>How?</b> (resemblance) Naturally, by associating ideas, from their own experiences, etc.	<b>Which</b> meaning? (resemblance)
Good Intelligent Energetic All over the world Of all races With any sense, Who are not nuts, Living in all parts of the globe, etc.	<b>Where? When?</b> (contiguity) In their own heads, in all times & places, whenever they are challenged, etc.  <b>Why?</b> With what consequence? On what condition? ( <b>cause/effect</b> ) Because they have the ability to generalize, etc.	Hidden Ambiguous With consequences With a pinch of humor Which they want to share with others, Which helps them make sense of the world they live in, etc.

### Analysis of Kuanua sentences from the Tolai Texts by Ulrike Mosul

Damana To Kutuia i tapatapal na bar na vudu ta kana uma upi, I ga vavaongo ko, upi I ga gigire na vaninara upi go diat, upi na pait ta vakilang, upi na varve vaninare To Kadik ma kana tarai, ba diat a talil, diat-a dara. (Mosel: 1977, pp. 5-6)

So To Kutuia pretended to be pruning a banana tree in his garden, so that he could see them in advance and give a signal to inform To Kadik and his men that they were returning, that they had already appeared.

By asking who did what, we identified seven nexal patterns (7 S/V/Cs) in this word-mosaic:

**SVC – 1:** /Damana To Kutuia i /tapatapal /na bar na vudu ta kana uma /,

**SVC – 2:** / upi i /ga vavaongo ko/,

**SVC – 3:** /upi i /ga gigire na vaninara /upi go diat/,

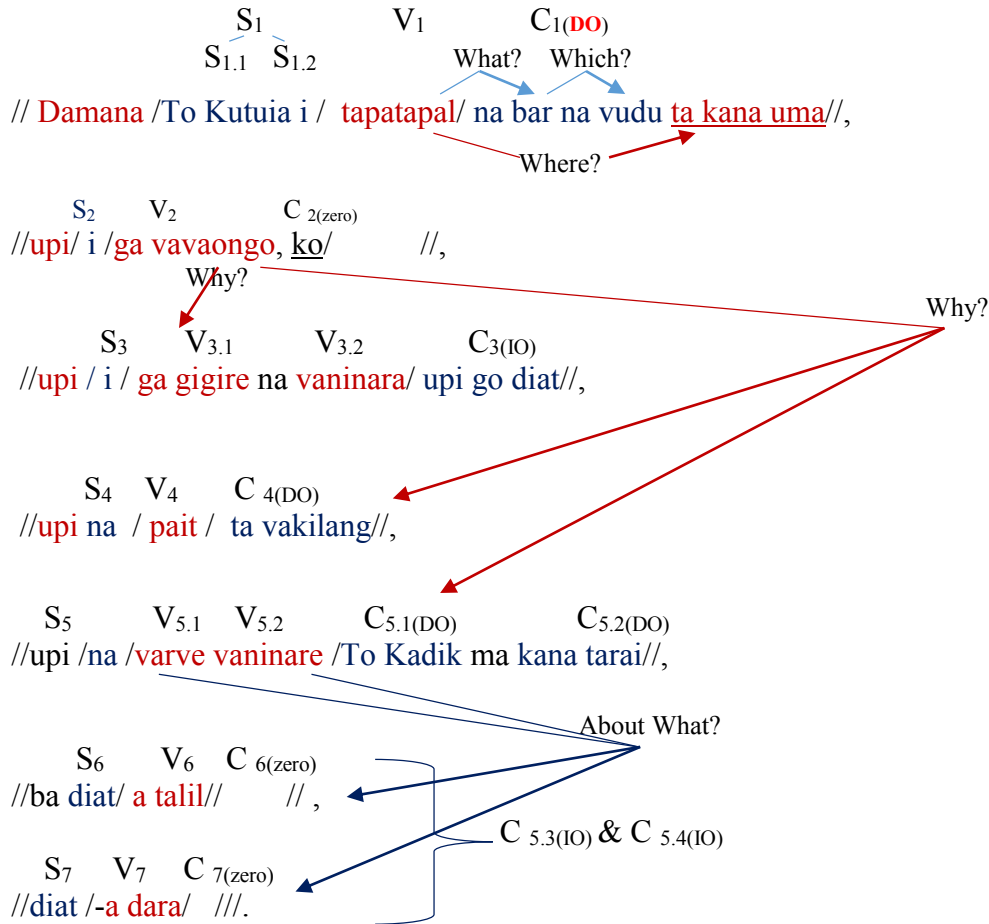
**SVC – 4:** /upi na pait ta vakilang/,

**SVC – 5:** /upi na varve vaninare To Kadik ma kana tarai,

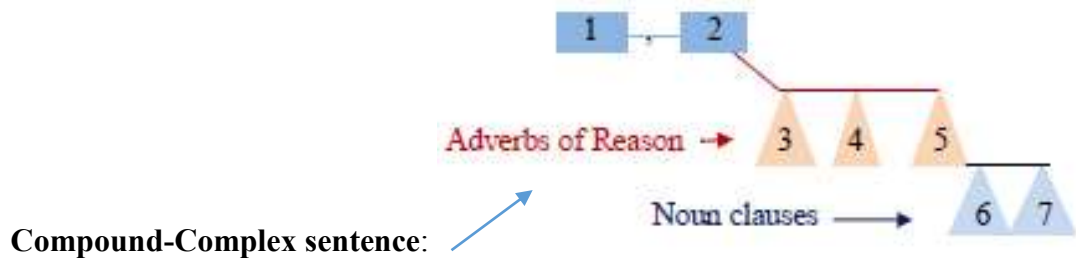
**SVC – 6:** /ba diat/ a talil/,

**SVC – 7:** /diat-/a dara/.

**Step 2:** Asking questions to discover the purpose of the use of words/groups of words (relationships between them). Universal associations – in Kuanua form:



**Step 3:** Diagramming & labeling the structure:





**The same universal associations in the English form:**

$S_1 \quad V_1 \quad C_{1(DO)}$   
 $S_{1.1} \quad S_{1.2}$   
 // Like that, /To Kutuia he / **pruned** / the banana tree in his garden//,

$S_2 \quad V_2 \quad C_{2(zero)} \quad S_3 \quad V_{3.1} \quad V_{3.2} \quad C_{3(IO)}$   
 //so/ he /pretended, huh/ //, //so/ he / 'd see and **prepare**/ for them//,

$S_4 \quad V_4 \quad C_{4(DO)} \quad S_5 \quad V_{5.1} \quad V_{5.2} \quad C_{5.1} \quad C_{5.2} \quad S_6 \quad V_6 \quad C_{6(0)} \quad S_7 \quad V_7 \quad C_{7(0)}$   
 //so he /'d **make** /a signal//, //so / he /'d **warn** / To Kadik & his men//, //that they/ **are returning**/ //they /are coming/ //.

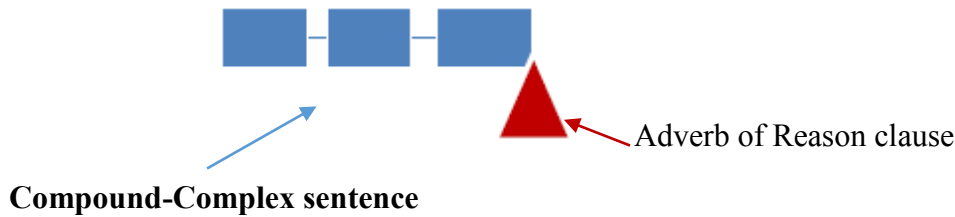
**Universal associations of Human Understanding in Kuanua, English & TokPisin forms:**

$S_1 \quad V_1 \quad C_{1(DO)} \quad S_2 \quad V_2 \quad C_{2(DO)} \quad S_3 \quad V_3 \quad C_{3(DO)} \quad S_4 \quad V_4 \quad C_{4(0)}$   
 // Io /namur/ i /tak pa/ ia / ma /i / ule vue /ma / i /ga vung/ ia / **ura ra pia**/ pi /dir / mamai/ //.

$S_1 \quad V_1 \quad S_2 \quad V_2 \quad S_3 \quad V_3 \quad C_{3(DO)}$   
 //Em i/ rausim/ na /em i /putim go **daon long graon**/, bai/ tupela /kaikai /buai.

$S_1 \quad V_1 \quad S_2 \quad V_2 \quad C_{2(DO)} \quad S_3 \quad V_3 \quad C_{3(DO)} \quad S_4 \quad V_4 \quad C_{4(DO)}$   
 //Well, then/ he / took [it/] and /he /pulled / it / and/ he / put / it / **on the ground**/, /so /they/ could /chew buai//.

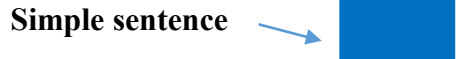
$S_1 \quad V_1 \quad S_2 \quad V_2 \quad C_{2(DO)} \quad S_3 \quad V_3 \quad C_{3(DO) + (IO)} \quad S_4 \quad V_4 \quad C_{4(DO)}$   
 //Well, then/ he / took [it/] and /he /pulled / it / and/ he / put / it **on the ground**/, /so /they/ could /chew buai//.



**A simple Kuanua sentence**

Ina pirpir ure ta ik a nat na mangamangana\* kai komave umana tarai ngalangala ta ra bobotoi.  
 I'll tell about some little 'doings'/customs of our people great/ancient in the darkness.

S V C<sub>(IO)</sub>  
 // I/ na pirpir / ure ta ik a nat na mangamangana kai komave umana tarai ngalangala ta ra bobotoi /  
 Adjective phrase Adv. of Time



\* Because 'doings' is a verbal noun, it can be modified both by an adjective (like a noun) and by an adverb of time (like a verb).

**Conclusions**

We have viewed Language as the universal *process* of Verbal Thought (generalization), and argued that word-meaning is the smallest functional unit of language, because it has all of its properties. Born by generalizing human minds, living and thinking in concrete space-time, all word-meanings have psycho-physical and socio-historical properties. These universal properties of word-meanings determine word behavior within each language system, causing both similarities and differences between the structures of the world's languages.

We conclude that:

1. The universal mechanism of generalization generates the structures of all languages.
2. Since words are universally used for the purpose of naming, describing, placing in space-time, or explaining events in our 4D world, their functions in the sentence ('parts of speech') are also universal.
3. Universal word properties explain why, in all languages, words tend to form *functional groups* (phrases & clauses): products of mental associations, words naturally associate with others, forming 'chunks' of meaning (groups of words that function together as one big noun, adjective, or adverb – phrases and clauses).
4. The dialectical perspective transforms our understanding of both syntax and semantics. Gnalysis, based on this new understanding of language, is flexible: it allows for multiple interpretations of ambiguous structures, capturing meaning-as-use, both intended and perceived.
5. Gnalysis uses the natural way we think to explain word behavior in the sentence: it elucidates the logical connections/relationships between the words and groups of words in the sentence mosaic, turning the study of syntax into an easy-to-understand, enjoyable word game.

**Fiona Silo: a short bio**

Fiona Silo is a linguistics student in the School of Humanities and Social Sciences, University of Papua New Guinea. She has a special interest in the *dialectical* method of linguistic analysis. In this paper, she uses Gnalysis, the analytical tool of dialectical linguistics, to examine the structures of Kuanua, her native tongue.

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