

Textual Continuity.

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Abstract.

It is supposed that all the objects-and/or-subjects of the surrounding world and all the events that take place in relation to them can be described in texts – texts that are sets of sentences. It is considered possible, by means of a process of decomposition, to render sentences (and consequently, texts) into summaries of predicative definitions. Such summaries are taken to be the metrics of a slang – the slang that serves as the framework for the creation of given texts. (Sentences don't need to have metrics in this sense: the very same sentences can be used in many slangs and in many texts.)

I affirm that all texts that have any relation to concrete objects-and/or-subjects of the surrounding world necessarily use the same slang. In other words, what I call "textual continuity" is the use and/or modification of a given slang through the creation of many texts devoted to particular objects-and/or-subjects. The metrics of a slang, moreover, is always subjective: the metrics of the slang for one text never exactly coincides with the metrics of the same slang for another text. In this article it is affirmed that slangs continually evolve (modify themselves) in the direction of:

1. First, disintegration,
2. And then, integration with slangs given to the description of other objects-and/or-subjects of the surrounding world and their changes, different from those described by the given slang.

I think that language is a sum of integrated slangs. It is also supposed in the article that modification of a given slang – or the creation, based on that slang, of a new one -- can occur only with the emergence of new ideas concerning objects-and/or-subjects of the surrounding world and what happens in relation to them.

I affirm that, in order to describe specific objects-and/or-subjects, it is absolutely necessary to learn a specific slang, and that in the process of such learning one inevitably becomes familiar with previously existing ideas about given objects-and/or-subjects of the surrounding world.

"Kernel Sentences" as Predicative Definitions.

Noam Chomsky supposed that the basis of a sentence consists of certain "kernel sentences". I call "kernel sentences" predicative definitions. It does indeed seem more expedient to use a philosophical terminology – the terminology used by Aristotle, Moore, Russell and Wittgenstein, as the most significant philosophers to have dealt closely with the study of language. Those philosophers spoke of predicative and non-predicative definitions for the description of events and changes occurring in subjects or objects of the Universe long before Noam Chomsky.

Besides, the term "predicative definition" is convenient in the sense that it is more apt to refer to individual words as "non-predicative definitions", and to "kernel sentences" as "predicative definitions".

Borrowings and Adaptations.

First of all, I would like to clarify the meanings of the terms "predicative" and "non-predicative". As is well known, *praedicatum* in Late Latin means "what has been said (previously)". In Aristotelian and subsequent

forms of traditional logic a predicate was understood to be one (the one in which something is said about the subject of speech) of the two terms for the judgment of a subject. In his treatment I count as predicative any definition of a subject or object in which something is said about an observable subject or object as it changes.

More: as is well known, Bertrand Russell introduced the notion of a "non-predicative" definition, in which what is to be defined is brought in through its relation to a class of which it is an element. For example: "the set of all sets that are not elements of themselves". It is said that the use of "non-predicative" definitions leads to paradoxes, so they should be dealt with carefully.

Text Decomposition (Parsing): the Idea.

The amount of published material directly devoted to the problem of extracting what I have called predicative definitions from sentences by means of decomposition (parsing) is unmanageably large and cannot be reviewed here practically. For reasons I cannot fathom the authors of such articles all seem to agree that lexical statistical parsing models based on text decomposition (parsing) are incredibly confused and complex – forgetting that Nature abhors excess! In other words: how is an ordinary, average person off the street able to understand a text? Doesn't he decompose (parse) it in some way?

I have come to the conclusion that the decomposition of "text units"¹ into predicative definitions is possible only in the form of a summary of predicative definitions, in which all the predicative definitions of a given "text unit" must, without exception, be represented. Moreover, each predicative definition taken by itself (one kernel sentence) cannot have or carry a concrete, specific contextual or subtextual meaning, as it acquires such meaning only within the structure of a "text unit", when used in a structure of many predicative definitions. In other words, a predicative definition taken by itself (a single kernel sentence) can be used in an unlimited number of "text units" that are in no way related to one another, contextually or subtextually.

By way of illustration: predicative definitions can be compared to bricks which can be used to construct a huge number of totally dissimilar buildings. One brick alone is useless, it makes no sense: you can't build a house with one brick.

In summary: a person decompose (parse) texts by breaking them down into summaries of predicative definitions.

Decomposition (parsing): технология.

A text is made up of words. But what is a word? First of all, a word is made up of letters, which are, in practice, meaningless if separate. And yet a word, as the joining together of several letters, already, beyond any doubt, has a certain meaning. But the existence of synonymy makes the meaning of words, taken separately, vague and lacking in concreteness and separate words are declared to be non-predicative definitions. For example, the word "red", taken by itself, can mean anything: beginning with a colour and ending with a pejorative name for a Communist. In order to understand the "true" meaning of a word one must first identify in what minimal lexical construction of speech a given word is being used; where a minimal lexical construction of speech is a predicative definition: the articulation of three words, relating to three parts of speech - substantives, verbs and adjectives - in the context of «единицы текста». All other parts of

¹ I take text units to be the parts of a text that are separated by punctuation marks: parts of sentences, sentences, paragraphs, chapters.

speech, with the exception of prepositions and interjections, can be, in some way or other, taken to be (or be reduced to) nouns, verbs, and adjectives, where:

1. A substantive has the meaning of the abstract Name of certain objects and subjects;
2. A verb defines the abstract Name of an action;
3. An adjective is the abstract Name describing objects and subjects in the process of change.

This triad of non-predicative definitions is indispensable to defining the subjective evaluation of a fact, when faced with the possibility and the need to include the objects and subjects of the fact within the certain context and subtext. In other words, a person has to evaluate a sandwich from all sides: he has to understand that it's a sandwich, and to decide whose it is, whether he should eat it or not, whether it's fresh and tasty, etc.

The presence of at least one predicative definition is absolutely necessary and sufficient for the creation of a sentence, even if it's missing one or more words from the substantive/verb/adjective triad. Such a word or words can be reconstructed on the basis of the context and subtext of the text; where:

1. The context consists of those predicative definitions where a substantive is used as the abstract Name of objects and subjects and abstractions;
2. The subtext consists of those predicative definitions where pronouns and interjections are used as the abstract Name of objects and subjects and abstractions.

For example, having said the word "unfresh", one can reconstruct the words "sandwich" and "exists" if we know in what context and subtext the word "unfresh" appears. And if we don't know the context and subtext of a given predicative definition, then the word "unfresh" can be used with, for example, the words "fish" and "smells". Only a text, being a collection of predicative definitions grouped together in meaningful sentences, can provide, more or less identically, the context and subtext of every one of these predicative definitions. That is, a text is considered to be completed in so far as its context and subject are, more or less identically, defined.

Processing the Text.

The task comes down to extracting all the predicative definitions from every "text unit". Such a collection is termed the summary of the "text unit"; the number of times each predicative definition occurs in the "text unit" is referred to as its weight. But only the summary of the entire text can make it possible to speak of determining the metrics² of the slang in which the text was composed!

In other words: In order to understand a text a person must be able to somehow take in several sentences from the text so as to understand its context-and/or-subtext by understanding the metrics of its slang.

"Text Units".

² Merriam-Webster Online Dictionary:

Main Entry: **met-ric**

Function: *noun*

2 : a standard of measurement <no *metric* exists that can be applied directly to happiness -- *Scientific Monthly*>

One can only take as "text units" with contextual and/or subtextual meaning those "text units" that contain in their structure the Names (nouns) of concrete objects-and/or-subjects.

Examples of Summary.

At the URL http://lexiclone.com/SummarySample_Fyodor_Dostoevsky.htm , the reader can see an extract from Fyodor Dostoevsky's summary (a part of which is reproduced below), created on the basis of his book *The Brothers Karamazov* in English (the numbers to the right represent the frequency of each predicative definition's occurrence in the text):

it - be - in : 1 466

i - be - in : 1 347

it - have - in : 996

you - be - in : 936

you - be - your : 798

i - have - in : 664

all - be - in : 657

it - will - in : 535

my - be - in : 496

all - have - in : 473

Clearly, it is subtext that dominates in Dostoevsky's text. In another summary - that of my Patent #6.199.067 - it is context that dominates:

one - say - least : 1 447

segment - say - least : 1 124

datum - item - plural : 1 025

system - say - remote : 950

datum - say - plural : 888

computer - say - remote : 845

datum - item - linguistic : 845

system - say - least : 844

computer - say - least : 818

one - say - remote : 805

In these examples we see parts of the subjective metrics of the slangs in which the given texts were composed.

Slang.

The Merriam-Webster Online Dictionary defines a slang as follows:

Main Entry: slang

Pronunciation: 'sla[ng]

Function: noun

Etymology: origin unknown

1. language peculiar to a particular group;

2: an informal nonstandard vocabulary composed typically of coinages, arbitrarily changed words, and extravagant, forced, or facetious figures of speech.

I am completely in accord with the view expressed in Merriam-Webster: every area of human activity presupposes the existence of a specific means of communication – a single one for all the subjects-and-objects of a given activity – a slang.

That is to say, I affirm that all texts devoted in any way to the same activity must necessarily use the same slang. That necessity is mainly expressed through the use of the same Names to denote the subjects-and/or-objects described in the text, as well as the same verbs and adjectives to describe what happens with those subjects-and/or-objects.

Continuity of Meaning.

One can affirm that the very existence of predicative definitions creates an extended textual continuity of meaning for "text units"; where such continuity manifests

1. Either by means of "synonymic linkage" of the predicative definitions of a new "text unit" to those of a preceding "text unit";
2. Or by means of the simple repetition of the predicative definitions of a given "text unit" in subsequent "text units".

"Synonymic Linkage" as the Mechanism for the Continuity of Meaning Between "Text Units".

"Synonymic linkage" means that synonyms³ are found for all or several words in the structure of a predicative definition, and these words are then replaced. The new, synonymous predicative definition is devoted to illuminating changes in the same subject-and/or-object as the old predicative definition.

"Synonymous" predicative definitions are found in this slang or in others by means of association⁴.

Linkage of "Text Units" by Means of Simple Repetition of Predicative Definitions in the "Text Units".

"Text units" can be linked semantically by the repetition of the same predicative definitions in consecutive "text units".

Frequency of Use of Predicative Definitions.

It has been established through experiment that the fundamental characteristic of a slang is the frequency with which specific predicative definitions are repeated by "text unit": this (within the limits of statistical error) constitutes its objective metrics.

The Evolution of a Slang.

I have come to the conclusion that a slang emerges at first through the borrowing – in order to describe certain new objects-and/or-subjects and what happens in relation to them – of a group of synonymous predicative definitions from all possible slangs related to the many fields of human activity, by association. Such groups of predicative definitions are then extended by new meaning and, as a result, the slang

3 By synonyms I understand one of two or more words or expressions of the same language that have the same or nearly the same meaning in some or all senses.

4 Merriam-Webster Online Dictionary :

Main Entry: **as-so-ci-a-tion**

Function: *noun*

3 : something linked in memory or imagination with a thing or person

4 : the process of forming mental connections or bonds between sensations, ideas, or memories

acquires a new, unique metrics: the new slang exhibits an absolutely unique frequency in the repetition of predicative definitions.

There are, as I suppose, two steps in the evolution of slangs:

1. Newborn slangs become ever more specialized and less intelligible in so far as the slangs' metrics are extended by new, unprecedented meanings.

I call this process "slang disintegration". For example, the slang of quantum mechanics at first became unintelligible to everybody except a very small group of carriers of that slang – the pioneers of quantum mechanics – despite the fact that this slang used, for the most part, the same predicative definitions as other slangs, but with a new meaning.

2. As a given area of human activity grows in popularity and comes to be in greater demand its slang begins to be integrated into the language, as into a sum of integrated slangs. Here the integration of a slang means the growth in the number of synonymous predicative definitions in relation to the growth in the number of people who are in need of the given slang. (New people change the metrics of a given slang and other slangs in order to make the slang more intelligible to themselves.)

For example, the slang of quantum mechanics has already been integrated: thousands of people have introduced a mass of new predicative definitions into the outdated slang of the first 10-20 quantum physicists of the late 19th and early 20th centuries, changing its metrics. Other slangs describing the objects-and/or-subjects of quantum mechanics have had their metrics changed as well. For example, a mass of new predicative definitions associated with nuclear weapons have become firmly established in the slang of politicians.

Textual Continuity.

Textual continuity is the persistence in use, in newly created texts, of:

1. Either the pre-existing metrics of a slang,
2. Or a modification of the pre-existing metrics of a slang,
3. Or fragments of the pre-existing metrics of a slang,

for the description of concrete objects-and/or-subjects of the surrounding world.

In so far as the knowledge of ideas – ideas that have to do with concrete objects-and/or-subjects of the surrounding world and events taking place in relation to them – necessarily becomes a subject in the process of learning a slang, one can say that any text dealing with such objects-and/or-subjects is in some way or other based on such ideas.

In other words: in order to discuss concrete objects-and/or-subjects in a textual format, one has to first of all become competent in the slang that *alone* makes it possible to create texts that are intelligible to others. And such a learning process inevitably makes one familiar with the ideas that are already in circulation concerning concrete objects-and/or-subjects of the surrounding world and events taking place in relation to them.

New ideas about the concrete objects-and/or-subjects of a given slang lead inevitably to the modification of the slang and/or the creation of a new slang, but always on the basis of continuity in use of a pre-existent metrics of the slang. Identifying a text that contains new ideas is easy: it will be enough to analyse the metrics of the slang.

Subjectivism.

Because of the subjectivism involved in the use of any slang, new texts are always created on the basis of the subjectively transformed (within the limits of statistical error) metrics of a slang. That is to say, the objective metrics of a slang is an abstraction that has no reason to exist. As with any science, one has to mention statistical error when beginning to discuss the objective metrics of a slang.

Conclusions.

I affirm that, in order to describe specific objects-and/or-subjects, it is absolutely necessary to learn a specific slang, and that in the process of such learning one inevitably becomes familiar with previously existing ideas about given objects-and/or-subjects of the surrounding world.

One can boldly affirm that "The horizon of the present cannot be formed without the past"⁵: the creation of new texts is always based on knowledge of an already existing slang and the ideas present within it.

A new slang can appear only in conjunction with the discovery of new ideas, for which predicative definitions do not yet exist.

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