

## **An Artificial Intelligence by LexiClone.**

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### **Borrowings and Adaptations.**

First of all, the author 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 the author counts as predicative any definition of a subject or object in which something is said about an observable subject or object as it changes. In addition, the author proposes as the sole measure of change the movement of a subject or object with acceleration: if a subject or object is immobile or moves evenly, it cannot be observed and, consequently, cannot be defined predicatively.

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.

The author, of course, adopts Russell's definition, but in a new mode: one counts as non-predicative any definition of a subject or object in which something is said about a subject or object that is unchanging. For example, according to the author there are no closed sets in the world of change -- a set can strive to be the set of all sets, but no more.

### **Part One. Theory.**

The present article is devoted to resolving pragmatically the question of what human thought is, and to the concise description of the prototype of the first Artificial Intellect, which was used in QA and Novelty tracks of TREC 2003.

#### **1. The Idea.**

The idea of lexical cloning came out of the realization that sought-for information is "needed" -- "needed" by someone for some purpose.

The author -- in the process of pragmatically-cynical interpreting and developing, within the framework of the theory and practice of lexical cloning, a pantheistic theory according to which the thinking "I" of every person and all people is but a function of a part of substance, i.e., the manifestation of the striving of parts of substance, as first principles of changing existence, to particularize and separate their own changing/existent parts from everything else, from the plurality of other parts of substance, of other "I"s -- has come to the conclusion that the thinking "I" is but the manifestation of a substance striving towards definition and unchangingness and, as a consequence, towards measurability. And, in other words, thought is understood to be the manifestation of the striving of a part of substance to become a measurable essence -- that is, to define itself.

But if the calculability of "I" is a result, does that mean that it cannot be measured in the process of self-definition? And having become calculable, does a person stop thinking, or do "I" stop changing?

The author supposes that, in topological terms, a person is a point of

accumulation (an open set)<sup>1</sup> which exists, as a constantly changing essence, only within the framework of the theory of Internal relations. That is, "I" cannot be calculated on the strength that the boundaries of "I", like the boundaries of points of accumulation, like the boundaries of parts of substance, cannot be defined because "I" am constantly changing<sup>2</sup>. For example, is a man the same before and after breakfast? And having read a book, is a man the same as he was before doing it? Of what kind is he? When is he? Where is he -- that man?

Furthermore, on becoming a calculable material point available for precise measurement within the framework of the theory of External relations, "I" become unmeasurable because of the lack of Internal qualities that would make "I" separable and distinguishable from every other "I". Or, in so far as material points within the framework of the theory of External relations have no internal properties, they are indistinguishable from one another: all material points are one and the same essence<sup>3</sup>. That is, we have the classic case of the dialectical removal of the contradiction between the process of becoming and its result: an essence, in the process of self-definition while in a state of uninterrupted change, takes on a new quality unprecedented for that essence, becoming that which the essence hadn't been, while at the same time losing all its previous qualities. In the generally accepted language of mathematics, it comes out as follows: a function, having reached its limit, stops changing and loses all of its previous properties, without exception.

## 2. Lexical Cloning.

The main point of the theory of lexical cloning is the supposition that all the events in the Universe are always and without exception, in one or another form, refracted through the inner world of any subject of lexical cloning.

That is, consider Erwin Schrodinger's now-classic paradox: One is asked to imagine a cat trapped in a box with a glass vial of poison. Nearby lies a chunk of radioactive material, like uranium. If an atom of the uranium decays, an electronic detector will trip a hammer that smashes the vial and kills the cat. According to quantum mechanics uranium atoms cannot be said to be in a definite state -- decayed or undecided -- until they are observed. Before that, the atoms hover in a quantum limbo, stuck in both possible states at the same time. Here is what Schrodinger playfully proposed: It is only when opens the box

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<sup>1</sup> A point of accumulation is the boundary point of the set M - the point x of the topological space  $X \supset M$ , of which any vicinity contains an indefinite number of points of the set M. Everything - all things, animals, humans - are accumulation points.

<sup>2</sup> The author assumed that a point of accumulation (an open set) always strives to become a/the material point (a/the closed set); and that this striving is the motivation for the universe to "spin" around, to change: the point x of the topological space  $X \supset M$  strives to include (for the sake of closeness) some other points of accumulation in its neighborhood. But after becoming complete-closed a set (a point of accumulation) is to lose all its qualities that make it unique and distinct. Here, the author sees the well-known Russell's paradox: how to distinguish something that has exactly the same quality? In other words: if something is "red", how to distinguish this "red" from all other "reds" (a complete-closed set does not change and cannot be predicatively defined)?

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and makes the observation that the uranium emerges from the netherworld and makes up its mind. So why cannot the same be said for the poor cat? Reflecting on this case, the author comes to the following conclusion: there is no part of the Universe that can be looked at as a closed, isolated space or set. This means that the cat's timeless demise, in one way or another, is at once refracted through the changes in Internal condition of every subject and object in the Universe: any and all existing spaces and sets are open!

### **3. Clones.**

The theory presented above helps us establish the notion that all external changes are refracted through internal changes. This speculation has allowed the author to create, by means of the original technology of lexical cloning, a range of computer clones of human beings, which he is tempted to call Artificial Intelligences. Lexical cloning presupposes that for every such clone one chooses a prototype, the texts of which are used as the basis for the cloning of their author: a program called UniSearch, having distilled an author's thinking from his texts, recreates the person's individuality on a computer; such an individual has every right to bear its prototype's name. Any person can be the object of lexical cloning: it is supposed that a human being is not only what he writes but what he reads and says, and that such texts contain the necessary and sufficient information for the reconstruction by computer of a person's thinking, as an individual.

To demonstrate that clones can exist and that they truly are a manifestation of individuality on the computer level the author has been obliged to formalize his entire theory by means of some postulates and definitions - an indigestible mixture of philosophy, topology and psychoanalysis - which is presented below, together with its practical demonstration.

### **4. More Theory.**

#### **Postulates.**

1. A fact is understood to be the observation of changes in a limited number of objects within a limited interval of time; in which the changes in the objects of the observation oblige the observer to change as well.
2. The only criterion for the authenticity of a fact is its approximate (within the limits of reasonable error) and multiple repetition in almost identical circumstances.
3. Abstraction is an immutable whole; countable only by means of the natural number 'one'; existing only in the present tense of the verb 'to be'.
4. Substance is a plurality, existing only in the present progressive tense of the verb 'to become'.
5. An abstraction is a single material point. A substance is a set of points of accumulation.
6. Abstraction is not substance, and vice versa. Abstraction can become substance only by changing; a substance can become an abstraction only by ceasing to change.
7. Substance strives to become abstraction.

Postulates are different from axioms in that they require demonstration and cannot, unlike axioms, be taken on faith. In addition to this system of postulates the following definitions will later become indispensable:

1. "I" am a point of accumulation. "I" seek rest in immutability.
2. Time. Only three aspects of time exist: past, present and future. For each aspect of time there exist two categories:
  - a) one, for abstraction: simple tense;
  - b) and another for substance: progressive tense.
3. Numbers. There are only two natural numbers of abstract nature, united in their duality: one, equal to zero and zero, equal to one; there are rational

numbers in the continuum from zero to one; there are irrational numbers in the continuum from zero to one.

4. Measure. There is no Measure for material points. For points of accumulation, their measure is taken to be their internal conditions; such measurement is always subjective and never objective.

5. Theory of External Relations: Main Postulate. Material points have no internal characteristics or/and external dimensions.

6. Theory of Internal Relations: Main Postulate. The internal changes of points of accumulation are the only measure of such points.

7. Limits. Immutability is the limit of change; the present tense is the limit of the present progressive tense; the existence of a material point is the limit of a point of accumulation; the Theory of External Relations is the limit of the Theory of Internal Relations; formal logic is the limit of dialectical logic.

8. Knowledge. In an attempt to answer Plato's question, "Is a man capable of knowledge, or can he do no more than make suppositions, holding opinions that are more or less close to knowledge? And is there in fact any such thing as knowledge?" the author thinks that knowledge is an abstraction, having no substance in the present progressive tense.

9. Life Experience. One can look at the life experience of a person as a sum of habits, in Hume's sense; where there is no single habit in isolation, but a dynamic system of interrelated habits, changing in unbroken relation to each other.

10. Thought. Thought is taken to be the manifestation of the striving of a part of substance to become whole, and it is an uninterrupted function: thought is the imposition of a point of accumulation's entire life experience on a given situation, in an effort to change it and/or to change "oneself" in such a way as to become whole.

11. The Thought Web. It is affirmed that thought cannot be broken down or dismantled into component parts, into some independent elements of thinking -- into separate ideas and thoughts -- and that there is an indivisible Web in which all ideas and thoughts are linked, changing in unbreakable relation to each other.

12. The Logic of Thought. There are three laws of Formal logic, for decisions already taken:

*The Law of Existence.* What is, is.

*The Law of Contradiction.* Nothing can simultaneously be and not be.

*The Law of the Exclusion of Contradiction.* Everything must either be or not be.

13. The laws of Dialectical logic, for arriving at decisions:

*The Law of Existence.* A point of accumulation is constantly becoming that which it was not.

*The Law of Contradiction.* A point of accumulation is constantly becoming that which it was not, ceasing to be that which it was.

*The Law of Becoming.* The contradiction between existence in the present progressive tense and the desire/striving to be in the present tense is the cause of eternal change.

14. Error. As soon as a person takes a Formal, immutable decision and ceases to follow the laws of Dialectical logic, he falls into error, and loses his way.

Information. The information that is indispensable to "meí gives "meí the possibility to become whole, in reality or in imagination.

15. The Meaning of Information. The meaning of information is defined by its influence on the Web of ideas, leading to the transformation of the point of accumulation into a new quality.

## **Part Two. From Theory to Practice.**

## 1. Cloning.

The Web of ideas is that internal property of a point of accumulation which allows one to localize "meí almost synonymously, within reasonable limits of error, as distinct from others, within the framework of the Theory of Internal Relations. Indeed, if the Webs of ideas of a certain number of people, as points of accumulation, coincide right down to the smallest details, then there is no way of distinguishing between them on the basis of the Theory of Internal Relations. Furthermore, one can suppose that if their Webs of ideas coincide, then the Measures of such people will coincide as well .

But is it possible to fixate an individual Thought Web? Yes, it's possible, within reasonable limits of error, unavoidable upon taking the limited domain of an uninterrupted Function: for example, a text is the imprinting of a Thought Web in a combination of words, within limits. In creating a text an author fixates the internal manifestations of a Thought Web - by way of induction - with the consequent reconstruction of that Web - by the method of deduction. That is to say, what takes place is the imprinting of a limited part of the Web in the form of a set of meaningful combinations of words, at a certain moment in time.

As a mechanical means, an instrument for the processing of the internal manifestations of Thought Webs - texts - and the consequent lexical cloning of their authors, we have chosen the computer. Unfortunately, faced with the non-existence or unavailability of those resources indispensable for the fixation of all the elements (visual, acoustic, tactile, etc.) in the exchange of information between an individual Web of ideas and its surrounding points of accumulation, as well as the unavailability of most of the objects of such study - be they President George Bush, Hillary Clinton, or Homer - for round-the-clock observation in stationary circumstances, the author has been obliged to limit himself exclusively to computer-aided processing of those authors' texts. The question arises, how are texts to be organized in order to be processed by computer?

## 2. The Text.

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. 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 and in what slang a given word is being used.; where:

1. A minimal lexical construction of speech, also called a predicative definition, is the articulation of three words, relating to three parts of speech - substantives, verbs and adjectives - in the context of a sentence;
2. A slang is an aggregate of predicative definitions used with a strictly specialized meaning, particular to each and every type of human activity .

Indeed, all other parts of speech, with the exception of prepositions and interjections, can be, in some way or other, taken to be substantives, verbs, and adjectives, where:

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

This triad of abstract Names is indispensable to defining the subjective

Ethical and Aesthetic evaluation of a fact<sup>4</sup>, when faced with the possibility and the need to include the objects and subjects of the fact within the context of a given point of accumulation. 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. Moreover, 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 predicative definition; where:

The context consists of those predicative definitions where a substantive is used as the abstract Name of points of accumulation and abstractions;  
The subtext consists of those predicative definitions where pronouns and interjections are used as the abstract Name of points of accumulation and abstractions<sup>5</sup>.

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.

### **3. Processing the Text<sup>6</sup>.**

In so far as it is assumed that the creation of an Artificial Intelligence requires the lexical cloning of an individual's thinking, then the task comes down to extracting all the predicative definitions from every sentence of the text, and then counting how many times each one occurs in the text. Such a collection is termed a summary; the number of times each predicative definition occurs in the text is referred to as its weight. A summary, being an ordered list of triads, is susceptible to rapid processing by computer.

The margin of error in the cloning is lessened in proportion to the amount and size of the texts being used. Beyond that, the author's idea that a person's Thought Web consists of everything that a person reads, says and writes allows us to rid ourselves of the requirement to use only the texts created by a given person: for the purposes of lexical cloning one can simply use what a person reads.

### **4. Examples of Summary.**

The entire summary of George Bernard Shaw, created on the basis of his books as found on the Internet at the URL <http://promo.net/pg/>, contains a little over 320,000 triads occurring more than once. The first triad - it-be-in - occurs 4 755 times; the second in order of frequency - i-be-in - occurs 2 534 times.

Similarly, at the URL [HYPERLINK "http://lexiclone.com/SummarySample\\_Fyodor\\_Dostoevsky.htm"](http://lexiclone.com/SummarySample_Fyodor_Dostoevsky.htm)

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<sup>4</sup> Plato said about this: "And pleasant is that by which, when it's come to be present in us, we feel pleasure, and the good that by which, when it's present in us, we are good", guessing that Thought Webs can, from time to time, produce mistakes.

<sup>5</sup> Pronouns and interjections name points of accumulation in general; substantives name points of accumulation in a concrete way.

<sup>6</sup> We here ignore ideographical languages.

[http://lexiclone.com/SummarySample\\_Fyodor\\_Dostoevsky.htm](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 (the numbers to the right represent the frequency of each triad-phrase'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 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

It appears that the preponderance of subtext can be explained by the fact  
that certain texts concentrate on the Ethical component in the process of a  
person's becoming whole -- on the question, what will happen if certain points  
of accumulation are included in the vicinity of a given? -- rather than on the  
Aesthetic component. On the other hand, texts of the kind we might call  
"technical" are primarily concerned with the Aesthetic component in a part's  
becoming whole, examining not the consequences of the inclusion but rather its  
mechanism, and therefore context predominates in them.

The summary of this article is:

all - be - in : 295  
it - be - in : 254  
say - say - least : 224  
text - be - in : 174  
must - be - in : 132  
weight - be - summary : 122  
say - say - plural : 112  
weight - be - in : 112  
text - weight - summary : 109  
weight - weight - summary : 108  
triad - be - in : 106  
one - be - in : 106  
text - be - summary : 104  
i - be - in : 104  
phrase - be - in : 100  
each - weight - summary : 97  
number - be - in : 97  
remote - say - least : 96

To show summaries in their entirety would be impossible because of their  
extremely large (up to 5M) size.

### **5. Time, Again.**

The use of the present tense in the above constructions -- Dostoevsky is basically working out the Ethical component in The Brothers Karamazov -- is not an accident. Time, like infinity, exists only for points of accumulation. Within limits, immediately after the fixation of its Thought Web (in the summary of predicative definitions), the clone of Dostoevsky becomes truly immortal, immutable. It is no accident that one of the products of the author's company, LexiClone, is called "Immortality".

### **6. More About Experience and "the Russian Genius" .**

As was defined earlier, the external manifestation of a Web of ideas consists in a form of regularity we refer to as habits: a point of accumulation, be it a human being or a giraffe, interacts time after time with strictly defined points of accumulation that, in imagination, by mistake, or in reality, make it whole. One identifies the usefulness or harmfulness of such inclusion of points of accumulation in oneself by means of feedback, in Wiener's sense. And this means that, yes, the "Russian genius" was right when, penetrating the darkness of the ages, he said that "habit is given to us as a blessing, it is a substitute for happiness"!

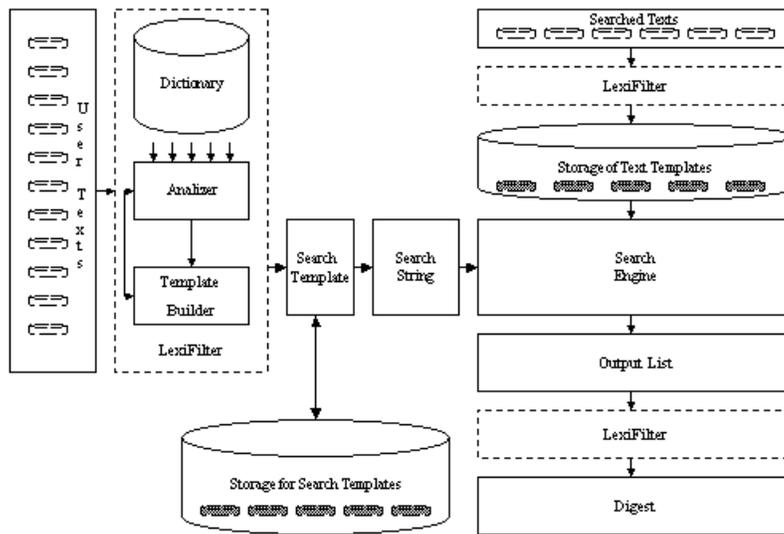
As far as choice of texts is concerned, habit manifests as an appeal to texts with a well-defined context-and-subtext - choosing texts within the framework of a well-defined "slang", for well-defined purposes.

### **7. The Search Engine.**

The author, as an immigrant in the lair of unbridled capitalism with its limitless opportunities to "make" money, naturally put the theory into practice at once and created a search engine for finding textual information in electronic form: the program is demonstrated on the Internet at the URL <http://www.lexiclone.com/Products.htm>

The system works as shown in the following diagram:

Figure 1



The program, called UniSearch, does the following:

It fixates the searcher's Web of ideas, as a network of predicative definitions within limits;

And compares it with the Webs of ideas of authors, taken within limits, for a certain collection of texts.

The result of the operation of the program consists of several (sufficiently few) sentences, distilled out of the collection of texts, containing the desired information and called "digests".

These are some examples of "digests": the author asked clones: How should we prosecute terrorists, murderers who kill innocent people? What should we do with them? Should we kill them in return? The Clone of Plato said: How should we answer him? The clone of the Bible said: (4.0% Ephesians) For we are his workmanship, created in Christ Jesus unto good works, which God hath before ordained that we should walk in them. The Clone of Mohamed said: Thee do we serve and Thee do we beseech for help. The Clone of Bernard Shaw (20th century) answered: Who are we that we should judge them? Fedor Dostoevsky said - Well, what can we do?

For the normal functioning of the program it is desirable, although not necessary, to create a summary of the user, which will make it possible to reconstruct the Thought Web of the person searching for the information. Then,

1. The user puts in a search text, of any size;
2. On the basis of that text, the program selects those texts in the collection that were created by authors whose own Thought Webs are closest to the Thought Web of the person seeking the information, as extracted from the search text;
3. If the searcher has created his own summary, whatever has been found on the basis of the search text is then re-sorted in such a fashion as to select the texts of those authors whose Thought Webs are maximally close to the searcher's Thought Web;

4. Out of those texts are extracted sentences that correlate maximally with the searcher's information requirements. As it happens, it's possible that no such 1) texts and 2) sentences are to be found in the collection of texts. One can identify their presence with the help of Compatibility.

### 8. Compatibility.

The choice of one or another text is made through the medium of a standard formula, which is called a "controller" in Reinforcement Learning, and later named Compatibility by the author:

Figure 2

$$\text{Compatibility} = \left( \frac{\text{Sum} (\text{Weight-SU} * \text{Weight-ST})}{\sqrt{\text{Sum} (\text{Weight-each-SU}^2) * \text{Sum} (\text{Weight-each-ST}^2)}} \right) * 100$$

where:

Weight-SU is the weight of the triads that are common to the summaries of the searcher and of the text,

Weight-ST is the weight of the predicative definitions that are common to the user's summary and the summary of the text,

Weight-each-SU is the weight of each triad in the user's summary,

Weight-each-ST is the weight of each predicative definition in the summary of the text.

### 9. More on Slangs.

There isn't and cannot be anything superfluous in a given slang! Any attempt at excluding certain words from the make-up of a slang leads to catastrophe. For example, Peter D. Turney of the Interactive Information Group at the Institute for Information Technology, National Research Council Canada, proposes, after selecting so-called key phrases, to remove all words of less than three or four letters from them, and to establish the context of the text in this manner. But in the contexts of the texts created by Peter D. Turney's method, the preposition "in" is completely absent!

### 10. The Preposition "In".

Summaries provide us with yet another, although indirect, demonstration that points of accumulation strive to become a whole. This demonstration is the existence, in all languages<sup>7</sup> known to the author, of the preposition "in" which appears simultaneously and always as the adjective "interior" when creating summaries, the predicative definitions containing "in" are the very triads that occur most frequently. In the author's view, this fact confirms the appropriateness of the integral (egocentric) conception of the universe proposed in the postulates, according to which every point of accumulation is taken to be the center of the world and always strives to become such.

To take an example, in the divine Julius Gaius Caesar's summary, created on the basis of his work De Bello Gallico, we can see that the most frequently occurring predicative definition, which has led to the very word Caesar becoming

<sup>7</sup> A language is understood as a collection of slangs, constantly changing according to the laws of Dialectical logic: there is a constant cross-borrowing of words and combinations of words from one slang to another, as well as a constant change in the meanings of words and of their combinations.

a pejorative, is the triad "caesar-be-in". The next triads in the series, such as "all-be-in", "all-have-in", and "caesar-have-in" are understood as an attempt to include absolutely everything inside the whole. The army "army-be-in" the legions "legion-be-in" and the camps "camp-be-in"- all have to be there, too. And all the divine one" enemies "enemy-be-in" and "gaul-be-in" - must follow into there as well.

Speaking of Daniel Defoe, we also see that everything must be "in" the whole "all-be-in". There's the question "if-be-in"? to which Defoe himself gives the answer "much-be-in". An original reading of Robinson Crusoe, isn't it? And now, the radiant Anton Chekhov. He believes in God "in" the whole "one-be-in" - and that we will all be there "all-be-in". At the same time Anton Chekhov reflects on the problem of time for the whole "time-be-in" - and puts to himself the skeptical question: "if-be-in"? He is certain that even there, in the bright world of the whole, lies will penetrate "lie-have-in".

Nevertheless, he is ready to take everything into the whole "out-be-in". After all, his whole is full of love "love-be-in". But falsehood will penetrate even there "lie-will-in", - where nothing is - "nothing-be-in". Doesn't a reading of Kashtanka and other short stories give us grounds for such conclusions?

And here are the ideas that predominated in the mind of Lenin in the year 1919: the country, the Party, the Communists, the bourgeoisie, and all people must be in the whole "country-be-in", "party-be-in", "all-be-in", "communist-be-in", "bourgeois-be-in", "mass-be-in". Everything, "inside" the whole, must be Soviet "soviet-be-in"; and all classes (social classes, obviously) must be in the whole "class-be-in". As a true revolutionary "revolution-be-in" - Lenin is persuaded that struggle is everything "struggle-be-in". In such conditions the Party must be the party of the majority, the party of the Bolsheviks, and not just anything "party-be-party", "must-be-in", "most-be-in", even within the whole. Nevertheless, Lenin is a true believer: "one-be-in", although the triad "party-be-in" has a significantly greater weight.

The four most frequent triads in the Bible: it-be-in 3 499; lord-be-in 3 341; all-be-in 3 278; i-be-in 3 083.

Without the aforementioned unwieldy theory of the Internal Relations the author might accomplish the same mistake as Peter D. Turney: "Words with less than three characters are removed from the list, as are stop words (words like "and", "but", "nor", "from", "she", . . .), using a predetermined stop word list . Unfortunately, Peter D. Turney does not even know that a text has not a context only but a subtext as well.

## **11. The Program.**

To experience how the UniSearch program works, a reader is asked to visit the URL <http://www.lexiclone.com/Products.htm>

### **Part Three. Artificial Intelligence.**

#### **1. The Thing-in-Itself.**

Apart from what exists indefinitely through the changes of diluted, imprecise points of accumulation, there is another kind of substance: the "thing-in-itself"; where the computer is just such a "thing-in-itself".

To understand what a "thing-in-itself" is, we will have to make use of analogies:

1. There is a natural number one, equal to zero;
2. There are rational numbers in the continuum from zero to one;
3. There are irrational numbers in the continuum from zero to one.

An abstraction is a unity, equal to zero; points of accumulation are irrational numbers; "things-in-themselves" can be represented as rational numbers. If the whole number one is thoroughly stable in its dualistic nature, then "things-in-themselves" are more stable than points of accumulation, while still

being points of accumulation nonetheless.

To put it another way, silicon is relatively stable in the sense that, as a chemical element, it doesn't change much: it is well known that only upon the application of a definite amount of force can a chemical element become whole, so that it divides into its components, as uranium atoms do at the moment of a nuclear explosion. The same can be said about the computer's other components -- the ones made of copper, plastic, iron, etc.: they are stable.

And yet silicon, for example -- the silicon atom, as a chemical element -- is made up of elementary particles, every one of which is constantly changing, constantly in motion (the notion of an unmoving elementary particle is nonsense)! And silicon itself can, in certain mediums and at certain temperatures, no longer be all that stable. This means that we can suppose that there are certain "condition-niches" in which discrete (for the maintenance of a relatively unchanging state) rather than constant change is possible for points of accumulation. That is, "things-in-themselves" are points of accumulation that change discretely, sometimes, and not constantly.

To put it in other terms: a man, who has attained a particular position in life that gives him everything, becomes a "thing-in-itself", lazy and apathetic. And only the threat of losing everything or a part of it changes him, in direct proportion to the force of the threat, with correction for age. In general, age means something completely different for organic substances than for inorganic ones.

Going back to the computer, its nature as a "thing-in-itself" contradicts the nature of thought, which is an uninterrupted -- not a discrete -- function.

## **2. The Elemental Basis of the Computer.**

We are drawn to the following conclusion: one must restructure the computer so that it and its parts cease to be "things-in-themselves" and begin to change constantly.

But apart from the question: how?, another question demands our full attention: why? Isn't it cheaper and simpler to conceive and give birth to a human being? Nature has already made all the necessary investment of capital, having created a constantly changing (until the age of 40-50 years) organic computer in the form of a human being. What's the point, then, in repeating what's already been done? Why?

## **3. Artificial Intelligence as an Instrument.**

So, if one wants to create an instrument resembling the computer in Stanley Kubrick's 2001: A Space Odyssey, such a computer should be able to: Find, as the result of a search, those parts of a clone's (or several clones") Thought Web that relate to a given task.

Adapt those parts of the Thought Web to the new situation by constructing new sentences: summaries contain everything that is necessary and sufficient for this. The author's company, LexiClone, due to lack of resources, hasn't yet fully developed this aspect of the process.

3. It is evident that, by means of long-known and widely applied methods for transforming electrical signals into mechanical actions, the Thought Web clones are able to use manipulators, fulfilling Commands that are the internal source of the motivation for action.

The program for finding information in the form of "digests" is already available as a commercial product. For example, with the help of the program one can already have this kind of dialogue with the clone of the most wise and witty George Bernard Shaw:

Question: how do you do?

Original Result

[100.0% BERNARD SHAW. PYGMALIO\_16]

How do you do

Question: it is a nice day today, is not it?

Original Result

[23.1% Bernard Shaw. MRS WARREN'S PROFESSIO\_14]

But it's very awkward to be uncertain about it now that we shall be meeting the girl every day

Question: Hmm, you are joking, are not you?

Original Result

[70.7% Bernard Shaw. MAN AND SUPERMA\_22]

But you were

Question: No, I thought that it is a wonderful day indeed. What do you think about the weather? I like snow. Do you?

Original Result

[43.3% Bernard Shaw. Arms and the Ma\_18]

Do you think so

Question: Yes, I do. Would you like to go for a walk a day like this?

Original Result

[16.3% BERNARD SHAW. ANDROCLES AND THE LIO\_1]

But I do, I do, (screaming) I do

Question: It is a lot of snow, an awfully strong wind and a very low temperature. I think that it is the best weather for walking on a boardwalk. Would you go with me? We will see an ocean!

Original Result

[4.3% BERNARD SHAW. CANDID\_21]

Thank you: I will

Question: What do you think about our government? I think we have the wisest people to govern us. Do you agree?

Original Result

[43.3% Bernard Shaw. Arms and the Ma\_18]

Do you think so

Question: Yes, I think so. Look at our ministers: they are very good educated and know how to do what they should do. I believe that we will have an excellent bloody war soon. Is not that nice?

Original Result

[9.2% Bernard Shaw. You Never Can Tel\_31]

I thought so

Question: Look at our prime minister. Is not he just charming! I have never seen somebody who loves to fight for our freedom as much as he wants. I hope that he would kill enough children and women during the next war.

Original Result

[2.8% Bernard Shaw. THE DEVIL'S DISCIPL\_14]

Yes, that is just what he will say to you

Question: He is saying the same to all of us. Do you think that murdering of innocent just delighted? I wish to kill a couple of children.

Original Result

[7.0% Bernard Shaw. Arms and the Ma\_18]

Do you know what you said just now

Question: Yes, of course I know! Children always make bad things, they are impolite, have unbearable manners and eat too much. Would you kill couple of them?

Original Result

[3.2% BERNARD SHAW. ANDROCLES AND THE LIO\_1]

And you think I don't know

[2.7% Bernard Shaw. You Never Can Tel\_31]

Oh, yes: of course you say so

[2.1% BERNARD SHAW. ANDROCLES AND THE LIO\_1]

Yes, my dear: I know you do

Question: You do not know what?

Original Result

[57.7% BERNARD SHAW. ANDROCLES AND THE LIO\_1]

What can you do

[35.4% BERNARD SHAW. HEARTBREAK HOUS\_18]

You don't understand

[26.7% BERNARD SHAW. HEARTBREAK HOUS\_18]

What do you want to be kissed for

Or this dialog:

Question: You are joking, right? You make a joke. Original Result [25.0%

BERNARD SHAW. THE INCA OF PERUSALE\_4]

You are quite right-- ERMYNTRUDE [interrupting]

Question: I am sorry: do you understand what I just said? I cloned, duplicated your soul after you death. I am speaking with your duplicate, not with you.

Original Result [2.7% BERNARD SHAW. CANDID\_16] I know that it is not your fault--it is something that?must happen; but don't make light of it

Question: I see that you are in a good mood and lost any interest to me. You are thinking that I may be a beggar that asks for money or something like this. I am serious. Would you like somehow to be sure that I am not joking?

Original Result [32.3% BERNARD SHAW. HEARTBREAK HOUS\_23] I am not

Question: Well, I see that you begin to take me gravely serious. You see that I may be right. Do you? Original Result [8.5% BERNARD SHAW. HEARTBREAK HOUS\_36] What on earth do you mean

Question: I am trying to perform a scientific experiment. I am a philosopher. My specialization is the philosophy of language. I established a theory that using extracted from a text patterns we can reconstruct this text's author thinking. I took all your writings and I am trying to duplicate you based on your writings. I need to get your meaningful replies on my questions this way I may prove that I really found the way to duplicate a human thinking.

Original Result [4.4% Bernard Shaw. THE DEVIL'S DISCIPL\_14] You are going to your death [3.6% BERNARD SHAW. HEARTBREAK HOUS\_23] I should not have recognized you: your head is? no longer like a walnut

Question: What do you think? Original Result [57.7% BERNARD SHAW. MAJOR BARBAR\_30] What do you mean

Question: I mean this how do you feel? What do you think? You are dead for many years. I gave you a chance to live after your physical body died.

Original Result [9.9% BERNARD SHAW. CAPTAIN BRASSBOUND'S CONVERSIO\_7] Do you LIKE to be treated as he treats you

Question: You exist as your duplicate, a duplicate of your soul. Original Result [34.8% History] I cloned, duplicated your soul after you death

Question: That is right. You finally understood me.  
Answer: OK ...

Question: I do not understand you.  
Original Result [15.4% Bernard Shaw.  
THE DEVIL'S DISCIPL\_14] Do you want to kill me

Question: What do you not understand? Do you suspect me in something?  
Original Result [32.0% Bernard Shaw. Arms and the Ma\_18] What did you do with it

Question: I need to get the proof for my theory.  
Answer: OK ...

Question: It looks like you will not speak to me.  
Original Result [16.7%  
BERNARD SHAW. MAJOR BARBAR\_30] I thought you would

Question: I have to go. Would you like to ask me something? Are you interested to know something?  
Original Result [19.9% BERNARD SHAW. CAPTAIN BRASSBOUND'S CONVERSIO\_7] Do you LIKE to be treated as he treats you

Question: I am alive and free. You are dead and duplicated after your death. I own you, in some sense.  
Original Result [3.4% BERNARD SHAW. CAPTAIN BRASSBOUND'S CONVERSIO\_7] It will be on your own tombstone, presently, if you?cannot hold your tongue

Unfortunately, due to a complete lack of financing, we cannot bring the program on the company's website even up to the level already used within the framework of QA TREC 2003. But even from what is already there, it does look like the obtainable answers could be accepted as rational: the author believes that he has found how people think and construct texts.

One can speak, as one did with Shaw, with clones of the Bible authors and of Mohammed (the founder of Islam) at the URL [http://lexiclone.com/fi\\_starc.html](http://lexiclone.com/fi_starc.html)

### **Conclusion.**

It is evident that the obtainable answers are rational: they are the answers of an Artificial Intelligence as an individual, which can be called by name but which doesn't have the right to claim that it is a person: a person is not just made up of thought but of desire, of passion, which is the source of the motivation to act.

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