



**The Adjustment of Identity:
Inquiries into Logic and Semantics of an Uncertain World**

Nijaz Ibrulj

University of Sarajevo, Faculty of Philosophy

nijaz.ibrulj@ff.unsa.ba

Abstract:

In this article I present some characteristics of logic and semantics of an uncertain world. I confront two-valued and fuzzy logic. I use Kafka's novel *Process* as an example, which is designed as an uncertain context with words which are rigid designators without rigid meaning. That produces an uncertain world of logical and semantical relations. In presentation of problems I introduce basic concepts of Frege's, Wittgenstein's, Tarsky's, Searle's, Quine's and Davidson's philosophy of language. I distinguish the logical and semantical identification of identity. Further, I make difference between reference and inference, or representation and identification as two components which are fundamental for the identification of identity. I ground this difference on the role of logical unification and granulation of predicates in the structure of thought and semantical unification and granulation of attributes in the structure of statements and their relation to ontology of context. Confronting the logical and semantical unification and granulation I find that the limits of logic are not also the limits of language. The semantical unification goes beyond the highest genre and below the lowest species. That enables the extra-logical, non-scientific, confessional, prophetic, artistic, and ordinary use of language.

Who was that? A friend? A good person? Somebody who was taking part? Somebody who wanted to help? Was he alone? Was it everyone? Would anyone help? Were there objections that had been forgotten? There must have been some. The logic cannot be refuted, but someone who wants to live will not resist it. Where was the judge he'd never seen? Where was the high court he had never reached? [...]

But the hands of one of the gentleman were laid on K.'s throat, while the other pushed the knife deep into his heart and twisted it there, twice.

Franz Kafka, *The Trial*

1. Introduction

What is the truth, for man to search for it so much, and what is man, to be searching for the truth so much?

Truth is a moving target in philosophy and science, but it is perhaps in art and literature that it moves at its fastest. The distance between us and the truth is also problematic: at times it is so near that our senses fail to recognize it; and sometimes it is so far that our mind only sees it in images itself produces. How, then, does the truth adjust itself to man, and how does man adjust himself to the truth? What is the relationship between identity and the truth?

Is that which we designate as the noun the “truth” and as the predicate “true” visual phenomenon or a mental representation of the visual phenomena, or is it only a linguistic property/predicate of some linguistic phenomena like that of the following propositions: (1) “The snow is white“, (2) “Bachelors are unmarried man”, (3) “Gold is a yellow colored metal”, (4) “The temperature is somewhere between the fifth and the sixth degree”, (5) “Salary is almost always paid between the 1st and the 8th in month”, (6) ‘Josef K.’ ” is the same person designated with the letter ‘K’ in Kafka’s novel *The Trial*”, or, (7) “The concept ‘identical twins’ designates two persons of the same sex who are genetically identical.”

Under which conditions are these propositions true? Is there some objective criterion applicable to all of these statements which would decide about their truth or the lack thereof? In what way does that which is claimed in these propositions adjust itself to what is and how it is outside of the proposition and, therefore, how does it adjust to that which is and the way it is in our senses and in our mind? Is there a procedure or some process that puts the language, world and thought into a *single relation* in a way that the identity claimed in these propositions becomes identical with the “identities” or “facts” or “states of affairs” outside the propositions, that is – in reality, or to those formed in mental state of affairs and in mental processes of our mind?

Apart from the *external adjustment* of thoughts and their expressions to the facts, is there some formula or a principle that would also enable the *internal adjustment* of the left and the right side of the identity sign or copula; something that enables the entire symbolical “reality” – one conceptual content – on the left side of the identity sign to correspond to the entire symbolical “reality” on the right side of the identity sign, as in propositions (8) “ $x+y=z$ ” and (9) “All blonds have same hair color”, so that everything is adjusted within the limits of quotation marks over the content of the propositions?

Through posing these questions we have suggested the possibility of differentiating the formulation of identities in those propositions that are dependent on ontology and of identities in propositions that are independent of ontology. If we wish to, we can name those ontology-dependent propositions the *uncertain propositions*, and these ontology-independent proposition *certain propositions*. This does not mean that we have substituted the traditional distinction between the analytic (experience independent) and synthetic (experience dependent) propositions with the new terms, it means only that we wish to open the question in a new way: why do rules for logical identity apply in “all possible worlds”, but not in the world of physical objects, particles in the gravitational fields, persons and their behaviors, their semantic and social history? Why is it that in these latter realities objects stand in different relations of “identity” (authenticity) other than that of this logical and theoretical? What is the relation of all these different “states of identity”?

In this text I wish to speak about the adjustment we accept to be *the truth* in interpretation (identification and re-identification) with particular regard to context (“obvious”, “logical” and “true”) as the *adjustment of the identity*, about modeling the identity of the persons, objects, facts, contexts, realities, cases, states of affairs. In particular I wish to speak about the logical and linguistic construction of identity (authenticity) of identity that ought to arise out of this adjustment.

Why is it necessary for identity to adjust, adapt and to be modeled in the perception of physical objects, in thoughts as well as in language? The truth is a daily being dependent on time,

space and society; a being that appears and disappears, happens and verifies itself in our speech, in interpersonal communication, in the interpretation of oneself and others. It is only here and in this way that it becomes objective [6]. The logic that we find in books and systems exists solely in this daily, language-arranged being; in communication and interpretation that re-arranges it, and only there can it be properly grasped and studied.

2. The Two-Fold Adjustment to the “Truth”

The question of *identity of identity* has been open to debate since Aristotle’s differentiation of synonymy, homonymy and paronymy [1, K. 1a1-15], i.e. the differentiation between the same (*auton*), the similar (*homoion*) and the equal (*ison*) [1, M.1021a10]; between that what we call substantial, qualitative and quantitative identity. Wherein does the logical and wherein does the semantical identity appertain to? It is quite possible that the science works on crossing this bidirectional road where identity is adjusted from periphery to the center, from perception to interpretation, and from interpretation towards things, from sense to reference [7] and whereon one relationship between the internal and the external is yet to be formed, a relationship which, under certain mental and space-time conditions, can be designated with the term “truth”.

I want to name this external adjustment “*semantic adjustment of meaning/re-ference*” or the adjustment of extension, and the internal adjustment I wish to name “*logical adjustment of sense/in-ference*” or the “adjustment of intension”. Words “direct to” or “point to” objects, words “relate to” objects, words “re-fer to” objects (things, properties, relations, events, processes, persons, human behaviors, words, sentences, thoughts). The way in which words relate to objects differs from the way in which propositions relate to objects.

The word/name “Aristotle” refers to the ancient Greek philosopher who was born in Stagira, to a Greek shipping magnate, to a computer antivirus programme, to a dog of one of the MTV’s popular singers, etc., while the set of words/predicative relation “ancient philosopher born in Stagira” refers only to Aristotle – the ancient philosopher born in Stagira. What is the rigid designator here: a proper name or the predicative part of the proposition? For names to be the rigid designators in all possible worlds, as Kripke claimed [14], they would have to belong to a single rigid semantical compress/context wherein either “predicative semantic sequence” (extension), or a complex semantical symbol from the other side of the equality sign, would always have to correspond to them. In my opinion, one should rather speak of the different ways of designating (referring to), sometimes even the same objects.

On the other hand, concepts involve, or are involved, they include each other, or are included in one another, they in-fer and inter-fere, they de-fine objects (things and concepts) in accordance with logical rules of subsumption and subordination. Concepts, in the whole of the conceptual content, differ from its predicative parts by the position they take and by the degree of logical generality they possess. Concepts can sometimes be identified with its predicative parts, and even substituted; other times, this is not possible.

Last of all, I wish to anticipate an additional point: a semantic adjustment of the identity of identity, or an adjustment of reference, is accomplished by the *semantic unification* of linguistic generalities belonging to the expressions out of which the proposition is built, as well as by the *semantic granulation* of attributive relations of a proposition through which it is possible to identify attributive states – the minimum and maximum of attributes – belonging to a certain object.

Contrarily, the logical adjustment of the identity of identity, or an adjustment of the intensity of logical generalities around the identity sign in a proposition, is accomplished by the *logical unification*/homologization of predicates, or by the inference of the values of logical variables, and by *logical granulation*. In other words: integration and distribution are two procedures, or two directions, or two ways of adjusting the identity of identity; they both operate in the structures of logic and language in the function of adjustment of thoughts and propositions with the objects they refer to.

We should now be precise: in the foundations of logical unification/homologization lies the logical/generic synonymy of the concepts of things. Logical unification is a procedure of

homologization of logical generalities within the totality of a conceptual content which forms a thought. Logical unification is directed by the highest genus, the one to which all degrees of logical generalities belong, and out of which the conceptual content is built, regardless of whether or not the conceptual content is divided into the subject and predicative parts. Logical granulation is an application of logical differentiations within the logical content. It is directed by the lowest placed class (species), i.e. the set of differences leading to it. Hence, a thought is a sequence of logical content with one limit in the highest genus and the other in the lowest class (species), regardless of whether they appear in that sequence or not. The minimum and maximum of logical generality of every thought is determined by these limits.

The analogy of the linguistic expressions lies in the foundation of semantic unification. Semantic unification is the homologization of linguistic generalities within a given complex linguistic expression that forms a proposition – from singular names to the abstract general expressions. Semantic unification is directed by the expression which, in a given ontological relation towards the object, includes the greatest number of analogical expressions. Semantic granulation is an application of the linguistic differentiation in attributive limitations within the description of an object with a finite number of expressions. A given expression of a given proposition is a sequence of analogical expressions which stand in attributive relation to one another, and whose upper limit is the object which the proposition refers to, and the bottom limit is a primitive (non-interpretative) attributive expression ascribed to all similar objects.

Thus far we differentiated *logical and the semantical unification* from the *logical and semantical granulation*; between the predicative and attributive relations, or, between the structures and the procedures belonging to language on the one hand, and those belonging to thought on the other. Attributes are the properties of things, and predicates are the characteristics of concepts. However, their interaction and dependence occurs in the context, within the limits of ontology of a context/a theory and its language, i.e. within the limits of the idioms of identity and quantification of one language and one culture (Quine), or perhaps within the limits of “my world” and “my language” (Wittgenstein), or does it have to occur in the limits of every language and every thought whose parts are articulated, i.e. they have sense and reference (Kripke)?

Amongst myriad others, there is one “holistic”, *Wittgenstein’s principle*, which has dominated and still dominates a certain philosophy and science, and can be exposed in the following triptych: (1) that which one can precisely/clearly think, one can also precisely/clearly talk about, (2) whereof one cannot speak, thereof one must be silent, (3) whereof one can neither think nor talk, i.e. that which is unthinkable and unspeakable is only mirrored in language (*Tractatus*). With this, we have said that language and logic both extend within the same limits, that language does not go below or beyond the limits of logic nor does logic extend beyond or below the limits of language.

With this, too, we directly dismiss the possibility of uncertain ontology and uncertain language and uncertain thinking which could be identified as identical in any relation – either logical or spatial/temporal. But, how would the outer-logical, non-scientific, mythological, religious use of language be possible, how would that which Frege called *Dichtung* and the *Sprache des Lebens*, that which has sense (*Sinn*), but has no reference (*Bedeutung*), be possible?

3. Joseph K. in a Fuzzy World

Let us now take a look at an example of a thought content which can come into our consciousness by the force of the outer sensory stimulation of associative memory, and which can be formulated in a certain proposition. This proposition can be formed while we are sitting in, let us say, a *Free Speech Cyber Cafe* in Berkeley, drinking our coffee and looking at a person crossing the *Campus* lawn, heading towards the Moffitt-Doe library wearing a T-shirt with a big “K.” This can provoke a whole series of associations: (1): “Student with a *Calvin Klein* T-shirt”, (2) “T-shirt with the *Calvin Klein* logo”, (3) “*Calvin Klein* logo”, (4) “*Calvin Klein*”, (5) “Klein”, (6) “K.”, (7) “the character from the Kafka’s novel *The Trial*”, (8) “member of the *Kappa* fraternity from the *International House* on the K/ Campus”. What is his name: Jusuf, Jasef, Josof, Josaf, Jesuf ? How

many K's actually appear in Kafka's *The Trial*? How many people wear a *Calvin Klein* T-shirt, or how many members are there in the *Kappa* fraternity?

Which argument fulfills this "function": "object x has the property of K?" When precisely do we start thinking of the person, when of the thing, when of the complex symbol, and when of the simple sign that can refer to some other person? Which sequences of interpretation are involved, which are possible, and which are allowed? The semantic granulation of expressions, which in this case is related to physical stimuli and semantic history, produces one semantic net of relations (semantic compression) inside which the attributive relation functions. That relation can descend to the simple/primitive (non-interpretative) symbol, and ascend to the first logical form which the predicative relation begins to matter.

What kind of conceptual content can be created from the series of different representations provoked by a single sensory, external, physical stimulation of associative memory? What sort of mental and what sort of linguistic reactions correspond to this *uncertain physical input*? What is uncertain here: the *input* or the *output*, the stimulus, or the interpretation? Where does the interpretation take place? In the visual perception (retina), in the mental picture (somewhere in a parallel part of the brain), or in the semantic history of the sign (somewhere in the semantic zone of memory – in the amygdale, thalamus or hippocampus, which would be connected to the Broca's/linguistic zone in the brain), or in some experience of consciousness that would not be neurobiologically determined, as for example *Bewusstsein* or *Selbstbewusstsein* in Hegel's *Phenomenology of the Mind*?

To an understanding of a world which appears and disappears, to such an understanding of a truth which moves back and forth, and to such an understanding of an interpretation in which the truth, "truth" and the "truth about the "truth" "originate" in, corresponds a wholly different logic, the *fuzzy logic*, and a wholly different semantics, the *semantics of the uncertain world*. Inquiry into semantics of the uncertain world or into the theory of modeling of the meaning of words is prompted, encouraged by mathematicians, computational linguists, computational psychologists, by people who try to discover the semantics and logic of the world as imprecise, uncertain, unlikely, indefinable, and variable, and not just as it is already imagined. This, however, does not entail the unspeakable world.

Let us now move away from the mathematical and logical abstraction, and head towards the world of life and literature, and let us try to establish relations which, quite contrary to Rudolf Carnap's claim [2], occur to a man who is walking down the street where not a single motion is previously determined: birds fly uncertainly, cars move uncertainly, people walk uncertainly, the leaves of the trees in the Wilson's Avenue in Sarajevo fall uncertainly to the ground, the looks of the people uncertainly cross space and (its) objects / within it, the pedestrians and cars move together uncertainly from Miklošič's street across the Tromstovje Bridge in Ljubljana. The sounds around the river *Ljubljanca* are substituted in consciousness with the sounds coming from the river *Miljacka*. One external stimulus creates a net of related representations which consists of a minimal and maximal associative mental response to the received stimulus. One rigid stimulus never produces just one rigid and isolated representation in a subject's mental response.

Likewise, Josef K., the person representing the character in Kafka's novel *The Trial*, lives in an equally similar uncertain world without difference (the trial slowly turns into a conviction); in a world where concepts are uncertain, with no *in-fERENCE* (there is no clear logical relation of concepts), words are vague with no *re-fERENCE* (rigid designators do not have rigid meanings), the events are blurred, places are undefined and unadjusted to the events, the characters are also undefined and atypical, social relations are vague and uncertain. In the words of a modern logical and semantical theory of Lotfy. A. Zadeh [23], this person lives in a *fuzzy world*. The context of the novel is full of, not only linguistic variables and semantical generalities, but also, in Quinne's words, it is completely ontologically relativized and built on the basis of substitutive, rather than object-related interpretation of variables [17].

Josef K. himself, however, is a rigid type who searches conventional meanings, precise situations and precise relations; he demands a rigid or monotonic logic for a world in which he lives

(with two truth values: true or false, where a third does not exist (is non-existent) and the rigid moral he himself possesses. In contrast his trial is a *fuzzy* trial where nothing is certain, nothing is specified and nothing is given as a constant – the whole context is a variable. The laws by which Josef K. is being tried in his trial are in fact two pornographic books and one novel called “What Grete Suffered from her Husband Hans” [13]. Josef K. is arrested (exactly) on his 30th birthday, although he is not taken into custody and incarcerated; his trial has begun, but moves nowhere; he has an attorney defending him, but the attorney never leaves the bed; his legal hearings are not held during week days but on Sundays, and they do not happen in a court but in the attics of the barracks; the courts he visits are dark residential buildings on the periphery; he is the first procurator of a large bank, however, the investigator still asks him if he is a house-painter; his serious and sharp defense during his first and only hearing in an attic of a certain suburb is interrupted by pornographic sounds (screams of a woman) from the intercourse between a student and a laundress; the priest in the cathedral defeats his *two-valued logic* by turning each of his conclusions into an opposite syllogism.

Let us, at this point, make one *connectionist experiment* and highlight each letter K. that appears in *The Trial* with the felt-tip pen, and then let us put all the pages on one big surface so they are visible as one big jumbo-poster or one big screen. What one could then see is a DIAGRAM OF THE LETTER K WITH ONE DOT showing the whole book as a single-valued codebook whose “process” consists of a moving form, as a moving coded nonsense that has suddenly compressed. In this way it is possible for a new image to emerge, different from that which we get by simply listing the book from right to left: in a semantic compression created by the context of the novel. We can see that this stiff, rigid procurator from the bank who is represented by a single letter (K) and one dot (.) is actually a rambling and a scattered position in a well arranged nonsense.

This experiment suddenly shows the context as a rigid framework and the person becomes the *fuzzy* place, the uncertain topic, a moving target, scattered object, and a dot pointlessly spinning on the screen, a dot that stands nowhere in the mapping or in the equality of itself. This mapping into oneself is actually the very essence of the relation we call “identity” or “equality of the sets of elements” on both sides of the equality sign! Here, we discuss the object that cannot be compared with any other object in the context, nor can it be compared with itself. Only then it becomes visible how the *fuzzy* context was represented with more constants than the “object K.” in it. Slightly thanks to this dot, placed under the lower cross stroke of the letter K., this object somehow still clings onto the context.

4. Josef K. in the *Tractatus*

One other Austrian, Ludwig Wittgenstein, in his opening sentence of *Tractatus logico-philosophicus* stated “The world is everything that is the case” [21], meaning that everything is just fine with our ordinary language: language which mirrors states of affairs, facts, cases and reality is just as precise as the world is: existing states of affairs and nonexistent states of affairs “p” and “not p”. Such a world and such a language have the same logical structure, a structure which enables the language to be the picture of reality (*die Wirklichkeit*), but not the picture of the world (*die Welt*). Wittgenstein did not allow space for the linguistic variables, nor do his terms “case”, “fact”, “state of affairs” point to an ontological relativity. On the contrary, the limits of my (rigid, without ontological variables) world, says Wittgenstein, are the limits of my (rigid, with no logical variables) language.

The world and the language cannot be in collision, simply because logic cannot be in collision with its application: if the world is rigid (facts, states of affairs, case) then the language is rigid too, words are rigid designators, regardless of the existing or nonexistent states of affairs! In fact, the world according to Wittgenstein can be only unspeakable but cannot be uncertain: if it is not a case or an elementary example of the world pictured in an elementary proposition. Reality (*die Wirklichkeit*) is that which is speakable and within it mirrors the unspeakable (*die Welt*).

Regardless the possible logic of the case might be, it is always in the service of positive sciences which create elementary tiny pictures of the world. There is not only one picture of the

world, there is no logical stratification, and there are only surface pictures which are created by the elementary propositions of positive sciences. There are only rigid descriptions, singular identity identifications of that-and-that, this-and-this, which appear like-this-and-this or so-and-so. The absence of logical unification (homologization of logical intensities which the abstract terms possess) has produced rigid and finite elementary semantic granulation (extension), one possible example of one logical relation, i.e. one symbolic or formal logical image of one material logical relation. In other words, the formal symbolic relation (proposition) is the picture of the existing or non-existing logical relation (fact, state of affair, reality)! This is why Wittgenstein was able to treat the general propositional form in two ways, both as a constant and as a variable (*Tractatus*).

Propositions in Kafka's *The Trial* do not reflect facts or states of affairs. On the contrary, negationless propositions describe, concern, and refer to nonexistent states of affairs. The fact that Josef K. *is not* guilty, the fact that the court *is not* a court (C= not C), the fact that the trial *is not* the trial (T= not T), the fact that the object to which the term refers to *is not* that object or is not such an object. Despite this, the propositions do not refer to the non-existing states of affairs, but rather take them *as* the existing states of affairs. Seen from the perspective of Wittgenstein's logic of the states of affairs as it is developed in *Tractatus*, the ontology of *The Trial* wherein Josef K. moves consists only of the nonexistent states of affairs, i.e. states of affairs expressed as "not p". There is no implication either, because nonexistent states of affairs can imply nothing but the nonexistent states of affairs.

Still, Josef K. makes material implications in his own logic even though the only things available to him are the non existing states of affairs. He concludes: if he is arrested then it *means* he is accused, if he is accused, it *means that* either he committed a crime or he is innocent, if he committed a crime, then it *means that* he should be convicted, if he is innocent then it *means* he should be freed. Guilty or innocent, there is no third option: the rigid implication in monotonic logic of normal process functions like that. The logic of the context in *The Trial* is twisted: if someone is formally declared as "arrested" and afterwards as "guilty," then it does *not mean* that someone is (conventionally) arrested and (conventionally) guilty! In a *fuzzy process*, he is only submitted to a psychological pressure: he is declared as "arrested" and "accused" and it is the only existing state of affairs in the novel which gradually proceeds into another existing state of affairs: into a conviction, without being arrested, without being incarcerated, without a hearing, without indictment, without defense, without the right to appeal.

Logic operates with the non existing states of affairs and treats them like facts of a negative auspice, which themselves belong to the possibility of logic. The non existing states of affairs mirror themselves in the propositions which possess a negation, propositions denying some existing state of affairs or some affirmation. However, semantics of non existing states of affairs are not the same as semantics or orthology of false speech: it shows/renders nothing as a being, exactly as Plato defined it in the *Sophist*. Semantics of the non existing states of affairs is a semantics which does not begin with the linguistic variable that needs to be granulated or have its value set between the minimum and maximum, actually it is a semantics of an illusion. Josef K. goes through this semantics by trying to "build up" a system of rigid logic which, in this context has "fallen", instead of immersing himself into "his process" and "studying it seriously" in order to postpone the conviction as much as possible.

5. Josef K. in Wittgenstein's *Sprachspiele*

Josef K. starts to lose the trial before it had even begun, more precisely, in the moment when his name, appearing in the first sentence as the abbreviation "Josef K", is additionally abbreviated in the third sentence to the "K" only. The author of the novel does not allow even the slightest possibility for the character to be identified with the context. That is why the name "J-o-s-e-f" itself contains vowels (o, e) as phonetic variables, or as phonetically open or imprecise voices. The vowels in his name can, at any given moment turn into variables and bring into question the rigidity of his name, an option Kafka does not want. He even deprives K. of the possibility of uttering his name differently: e.g. as "Josaf", or "Jisaf" or "Jesof", or "Jusuf" or "Jesusf". When his name is

finally reduced to (a single letter) K., it loses even the nominal prospect of being something other than the rigid sign in the imprecise context. In the opening sentence of the novel the writer designates him as “Josef K.”, and immediately after, in the third sentence, he marks him merely with a letter “K.”. After that, he is referred to only with the letter ‘K.’ 1169 times. There are only several places where the sign K. is defined by the expressions: “mister”, “chief clerk”, “Josef”.

In his book *Logische Untersuchungen* Wittgenstein argued that the world and the language combined in one “language game” can lead to a semantic unification: language is a world for itself, each linguistic reaction – one “language game” – is the *function* of some *meaning* which words possess in their use or in their “grammar”. To learn the grammar of one word means to learn (all the ways) of its use [22]. He was so stricken with the meaning of the words (with the grammar, with the use of the words) that he even claimed that the words themselves observe us from the text! Is there anything more dangerous than the letter K. observing us from the novel, scattered in 1169 places? Taking Wittgenstein from *Logische Untersuchungen* as a witness, this could mean: 1169 meanings of the sign K.! It is an argument against the rigidity of meanings of rigid designators.

Franz K. completely reduced Josef K. to “K. in the trial”: all of his thoughts are 100% occupied with his trial, he is entirely devoted to performing the procedure that exists nowhere but in his memory, a memory that refers to the time before “the arrest”; to the procedure that should exist in a normal world; in his thoughts and in his expectations he sees the trial as a regular, normal procedure which has its course or its procedure in a legal state, while, in fact, it all begins when he wakes up in a *Workshop*, in one irregular, abnormal, non-procedural, informal process and trial.

Instead of living in the world of real meanings K. lives in a *workshop* (in his *trial*) where meanings of the words the “accused”, an investigating judge, a court, a trial, a lawyer exist only nominally, as terms which no longer have their full meanings (neither do the persons have full names!) which could be used in one way or the other, depending on the accused’s behavior. His trial is at the same time a diluted nominalistic, and a condensed psychological workshop (*psycho-word-shop*), an open synthetic function where the functions of the singular / individual terms do not exist. What actually rotates are only the psychological states of expectations, physical manipulations of his associative memory, instigations to wrong conclusions, and disappointments caused by the absence of real/genuine external events.

In such a *psycho semantic workshop* it is completely irrelevant if he is labeled as a “room-painter”, or “the first procurator of the bank”, what is relevant, however, is what kind of psychological and physical reaction this labeling causes inside him. The entire architecture of the context is nominal/istic (attendant, lower clerk, investigating judge, lawyer) and the meanings are *fuzzy* or uncertain because the reality they refer to is different, in other words, not an ordinary one. Likewise, his memory is also reduced to a “short term “memory; to cognizing faces and shapes which are present in the context. Despite the fact that he has no single recollection in the whole novel, he keeps searching for a procedure that belongs to a “long-term” memory.

K. would function brilliantly in a Bolle’s world which can be formed using the functions of the numbers 0 and 1, where 0 = “false” and 1 = “true”. In his procedural logic, he would subsequently create rigid descriptions of situations with just two symbols : 01, 10, 00, 11, 101, 110, 011, 010, 1111, 010101, 011011, 110110, 001, 1000010, 11110111, 11010101, 11111010, 10101111, 01110001, 11000111, 11001101, ...one endlessly arranged world of combinations of full and empty, one endless chain of sequences of “yes” and “no” with which one can count and that can be brought up into a convergence and divergence using different principles, even though, for instance, there is no difference in the content between the expressions 10101010 and 01010101. Nevertheless, he designates himself with the predicative relation of the words “I am the chief clerk in a large bank.”

On the other hand, the context of his (K.’s) civil lawsuit is irregular, informal, but at any given moment and at any given place, the actual, real, uniformed and rigid actors of the real process and the real trial can step into it. Kripke thought that the expressions are always rigid designators in every possible world [14]. However, one should add: if there is a rigid ontology, then there are also rigid meanings, words are thus (then) rigid designators. In a strange way the following is shown

here: rigid designators refer to both, non-existing and unspeakable states of affairs, but they do not refer to the uncertain ones.

Semantics cannot remain certain and rigid if the ontological status of the facts which words designate or refer to is being changed. Kripke could claim that the term “court” or “investigator” always refers to some object, any object, even imagined, non-existing object, but not to something like “a court which is different from the (real) court”, “investigator who is not the (real) investigator” or, “process which is not the (real) process”. This would then lead to a paradox of rigid designators.

In the previous section I have made an experiment that led us to the context of a *Workshop*. By doing so, with the help of Wittgenstein’s concept of the “language game” we have *fuzzyfied* (*fuzzyfication*) the linguistic constant K. and turned it into a linguistic variable, which was not the original intention of the father of *fuzzy* logic, Lotfy Asker Zadeh. However, since we have already found ourselves in the *Workshop*, we go one step further and make one more *fuzzyfication* in another way: animated fuzzyfication! If we would to repeat the same experiment with the letter K., only this time by using fluorescent felt-tip pen, and list through Kafka’s novel in the dark, in a way the authors of cartoons do it, letting paper sheets, placed between the forefinger and the thumb fall quickly, the rigid context would disappear from perception and the “letter K. with one dot” (K.) would create an animation of one movable target in literature that gets both, closer and further.

6. Josef K. in Searle’s *Chinese Room*

The question of relation between semantics and syntax in natural languages [3] as the question of sense and reference [7] and as the question of semantical and structural definition of the truth (truthful proposition) [20], is set out differently in cognitive science, artificial intelligence and computational linguistics. In the famous *Gedankenexperiment*, which he created in his text “Minds, Brains and Programs” entitled *Chinese Room*, John R. Searle makes an argument against the strong theory of artificial intelligence which claims that computers are intelligent physical systems which not only operate with symbols and perform structural procedures, but, are also capable of understanding the meaning and the semantics of symbolic sets [19].

Searle shows that these procedures can easily be performed by a man, while at the same time he does not necessarily understand the meaning of the alphabet, words, sentences, or the whole context that they together form. As an example he takes Searle who is completely unfamiliar with the Chinese alphabet, who knows not even one of the letters of the Chinese alphabet, closed in a room and given a set of the Chinese text, one set of Chinese letters together with the set of rules for a correlation of the subsequent set with the first one (the rules are given in English language, which Searle knows and which enables him to correlate one set of formal symbols with the other set of formal symbols); the third set of Chinese symbols together with the instructions in English which enable him to correlate the elements of this third set with the elements of the first two sets, and these rules give him directions on how to connect certain kinds of Chinese symbols to certain kinds of shapes as a response to a certain kind of shape given to him in the third set. Let the first set of elements be named “letter”, the second one “story”, third one “questions”, let the set of symbols that he connects as an answer to the third set of elements be named “answers to the questions”, and may the set of rules given to him in English be named “programme”. Searle claims that now, by following the rules he understands since they are in English, the language he knows, he will be able to put together the elements taken from different sets of the Chinese characters text and piece a story in a Chinese language thou he would not understand it. Through connecting the elements and their correlating, he produces an answer (*output*) out of what is given to him in the room (*input*) by manipulating non-interpreted symbols. He simply behaves as a computer running computational operations with formally specified elements. Therefore, Searle concludes, (in order) to function in one context it does not imply understanding it, just like the computer and the programme are functioning, although they do not comprehend [19].

Let us this time confine/close Josef K. or simply K. instead of Searle himself in Searle’s *Chinese Room*. He does not know the semantics of the world he lives in; in fact, he is not familiar

with the *fuzzy* semantics because his semantics is rigid, semantics of the rigid designators, semantics of every possible world (Kripke), but not the semantics of every possible reality. However, the problem is even bigger in so far as, unlike Searle in Chinese room, K. does not receive neither precise procedural instructions nor the rules for connecting or correlating the elements of events in the context of *The Trial*. He actually has no directions whatsoever, and he is asked nothing else but to get carried away in his position (that he is the guilty one) and this is precisely what he is incapable of doing because he is constantly carried away that he is the innocent one. Josef K. is sharp (crisp) upon every contact, his claims are sharp his offsets are harsh, his logic is, in terms of Lotfy A. Zadeh the "*crisp logic*". From the beginning to the end of the novel he functions but does not understand anything, his functioning does not gradually evolve into an understanding in the way his trial gradually turns into conviction. From the viewpoint of the semantics of context, his process has neither sense nor reference. The events in his process are unrelated and do not follow (by) any rule. His trial has no truth value, because the words have no rigid meaning. His case could possibly be represented by function of belonging in one *fuzzy* set, yet his problem would not be solved by it. This means that such a context has no truth value: "absolutely true" or "absolutely false". What is missing for the context to have meaning is *identity of identity* (authenticity) or identity of the words with their meanings. The process is nominalistic, the meanings of the terms used are uncertain, the words are not rigid designators, for the most part there is no reference (object, state of affair, fact). Josef K. manipulates with the terms, words: the guilt, accused, questioning, defense, lawyer, court, clerk..., but he is not able to put together the rigid context, because the order of events is uncertain, and because the meanings are uncertain; he cannot interpret nor identify the world that exists behind these terms. In other words: the context of the novel *The Trial* is given in formal implications, but there are no material implications, consequently there is no possibility for recursive definition. The semantics of an uncertain world would actually be, in Aristotle's terms, homonymous identification of identity which is the basis for homonymous predication – things have a common name, but yet a different notion of essence designated with it (with a name). This "concept of essence marked with a name" (*kata tynoma logos tes ousias*) plays an important role in determining the meaning of words and sentences in Aristotle's logic and semantics: definitions created on homonymy are based on attributive heterological relation and not on the predicative homologization, they are logically unclear because they are based on coincidental relation of attributes with the substratum. The definitions of homonymous things are not the same (*auton*) but attributive (*idion*) [1, K. 1a1-15].

Josef K. is not able to interpret the symbols that surround him in the context because they are set up only as formal elements of one context, as common terms without firm meaning or the essence they designate, as words which have no reference or do not have a convention based ontology. Besides this, he has no precise instructions how to use these formal elements. He has no single direction on paper. He does not even have the invitation to go to court. He has no pile of documentation about his annual trial. He is being invited to questioning orally, over the telephone. His trial does not officially exist, but everybody knows about it. He interprets everything wrongly because he does it from his internal mental set, from his inner linguistic room, from his rational cage, wherein the *homunculus* Josef K. acts, which holds everything certain (precise), regulated, procedurally memorized, but to what nothing in the world corresponds, neither semantically nor structurally.

7. Identification of Identity of Identity

Logicity of one thought depends on the technique of unification and granulation of the conceptual content that constitutes one thought, and the meaning of one proposition depends on the technique of unification and granulation of parts of the propositions/expressions: sentencehood of a sentence depends on the semantic use and on the structural arrangement of its parts. What controls this arrangement? The arrangement of logical forms is controlled by the logical apparatus of quantification, identification, and generalization. How does one stand with the semantical arrangement? How is sentencehood accomplished? What is that which carries out the

“homologization” of linguistic forms (unification of designators) which is necessary to accomplish the identity of identity in language?

Analytic philosophy has opened a programme of demands so that the *sentencehood of sentences* of the natural language could be submitted to the *logicality of a logical form* of the proposition in that language. The demand for logic to be the grammar of a language – originally posed by Frege and then widely accepted and nurtured all the way up to the dreams of canonical notation, to mechanical translation of idioms of thoughts into the idioms of expressions [3] – actually tells us that the field of language is the field of contingency, and that the field of the logical is the field of necessity. To reckon with the contingency would mean breaking up with the terror of language over thought [9].

Let us examine these demands from the point of their essence. What does it mean to speak about the logicality of a thought? The logical structure of a thought, according to Frege [8], depends on the relationship between the parts of a conceptual content (*Gedankengefüge*), on the connectives (logical constants, logical operations) that stand between them, on the level of logical generality that one conceptual content possesses, on the quantifier that relates to the predicative part that is made out of conceptual words (*Begriffswörter*). The *homologization of predicates* is the basic law which should lead to the logicality of thought or to logical identity of identity in logic: to equal arrangement of logical generality of parts of the conceptual content that stand on the left and the on right side of the identity sign. This is accomplished only if all the parts of the conceptual content belong to the same genre, from the highest to the lowest; from the highest genre to the lowest species (subordination). Only then is there a cognitive synonymy and definition and “substantial identity” [12]. Only then do things have (a) common (and not the same) name and (the) same (and not a common) concept of the essence designated with a name (Aristotle).

We could also pose a question about the languageness (languagehood) of a natural language, like the language of Papuans. How much do the elements and structures of their articulated communication possess the abstractness of language and how many of them are mimetic and onomatopoeic in their character? From which relation should one derive answers to these questions, from comparison with our language, from comparison with similar languages, or from the investigations of the use of that very language itself, thoughts it expresses and reality it refers to? Hence, we have: the meaning of one sentence, the meaning of one set of the sentences, sentencehood of one sentence and sentencehood of one set of the sentences. But in the end not / but in the end we do not have: languagehood of one language – whereof it all depends?

We should not forget one other Wittgenstein’s claim from *Logische Untersuchungen*: “*Einen Satz verstehen, heißt, eine Sprache verstehen. Eine Sprache verstehen, heißt, eine Technik beherrschen*” [22]. For Wittgenstein it meant: to know the rules of the use of words and sentences in one language game. But, we can observe this from the viewpoint of that what is logical in a language game and say: technique that should be mastered is the technique of unification and granulation of language expressions and logical forms.

Is it not the same as speaking about the musicality of one music piece, about how its parts are arranged, do they hold together with one law of tone array and do they create *one* tonal whole, be it harmonic or disharmonic? Isn’t the tonic unification, a symphony that replaces the synonymy at stake here? Isn’t it the same as to speak about the artistry of one drawing or painting, about the photographicness of photograph? But, we speak of the photogenicity of a person: some person is photogenic, though not pretty. We make a difference here between the content of photograph, a person or some object, and the very form of photograph, its structure, relation of photo-elements. A person is photogenic, a photograph is photographic.

Some artistic painting is not as photographic as a photograph, but the set/the whole of color components, lines, surface, perspectives, voids, objects and their formation is a synthesis giving the painting the characteristic of splendid work of art, which, for example, truly represents one scene in reality, though it does not show something beautiful (Rembrandt’s painting “*The Anatomy Lesson of Dr Nicolaes Tulp*”).

Thus far, we have spoken of the logicity of propositions, even though it is spoken about the logicity of some acts too, some events, some actions, and some process. But, what is logic of propositions principally? I want to say something anarchical here: the logic of propositions is not concerned with the expressions of propositions, but with the thought it expresses, it is actually to be found in the *relation* between the parts of the conceptual content and this relation is that which enables that *one* part, assembled of a large number of expressions, expresses one thought for which we say is logical or illogical proposition.

Thoughts too have their parts. In logic, in order to be logical or illogical one thought always has to be assembled out of two parts at least: *if* part and *then* part. In logic, thoughts are always compounded of the premise and conclusion, antecedent and consequent. Though, there is one more thing to anticipate here: logicity of logic of some expression enables the identity of parts out of which the thought expressed in proposition is composed of. Belonging of all the predicates of one subject into the same genus, hence: substantial identity or cognitive synonymy. To what then does the predicate “true “ (proposition) refers to in propositions: to language expression or to thought expressed? Can this possession over the predicate true be discovered out of the very proposition itself, or do we need certain proposition about this proposition wherein we would say that it is true or false?

8. Recursive Adjustment of Identity

Cognitive synonymy is a recursive logical function composed of that which is *common* and that which is *same*. Form is that which is common and content is that which is same. Word / expression is that which is common and concept is that which is same. It is the model of logical and linguistic equivalence, model of equivalence of formal and material implication and model of equivalence of the world and reality. This is why Davidson held blindly to Tarski’s convention T, i.e. one-referring, mutual biconditional in trying to give formally satisfying and materially adequate theory of truth for one natural language or natural languages in general, even though Tarski used it for formalized languages only (the language of the calculus of classes) [20].

In logic, however, the paraphrase is not the same what the recursive definition is: paraphrase repeats the content, not the form, it transforms one and the same thought or one and the same logic of proposition into another expression, as in Tarski’s example of proposition inclusion (x_I) and (x_{III}) and the negation of their inclusion: “ $\neg(x_I x_{III})$ ” and “ $\neg(x_{III} x_I)$ ” formulated in the paraphrase $((\neg(x_I x_{III})))$ by which one logical relation of elements appears in two different language ways. Recursive definition, however, repeats both – the content and the form – with the exception that it puts predicate “is true proposition” (Frege’s “fact that _____”, or Wittgenstein’s expression “case that _____”) in metalanguage, in a predicative part, as is the case in the following example: “Proposition ‘Snow is white’ is true if and only if the snow is white”.

Let us now consider this from the viewpoint of difference that I want to introduce in this text, the difference between the logical unification which functions within the content (of thoughts, conceptual content) and semantical unification which functions in the expression of one thought, i.e. from the viewpoint of difference between (the) predicative and attributive relation through which the homologization of the content and of expressions on the both sides of the identity sign is accomplished by. It has already been mentioned that in the sense of logical reference the identification of identity of identity or the homologization of content of thought is based on *predicative/cognitive synonymy* by which the sense/thought/conceptual content is adjusted/arranged, and it has also been mentioned that in the semantical sense the identification of identity of identity or the semantic unification occurs/is based on the *homonymic predication/attribution* by which the meaning/reference/signified is adjusted.

I would like to supplement this relation of inference and reference now with the next characterization: the semantical unification of expressions goes above the highest genre/genus to which the logical unification/homologization of predicates reaches, and semantical granulation goes below the lowest species to which the logical granulation reaches. This means: *the semantical maximum and the semantical minimum do not coincide with the logical maximum and the logical*

minimum. This enables the language to function in the extra-logical, irrational, metaphysical, mythological, poetic, confessional and prophetic constructions.

For the moment let try to expand Tarski's T convention to show this duality of logical and semantical characterizations: (1) "Proposition 'Snow is a kind of precipitation' is true if and only if the snow is a kind of precipitation", (2) "Proposition 'Snow is white' is true if and only if the snow is white". In the proposition (1) "A=A" under the condition that "A=A", and in (2) "A=B" under the condition that "A=B". What's the difference? In (1) the relation is substantial, the subject is identical to itself, and in (2) the subject is partially or qualitatively identical only to one of its attributes.

The relation in (1) is generic and can be generically granulated: "Snow is a kind of precipitation consisting from pieces of tiny crystals of ice". In (2) generic granulation is not possible because it involves the attribute (real property, description) and not the predicate (logical characteristic, definition). Is the identity of these propositions adjusted in the same way or do we speak about the same degree of identities in both cases?

The unification of variables, logical and linguistic, should ensure the inner identity of identity (sense), and this implies substantial appropriation of the set WORLD {S} and the set LANGUAGE {L}. In the recursive adjustment of the identity of identity cognitive synonymy and linguistic synonymy contribute to connecting *the adjustment of inference* (logical identity, oneness, identity of conceptual content, substantial identity) *and to adjustment of reference* (linguistic identity, qualitative and quantitative identity, equality, similarity, identity of the meanings of words and the objects designated/signified, the sign and the signifier). Only in this way, by unifying the forces which have these two components, identification and representation, the adjustment and fitting to the "truth" aimed/targetted is possible: identity (identities, equalities and similarities) of the elements in the ontological structure of the being.

9. Conclusion

The central theme of this text could have been a consideration of Carnap's claim "To be is to be an element of the system" [2], or Quine's claim "To be is to be the value of variable" [18], or Wittgenstein's claim: "To understand one proposition is to understand one language...". This consideration, however, has immediately turned itself into a question of constant and variable, of rigidity of the constant and the *fuzzy* attributes of a variable. Can Quine's diagram be read as "To be an (entity) is to be the *fuzzy* value of variable?". Analytic philosophy became famous for putting on and taking off the quotation marks in trivial propositions "Tarzan loves Jane" and "Jane loves Tarzan" (TIJ & JIT), for searching the jungle of relations and classes of relations in order to find a place for a truth-valued predicate between the singular and general terms (predicates).

However, in the proposition "Tarzan is the king of animals", proper name is a rigid designator, while the predicative part is the logical structure of predicates of different generality. The concept "king of animals" is granulated into subordinated concepts: "king of terrestrial animals", "king of sea animals", "king of bipod animals", "king of four-footed animals", "king of reptiles"up until the last species and subspecies of beings included into the scope of the concept of animal. In the proposition "Tarzan is the king of jungle" the concept "king of animals" is implicitly given in the concept "king of jungle", included and unified in the logical space as logical generality of a certain rang. Let us observe the proposition "The snow is white": the noun "snow" is rigid designator, while it is impossible to granulate the predicative part within the same species, i.e. we would have to find a comparison (analogy) in the different species: as some other white object ("as milk").

The predicative part of the proposition or the context of the logical variable is *the compress of logical generalities* that can be granulated by going top-down like Plato claimed long ago (*Sophist*) that one should start from the highest fitted genre and descend by dividing each form into two forms up until the last species which can no longer be divided. Aristotle named this last species '*eshaton eidos*' or '*eshata ousia*', and Prorphyry as *eidikotaton eidos*.

Context has different levels of generalities: logical, ontological and semantical. *Logical granulation* of the concept “animal” and semantic granulation of the linguistic variable “animal” do not correspond, because in the first case what acts is *the predicative homologization* whose sphere goes only from highest genre to the last or the lowest fitted species, while what acts in the second case is the *attributive difference* which goes above the highest genre and lower than the last species to the granulation of accidental property (*symbebekos*).

Logical unification of variables, one procedure in monotonic logic that ensures identity and synonymic or cognitive belonging of all the relates on the two sides of the identity sign with the procedure of generic homologization or substantial integration of predicates (sufficient for the logical concept of truth that stands on the generic line of predicative parts of the content), has opposed to itself the *semantic granulation of variables* (so called *Computing with Words*), one procedure which came to term specially in *fuzzy* logic, which serves for adjusting the identity in the uncertain situations or contexts and one which stands on the attributive differentiation or on distribution of meanings of the expression parts for content that goes between the minimal and maximal belonging to one subject.

In the end: Who killed Josef K.? One? Someone? Everyone? The same context that killed K.? The context that killed “the first procurator of one large bank”? Fuzzy logic of an uncertain world? Context that killed “the house painter”? His rigid logic? His reactions caused by the uncertain context of the *Workshop* where he woke up in on his 30th birthday? The semantics of the nonexistent states of affairs in which he woke up, and for which he was trying to find an adequate logic? Logic or semantics or an invisible ontology? Visual or intellectual culture, visual or intellectual mentality, visual or intellectual states of affairs and processes? Nonexistent states of affairs, non-being that appears as the other of being? Repressive context of physical stimulations that started his perception and created psycho-nominal(istic) net of associations?

Philosophy and art, science and religion, have to seek answers to those kinds of questions in the ontology of an uncertain world, a world which has its own logic and semantics in the same way the ontology of the certain world, which exists only in transcendental-mathematical or theoretical constructions enabled by the rigid logic and rigid semantics has them.

Translation: Tijana Okić

References

1. *Aristotelis Opera*, Academia Regia Borussica (ed.), Ex Recensione Immanuelis Bekkeri. Volumen Primum. Editio Altera, Berolini, 1960.
2. Carnap, R., *Meaning and Necessity*, Chicago: The University of Chicago Press, 1956.
3. Davidson, D., “Semantics for Natural Languages” [in:] Davidson, Donald, *Inquiries Into Truth and Interpretation*, Oxford: Oxford University Press, 2001.
4. Davidson, D., “Reality Without Reference” [in:] Davidson, Donald, *Inquiries Into Truth and Interpretation*, Oxford: Oxford University Press, 2001.
5. Davidson, D., “On the Very Idea of a Conceptual Scheme” [in:] Davidson, Donald, *Inquiries Into Truth and Interpretation*, Oxford: Oxford University Press, 2001.
6. Davidson, D., *Subjective, Intersubjective, Objective*, Oxford: Clarendon Press, 2001a.
7. Frege, G., “Über Sinn und Bedeutung” [in:] Frege, Gottlob, *Funktion, Begriff, Bedeutung*, Göttingen: Vandenhoeck & Ruprecht, 1962.
8. Frege, G., “Gedankengefüge” [in:] Frege, Gottlob, *Logische Untersuchungen*, Göttingen: Vandenhoeck & Ruprecht, 1960.
9. Frege, G., *Begriffsschrift und andere Aufsätze*. Zweite Auflage. Mit E. Husserls und H. Scholz Anmerkungen, Herausgegeben von Ignacio Angelelli, Hildesheim: Georg Olms, 1964.
10. Frege, G., “Logik” [in:] Frege, Gottlob, *Logik und Sprachphilosophie*. Hamburg: Felix Meiner Verlag, 1986.

11. Ibrulj, N., *Filozofija logike*, Sarajevo: Sarajevo Publishing, 1999.
12. Ibrulj, N., "Holizam identiteta", *Pismo*, Sarajevo, 2004, pp.
13. Kafka, F., *The Trial*, Vintage Books, 2005.
14. Kripke, S., *Naming and Necessity*, Oxford: Clarendon Press, 1972.
15. Quine, W. V. O., *Word and Object*, Cambridge, Massachusetts and London: MIT Press, 1960.
16. Quine, W. V. O., *From a Logical Point of View*, New York: Harper, 1961.
17. Quine, W. V. O., *Philosophy of Logic*, New York: Prentice-Hall, 1970.
18. Quine, W. V. O., *From a Logical Point of View*, Second Edition, Cambridge, Massachusetts and London: Harvard University Press, 1980.
19. Searle, J. R., "Minds, Brains, and Programs" [in:] Haugeland, John (ed.), *Mind Design*, Cambridge, Massachusetts and London: MIT Press, 1980.
20. Tarski, A., "The Concept of Truth in Formalized Languages" [in:] Tarski, Alfred, *Logic, Semantics, Metamathematics*. London: Oxford University Press, 1956.
21. Wittgenstein, L., "Tractatus logico-philosophicus" [in:] Wittgenstein, Ludwig, *Schriften*, Frankfurt am Main: Suhrkamp Verlag, 1960.
22. Wittgenstein, L., "Logische Untersuchungen" [in:] Wittgenstein, Ludwig, *Schriften*, Frankfurt am Main: Suhrkamp Verlag, 1960.
23. Zadeh, L. A., *Fuzzy Sets and their Application to Cognitive and Decision Processes*. New York: Academic Press, 1976.