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ORDER OUT OF CHAOS - LINEARIZATION AND TIME

ABSTRACT

The current paper speculates on the LINEARISATION of time in language. It focuses on the feasibility of applying the hypothesis about the grammaticalization chain to conceiving of the hermeneutic character of language and the ontology of time and temporality in it. It draws parallels between language as a first order modeling system and mythology as an instance of a second order modeling system in order to promote the notion of linearization and narrativization as the major modes of cognition. The grammaticalization chain is used not only as a descriptive tool and technique, but also as the epitome of the phenomena being described. The hypothesis of the paper is that the grammaticalization chain inscribes the evolution of human emancipation from the phenomenology of the world, and the advance of discrete thinking. The fact that we need to be able to linguistically conceive of language in order to generate meaningful discourse organization is representative of the impossibility to ever get out of the hermeneutics of language. What is important is that no matter where we enter the circle the crucial threshold is TIME. Time is constitutive of language and subjectivity.

‘Linguistic picture of the world’ has been characterised as a collective, relatively stable, specific for a given linguistic community, mapping of reality into and onto language. This reality is reflected and restructured according to the values and parameters held meaningful and operative by this linguistic community. The analysis of all semantic units and categories in a language, whether overt or covert, throws light on the way people have grown to conceptualise different aspects of reality. As N. D. Arutjunova says (in Jakovleva E. S. “Fragments from the Russian Linguistic Picture of the World” in Russian 1994, Gnosis; Moscow) when we are trying to make a synchronic analysis of a semantic element we should appeal to whatever data is available for the history and cultural heritage of the linguistic community in question, in order to fully understand and estimate the real “valeur” of what we are studying.

‘Mythological picture of the world’ has not been so definitely formulated and explained. It has been described as a collective way of “holding “ immediate experience by clear, separate, mythical images. But for man the two have almost one and the same power of influence. “The word, like a god or a daemon, confronts man not as a creation of his own, but as something existent and significant in its own right, as an objective reality.”

(Cassirer, Ernst 1946, p. 36) The two pictures of the world (mythological and linguistic) belong to two different semiotic systems or at least codes – distinct modelling systems. This fact alone however cannot account for the striking differences of representation and conceptualisation of one and the same phenomenon in the two different systems. Especially if we consider the well-established belief that mythos precedes logos and that they are marked by a major degree of resemblance due to their relation if not of causation at least of succession.

This ages old reasoning has found a qualitatively new formulation in the concept of NARRATIVISATION. We believe that language can be conceived of as first-order narrativization of human experience. The cognitive faculty of language represents first level mimesis of modes of being into modes of perceiving via the mediation of modes of signifying. Language is a chaotic narrative of human civilisation. A linguistic model (every and any linguistic enquiry) tries to introduce a logonomic system that will render disparate linguistic facts interpretable in accordance with the imposed logos. Models of language transform the narration of language into a fluent topic-generated text. The latter is achieved only at the expense of excluding TIME (its phenomenology, ontology, linguistic being and power of influence) from discussions of linguistic import.

Time is constitutive of subjectivity and of language. The birth of chronotop is realised in language and the so-called “ordinary” conception of time is interpersonally generated. (Intrapersonally is a subtype of interpersonally) One of its linguistic expressions is the tense-modality system in natural languages. The question deserving a linguist’s attention is which of the types of time (universal time, calendar time, lived time, “ordinary time”, temporal time, time of the soul and time of the world) is represented in the tense-modality systems of natural languages? What is the role of TIME for the interrelations between subjectivization and grammaticalization? What is different in the modelling powers of TIME for the organisation of the so-called lexical strata and the grammatical system? One feasible answer can be arrived at by applying Langacker’s paradigm in cognitive linguistics, Lakoff’s idea of conceptual metaphor and the cognitive theory of the grammaticalization chain employed by

Heine, Claudi and Hunnemeyer to analysing linguistic facts from different genetically unrelated languages.

Time in this paper is not the abstract notion of the thing-in-itself. This is the object of scientific enquiry. 'Time' in this paper designates the way people conceptualise the ephemeral category and the way they utilise it. We are probing into the cognitive unconscious of the standard speakers of a natural language. The proponents of the conceptual metaphor theory claim that the basis of our conceptual metaphysics of time is space. We are tempted to say that Time is not Space. Time is motion through Space. Moreover in the grammaticalization chain identified by Heine, Claudi and Hunnemeyer and claimed to have universalist nature, Space appears only as a transitional intermediary step between person and time, i.e. space is only one of the possible source domains for the conceptualisation of time restricted to the use of prepositions or to specific temporal (or modal) notions. The chain itself has been presented in the following manner: "PERSON>OBJECT>PROCESS>SPACE>TIME> QUALITY. Each of these categories can be viewed as representing a domain of conceptualisation which is important for structuring experience. The relationship among them is metaphorical, i.e. any of them may serve to conceptualise any category to its right." This of course runs contrary to the localist hypothesis. Time as a source domain - two general metaphors have been recognised : TIME PASSING IS MOTION which Clark describes as moving ego metaphor and TIME PASSING IS MOTION OF AN OBJECT which is described as the moving time metaphor form the basis for one of the most conspicuous and important cognitive tenets of language the so-called second imaging system - "the deployment of perspective". "Given a structurally schematised scene, this system pertains to how one places one's "me look out upon that scene, including the location, the distance away, and the movement pattern of this conceptual perspective point. Belonging to this system is the category of perspectival mode, with its options of a steady-state or a moving perspective point." which is in practice a metaphorical extension of the category of time onto the category of epistemic rendering of information and has a superordinate level of functioning - structuring of discourse.

This principle, of course, finds its parallel realisation in the overall conception of the difference between literary narration (fictional narratives) and scientific narration (discourses of theorising). The major differentiating parameter that could be isolated is the prominence attributed to TIME, both on the explicit level of assuming

the latter to be the topic of discussion or as an influential factor, capable of causing facts (in the Piercian sense).

On the basis of a gestalt¹ framework approach to the elements of a language system or units of the products of this system, we try to postulate the thesis that TIME is operationally primary in relation to SPACE. It is subjectively more salient and subject-constitutive both on the psychological and linguistic level. Notwithstanding, “ordinary” time conceptions can only be born in the mental blends of language as a complex and unique (in terms of Benvenist’s classification of the inherent quality types of semiotic systems) semiotic system. Language is itself a logomomic system (at least when it is conceived of as discourse patterns) in which time is a categorial factor, a categorial phenomenon which structures social and cultural narration and an influential generative power. The focus of interest in this insurmountable pool of curious and worthy of consideration facts and possible perspectival construals we have restricted to subjectification, deixis, and conceptual metaphors and cognitive mechanisms for actualising the linguistic being of time. Language is (not only the grammatical scaffolding matrix of grammar) the only epistemological tool for approaching “ordinary time”. Literature, history, and other hermeneutic objects (or semiotic systems) superimpose their own logos and restructure TIME itself, while TIME experience its own ontology and exercises its full power on and in language.

Time has long been recognised as one of the major basic level categories. It is the second co-ordinating parameter which establishes and limits human existence in the universe. Humanity is confined by space and time which define its place in the universe. In semiotic circles time has been itself thought of as a major prerequisite for the persistence and growth of signs - Peirce’s synechism; as well as an object of investigation and analysis “Temporality” in “Phenomenology of Perception”, Merleau-Ponty 1962. Many philosophers have debated its nature in vain attempts to establish its character and mechanism of operation. Many physicists have discussed its physical and elemental properties. As yet no one can tell what time really is or explain why we have chosen to measure it by the mechanisms we have devised for this purpose, though even in the development of this mechanisms we can detect a parallel phenomenon of linearization. Presumably linearization is the human way of knowing. Linearization is associated with segmentation. Though we cognise through gestalts we tend to divide totalities into perceivable gestalts so that we can cognitively process them. The notion of time as a semiotic phenomenon also influences our

¹In Coseriu’s understanding of the term gestalt structure framework.

material culture - what type of physical object will we choose to represent time for us. In mythological times time was reordered and measured through festive activities and the calendar which was in close keeping with natural cycles and the processing of crops. Later on the watch was invented. By and by it appeared as a small object worn on the wrist in which people seemed to have captured time.

“The psychology of the world of objects” (M. Merleau-Ponty) is a big well for signs that point to matters of great significance and importance. From a semiological point of view watches are signs and their signifying aspects reveal what these objects reflect about the culture in which they are assigned to function. Digital watches reflect a growth of alienation in contemporary societies. (This brings us back to the two types of cultures - the closed and the open one. The closed is characterised by a strictly collective way of living of the community, where things and phenomena have values only in relation to the community as a whole, as a unified organism. With the disintegration of this collectivity and the emergence of the individual as the pacesetter and the measure of all things values shifted, the apprehension of everything changed. The different hierarchies of values that were slowly developed became characteristic of different groups within the same community. The disintegration of the unity coincided with the growth of alienation between the different groups and individuals. It is striking that a parallel can be drawn between this socio-cultural phenomenon and the development of the object designed to measure and register time. A digital watch flashes the time moment by moment, in contrast to the analogue watch which is based on relationality. The digital watch is atomistic; it divides time into discrete units, which flick by rapidly. The analogue watch sees time as something unified, and is rooted in history. Time passes but the cycle is repeated every 12 hours. Studies of the wearers of the previous generation of digital watches showed that one of the main reasons people bought digital watches was that they got a sense of power from being able to summon time by pressing a button, make the watch do something.

The change from the analogue to the electronic watch is parallel to the change from cyclic mythological time to linear scientific and everyday conceptions of time. The fact that a similar change occurs in two quite different codes seems to speak for itself. There might be something inherent in human nature which causes the opposing clash between the cyclic and the linear conceptions of time. The answer most probably is hidden in the fact that the human mind exploits linearization as its major means of acquiring knowledge and cognizing. Synchrony, the combinatory axis and the syntagmatic dimension are all projections of the LINEARIZATION principle

which constitutes the human way of knowing. By knowing of course is meant the so-called common sense knowledge.

We wouldn't dare seek the answers to such controversial, existential questions. We'd rather concentrate the attention on a peculiar phenomenon based on the premises of some widely recognised semiotic theories. Reference is made to Yuri Lotman's theory of the first and second order modelling semiotic systems. The term secondary modelling system somehow emphasise the derivational character of the second order system in relation to natural language. Yuri Lotman defined a modelling system as a "structure of elements and of rules for combining them that is in a state of fixed analogy to the entire sphere of an object of knowledge, insight or regulation. Therefore a modelling system can be regarded as a language. Systems that have language as their basis and that acquire supplementary superstructures, thus creating languages of a second order, can appropriately be called secondary modelling systems." (after T. Sebeok 1989, 25) Thus mythology turns out to be a resultant superstructure based on the primary infrastructure - language.

As far as time is concerned this postulate stands on slippery grounds if we face the issue of mythos and logos. It is a considerably spread belief that language is a first order modelling semiotic system while mythology is a second order modelling semiotic system. If we leave aside the questions of precedence and origin, this statement sounds like a solid one. But no one can deny that mythos was the first type of interaction with the world. The first form of worldview or picture of the world, while the conceptual constructs expressed through and formed in language follow suit in phylogenetic terms. If we accept to interpret their divergences in terms of function or to stick to Sebeok's definition of a secondary modelling system in which the notion refers to " an ideological model of the world where the environment stands in reciprocal relation with some other system, and where its reflection functions as a control of this system's total mode of communication," then we won't be bothered by the inconsistencies between the linguistic and the mythological pictures of the world. The latter will simply be the model program for the behaviour of the collectivity. It might be envisaged as the idealised corrective. Thus mythology will appear as the regulating mechanism in relation to society while language will be the operative or executive system.

Mythological picture of the world presents time as a circle. But this holds true only for the observer, not for the actual participant in the signifying collectivity that as single semiotizing consciousness creates for its own sake and of its own resources a picture whose function is to explain. Contemporary mythology on the

other hand has an interpretative function. It materialises its function as a prescribed evaluative scale postulated by a powerful group or an individual. It tries to subject to its terms not only the initiative body but impose itself on the recipient collectivity. This shift in the function of mythology inevitably changes the main co-ordinating determinants. Personal space and time are established and they run contrary to those of the collectivity as such. Ancient mythological conception of time as a circle implies a strife for eternity. But this eternity should imitate the here and now of the collectivity. Meanwhile contemporary mythology stresses the transient nature of things because its main purpose is to postulate the possibility of change, to define the concept of freedom so that it can justify the struggle for power.

Mythological description refers to a metatext, a text that carries out a metalinguistic function in relation to the datum; here the described object and the describing metatext belong to the same language. Therefore mythological description is monolingualistic in principle. Accordingly, understanding is linked with recognition and identification. Or in semiotic terms the mythopoetic conceptualising of the universe is a question of the transformation of objects, of understanding the laws of these transformations. This mythological consciousness is monolingualistic: this world's objects are described and experienced by means of this very same world, structured in the same way. The world is thus unified, though fluctuating. The immediacy of experiencing is not mediated by any intermediary system. Language appears to be that emerging mediating system. "..... the primary function of linguistic concepts does not consist in the comparison of experiences and the selection of certain common attributes, but in the concentration of such experiences, so to speak, in distilling them down to one point. But the manner of this concentration always depends upon the direction of the subject's interest, and is determined not so much by the content of the experience as by the teleological perspective from which it is viewed." (Cassirer, 1946, p.37) (Contrary to mythology where the experience itself has the determining role)

But this leads us to the following questions:

Is logos identical with language? Can logos and mythos be compared as adequate ways of interacting with the world? Can we safely say which precedes which in the development of human culture?

"The metaphysics underlying our own language, thinking, and modern culture imposes upon the universe two grand COSMIC FORMS, space and time; static three-dimensional infinite space, and kinetic one-dimensional uniformly and perpetually flowing time - two *utterly separate and unconnected* aspects of

reality.” (Whorf 1956, 59) (my emphasis) If we were still to believe in this separateness we wouldn’t be bothered by the cognitive linguists’ metaphors influence in important ways the basis of our thinking” (John Vervaeke and John M. Kennedy)

Contemporary cognitive linguists, whose main aim is to find out all possible relations of causation and conditioning of human way of thinking and cognising, claim that our conceptualisation of time is based on our sensual and rational conception and understanding of space (the other major co-ordinating parameter). Would this be so though we will be looking at a three-dimensional time which is as yet not true. It is true for the lexical subcode where we have three-partitioned time *today, yesterday, and tomorrow; now, after, before*, but in the tense system, which is part of the grammatical subcode, the three parts are thought of as sequentially positioned along a line. Besides, many linguists postulate that past and non-past exhaust the “arrow” of time. Moreover if space be the domain structuring the cognitive topology to be preserved in the conceptual mapping, how do we then account for the inherently two-partitioned space expressions: *here - there, up - down, left - right*?

Language is systematically grounded in human cognition, which in its turn is grounded in the conceptualisation of everyday experience by inference from the concrete to the abstract. (At the same time language is linear in its synchronic and syntagmatic aspects, but does not have the same characteristic as far as diachrony and the paradigmatic dimension are concerned. If we stretch the parallel further we will be struck by the network of correlating those dimensions in spatial and temporal terms: synchrony and syntagmatic relatedness are spatial in nature, while paradigmatic relations and diachrony are temporal in nature.) “Implicit metaphors influence our conceptualising by means of image-schemas, which are reduced, topologically structured, schematic representations forming an important underlying unit in our cognitive representation of meaning”. (Lakoff, 1980, 1987)

“The metaphor involves understanding one domain of experience in terms of a very different domain of experience. The metaphor can be understood as a mapping from a source domain to a target domain. The mapping is tightly structured. There are ontological correspondences, according to which entities in the target domain correspond systematically to entities in the source domain.” (Lakoff, 1989) “The Invariance Hypothesis: Do metaphorical mappings preserve the cognitive topology of the source domain.” (Lakoff, 1989) “It would also follow from this that a great many, if not all abstract inferences are actually metaphorical versions of spatial inferences that are inherent in the topological structure of image-schemas.” (Lakoff,

1989) If this be true why do we end up with this grand contradiction in the correspondences between cosmological time and space (Atlas held the flat Earth on his shoulders forever in cyclic mythological time while time flows in an arrow-shape in the three-dimensional space of the round Earth in the contemporary naive linguistic picture of the world) both in the code system of myth and in the system of language (or at least SAE Standard Average European)? What is more Eve Sweetser maintains that “we have universal, perceptually determined possible options for , 1990)

Could that be the human strife for order: the dichotomous strife, the binary principle that even Derridian deconstruction could not undermine? To keep the balance of the universe we need opposites; maybe these are actually space and time in our naive cosmology. To delineate space and time we use the principle of the sign - syntagmatic compatibility (they combine to produce the basic human co-ordinate system of orientation and experience of the world) and paradigmatic opposition (flat or line vs. roundness or cycle). In some cases there is a deep cognitive predisposition to draw from certain particular concrete domains in deriving the ways of understanding a given abstract domain. The central question is therefore what is related to what in our meaning-structures. The Earth is associated with stability and constancy, with statics. Time on the other hand is associated with change, motion and instability. Maybe that is one plausible reason for their diametrically opposed conceptualisation in broad cosmological terms. At the same time in terms of human space and time, the first can be immediately experienced and measured. The second is elusive and inconceivable. But since the two are inseparably related in their capacity of co-ordinating determinants of human orientation in the world, it is not implausible to suppose that their relation on the metaphysical level is transferred to their mundane conceptualisation of everyday phenomena.

In linguistics the most accepted division of tenses (tense being the immediate sign-vehicle for time in the system of language or at least in its grammatical subcode) is of course a three-fold one. But the issue at stake is only the sign-vehicle not the semiotic object itself. The present, past and future divisions of the tense continuum are placed along the arrow of time. This comes to show that time is conceptualised as a line stretching indefinitely. The points of interest up to now were concentrated on the controversy of whether we humans, the receptors of time progression, are static and just observe the flow of time, or whether we are the ones who move with the time arrow being static, somewhere there and forever. This means that there will be major differences in conceptual metaphors with great influence for metaphysics,

provided we take a definite stance in relation to this controversy. This however will not change our linear conceptualisation of time. It would only change our conceptions of subjectivity and human capacity to be the agent in the world.

Let us go back to the linguistic side of the controversy. Can we claim that the verbal categories of tense, mood and aspect are the three-dimensional representation of time corresponding to three-dimensional space? If this were so what are the metaphoric projections that predetermine and correlate the two major categories (space and time)? What is the reason for space being the source domain? And if we accept as true the Invariance hypothesis of Johnson and Lakoff how could we account for the vast discrepancy persisting in human conceptions of the universe's space and time. In mythological times the Earth was believed to be flat (i.e. the major prototype and model for space representations) while time was conceived of as progressing in a cycle. Today the undisputable belief (physically and experimentally proved) is that the Earth is a sphere (a slight diversion from cyclicity) and that time progresses in a one way direction (which might eventually lead to a change in the perfect sphericity of the Earth as a planet). It is clear that such issues yield for the time being only hypothetical speculations and cannot be proved or falsified empirically. One should not be carried away by the sense of freedom generated by this fact and concentrate at least on analysing the essence and value of the postulated correlations from the point of view of semiotics.

Might this drastic change in time comprehension be accounted for with the issue of establishing an identity with the problems of the semiotic self? Undeniably permanence is a temporal characteristic and a major prerequisite for establishing and maintaining a constant identity. (Man is a symbol says Pierce and as every sign needs a pattern of use and recurrent form and a definite range of meanings so that it can be recognised as that particular sign, identity of the semiotic self needs a perspective unfolding somehow so that the permanence be established against some kind of ever-changing flow.) Linearity establishes self-awareness by allowing the subject to project himself in opposition to the other who is **there**.

But what exactly does linear time mean or for that matter cyclic? In most cases the notion of cyclic time is represented by the cyclic repetitiveness of primordial mythological patterns and prototypes under different disguises. The linear type of time is envisaged as the unchanging mundane routine of contemporary everyday life. The mechanism and essence of contemporary mythology or the act of mythologizing different aspects of life has almost nothing to do with that of ancient mythology which in particular stands in the focus of our attention. Mythology per se

is a way of experiencing, an evaluative scale of interacting with yet an enigmatic world. Probably contemporary mythologizing aims at revaluation applicable only to a restricted community of believers in the Piercean sense. Ancient mythology tried to establish a balance, to postulate a routine, to maintain order in which things might be assigned their proper meaning and essence. So the cycle was a source of comfort, of assurance that the ideal is never lost, people are always somewhere around it and it awaits their arrival. Past and present and future have no value judgements attached to them. With the establishment of the Christian religion as a form of religious practice and conception, this order of the hypothetical division of time into past, present and future seemed to change. The Sin and the Saviour attached definite values to the flow of time. The wrong should be in the past. The good awaits us in the future. The present is most valuable because it delimits our existence. Human psychology and consciousness seem not allow for a different arrangement. Guilt and fear are the major powerful correctives that predetermine the established ordering. Mythology as creative hermeneutics renders myth making as an analytical process. "The Christian claims to be unlike other men: he dwells amphibiously in two worlds. Born into the realm of time, he is likewise sacramentally *renatus in aeternum*. As a result, for the Christian every event has a double but unified significance appropriate to the duality of his existence. He enjoys two modes of perception, two distinct but simultaneous ways of viewing each phenomenon; he has two types of information, not *drawn* from time and eternity respectively, but *seen* from them just as we see a thing through two eyes. He likewise uses two methods of expressing these parallel perceptions: one is history; the other is myth." (Lynn White, Jr. 1968, p. 35) (It is worth mentioning as an aside that Christianity was used as an explanation for the change of time conceptions even in linguistic terms. Coseriu used it to explain the appearance of modal-like periphrastic ways of expressing futurity.) In-between is temporally and spatially located our mundane immediate existence which we experience and which is projected in our cognitive subconscious.

As Mark Johnson says "We come into existence as a culmination of a reproductive cycle. The simplest CYCLE schema is thus represented by a circular motion. This circular representation of the CYCLE is inadequate insofar as it fails to include a salient dimension in our experience of cycles, namely, their climatic structure." (Mark Johnson, 1987 p.120) Here to our help comes the PATH schema which has a climatic end in view. The two schemas combine to produce our naive conception of time. The Cycle schema manifests a definite recurring internal

structure, while the Path schema stretches spatially contiguous entities to establish a link between them and render them as progressing and developing.

So after all, mythos has left its conspicuous traces in logos. Deeply rooted in our cognition the cycle is not stretched but diminished to “conventional” cycles that follow each other in a linear succession. The schema of the linear succession is the PATH schema, the one that has a final goal in view. After all, we have to make out a reason and a purpose of our existence.

Just as diachrony can be postulated only according to a definite synchronic stretch, so time cyclicity can only be perceived as and through a repetition of a period stretch.

A cycle or a line is a question only of perspective. Perspective in art (yet another semiotic system in which the conceptualisation and expression of time is dubious) has been formulated as a way of seeing in a subject's space. Seeing is a way of knowing and what's more the sense of vision has been recognised as the source domain for conceptualising the abstract domain of mental perception knowing. It would hardly be too farfetched to claim that whether time is a line or a circle is a question of the position that the subject of perception occupies with respect to the object being perceived. The Earth when it was the only cosmic object known to people was perceived and thought of as being flat. Only after people managed to ‘move away’ from its surface did they realise that it was spherical. The same principle applies to time. It can be perceived as a circle only from a posterior point of view. Is it possible that only for us, people living in an interpretative mythology, the explanatory mythology of ancient times conceptualised time as cyclic? Most probably yes. IS or the presentness of time is the key to self-awareness. It is never cyclic, though the preservation of self-awareness needs the permanence of cyclicity to maintain itself through the elapsing time of being.

The philosophical lure of a universe without birth and death can be very compelling. The notion of cyclic time runs contrary to Big Bang creation model. The last is fully in keeping with the linear conception of time. In 1946 two British astrophysicists Hermann Bondi and Thomas Gold speculated that if the universe appeared the same (on the large scale) from place to place, perhaps it also stayed the same from time to time. According to their theory there is not any possible change in the universe just a constant alternation to keep the balance. Matter enters the universe all the time. The overall behaviour of this unchanging universe is therefore not static, but steady state. Just like the steady state equilibrium of the “structured mass of overlapping, interwoven, and sometimes conflicting

conventional cycles” (Mark Johnson, 1987 p.120) of our routine and our conceptualisation of temporal connectivity as a series of “temporally interceding events.” (Mark Johnson, 1987 p.118); as our ability to interpret the circle as a line and the line as a circle.

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