

Oleksandr Kolesnyk – filologijos mokslų daktaras, Kijevo Boryso Grinčenkos universiteto Germanų filologijos katedros profesorius (Ukraina) Moksliniai interesai: semiotika, pažinimo studijos, kultūros studijos, mitologija El. paštas: axli@i.ua

Oleksandr Kolesnyk – Doctor of Philology, Professor at the Chair of Germanic Philology, Kyiv Borys Grinchenko University (Ukraine)

Research interests: semiotics, cognitive studies, cultural studies, mythology

E-mail: axli@i.ua

Oleksandr Kolesnyk

Kyiv Borys Grinchenko University, Ukraine

SYSTEMIC UNIVERSALIA IN LANGUAGE, MYTH AND CULTURE: METHODOLOGICAL REMARKS ON INTEGRATED INTERPRETATIONS

Abstract

This article addresses universal laws of the functioning of open systems involved in myth-oriented semiosis, categorisation and world-modelling. The paper focuses on isomorphic regularities occurring in irrational rationalisation and respective verbal phenomena. The outlined systemic and inter-systemic interactions are interpreted from the standpoint of M-logic methodology, semiotics, cognitive linguistics and cultural studies. The paper suggests formalised notations for logical construals, and demonstrates the cognitive premises of myth-oriented designations and the etymological reconstruction of a basic operator's content.

Key words: myth, culture, regularity, system, pattern.

DOI: http://dx.doi.org/10.15181/rh.v28i0.2231

Introduction

Modern globalised 'informational' civilisation faces numerous challenges: ecological demise, military conflict and hybrid wars, technological advances that aggravate the human invasive impact on nature, ideological crises, cultural 'fusions', epidemiological issues, etc, as well as typically human auto-destructive and competitive patterns of behaviour. In this context, the irrational component of categorisation, secondary myths and verbal construals functions as 'navigational stimuli' for social and cross-cultural interactions, subcultural transfor-

mations, political discourse and scientific research. Present-day linguistic studies demonstrate a tendency towards interdisciplinary interpretations (Forceville 2012; Zhabotynska 2019; Домброван 2020; Клименюк 2010; Терехова 2018). Therefore, we attempt an integrative analysis of language units verbalising mythical concepts and mythical scenarios. This article discusses universal patterns of the functioning of open systems (Bertalanffy 1968; Minati 2002) which impact the algorithms of irrational rationalisation and the respective verbal construing of alternative realities.

We address the phenomenon of irrational rationalisation as a set of interpretative cognitive operations and logical procedures that result in the generation of specific informational quanta pertaining to possible states of affairs within certain (observable, conventional, shifting and fuzzy, imaginary, etc) coordinates. Sets of interpretational procedures are triggered by either irrational incentives (relevant to states of 'expanded consciousness' associated with inspiration) or rational pragmatics (engineering pre-designed alternative worlds, fake realities, etc). In both cases, cognitive activities employ inchoative axiomatic (thus irrational or 'mythic') structures as interpretational prisms or basic operators. These basic operators are identified as components of the mythical space (MS, an energy-informational continuum represented in the semiosphere and materialised in national language world-views), primarily mythical concepts and mythical scenarios, as well as diachronically created secondary mythical structures or derivative simulacra.

Irrationally triggered, motivated and 'tuned' scenarios of systemic interactions which demonstrate different degrees of automatisation and recur within ever compressing time spans due to the increasing volume of information modify the configuration of the human 'sense field'. These semiospheric transformations impact the ways of categorisation, the patterns of human interaction with the world and social groups, as well as human biological features as a species:

...SYS {cycle n} > SYS' {cycle n' = myth / MS [stimulus / governor] \rightarrow practical (interpretational, cognitive, communicative...) activity [recurrent / recursive automated patterns] \rightarrow genetically embedded species' features [operational 'drivers' for standard patterns of activity]} > SYS' {cycle n'} ...

We approach the respective national linguo-cultures and language world-views, primarily their myth-related segments, as containers of verbal correlates of basic patterns regulating inter-system interactions. These patters appear to be isomorphic with the fundamental laws of nature that define the functioning of open systems in space, time and energy exchange.

Discussion: methodological premises of analysis

Addressing lingual phenomena of diverse nature, we carry out an interdisciplinary multi-vectored analysis of verbal signs representing mythical concepts and scenarios. This integrated approach encompasses analytical and synthetic procedures, and focuses on the reconstruction of inchoative irrational axioms. The focal points of the employed approach towards lingual, cognitive, social and cultural phenomena are the following key concepts, which constitute the 'M-logic' (Kolesnyk 2017), namely:

- 1) the neo-anthropocentric or rather eco-centric perspective of analysis and interpretation (shifting the focus from the personality towards the functioning of natural systems, establishing the correspondence between the studied phenomena and the universal laws of nature) (Capra, 1996; Brier, 1999).
- 2) the irrational 'mythical' determinism of verbal designation processes and respective cognitive/conceptualising procedures, i.e. the irrational premises of myth-oriented semiosis as the basic mechanism for creating alternative realities. Considering the universal nature of causative relations between oversystems, systems and subsystems, we apply the following model to: (a) the structure of the

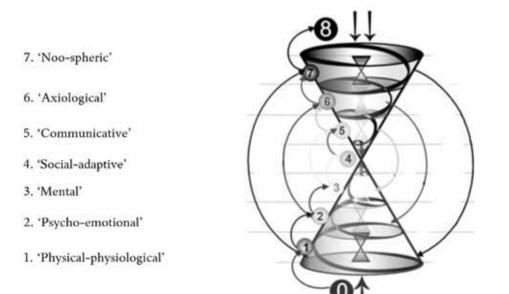


Figure 1. Hierarchical structurestructureure of an open system

language system and potential lingual signs; (b) verbal construals pertaining to the 'activated' state of the system; (c) existential modes of a language user (Figure 1).

- 3) the non-linear causative logic of interactions between systems and their components (establishing multi-dimensional volumetric relations between phenomena and notions) that corresponds to the principles of the development of open systems and the enigmatic nature of bifurcations marking their transitional states (focusing on hierarchical correlations, compensatory mechanisms responsible for the sustainability of systems, a dialectic balance between systems' entropic dynamics and the tendency towards homeostasis, etc) (Minati, 2002)
- 4) relativity and the 'fuzzy' nature of both mythical phenomena in their ontology, their mental interpretations, and verbal representations. The notion of 'fuzzy entity' (FE) refers to both elements of MS and phenomena inaccessible via standard rigid logic (Zadeh, 1972). Sets of Fes' conceptualised features (as well as the respective energy-information quanta) form clusters with flexible (dynamic, diffuse, 'fuzzy') contours shaped by causative, associative, partitive and locative-transformational attractors: Δa_n (ontological features), Δb_n (functional features), Δc_n (axiological features), Δd_n (locative features), where n stands for the degree of a feature's manifestation within a changeable range.
- 5) enigmatic phenomena (EPh) involved in shaping myth-related possible world (allowing for implicit connections between systems, fuzzy [vague or hidden] parameters of objects involved in scenarios, unpredictable contours of expected informational developments caused by irrational [mythical or supersystemic and thus unknown] reasons). Therefore, we regard an EP as both a marker of a system's entropy and a trigger of dynamic (arguably evolutionary) transformations.

In the context of non-rigid categorisation and mythical operators' impacting communication and world-modelling, verbally mediated quantum transitions that involve EPhs appear as:

(scen n') IN x (R/M

IN x (R/M) $\sum a_{n}b_{n}c_{n}d_{n}$ $trans(\Delta \varepsilon / MSa_{0}b_{0}c_{0}d_{0})$ OUT Δx (R/M) $\sum a_{n+1}b_{n+1}c_{n+1}d_{n+1}$ \exists (scen Δn ') IN x (R/M) $\sum a_{2}b_{2}c_{2}d_{2}$ trans ($\Delta \varepsilon / MSa_{0}b_{0}c_{0}d_{0}$) OUT Δx (R/M) $\sum a_{2+1}b_{2+1}c_{2+1}d_{2+1}$ This reads: for any variant of scenario \mathbf{n} ' involving a real or mythical object \mathbf{x} and employing verbalised data on its ontological (a), functional (b), locative-temporal (d), and axiological (c), features revealed to a degree n, provided there is a set of causative factors (an impulse, energy $\Delta\epsilon$) and the influence of mythical basic operators that outline the object's prototype parameters (MSa- $_0b_0c_0d_0$), the scenario results in the object's expected transformation reflected in its parameters' change $a_{n+1}b_{n+1}c_{n+1}d_{n+1}$ there is yet an unpredicted scenario $\Delta(n')$, characterised by fuzzy/unknown data at the 'input stage' and an unexpected transformation of the object at the 'output stage'. If the system undergoes a positive adaptive transformation (scen $\Delta(n') = 1$) the following quest-type scenario sequence unfolds: scen $n' \to \text{scen } \Delta(n') \to \text{scen } n'+1$, where states of affairs are close to expected ones.

If the scenario fails due to a lack of data, the deterioration of the object's parameters, or failing to achieve the expected goal, then: scen $n' \to scen \ \Delta(n') \to scen \ n' \infty$, i.e. the scenario re-occurs with different input data or: scen $n' \to scen \ \Delta(n') \to scen \ -n'$, i.e. the object is annihilated.

As the object \boldsymbol{x} is not the only 'fuzzily parametric' participant in scenarios, we exercise the idea of the scenarios' virtually unlimited range of variation. The degree of variation in the objects' parameters Δ largely depends on the characteristics of lingual signs that designate it, primarily on account of the possible multiple interpretations of their semantics.

- 6) inversion as a fundamental property in the fluctuations of systems (apart from bifurcations) that are caused by an excessive level of hierarchically diverse unbalanced systems' entropy and their adaptive metamorphoses determined by universal laws of the development of systems. M-logic exercises the mythical principle 'above is as below', and traces common features in various systems' componential rearrangements targeting primarily the re-orientation of semantics and senses as well as transformations of the respective spaces. A large-scale culturally relevant inversion is the historic migration of MS from the nuclear segment of world-views to the periphery and back.
- 7) isomorphism between lingual code-ons' carriers (sounds) and their inner form, the latter associated with wave-like neural processes pertaining to perception, interpretation and the transmitting of information 'riding' the principle of iconicity and the mechanism of intersystem resonance (isomorphism between semantic and neurologically generated fields responsible for the work of an irrationally 'tweaked' 'collective mind').
- 8) synchronic-diachronic or 'stream-like' mode of lingual data within the semiosphere (accessing the entire database of the human semiosphere targeting universal patterns of informational exchange and respective lingual codes' paral-

lels; considering contrary inchoative informational quanta involved in the conceptualisation/modelling of worlds (conceptual oxymorons like 'ordered chaos', 'living dead', and 'dark light' etc) and identifying wave-like semio-genesis as a means and manifestation of cognitive projections of the multitude of possible worlds and realities.)

Except for these interdisciplinary considerations, in our analysis and interpretations of lingual data, we exercise 'broadband analogue networking' based on the principle of gnoseological relativity (Gödel, 1949), i.e. identifying the synergetic interaction patterns common to systems of diverse etiology and traditionally tackled from specific scientific vantage points.

Discussion: universal patterns of systems' interaction in the analysis of myth-related verbal signs

In the integrated multi-aspectual analysis of verbal units denoting components of MS we reconsider algorithms of the interaction of open systems that are isomorphic to the laws of nature and, arguably, to the patterns of natural language functioning and respective cognitive mechanisms. Considering the universal laws of similarity (fractal expansion), causality and cyclical development, we also register the enigmatic nature of systems development vectors in any segment of time-space. The said systemic properties appear to be factually copied at various levels of existence (including lingual phenomena, hence their multiple relativistic interpretations and categorically flux synthetic inferences on account of the variable dynamic states of affairs in alternative realities of diverse etiology). Thus, we speak of the following common premises of linguo-semiotic, mythical-conceptual and cultural phenomena.

1. **The law of polarity** (dialectic unity of opposites) that applies to contrary parameters of any open system's terminal components and contributes to their instability *in principio*. As a system strives for balance and order, its asymmetry and entropy stimulate its adaptive, progressive and inversive transformations.

This dialectic fusion manifests itself on the structure of conceptual oxymorons. The latter stand for binary relatively static patterns that encompass contrary features of mythical concepts, thus representing the whole range of their potential orientations, reflect the ambivalent nature of mythical axioms, and facilitate systems accepting contrarily directed misbalancing impulses from diverse conceptual hierarchies (worlds) and entering evolutionary (adaptive) or destructive (entropic) transitions. These types of oxymorons (like KNOWN MYSTERY, LIVE [UNDEAD], DESTRUCTIVE PROTECTOR, ORDERED CHAOS, GOOD EVIL) depend on sets of contracting features' reference and hierarchical affiliation.

For instance, the following designations refer to the possible identification of contrarily oriented spatial objects: Si an ghealach, // mall san oiche // 'Si an ghrian 'This is the Moon in the night, this is the Sun'; or temporal-existential phenomena: Si na Samhna, // tús na Bliain Úr. // 'Si an crann marbh. // Deireadh an tua 'This is Samhain, the beginning of the year. This is a dead tree, the end of the year' (Enya 1992);

Systems' dynamic transformations in space-time can unfold as transgression (repolarisation accompanied by a break in basic functional patterns) or inversion (reprofiling and rearranging the systems' components). For example, the concept of ANTHROPOMORPHIC BEING which 'rides' the overlapping conceptual oxymorons HUMAN INHUMAN and INHUMAN HUMAN, while both structures are capable of inverting into each other as a result of mythical scenarios like MAGIC TRANSFORMATION, cf. *Geralt znikąd. Jestem wiedźminem. ... Mój dom, to Kaer Morhen, Wiedźmińskie Siedliszcze. ...Tam produkowało się takich jak ja. Przeszedłem tam zwykłą mutację.* 'Geralt from nowhere. I am a witcher. My home is Kaer Morhen, the witchers' settlement. Ones like myself were made there. I underwent a regular mutation there' (Sapkowski 1998, 118).

Cf. also designations of fundamental existential phenomena correlating with the oxymorons LIVE UNDEAD and LIGHT DARKNESS: '... какие преграды из ткани Сущего смогут остановить существо, созданное из <u>лоскутьев Света,</u> сшитых нитями Тьмы?" 'Which obstacles made of the tissue of Life can stop a being created from the shards of Light sewn together by the threads of Darkness?" (Перумов 2002, 408); as well as a number of spatial concepts that appear as variants of the STRUCTURED CHAOS oxymoron: Things from the Dungeon Dimensions, clustering around the magical leakage and constantly probing the walls of reality (Pratchett 2000, 28), implying the idea of Multiverse comprising hostile subversums; Прокляття земної долі 'The Curse of earthly fate' (Соколян 2008, 21), where the 'inverted heaven' provides operational space for DESTINY. In a broad sense, virtually all human practices (cultural, cognitive, semiotic, etc) demonstrate structural and semantic features that fit the oxymoron UNIVERSAL UNIQUE. The logical of irrational rationalisation, peculiarities of MS's content, individual pragmatics and peculiar extralinguistic contexts, generate specific (mostly conflicting) world-views which are still compatible.

2. **The law of reiterations** correlates to the phenomenon of fractality as infinite iterations of a scaled structure of a certain object/process which occur within the interior systemic dichotomies (initial oxymoron-like structures). With regard to MS's functioning and verbal world modelling, this law manifests itself as the multiple accentuation of the respective basic concepts or contextually

profiled features of the world (as states of affairs within it are expected to change, due to repeated verbal designations of its constituents).

This accentuation is based on the polysemantic nature of language units, as well as the pragmatic 'equi-finality' of synonymic units' functioning. For instance, Old English designations of the KING/RULER are based on a number of conceptual metaphors and metonymies that are reinforced multiple times:

KING IS A PROTECTOR/DEFENDER: eodor Scyldinga 'defender of Scildings' (Beo, 428, 662), seleweard 'hall guardian' (Beo, 667), eorla hleo 'protector of thanes' (Beo, 791, 1034, 1866, 2189), folces weard 'guardian of people' (Beo, 2513), wigendra hleo 'protector of warriors' (Beo, 429, 899, 2337), helm Scyldinga 'helmet of Scildings' (Beo, 1321);

KING IS A RULER: frean Ingwina 'Ingveons' ruler' (Beo, 1319), gumdryhten 'lord of the clan' (Beo, 1642), mandryhten 'lord of people' (Beo, 2647);

KING IS A WARRIOR/WARLORD: wigena hlaford 'warriors' lord' (BM, 135), *Hreŏcyning* 'victory king' (Wid, 7); *Herefarena cyning* 'king, the lord of the army' (Wid, 34), *sigedryhtne* 'victorious lord' (Wid, 104), *leoflic lindwiga* 'beloved shield-bearer' (Beo, 2603);

KING – GENEROUS: *hira beaggyfan* 'giver-of-rings' (Beo, 1102), *sinces brytta* 'breaker-of-treasures' (Beo, 607, 1170, 1921, 2071), *beaga bryttan* 'breaker of rings' (Beo, 35, 352), *sincgyfan* 'giver-of-treasures' (Beo, 1012, 1342; 23:278);

KING – OUSTANDING: *þegn ungemete* 'unsurpassed ruler' (Beo, 2721), *selestan sæcyninga* 'the best of sea-kings' (Beo, 2382), *unforcuð eorl* 'noble thane' (BM, 50; Wid, 12).

These units denote a KING as a subject of superb qualities and a prototype member of a social group who is therefore capable of sustaining the connection with the oversystem (the SACRAL SPHERE) and transmitting the system's 'development programme' suggested by the oversystem. Designations of the KING in texts and discourse counstruals of different historic periods refer to the same features, thus implying the tactical effectiveness of the unfolding scenarios or the strategic correction of the current state of affairs, cf. *In Aragorn Elessar the dignity of the kings of old was renewed* (Tolkien 2000, 364), i.e. the respective status is gained due to the king's facilitating a number of successful quest-like scenarios which save the world.

In a strictly linguistic perspective, the principle of fractality corresponds to the principle of analogies: ablaut gradations appear to be patterns of 'quantoring' verbalised information; diachronically stable root morphemes iconically represent 'basic functional scripts' of the denoted object/phenomenon, etc. In a broader sense, we regard fractality as copying the internal structure of MS and its segments, and applying their architecture to the modelled realities of different

levels. A modelled reality (a possible world as a semantic, logical, mathematical model or an ontologically observable/empirically inaccessible continuum) follows the logic of irrational rationalisation, and arises as a sequence of 'inlaid isomorphic and isofunctional loci that construe a focal object, a world's centre within a ritualistic-mythical tradition'. Therefore, changes in any segment of the mythical 'matrix' of the world cause changes in its other sectors, regardless of the distance between them in the physical ('real', observable) time-space (Kolesnyk 2019).

However, fractality does not negate the variability of mythical scenarios. The latter unfold according to the laws of Nature (rather than solely human factors), which are implicitly present in the national cultural codes. While fractality is reflected in the traditional idea of a human as a micro κόσμος i.e. [13], anthrop systems (mostly unnatural in terms of their pathological impact on nature) are capable of reaching the plane of the oversystem, and introducing changes to it by resolving the conflicts between CULTURE and NATURE (in case of eco-centric projective world-modelling). The inner form of a designation unit denoting a fragment of MS contains condensed models of all possible variants of the respective concept's functioning within mythical (myth-oriented, secondary, possible, etc) world-views and conceptualised inter-systemic relations. The fractality of MS's architecture provides equally ranking polycentric conceptual and semantic interactions (an analogue to the universal mythical principle of 'participation' referring to a natural state of affairs) within a verbally mediated 'multiverse'. Incorporating fractal interaction into analysis allows us to see beyond the 'supernatural' or 'magic' features of phenomena, objects and processes and their transformations.

3. The law of conservation (of mass, energy, etc), which could be identified as 'the pattern of similarity and consequence' as an expansion of the law of reiteration, manifests the universal triadic hierarchical correlation of systems, their constituents and clusters of systems in terms of their causative-consecutive relations. According to this law, a system absorbs prior experience, and adapts effective patterns of energy-information interaction for new contextual conditions (configurations of the focal senses correlating to the universal patterns of systems' interactions reiterate at various scales). MS as the container of inchoative interpretative axioms is regarded as a subsystem. The semantic space of a given culture provides the choice of basic interpretative operators, thus functioning as the attractor at a systemic level. Consequently, the semiosphere as the container of diachronically shaped quanta of senses (universal human experience) appears to be the attractor of the super-systemic level that defines the purpose and peculiarities of the system's functioning.

The hierarchical (hypo-hyperonymic) relations between the triad's components create a 'field of possibilities' that defines the trajectory of the development of objects belonging to one of these planes or migrating between them. The purpose and strategic programme of development are defined by the over-system (superordinate plane of existence). The system itself chooses and implements the tactics of development at the basic level of existence. Subsystems belonging to the subordinate plane of existence provide the inventory of means, tools and specific techniques for implementing scenarios which target pre-set goals.

As the cognitive tools employed by the subjects at lower levels of the triad are normally insufficient for comprehending the holographic image of the world and the sense of existence pre-designed by the oversystem, different mythical traditions associate the latter with 'higher powers' (Germanic wyrd / Örlög, Slavic, Ukrainian $\partial o n n$, etc) or extraordinary beings like gods. These supersystemic entities govern the systems, which are represented by the triad Nature-Person-Society (equi-ranking and cooperating according to the principle of participation in the eco-centric perspective, yet distorted human-dominated in the current 'real' state of affairs). Diverse social institutions, artefacts, languages that facilitate the flow of mythic scenarios, are identified as subsystems.

4. The law of cyclical development (correlating to the dialectic law of the passage of quantitative changes into qualitative ones, as well as the pattern of systems' phasal transitions) outlines the sequences of involution/evolution stages in the development of cultures, world-views and informational fields. The same logic applies to sequences of analytical and synthetic procedures in scientific interpretations, material (corpuscular) and wave (quantum) premises of ontologically observable objects, deviation from the norm, the introduction of a non-normative element into a system and the rise of a new norm, migration of MS from the nuclear part of world-views to their periphery and back, etc.

With regard to lingual and conceptual phenomena, this law describes the migration of conceptual domains within world-views as well as profiling/shading certain components of the language units' semantics, and the recurring reorientation of axiological and evaluative connotations of the units denoting mythical concepts. For instance, reconstructing the etymology of units denoting the WITCH concept results in seemingly contradictory interpretations (for a detailed discussion, see [Liberman 2008, 215-224]). The controversial etymologies (empirically non-verifiable due to the lack of experience concerning respective practices) reflect terminal features outlining a conceptual sphere structured around the WITCH concept:

(1) O.E. wicce, wicca 'witch', 'witcher', wiccian 'to use spells', wīglian 'to prophesy, predict', wīglere 'wizard', gewīglung 'spells' < Germ. weihs 'holy' (~

- Lat. *victima* 'victim', containing the feature {['to separate'] > metaph. ['to alienate, estrange'] > ['to be extraordinary']} < I.E. *ueik* 'extract, separate' that could be associated with 'particles, energy carriers', also ~ *ueigh*-'way'(Pokorny 1959, 1128), i.e 'trajectory of stream of particles' that allows a hypothetical reconstruction '(un)controlled power/energy' > 'extraordinary (way of) being');
- (2) Germ. $weihs \sim \text{O.E.}$ $w\bar{e}ofod$ ($w\bar{e}ofud$, $w\bar{i}obud$, wiohbed) 'altar', Northumb. $w\bar{i}gbed$, where $w\bar{i}g$ is regarded as a variant of $w\bar{i}h$ -, while O.E. $w\bar{i}g$ 'idol, image' (but also 'war, battle' i.e. 'conflict, clash' that allows a hypothetical reconstruction 'the clash of supernatural powers/energies controlled by a wizard'), O.N. -veig in personal names like Rannveig ($v\acute{e} < *w\bar{i}ha$ 'altar'), so 'witch' $< *\{['controller'] / ['user of the means controlling powers']\};$
- (3) O.E. wicca ~ Germ. wiegen 'to rock', G., Dut. wigelen 'to rock, shake', G. bewegen 'move' > 'uncontrolled movement' (as a part of kinesthetic manifestations like convulsions involved in prophets' activities (cf. Gr. $\mu\alpha\nu\tau\iota g$ 'prophet', Gr. $\mu\alpha\nu\iota\alpha$ 'rage', and typological parallel: Goth. wobs'vehement' < *vat- 'spiritual agitation', as in Scr. api-vat-, Lat. $v\bar{a}t\bar{e}s$, O.Irl. $f\acute{a}ith$ 'prophet, poet') (Feist 1888, 136), probably cognate with O.E. Woden, O.N. Oðinn, O.H.G. Wuotan (Balg, 1887, 570), the god of war, wisdom and poetry, allegedly involved in magic practices: En tik sida kodu // Samseyu i, // ok draptu a vett sem volur, // vitka liki.

'And you as I heard, on Samsey [were] and beat the drum like a witch' (Lok, 24).

(4) E. witch ~ O.E. witega, O.H.G. wîzago ~ O.E. wīt(e)ga that probably relate to each other like a later transition wissen > wizard, which is traditionally explained by deformation/simplification tg > tk > kk / cc as in O.E. $w\bar{t}tga > wicca$, O.N. vitki 'wizard' (in which the said transition is incomplete). In this case witig 'wise, clever' < witan and wītga, wītiga 'prophet' < *wītig 'to see' are accepted as possible. This hypothesis allows reconstructing the model {['to know']} > 'witch', as well as identifying the possible trajectory of negative connotations {['to know'] > ['different due to knowing more'] > ['strange due to being different'] > ['dangerous due to being strange'] > ['evil']} developing in wītga > wicca > wicked (hence O.N. vitka (2) 'to reprimand, punish' (Vries 1962, 670). Diverse interpretations concern accentuating different aspects of polysemantic and genetically close I.E. stems *wīh-'holy', *wīg-, *wīh- 'idol' / 'war', *weik- 'spin, move', * weku- 'speak' (verbal nature of magical practices). This diversity reflects the contrary (polar) experience acquired by different human groups while interacting with respective phenomena. Thus, different sets of verbalised features appear to refer to the 'norm' in historical versions of national world-views. Accentuating the respective features contributes to the basic configuration of an alternative world, cf. neutral (1), negative (2), or positive (3) implications of the WITCH concept: (1) Heiði hana hétu // hvars til húsa kom, //völu velspáa, // vitti hon ganda 'Heid she was called, when she entered the house, a prophet-witch who cast spells' (Völ, 22); (2) The witch grinned in the half-light. 'Aye, but Valgard is a tool I shall use to make a weapon that will pierce Skafloc's heart (Anderson 1981, 36), (3) they were proud of having a witch in the family! (Pratchett 2000, 53).

- 5. The law of alternative choices defines the dynamics of the systems' development: at each specific moment in a certain (time-space, informational, semantic, etc) continuum's fluctuation, any engaged system passes a bifurcation point. The acquired contextual configurations of lingual construals are determined mostly by the language user's pragmatics. They are also impacted by a number of extra-linguistic attractors and repellents pertaining to both a supersystemic level or synergetic 'operational space', and not necessarily consciously taken into consideration. Sets of factors influencing this choice are infinitely variable, so the systems' behaviour is both rational and irrational, and therefore enigmatic. Thus, the pragmatic choice made at each level of interaction determines the way bifurcations are passed in terms of the systems' general orientation (the textual world's configuration), discourse strategies, tactics, wordbuilding models, choice of idioms, prosody, etc.
- 6. The law of hierarchical and synergetic development pertains to the 'stream-like' mode of multi-dimensional open systems. As the paradigmatic (hierarchical) plane of diverse codes conforms to their syntagmatic (synergetic) plane, units with a pre-set configuration (language signs encoding prior cultural experience) change their properties and enter dynamic multi-dimensional clusters which generate contextual noematic senses. Considering the fact that so-called 'precedent phenomena' (containers of relatively stable features) and nonverbal codes are also involved in the categorisation and verbal representation of the world (as well as verbal creating possible worlds), the said conceptual and semantic clusters demonstrate a multi-modal inter- and hyper-textual architecture.

The hierarchical plane of energy-informational exchange processes employs the dichotomy of 'development programme' (imposed by an oversystem, introduced via level 7 of a system) VS 'resources for fulfilling the programme' (provided by subsystems, available at level 1 of the system). The synergetic plane unfolds within the dichotomy of 'interaction' VS 'results of interaction' (both expected and achieved). Texts created in different historical periods can therefore enter intertextual 'diachronic-synchronic construals'. Their internal structure exercises allusive connections, while the texts themselves become neological phenomena that generate new cultural patterns and subcultures.

7. The law of expediency (determinism) of development defines the logic in the unfolding of scenarios that defines the vector of modifying states of affairs within a certain world. The above-mentioned hierarchical dichotomy reflects determinative-regulative systemic relations: the programme (metaphorically, the energy of the FIRE element from a SACRAL SPHERE that outlines sets of strategic reasons and the purposes of a system) sets up 'default coordinates' for the system. Each hierarchically higher level (subsystem) functions as a governing operator for the hierarchically lower one, the vector of development being directed from level 7 to level 1.

Progressive-modificational relations (from level 1 to level 7) reflect the evolution of a system's components as it executes the said programme.

Eventually, symmetric determinative-causative relations unfold in correlations of level $7 \rightarrow$ level 1 (an 'input programme' attracts adequate material resources), level $6 \rightarrow$ level 2 (axiological navigational coordinates trigger comfortable 'emotional' states of a system), level $5 \rightarrow$ level 3 (peculiarities of inter-systemic relations determine the 'mental' activities of each participant), while level 4 represents a transitional plane of an otherwise complete system. These patterns of causality unfold simultaneously, while the differences in the nature and dimensional parameters of the codes involved in world modelling result in hybrid cultural patterns, subcultures, informational simulacra based on secondary and tertiary myths, a semantic multiverse, etc.

Conclusion

A number of patterns of functioning of open systems that conform with the universal laws of nature are relevant within the context of verbally mediated interactions. These patterns are engaged in irrational cognition, irrational rationalisation, and myth-oriented semiosis as the primary mechanism of verbal world modelling. Verbal world modelling and the further genesis of cultural gestalts, conceptual spaces and world-views follow a 'quest-like' non-linear logic. The fundamentally irrational nature of these processes is defined by both the choice of inchoative interpretational axioms (components of the mythical space) and the determinative impact of the superordinate governing structures.

The isomorphic mechanisms of categorisation, verbal designation and creating cultural patterns comply with the universal laws of development of open systems. Except for solely linguistic purposes, an integrated interdisciplinary approach towards verbal, conceptual and cultural phenomena is promising with regard to prognostic analysis and gaming therapy.

References

Anderson 1981 - Paul Anderson. The Broken Sword. N. Y.: Ballantine Books.

Balg 1887 – G. H. Balg. A comparative Glossary of the Gothic Language. London: Truebner & CO, Halle: Max Niemeyer.

BM – Battle of Maldon: http://www.oldenglishaerobics.net/maldon.php

Beo - Beowulf: https://rpo.library.utoronto.ca/poems/beowulf

Bertalanffy 1968 – Ludwig von Bertalanffy. General System theory: Foundations, Development, Applications. New York: George Braziller.

Brier 1999 – Søren Brier. Biosemiotics and the foundation of cybersemiotics: reconceptualizing the insights of ethology, second-order cybernetics, and Pierce's semiotics in biosemiotics to create a non-Cartesian information science. *Semiotica*, 1/4 (127), 169–198.

Capra 1996 – Fritjof Capra. The Web of Life: A New Scientific Understanding of Living Systems. NY: Anchor Books, Doubleday.

Carnap 1947 – Rudolf Carnap. Meaning and Necessity: a Study in Semantics and Modal Logic. Chicago: University of Chicago Press.

Cignoli 2000 – Roberto Cignoli, Antoni Torrens. An algebraic analysis of product logic. Journal of Multi-Valued Logic and Soft Computing, 5(1), 45–65.

Downing 2002 – Laura Hidalgo Downing. Negation, text worlds and discourse: the pragmatics of fiction. Stanford, CT: Ablex.

Enya 1992 - Enya. Celts. In The Celts. https://www.azlyrics.com/lyrics/enya/thecelts.html

Feist 1888 – Sigmung Feist. Grundriss der Gotischen Etymologie. Strassburg: Verlag von Karl J. Trübner. 167 S.

Forceville 2012 – Charles Forceville. Creativity in pictorial and multimodal advertising metaphors In Jones Rodney (ed.), *Discourse and Creativity* (p. 113–132). Harlow: Pearson/Longman,

Gödel 1949 – Kurt Gödel. A Remark about the Relationship between Relativity Theory and Idealistic Philosophy. In P. A. Schilpp (ed.), *Albert Einstein, Philosopher-Scientist* (p. 557–562). Library of living Philosophers VII, Open Court Publ.

Kolesnyk 2017 — Oleksandr Kolesnyk. Introducing M-logic: basic remarks on key concepts. *Теоретична і дидактична філологія, 25*, 159–169 [Сер. Філологія, Педагогіка, Переяслав-Хмельницький: О. В. Щербатих].

Kolesnyk 2019 – Oleksandr Kolesnyk. Cognitive premises of the myth-oriented semiosis. Cognitive Studies | Études cognitives, 19 [Institute of Slavic Studies, Polish Academy of Sciences]. [Retrieved November 12, 2020]: https://ispan.waw.pl/journals/index.php/cs-c/issue/view/112/showToc.

Liberman 2008 – Anatoly Liberman. An analytic dictionary of English etymology: an introduction. Minneapolis, London: University of Minnesota Press.

Lok - Lokasenna: http://norroen.info/src/edda/lokasenna/on.html

Minati 2002 – Gianfranco Minati, Eliano Pessa (Eds.). *Emergence in Complex, Cognitive, Social and Biological Systems*. N. Y.: Springer Science + Busines Media.

Pokorny 1959 – Julius Pokorny. Indogermanisches etymologisches Wörterbuch, 1–2. Bern: Francke.

Pratchett 2000 - Terry Pratchett. The Light Fantastic. N. Y.: HarperTorch.

Rowling 1999 – J. K. Rowling. Harry Potter and the Sorcerer's Stone. N. Y.: Scholastic.

Sapkowski 1998 – Andrzej Sapkowski. Ostatnie życzenie. Warszawa: SuperNOWA.

Tolkien 2000 – J. R. R. Tolkien. The Return of the King. N. Y.: Ballantine Books.

Völ – Völuspá: http://norroen.info/src/edda/voluspa/onsb1.html

Vries 1962 – Jan de Vries. Altnordisches etymologisches Wörterbuch. Leiden: Brill.

Wid - Widsith: https://www.sacred-texts.com/neu/ascp/a03_11.htm

Zadeh 1972 – Lotfi A. Zadeh. A fuzzy-set-theoretic interpretation of linguistic hedges. *Journal of Cybernetics*, 2, 4–34.

Zhabotynska 2019 — S. A. Zhabotynska. The study of language: linguistic paradigms. *Studia Philologica*, 12, 7–12 [Київ. Ун-т ум. Б. Грінченка].

Домброван 2020 — Т. І. Домброван. Language as a scale-free Network. *Науковий вісник Чернівецького університету, 823,* 71–73 [Сер. Германська філологія].

Клименюк 2010 – А. В. Клименюк. *Знание, познание, когниция.* Тернополь: Підручники і посібники.

Мізін 2019 — К. І. Мізін. Точки дотику культурної лінгвістики і лінгвокультурології: теоретичні підвалини та методологічний інструментарій. Іп Людино- й культурознавчі пріоритети сучасного мовознавства: напрями, тенденції та міждисциплінарна методологія: колективна монографія (с. 71–84). Переяслав-Хмельницький; Кременчук: ПП Щербатих О. В.

Перумов 2002 – Н. Перумов. Гибель богов. М.: Олма-Пресс.

Соколян 2008 – Марина Соколян. Вежі та Підземелля (притча-фобія). К.: Грані-Т.

Терехова 2018 — С. І. Терехова Поліпарадигмальна методологічна основа сучасних лінгвістичних досліджень координат комунікації. *Науковий вісник Міжнародного гуманітарного університету, 32,* 244—246 [сер. Філологія].

Oleksandr Kolesnyk

Summary

Present-day linguistic studies that are regarded as interdisciplinary are still incapable of suggesting solutions to fundamental issues concerning the origin of language, the nature of irrational modes of cognition, and the crossing over of myths into various domains of the 'rational' postmodern world. This article addresses these issues from the standpoint of the myth-oriented semiosis theory, semiotics, linguo-cultural and linguo-cognitive studies, accentuating their correlation with phenomena pertaining to the worlds of different degrees of 'reality' and created via codes other than lingual. We outline the basic assumptions that lead to the further search for universal patterns of energy-information exchange between systems of a diverse nature. This is the neo-anthropocentric approach that focuses on man's relative and dynamic, rather than focal and dominating, status within the network of life, as well as in research procedures; the causative-systemic world-view and combination of rational and irrational (sensory, intuitive, 'pre-learned') cognitive procedures. We also consider the principle of 'gnoseological relativity' that allows multiple interpretations of the data obtained, as well as integrating seemingly contradictory theories and approaches towards analysis, thus aiming at creating a multi-dimensional model of interactions of open systems.

The article discusses the following patterns of the said development of systems: the law of polarity, the law of reiteration, the law of conservation, the law of cyclical development, the law of alternative choices, the law of hierarchical and synergetic development, and the law of expediency. Manifestations of these laws are traced at the levels of lingual units, texts, myth and cultural patterns.