Linguistic Frontiers • 6(2) • 2023
DOI: 10.2478/lf-2023-0017

sciendo

Linguistic **Frontiers**

How to do languaging(s), language games and languages

Original study

Mikhail Ilyin (ORCID: 0000-0001-9969-1259)
Institute of Scientific Information for Social Sciences of the Russian Academy of Sciences, Center for Advanced Methods of Social Studies and Humanities, National Research University "Higher School of Economics" (mikhaililyin48@gmail.com)

Received: March 2023, Accepted: April 2023

Abstract: The article elaborates on substance-form aspects of integral communicative practices. Respective substance matters emerge with their shaping into formative and formal modes within the integral bio-social existence and experience of humans. Instrumentally modes help humans to shape or form their irregular substance matters into *in-formed* mental, behavioral and communicative practices.

The article outlines interpretations of respective transformations and processes from Aristotle, Descartes and Kant to Russell, Wittgenstein, Austin and theoreticians of ongoing cognitive and languaging revolutions. The rigid opposing of the ultimate substance/form abstractions provokes conceptual impediments that result in the notorious pseudo-Cartesian mind-body problem. It is possible to overcome it by refocusing on actual middle ground integral developments including actual psychosomatic and mental processes, human communicative interactions and their pragmatic activities. A promising way to do that is to develop intellectual instruments similar to accommodating Hjelmslevean distinction of content and expression planes or relatively integral substance-form complexes.

The article suggests a range of instrumentalities to methodologically reinterpret actual middle ground practices of languaging and language games. To that effect, it suggests a few complementary ways of their embedding and enacting, particularly new modes and procedures to conceptualize prerequisites and outcomes, externalities and affordances of the matching middle ground practices.

Keywords: languaging, language games, abstract substance-form distinction, the mind-body problem, middle ground mental, behavioral and communicative practices, embedding and enacting, prerequisites and outcomes, externalities and affordances.

The title of the seminal volume "How to do things by words" (Austin 1962a) is the departure standard for the article and its *modus rationis*. With all the reverence to John Austin and his ideas, my text challenges customary fixation on nouns to designate the world around and the means to perceive and understand it that Austin displays in the title. By contrast, my title highlights processes of languaging and language games as well as actual languages as we know and use them. So, despite the formal grammatical use of two nouns and one *-ing* form, all the three phenomena referred to are nothing but processes we naturally involve in and contribute to. The title puts bluntly the purport to convert naïve expressions shaped in customary scholastic terms into far more accurate and relevant accounts of what actually happens when we achieve something (do "things") by communicating and interacting with other people (by "words").

Another source of inspiration is also a text by John Austin. It is a less famous but equally significant volume "Sense and Sensibilia" (Austin 1962b) compiled by Jeffrey

This research is supported by the Russian Science Foundation under the grant No. 22-18-00591

Warnock from Austin's manuscript notes. It is commonly acknowledged that that the designation "Sense and Sensibilia" is Austin's own. It intentionally resonances with the title of Jane Austen's famous novel "Sense and Sensibility"[1] (1811). Replacement of sensitivity by sensibilia is quite significant. Implications shift from the proclivity to being emotionally responsive through abilities to register subtle feelings and any other senses to the outcomes of such abilities. "Jane Austen's title […] might be paraphrased as "Good Sense versus Sentimental Sensitivity," suggests a confrontation between reasonableness and romanticism, or, as Aquinas might have said, between reason and the passions of sense-appetite. John Austin's work criticizes earlier twentieth-century British philosophers for the view that we never directly perceive or sense material objects, but only sense-data or our ideas, a criticism with which Aristotle and Aquinas would be in sympathy" (Aquinas 2005, 6). So, finally, sensibilia boils down to sense-data in quite an operational and even technical sense.

Aristotle elaborated the somewhat broader notion of sensibilia in his treatise "On Sense and Sensibilia" (Περὶ αἰσθήσεως καὶ αἰσθητῶν[2]). Its Latin translations comprised three options. The one preferred by John Austin was sensibilia – "De sensu et sensibilibus". Here the word *sensibilibus* is Dative of *sensibilia* (neuter adjective in plural) meaning "something perceptible, something that can be perceived by the senses or has been perceived".

There are two more current Latin equivalents. One is "De sensu et sensili" with Dative of the adjective *sensile* «endowed with sensation". This translation was promoted in a very popular edition (Aristotelis 1848) as well as earlier editions (Aristotelis 1596).

Another Latin option is "De sensu et sensato" where the word *sensato* is Dative of the adjective *sēnsātum* "perceptible by the senses". It was a preferred one for Thomas Aquinas. In the 2005 English publication of Thomas Aquinas' Latin translation of Aristotle's original Kevin White chose to render the key Aristotelean notion quite plainly as "what is sensed" (Aquinas 2005).

In the case of relations between sensoria, their sensing, the data attained and the outcomes of the respective processes the article again reshuffles our vision from reified things centered one to an evolutionary worldview of unfolding processes similar to languaging.

SENSIBILIA AND SENSING

Sensing and its effects were in the focus of human thinking since times immemorial. Most probably sensing was taken for granted by our early ancestors all through the glottogony and cognitive evolution of early humans. It was only at the advanced stages of glottogenesis[3] and advancement of cognition and behavioral modernity practices that people stated systematically to discriminate bodily organs and their specific capacities, processes and their outcomes both individual and collective. Virtual notions and abstract concepts reflecting modes and modalities, properties and qualities of the respective processes and their collective and individual outcomes are still developing. We participate in this formative vocation.

Already Aristotle quite explicitly and thoroughly debated sensual capacities, their exercise and their outcomes in terms of senses (*αίσθηση*), sensing (*αἴσθησῐς*) and sensabilia (*αισθητές*). This triple division introduces the middle term which is the first one serving as a point of departure for Σταγειρῖτης. In a way this term is a precedential one – anyhow it paves the way to later conceptualizations of dynamic phenomena like those of languaging, thinking and pragmatic interacting with other people.

Approaching the modern age of critical science, one has to acknowledge that another major intellectual mastermind to address sensibilia was **Immanuel Kant**. He did so in his inaugural dissertation written in Latin and called "De mundi sensibilis atque intelligibilis forma et principiis" (On the form and principles of the perceptible and intelligible world) (Kant 1770). It was written in 1770 and marked both the completion of the so-called "pre-critical period" and the entrance into the "critical period".

The dissertation rests on the fundamental distinction between sensibilia or in Kantian terms sensorial world (*mundus sensibilis*) comprising phenomena as they appear to the senses and the intellectual world (*mundus intelligibilis*) containing the intrinsic mental forms. The paragraph 13 of the dissertation displays this distinction very clearly, "The principle of the form of a universe is that which contains the cause of the universal tie by means of which all substances (omnes substantiae) and their states (earum status) pertain to one which is called *a world*. The principle of the form (Principium formae) of *the senorial world* (*mundi sensibilis*) is that which contains the cause of *the universal tie* (*nexus universalis*) of all things as far as they are *Phenomena* (*quatenus sunt Phenomena*). The form of the *intelligible world* (*mundi intelligibilis*) acknowledges an objective principle (principium obiectiuum), that is, some cause by which it is the colligation of what exists in it. But the world regarded as Phenomenon (spectatur ut Phenomenon), that is, with respect to the sensibility of the human

1 The title displays an opposition of rational reasoning and emotional inference is more accurate and happy to highlight the driving sway of the book's plot.

2 Conceivably the closest translation would have been "About sensing and the sensed". Cf. debate on Latin translations.

3 Cf. distinction between glottogony and glottogenesis. The former one is still continuing evolution of vocal communicative practices and habits or *speech* and the later one is a more resent evolution of verbal and multimodal communicative systems and institutions or *languages* in (Ilyin 2022) and later in this article.

mind (respectiue ad sensualitatem mentis humanae), acknowledges no principle of form but a subjective one (principium formae nisi subiectiuum), that is, a certain mental law by which it is necessary that all things qualified for being objects of the senses (sensum obiecta) would seem to pertain *necessarily* (*necessario*) to the same Whole (Totum) (Kant 1770, 14).

The key moments of Kant's reasoning are very strict distinctions between substance and form, objective and subjective, sensorial and intelligible. He maintained them all through the critical period but slightly realigned them pragmatically. It is fair enough for a philosophic or even metaphysical consideration. Abstract radical distinctions are very good instruments for critical investigations of the perplexing empirical cases of the actual overlapping of the two worlds. In fact, both worlds of Kantian pure reasoning are nothing but contrastive intellectual limits to frame the actual existence of our Observable Universe with humans as its necessary agency between two abstract extremes of pure (reine) substance and form. It is *the Anthropic principle* and our *Being-in-the-world* (cf. Heidegger's *In-der-Welt-sein*) which accounts for the reflexive overlapping of substance and form, objective and subjective, sensorial and intelligible etc.

To make a long story shorter let us jump now to the beginning of the last century when **Bertrand Russell** gave "the name sensibilia to those objects which have the same metaphysical and physical status as sense-data without necessarily being data to any mind" (Russell 1918, 110). Doing so Russell inquisitively noted that "if 'sensibilia' are to be recognized as *the ultimate constituents of the physical world* – italics mine – *M.I.*), a long and difficult journey is to be performed before we can arrive either at the 'thing' of common sense or the 'matter' of physics" (Russell 1918, 113).

Path-breaking Russell's claim still remains underexplored. Sensibilia being mental manifestations of the sensual domain mingle or *identify* with phenomena of terrestrial environment, or with its specific manifestations. Bertrand Russel claims, "The 'thing' of common sense may, in fact, be *identified* (italics are mine – *M.I.*) with the whole class of its appearances (external phenomena – *M.I.*) — where, however, we must include among appearances not only those which are actual sense-data but also those 'sensibilia', if any, which, on grounds of continuity and resemblance, are to be regarded as belonging to the same system of appearances, although there happen to be no observers to whom they are data" (Russell 1918, 114).

Fascinatingly Russell adds up to *appearances* or external phenomena of the physical or biospheric world also actual sense-data and sensibilia or phenomena of the internal mental domain. The reason is evident and straightforward – they all appear and exist on equal footing as phenomena, be they internal or external. Still, the *modes* for their appearance (emergence) and existence (evolvement) may significantly differ.

Anyhow Bertrand Russell determines to conclude, "Since the 'thing' cannot, without indefensible partiality, be identified (note *tour à tour* the previous identification on p. 114 – *M.I.*) with any single one of its appearances, it came to be thought of as something distinct from all of them and underlying them. But by the principle of Occam's razor, if the class of appearances will fulfil *the purposes for the sake of which the thing was invented by the prehistoric metaphysicians* to whom common sense is due, economy demands that *we should identify the thing with the class of its appearances*. It is not necessary to deny a substance or substratum underlying these appearances; it is merely expedient to abstain from asserting this unnecessary entity. Our procedure here is precisely analogous to that which has swept away from the philosophy of mathematics *the useless menagerie of metaphysical monsters* with which it used to be infested (all italics are mine – *M.I.*)." (Russell 1918, 114–115).

In other words, Bertrand Russell infers that although it is tempting (and quite easy) to invent a thing-like object in the manner of "the prehistoric metaphysicians" the outcome is futile. In actual fact, the invented 'thing' turns into "the unnecessary entity" or even "the useless menagerie of metaphysical monsters".

In his "Sense[4] and Sensibilia" **John Austin** equally shuns getting into metaphysical bestiary of doggedly fixed *scholastic* terms. He actually avoids debating the doctrine implying that we "never see or otherwise perceive, or anyhow never *directly* perceive, material objects (or material things), but only sense-data" (Austin 1962b, 2). He believes that the very issue discussed is basically irrelevant. In his view splitting the world into two distinct domains of "sense data" and "material things" is largely misleading or even nonsensical. Austin's "general opinion about this doctrine is that it is a typically *scholastic* view, attributable, first, to an obsession with a few particular words, the uses of which are over-simplified, not really understood or carefully studied or correctly described; and second to an obsession with a few (and nearly always the same) half-studied "facts" (Austin 1962b, 3).

Austin is confident about the irrelevance of the doctrine, "I am not, then — and this is a point to be clear about from the beginning — going to maintain that we ought to be 'realists', to embrace, that is, the doctrine that we do perceive material things (or objects). This doctrine would be no less *scholastic* (italics mine – *M.I.*) and erroneous than its antithesis. The question, do we perceive material things or sense-data, no doubt looks very simple — too simple — but is entirely misleading […] So we are not to look for an answer to the question […] What we have above all to do is, negatively, to rid us of such illusions as 'the argument from illusion' […] an operation which leaves us, in a sense, just where we began.

4 Unfortunately John Austin (or Jeffrey Warnock?) choose a commonplace English term *sense* rather than far more relevant Aristotelian *sensing* (*αἴσθησῐς*).

In a sense — but actually, we may hope to learn something positive in the way of a technique for dissolving philosophical worries" (Austin 1962b, 3–5).

In actual fact, John Austin does not refute or even discuss the sense-datum doctrine of perception, but reshapes speech acts into techniques for dissolving philosophical worries of the doctrine's advocates and challengers. To Austin, the proper explanation of the philosophical statements or any other kinds of lingual utterances is not to identify them as true or false, but to check if they are pragmatically sound. The issue is not to fix clear meanings of words or the validity of sensibilia but to find out how what we 'perceive' can be described, identified, classified, characterized, and named in alternative ways. Eventually, the issue is how we interpret, translate or otherwise transform what we are sensing into what we are doing.

Austin's favorite domain is not that of either pure *mundus sensibilis* or equally pure *mundus intelligibilis* but rather the middle ground or Midgard of common people and their ordinary language or rather languaging.

PHENOMENA ET MODI

The world of ours shapes into observable or sensual occurrences and facts that are habitually called *phenomena*. Literally, Latin *phaenomenon* or Greek *φαινόμενον* means "something appearing to view". Actual phenomena are substances molded by all kinds of forms or modes. There are two distinct types of modes of existence (modi existendi). They are those of distinct embodiments of material things and those of virtual perceptions and cognitive images of humans. They are all dynamic and transformable into the middle domain of actual human and terrestrial life. Sensual/mental moments intermingle with matter/energy ones allowing multiple transformations. One can claim that phenomena are not 'things' in the strict sense. They are dynamic aspects of the world that we manage to highlight in our thinking and languaging and then fix in language games and pragmatic activities.

Respective substance matters (neural-mental, vocal-lingual and pragmatic-ergonal) emerge with shaping into formative and formal modes within the integral bio-social existence and experience of humans. Instrumentally modes help humans to shape or form their irregular substance matters into *in-formed* mental, behavioral and communicative practices.

It is important to make one more clarification about the modes of living (existence), cognizing (comprehension) and languaging. It is possible to imagine them and think about them as pure mental entities. Then they turn out or appear fundamentally different and unrelated to each other, just as Cartesian spiritual and bodily modes were inadequately or *unhappily* (Austinian term) called by Descartes himself contrastive 'things' – the thinking and non-extensive mind (*res cogitans*) and the extending but unthinking body (*res extensa*). The unfortunate lexical blander of Descartes was to represent an outcome of the process of mental experimenting as a thing. It led to its damaging nominalization that eventually helped to scholastically qualify a purely intellectual model of an ultimate fictional state of being a quality rid as a thing or something real or existent on its own.

Despite the continuing vicious circle debate on the mind-body problem they both are not comparable phenomena of equal standing. They are not separate and contrastive 'substances' or 'things'. It would be a gross and unhappy blunder even to call them 'substances in specific modes'. They are nothing but modes that instrumentally procure actual processes and virtual phenomena.

The former ones are mental and 'non-extensive' ones or plainly behavioral. They are caused by our mental focuses, speech efforts and the pragmatic manifestation of general human *actuality* (*Wirklichkeit*, *skutečnost*, действительность – *deistvitelnost'*). It is quite crude, but linguistically successful to say that numerous and diverse virtual phenomena essentially belong to what has recently been called a distributed language (Cowley 2009; Cowley 2011) and soon after distributed languaging (Thibault 2022a; Thibault 2022b). They are aptly highlighted by the terms languaging and linguistics, actively promoted by radically embodied ecolinguistics (Cowley 2021; Steffensen, Cowley 2021; Cowley, Gahrn-Andersen 2022). This direction is proactively and very creatively looking for new opportunities to understand the ways of human communication and thinking, trying to better understand what is happening in the language sphere.

The latter ones are seemingly 'extensive'. They are the phenomena of the cosmos itself around and within us. But in actual fact, we are inseparable from cosmic order. We are the ultimate – so far – agencies of cosmic ordering or evolution. We all are nothing but interfaces between *Umwelten* and *Innenwelten* of **Jakob von Uexkull,** or *les Dedans* and *les Dehors* of **Pierre Teilhard de Chardin** (Ilyin 2020). With the Anthropic principle, we are the ultimate manifestations of agencies in the world of surfaces within surfaces (Hoffmeyer 1998). To do this job we are to use all the integrative potential of Renatus Cartesius' self, his "being for oneself" (*ens per se)* or "me whole and complete" (*me totum*).

APOLOGIA CARTESIĪ

René Descartes critically tests the abilities of cognition. He makes a thought experiment on himself. Descartes consistently rejects everything that he can consider to be auxiliary parts of his own personality. The result is a step-by-step reduction of the multi-component integral self (*me totum*) (Brown 2007; Brown 2014; Brown 2016; Chamberlain 2020; Ilyin 2020) up to two finite limits – the essence of one's own disembodied mind and the body, purified of the slightest thinking abilities and thus actually inactive. Paradoxically nobody can even claim that the actually exists since the critical proof of existence is thinking, but *res extensa* does not think.

As for the inclusive, *me totum* does not disappear anywhere. It looms and fondles its absolute limits but the whole core of the personality is plunged into middle ground intricacies.

In his "third" objection **Thomas Hobbes** demonstrates that the interpretation of the results of an experiment in scholastic terms of things (rei) or substances turns into a significant distortion: "Which of all this can be separated from my consciousness? What can be considered separate from myself? Perhaps someone will answer this: I myself, the thinker, differ from my thinking; My thinking is not alienated from me, but only in its mode (modo), as it was said earlier that jumping is different from the one who jumps (saltatio a saltante). So, if Mr. Descartes began to prove that he, the comprehending, is identical with comprehension, we would again fall into the *scholastic style* (italics added. – *M. I.*). The intellect comprehends, the sight sees, the will desires, and thus, according to the law of analogy, the step, or at least the ability to walk, will walk. All this is vague, incongruous and unworthy of the everlasting clarity of expression inherent in Mr. Descartes" (Cartesius 1641, 242–243).

Descartes is forced to agree with Hobbes's arguments, but, alas, not to abandon the language and style of scholasticism be it nominalizing nominalism or reifying realism[5]: "I do not deny that I, the thinker, am different from my thinking, as a thing is from a modus; But when I ask: what of all this can be separated from my consciousness? (quid ergo est quod à mea cogitatione distinguatur) – I understand the modes of thinking I have listed, not my substance; And where I add: What can be called alienated from myself? (quid quod à mepso separatum dici possit) – I only mean by this that all these modes are intrinsic to me (significo tantum illos omnes cogitandi modus mihi enesse). I don't see what can be depicted here as dubious and dark" (Cartesius 1641, 243).

It turns out that the mind-body problem evolved not due to logical or intellectual faults of Descartes' reasoning but to his languaging or rather verbalizing. It was a very difficult job to account for both framework abstractions and the middle ground processes. But it was possible as three centuries later Louis Hjelmslev demonstrated quite smartly and convincingly.

UDTRYKSPLAN OG INDHOLDSPLAN

Forms are intricately fused with respective substance. In such a situation is formal linguistic analysis possible at all? Yes, **Louis Hjelmslev** introduced an extremely creative solution. The linguistic whole is projected in relation to both form and content, but separately – form wise and content wise. And then these projections are projected again, but only relative to the form. Now it is possible to work strictly formally with each of the two alternative projections. You can now ignore the vicious circle of form-content relationships by creating an expression plane (udtryksplan) and content plane (indholdsplan) based on the corresponding projections.

There is no point in retelling the famous thirteenth section of the Hjelmslevean Prolegomena, including a respectful but adamant comment on Saussure's attempts to treat expression and content separately from each other. Hjelmslev recognizes the possibility of such reasoning as a "pedagogical device", but does not see any real meaning in it (Hjelmslev 1993, 46; Hjelmslev 1969, 49–50). Instead, he proposes a new approach, the essence of which is expressed by a capacious key formulation: "Thus, in linguistic content (sproglige indhold), in its process (forlob, in the Danish original it is italicized, but italics are omitted in English translation – M.I.), we recognize (konstaterer) a specific form, a content-form that is independent and arbitrary (staar i arbitrært forhold til, stands in arbitrary relation to) in relation to the purport (meningen, extralingual psychic 'substance' – M.I.), and forms it into a content-substance (indholdssubstans)" (Hjelmslev 1993, 48; Hjelmslev 1969, 52).

Acting as a formally rigorous analyst, Hjelmslev not only does not express skepticism about the substance (substans) in each of the plans, but, on the contrary, even insists on the need to structure each of the plans and work with the corresponding structures. The result is a kind of structuralist expansion, which opens up the possibility of structuralist study of both the formal expression of linguistic phenomena and their semantic content.

The correlation of content plans quite expectedly shows that they are similar to each other. However, there is something in them that does not correspond to another plan. As a linguist, Hjelmslev first of all drew attention to the fact that in terms of expression, there are appendages, which he called *figurae*. They have structural characteristics, configurations, but there are no correspondences to these structures in terms of content. Emerging tension opens up prospects to develop middle ground processes rather than stuck with thing-like abstract entities.

NOMINA ET VERBA

We tend to give names to whatever we deal with – material objects around, people, anything we see, hear, perceive, think about or even imagine. With all its evolutionary advancement grammatical division into *nomina et verba*, nouns and verbs create damage detrimental to our thinking and communication as long as we tend to tread words as abstract classes of rigid entities (crisp sets) rather than actual types of evolving pragmatic efforts (fuzzy sets).

We give names to both phenomena and modi or rather to specific modes of evolving, shaping and joining together. Actually, the notion of joining together was expressed by the etymon *thing* or rather Proto-Germanic *þeŋaz ~ *þenxaz deriving from PIE *ten- 'to extend, to

5 Unfortunately both dominated scholastic thinking and still distort the current scientific reasoning. Options of Medieval and Modern conceptualism, of pragmaticism and abduction still remain to be properly encountered and explored.

span'. This PIE etymon spawned both Greek *τόπος* and Latin *tempus* – the two key terms denoting fundamental extension in space and time (Orel 2003, 420; Lehmann 1986, 360). Etymologically *thing* is something *extending* in time-space. Etymology exceedingly fits modern time-space cosmology but is unfortunately lost in everyday usage.

Anyhow modern lingual and cognitive habits refocus from fuzzy time-space extension to crisp material objects with fixed forms, locations and temporalities making the world around them more stable, solid and 'substantivized'. In ordinary language practice, we treat words or rather nomina and more specifically substantives as the natural frames of reference to our everyday speaking and thinking.

It looks natural that semioticians from **Charles Peirce** and **Ferdinand de Saussure** associated signs with words and names rather than other linguistic phenomena like deixes, pragmatic distinctions and markers or vocal expressions of wishes, intentions or other mental states[6]. Furthermore, mental states and processes are increasingly identified by nouns. Nominalization is becoming an increasingly dangerous distortion of our mental pictures and behavior (Sériot 1986).

Our ordinary languages and especially scientific disciplinary specialects are very prone to nominalization. It turns out to be a very powerful tool for transforming and even deforming our thinking and consciousness. We have inherited from the scholastics, whether nominalists or realists, the general attitude of naming, understanding, and seeing all their own mental creations as things or names. And this habit is so strong and powerful that it still shapes our consciousness and thinking in spite of all the innovations of positive, empirical and even critical research.

Ferdinand de Saussure, concluding the "Course of General Linguistics" insists that "the true and unique object of linguistics" (… la linguistique a pour unique et véritable objet) is what he calls *la langue*, "studied in and for itself" (la langue envisagée en elle-même et pour elle-même) (Saussure 1959, 232). In other words, everything that is outside *la langue* is supposed to remain beyond the domain of professional linguistic consideration or formal (structural) linguistics per se leaving away studies of language at large (le langage) and speech (la parole) as a broader domain of social studies and psychology (cf. the two introductory chapters of Saussurean course).

The domain of languaging is in fact much broader. It includes discourse (le discours) as a middle ground between la parole and la langue (Buyssens 1942). It outspreads further into social semiotics (Halliday 1978; Hodge, Kress 1988; Hodge 2016; Zolyan 2019), multimodal communication (Kress 2009; Bezemer, Jewitt 2018) and languaging studies and radical embodied ecolinguistics (Cowley 2021; Steffensen, Cowley 2021; Cowley, Gahrn-Andersen 2022; Thibault 2022a; Thibault 2022b), that are still emerging domains of scientific investigation.

LANGUAGE USE AND LANGUAGE GAMES

Prevalent linguists are typically inclined to refer to language use. This betrays their inherent assumption that what they call language is nothing but an instrument of a sort, an available thing to manipulate and exhaust human communication to some bound end. Thus, they reveal a shocking paradox. With all their avowed lingual emphasis they unconsciously expose their withheld vision of language and languages as something contributory and subservient to something far more significant and crucial.

The noun *use* denigrates language and human communication into something utterly instrumental and reduced to an occurrent action or a single act. Another noun *usage* does not repair that derision by adding up a sense of customary activity. But even this would not help much but only make it not so scornfully conveyed. Entirely instrumental language is stripped of its self-sufficiency and value. I do believe that the human linguo-cognitive capacity to share and advance our own self-awareness and vocation is superior to an instrument of any kind. It is both the source and the purpose of our becoming and being human. It is in fact the key way of our existence.

An ample way to describe the practices of exercising this linguo-cognitive capacity of ours was introduced by **Ludvig Wittgenstein** who coined the expression *language games* (*Sprachspiele*). Right away he starts his treatise with a passage from **Augustine**'s *Confessions* (1.8) about the way the would-be saint learned how to speak and talk. Wittgenstein ridicules his gullible scheme of "a particular picture of the essence of human language […]: the words in language name objects – sentences are combinations of such names" (Wittgenstein 2009, 5e). No doubt such a formal pattern looks naively ludicrous, though actually Augustine's authentic design serves as an ample guide to *Philosophical Investigations* and provides the layout for language games.

According to Wittgenstein language games involve not just sequences of words and utterances but the entire conducts of all involved in playing interactive games[7]. Furthermore, in § 23 Wittgenstein insisted "The word "language-game" is used here to emphasize the fact that the *speaking of language* (italics mine – *M.I.*) is part of

6 In fact Charles Peirce attempted to consider pragmatic distinctions etc. and even devised the notion of semiosis but he was overwhelmed by nominalist traditions just like Descartes. As a result Peirce could not resist scholastic temptations building numerous sign models in purely scholastic manner. Unfortunately modern semioticians follow Peirsean temptations rather than elaborating his genuine break-through insights of semiosis and its creative sway.

7 "7. In the practice of the use of language (2) one party calls out the words, the other acts on them. However, in instruction in the language the following process will occur: the learner names the objects; that is, he utters the word when the teacher points at the stone. — Indeed, there will be an even simpler exercise: the pupil repeats the

an activity, or a form of life" (Wittgenstein 2009, 15e). In fact, the notion of *form of life* (*Lebensform*) constitutes a complementary pair with the idea of language game. The combination of *Sprachspile* (*processes of gaming and playing with wordings and lingual skills*) with *Lebensformen* (*modes of living*) comprises authentic insights into how people become human or learn to communicate and understand each other. Anyway, it is far more relevant than the formal pseudo-Augustinian pattern of shaping blunt sentences from detached names or any similar structuralist exercises à la Saussure or Chomsky.

Ludvig Wittgenstein discerns a range of basic types of gaming coupled with modes of living. They are "those games by means of which children learn their native language" (§ 1, 7 etc.), numerous instances of games of chess (§ 200, 205, 316, 337, 365, 563, 576 etc.), "a language-game in which A asks, and B reports, the number of slabs or blocks in a pile" (§ 21), "a language-game of inventing a name for something" (§ 27), a language-game of learning a foreign language (§ 32), "the game of measuring with a metre-rule" (§ 51), "a language-game in which someone is ordered to bring certain objects which are composed of several parts" (§ 62), language-game of reporting (§ 94), reading (§ 156), experiencing a word (§ 273), confessing the motive of an action (§334), expressing a sensation (§ 288) and a language-game of lying (§ 249).

Now it is the appropriate juncture to refer to the famous §§ on games and family resemblance (*Familienähnlichkeit*):

> "66. Consider, for example, the activities that we call "games". I mean board-games, card-games, ball-games, athletic games, and so on[…] And the upshot of these considerations is: we see a complicated network of similarities overlapping and criss-crossing: similarities in the large and in the small.
>
> 67. I can think of no better expression to characterize these similarities than "family resemblances"; for the various resemblances between members of a family – build, features, colour of eyes, gait, temperament, and so on and so forth – overlap and criss-cross in the same way. – And I shall say: 'games' form a family" (Wittgenstein 2009, 36e).

In other words, Wittgenstein suggests that due to long-standing practice, an assortment of contingent properties of gaming and playing creates recurrent linkages producing networks of similarities and family resemblances. He stops at this juncture without raising a question if such a network provides something non-contingent and indispensable.

Surprisingly enough the positive answer had been already given a century and a half earlier by **Friedrich Schiller** who probably had been the first to claim the universal significance of games for human life and our very nature. In his seminal work of 1795 "*On the Aesthetic Education of Man in a Series of Letters*" (*Über die ästhetische Erziehung des Menschen in einer Reihe von Briefen*) Schiller highlighted the fundamental value, benefit and affinity (resemblance) of all kinds of *games* (*Spielen*) as exercise and advancement of vital human capacities. In the 15th letter he insists: "Thus, to speak out once for all, a human being plays only then and there where s/he is human in the full meaning of the word, and s/he is only completely a human being only then and there where s/he plays (Denn, um es endlich auf einmal herauszusagen, der Mensch spielt nur, wo er in voller Bedeutung des Wortes Mensch ist, und er ist nur da ganz Mensch, wo er spielt)" (Schiller 1795, 88 — translation is mine).

Somewhat earlier Schiller tries to explore the prototype of this basic notion which he calls a bare[8] game (*ein bloßes Spiel*) asking a question: "But what is meant by a bare play, when we know that in all human conditions that very thing is play (or game – *M.I.*), and only that is play which makes man complete and develops his twofold nature integrally? (*Aber was heißt denn ein bloßes Spiel, nachdem wir wissen, daß unter allen Zuständen des Menschen gerade das Spiel und nur das Spiel es ist, was ihn vollständig macht und seine doppelte Natur auf einmal entfaltet?*)" (Schiller 1795, 86).

Shiller figures out the essence of the bare game and calls it *play drive* (*Spieltrieb*) or as it is sometimes translated as play instinct. According to him this play drive is one the three fundamental drives – matter drive (Sachtrieb), form drive (Formtrieb) and play drive (Spieltrieb): "The object of the matter drive, expressed in a general concept (in einem allgemeinen Begriff ausgedrückt), is called life (Leben), in the broadest sense; a concept which means all things being material, and all imply the immediate presence in the senses (alle unmittelbare Gegenwart in den Sinnen bedeutet). The object of the form drive, expressed in a general concept, is called image (Gestalt), both in its figurative and strict meaning; a concept which includes all the formal properties of things (alle formalen Beschaffenheiten der Dinge) and all their relations grasped by cognitive abilities (Denkkräfte). The object of the play

words after the teacher — both of these being speech-like processes. We can also think of the whole process of using words in (2) as one of those games by means of which children learn their native language. I will call these games "language-games" and will sometimes speak of a primitive language as a language-game. And the processes of naming the stones and of repeating words after someone might also be called language-games. Think of certain uses that are made of words in games like ring-a-ring-a-roses. I shall also call the whole, consisting of language and the activities into which it is woven, a "language-game"" (Wittgenstein 2009, 8e).

8 The German homonymic verbalization *bloß* stands for two adjectives. The original one means "stripped off, naked" and the derived one signifies a quality of being purified and essential. This second is clearly used by Schiller and betrays the prototypal character of his categorization.

drive, presented in a general scheme (in einem allgemeinen Schema vorgestellt), could thus be called a living form (wird also lebende Gestalt heissen können); a concept which serves as a designation for all the aesthetic properties of phenomena (allen ästhetischen Beschaffenheiten der Erscheinungen), and in a word for what is called beauty in the broadest sense" (Schiller 1795, 82).

In many ways, **this triple scheme** may remind semioticians of our days of still nascent in 1795 Peirsean categorizing into the Firstness, Secondness and Thirdness. No doubt that Schiller himself intended his readers to notice the resemblance of the scheme with the three Kantian critiques[9]. They would easily identify the semblance of Schiller's life with Kantian nature (Natur) and pure reason (Verstand), form with freedom (Freiheit) and practical reason (Vernunft), and living image with art (Kunst) and judgement abilities (Urteilskraft). In this composition play, drive of living form turns out to do nothing but integrate living and structurating into living images of games and plays

Why this **Kantian foresight** first interpreted by **Schiller**, then recovered by **Peirce** and further reinvigorated by **Wittgenstein** is helpful and practical for a relevant perception of languaging, thinking and human pragmatic enacting? It is so because it helps to identify the common source for all those human capacities to communicate, ponder and behave in distinctly human ways. This common source of human and even pre-human primitive abilities and capacities was the focus of intellectual searching in the times of both Kant and Schiller. Their great fellow thinker Goethe in Faustus soliloquy identified four substitutes for Ancient and Christian Λόγος – the word (das Wort) or speaking, the thought (der Sinn) or thinking, the ability (die Kraft) or enabling, actual doing (die Tat).

Although this list of four notions would not include neither Kantian capacities (Vermögen, Krafte) nor the notion of play and play-drive by Schiller, they definitely ascertain the primary abilities and capacities.

The German word das Spiel has a very broad range of meanings and covers what English would call games, plays, gameplays, performances, and assorted acts of showing off, playing and enjoyment. Furthermore, the word *Spiel* is derived from Middle High German *spil*, from Old High German *spil*, and finally from Proto-West Germanic **spil* ("dance, move").

The same origin and meanings are typical of the Dutch word *spel*. In fact, it is the key term used by Johan Huizinga in his classical book "Homo ludens" first published in Dutch (Huizinga 1940) and translated into many languages to become an international bestseller. In the title of the book, its author exploits the binominal Linnaean nomenclature to imply a direct link between central human qualities and playing (spelen)[10]. What is more, Huizinga recognizes that playing is fundamental not only for humans but also for a broader range of living creatures, "Play (spel) is older than culture, for culture, however inadequately always presupposes human and animals have not waited for a man to teach them their playing (spelen). We can safely assert, even, that *human civilization has added no essential feature to the general idea of play* (dat menschelijke beschaving aan het algemeene begrip spel geen wezenlijk kenmerk heeft toegevoegd – italics mine M.I.). Animals play just like men. We have only to watch young to see that all the essentials of human play are present in their merry gambols. They invite one another to play by a certain ceremoniousness of attitude and gesture. They keep to the rule that you shall not bite, or not bite hard, your brother's ear. They pretend to get terribly angry. And – what is most important – in all these doings they plainly experience tremendous fun and enjoyment. Such rompings of young dogs are only one of the simpler forms of animal play. There are other, much more highly developed forms: regular contests and beautiful performances before an admiring public. (Huizinga 1949, 1; Huizinga 1940, 1).

Huizinga made this statement at the very beginning of the book. Later in chapter 11, he summed it up, "We have to conclude, therefore, that civilization is, in its earliest phases, played. It does not come *from* play (niet *uit* spel) like a baby detaching itself from the womb: it arises *in* and *as* play (ontplooit zich *in* spel en *als* spel), and never leaves it. (Huizinga 1949, 173; Huizinga 1940, 255). Thus, the non-human and pre-human capacity of playing turns into a distinctly anthropic and civilizing property of our human kind.

Coming back to Wittgensteinian language games one can note that they all despite their very special or even specific pragmatic characteristics intrinsically develop first family resemblances – probably due to similar pragmatic functionalities hic and nunc – and eventually apparent affinities of greater significance. Wittgenstein would not try to explain why and how this happens. His only hint is the habitual linkage of language games and forms of life. One can interpret this linkage as an inference that gaming in all its variations actually roots in living forms and processes of living itself.

This assumed intuition is astutely expressed by Friedrich Schiller and Johan Huizinga. It may be fair to follow them and define gaming, playing and game-playing as an exercise of essential proficiencies and skills of humans and other living creatures or even as a fundamental agentive potential of life itself.

Such an interpretation encourages addressing the very origin of languaging.

9 Schiller's reception and modification of Kantian ideas is a vital topic of scholarly research (cf. Cecchi 2010; Binkelmann 2019; Deligiorgi 2020; Mehigan 2020; Waibel 2020).

10 Huizinga notes in the Foreword to his seminal volume, "It seems to me that next to Homo Faber, and perhaps on the same level as Homo Sapiens, Homo Ludens, Man the Player, deserves a place in our nomenclature" (Huizinga 1949, IX; Huizinga 1940, XI).

BECOMING HUMAN

Languaging is an extremely subtle expression of our purpose and pursuit of becoming human. Its manifestations range from individual language-learning be it mother tongue or a foreign language to collective acquiring of all kinds of vernaculars and parlances. Still, the master process of them all is the procuring of plenteous concerns, capacities, conditions and affordances that make human communication and mutual existence possible. This master pursuit of anthropogenesis or formation and development of human practices of living, thinking and communicating together evolves in a series of boosted (critical) and slow (preparatory and consolidating) modes of development shaped into *cascades of persisting changes*. The emergence of *concerns* and *capacities*, *conditions* and *affordances* are not single and singular occurrences, but cascades of "*recurring rediscoveries*" that are responsive to cascades of relentless challenges.

Major challenge-and-response cascades enfold each of the *three main transition aeras* or aeons of our ancestral social primates to the current human condition: (1) *biosocial communication advancement*, (2) *glottogony* and (3) *glottogenesis*. Smaller cascades also split and enfold shorter developmental periods while minor cascades embrace specific phases of advancing modes of human communication or even particular individual innovations. With all the abundance and richness of behavioral outcomes and communicative practices both their protracted refining during regular modification periods and accelerated improvement within the cascades of changes can be boiled down to an assortment of regular patterns or rather their recurring rediscoveries.

One of such patterns is copying and internalizing externalities and peripheral conditions useful to successful living together. As a result, living, communicating and thinking together become more reliable on the one hand and affordable on the other. A respective example includes internalizing the objective (external) need for help and cooperation of others into subjective (internal) practices of politeness and corresponding behavioral rules. Another example comprises internalizing specifically motivated individual attitudes displayed in random external milieu into mutually acceptable ("conventional" and thus "arbitrary" in the specific Saussurean sense) meanings within common vocabularies. A further example involves internalizing pragmatic communicative settings and interactions into internal rules of grammar for shaping utterances into specific propositions with particular moods, tenses, agreements, governments, cases, persons etc.

Philologically biased linguist would say that adequate or happy external communication contexts of all possible kinds are internalized into internal linguistic rules (règles de langue). Personally, I would substitute the misleading word *context* for *social communication setting* or just *milieu* or even *Umwelt* to avoid simplifying the reduction of versatile and multimodal human communication to diminishing schemata devised by bookish literati self-centered on printed texts of their school curricula. I would rather link external *social communication settings* with internal *grammatic settings* and internal distributed *thinking (knowing) settings*, than demote all that magnificence to straightforward trivialities of blunt *texts within* plain *contexts*.

Coming back to anthropogenesis and languaging within this comprehensive evolutionary headway one has to set up its dimensions and contours. There are some widespread and accepted ways of modeling as well some less common and intricate.

Sequencing seems to be a very easy and natural way to structure alternative states vis-à-vis each other. Very often this type of modeling presents dynamic phenomena as series or even trains of disjointed states each distinctly different and displacing each other. In this case, the modeling rule – *one instead of the other* – distorts the vision of evolution with its simplifying reduction into repeating rejections and replacements. Far more relevant is the modeling principle – *new in addition to the previous ones*. It allows to concede and commend the multilayered buildup of heritage. This legacy accumulating is nonlinear. It implies choice and branching, nonlinear gameplaying and branching storylines.

The overall evolutionary formation suggests the allocation of at least four independent evolutionary plots cumulative gameplaying – each with its own holistic logic and independent deployment. They succeed and continue each other with cascades of "*recurring rediscoveries*" within a common story of anthropogenesis.

Evolutionary advancement of proto-humans and early humans entangled formation and development of human life practices, thinking and communication is a series of boosted (critical) and slow (preparatory and consolidating) modes of development in the form of cascades of evolutionary changes. Combination of the two modes that can be called *revolutionary* and *gradual* shapes into three major *aeons* (evolutionary plots, stories, stages from the Greek αἰών – lifetime, generation) – *multimodal biosocial communication advancement*, *glottogony* and *glottogenesis* as well as comparatively recent and faster phases of *modern language-building*, furthering of *current language families* and contemporary multiplication of *supra-vocal multimodal languages* entertaining non-vocal textures of writing, printing, radio- and televising, computing, visualizing or even direct neural interactions.

The initial plot (and aeon) of becoming human is *primary human advancement in biocommunication* supplemented by its social twinning. Essentially it is multimodal communication helping our ancestor primates to facilitate both biological and social cooperation and mutual help within proto-human species, populations and individual creatures. It started more than 7 million years ago and became the longest period of slow and uneven, occasional and sporadic advancements in communication.

Continuous communication improvements were distinctly refocused to vocal practices of *glottology* about 2 700 – 2 500 millennia before the present. Those

practices and emerging habits of speaking steadily replaced circumstantial voicing (shouts, screams, shrieks etc.) with habitual and regular vocalizations tuned to common happy specimens of articulating.

Between 130 – 100 thousand years ago the protracted elaboration of articulation abilities was accelerated by a cascade of conversions followed by continual fitting of innovations into more regular set-ups of communicative customs and even conventions. Eventually, about 50 – 40 millennia ago elaborations of speech practices were overlapped and integrated by *glottogenesis*. It was the next plot or aeon of human advancement with the promotion of verbal and multimodal communicative practices and institutions of languaging and *languages* as its systematic outcomes. Thus, the emergence of languages is quite a recent achievement on the standard timeline of evolution.

Its main underpinning was the transformation of circumstantial reference frames of external conditions and situations into regular patterns of communication standards.

Language-building and emergence of language-like entities.

Finally, it is the emergence and development of language with all the divisions just mentioned as a linguistic phenomenon known to us and social consciousness as a cultural and civilizational phenomenon. It is already appropriate to talk about the history of languages and intelligence or rather individual intellectual traditions.

PRIMARY HUMAN ADVANCEMENT.

The long and dramatic evolutionary process of anthropogenesis started more than seven million years ago and became the longest period of slow and uneven, occasional and sporadic advancements in communication. A long stage of silent or speechless and dumb or thoughtless primitiveness covers most of proto-human existence.

The initial plot (and aeon) of becoming human is *primary human advancement in biocommunication* supplemented by its *social twinning*. A combination of biosocial communication with appended supra-biological interactions provided proto-humans with new conditions, capacities and affordances. Multimodal biosocial communication fostered our ancestor primates to facilitate both biological and social cooperation and mutual help.

Abilities to communicate and interact are as early as the emergence of eusociality with insects and crustaceans that typically developed within superorganisms. Communication of relatively autonomous creatures is a much later development. An essential and consistent advancement of such abilities was wielded by the Hominina subtribe of hominids.

Practices of doing, sensing, mimicking and vocalizing together.

GLOTTOGONY

After over four million year long period of continuous communication improvements, they were distinctly refocused to vocal practices. Thus, the next plot or aeon of anthropogenesis supplemented the previous one. The new one can be called *glottogony* since it appeared miraculously similar to Hesiodic Theogony (Θεογονία). In actual fact, it revealed itself as a phenomenal birth of audio-vocal and eventually regular self-sufficient agency of distinctly human communication superior to any primitive band, tribe or individual.

The evolutionary plot of glottogony started with a revolutionary change over and transition that took approximately two hundred thousand years from 2.7 to 2.5 million years ago. This is truly a turning point, no matter how difficult it is to call it a moment of one hundred thousand years. It is associated with the formation of the so-called pre-speech (Rozov 2021).

After a million years of relatively regular and slow improvements about 1.5 million years before the present, processes began to emerge ensuring the reliability of communication by providing more reliable substitutes for incidental reference frames or external communication settings. It involved the internalization of the external communication conditions, options and settings into internal systemic faculties of speech generation.

It seems quite probable that the entire subtribe of *Homo sapiens* and its lines of *Homo sapiens neanderthalensis, Homo sapiens denisova* or *altaiensis* and definitely *Homo sapiens sapiens* or anatomically modern humans might have gradually mastered internalization of external communication settings well back a few hundred millennia ago.

With all that primary vocalizations were still largely involuntary and spontaneous. Still, they were distinctly and consistently supported by correlations with pragmatic and symbolic actions, although this distinction might have been still shaky and unusual. What was happening could appear to us as shouts, screams and howls. Ensuing the establishment of links between what Saussure would later call the signified (*signifié*) and the signifier (*significant*) was crucially vital. This was a tremendous step forward compared with the communication of other primates and animals. The signified was something noteworthy that should have become known to everyone. It could be the state of affairs, the perception and meaning of these provisions, expectations, intentions and pragmatic actions of people etc. It could be called a pragmatic background. It was coordinated and began to synchronize with the signifier – intentional imitations of the state of affairs, vocalization (shouts and howls, chanting and even singing), gestures and facial expressions. Such a transition could be called the Primary Saussurean Revolution.

Thus, already within glottogony distant indications and precursors of glottogenesis started to ensue. Its heyday marked about 130 – 100 thousand years ago emergence of very sketchy anticipations of the impending Saussure's langue or proto-language.

GLOTTOGENESIS

The next separate evolutionary plot was the emergence and deployment of practices, abilities and tools of

languaging and thinking. It was glottogenesis in a narrow sense. It was coupled with the appearance, even in the most rudimentary proto-forms, of analogues of *la langue*, of *la parole*, of discourses. But to move further from speaking to languaging and eventually to languages one had to develop semiotic referents to linguistic communities and linguistic persons or personalities featured by respective markers – would be pragmatic of communication parties and participants.

The advent of actual language-like entities could be discerned already with the appearance of some utterances and phrasings having semblance to speech acts, wordings and syntagmata still in completely situational vocalizations. Some repetitive organization of vocalizations gradually started to turn habitual. In a series of cascades of transformations, hints of language and its unsteady situational roots and backgrounds appeared ever more distinctly. Most importantly, step by step, they were internalized and stored in memory, first short-term, then more and more deep, finally in the operational systems of the generic, population and individual… Sooner or later a need arose for formatting a language that generalized all accumulated proficiencies and aptitudes.

The revolutionary spell of the next Rubicon extended approximately to thirty thousand years from about 130 to 100 thousand years before the present. Twice as much time – sixty thousand years – took the evolutionary development of the formation of a simple situationally determined speech syntax to provide only the fragile rudiments of language. People steadily mastered the difficult art of turn-talking. The resulting pragmatic results, and most importantly, the algorithms for obtaining them, were standardized and formalized in various kinds of customs, rituals and instrumental habits. This was a job work for several thousand years. As a result, story-building abilities arose. Plots were saturated with what were later called motives, and they, in turn, required the development of rules for connecting with each other into morphologically distinct sequences.

Over time, three-step associations begin to appear and become fixed by habits. Thus, it becomes possible to supplement binary Saussure connections with other Pearce connections, turning the former bundles into a full-fledged accomplice of triads. Identification of pragmatic agents and their sign-substitutes paved the way to the three-step process of semiosis. At first, it simply served to open the fixed mirror opposition of the signifier and the signified, but then it turned to acquire its own functionality. It helped to transfer static oppositions and to turn them into recursions with an infinite sequence of steps. However, at the same time, the new psychosomatic "disconnector" simultaneously "closed" single sequences of three steps. As a result, the intermediary circuit breaker became a kind of switch to operate a series of alternative options for connecting the signifier and the signified. A germinal version of the hermeneutical circle emerged, and with it interpretations and ultimately semiosis itself. Ultimately Extended Peirsean Revolution led to the formatting of full-fledged languages becoming the actual expedient behind the miraculous Chomskyan Language Acquisition Device (LAD).

As a result, approximately 50 – 40 thousand years ago glottogenesis came of age. New cascades of evolutionary changes transformed lives of our ancestors by adding up a set of 'behavioral modernity' traits (Lindly et al. 1990; Roebroeks et al. 1992; Klein 1995; Sherratt 1997; Korisettar 1998; Klein 1999) to well-established ways of life during the so-called Human revolution (Mellars, Stringer 1989). It was the time for the so-called Great Leap Forward (Diamond 1989; Davidson 2003).

Though some of the features of 'behavioral modernity' might have appeared somewhat earlier it is their integral complex that could be associated with the transformation of primitive proficiencies to speak and langue-like predispositions into distinct linguistic abilities and practices or protolanguages similar to modern ones.

An even shorter revolutionary overcoming of the next Rubicon takes only about ten thousand years. There is a point of view that it was this time that became

Surprisingly, no one suggested calling the period from 50 to 40 thousand years before us the Language Revolution, although there are reasons for this because people apparently acquired some semblance of what we now call language.

According to Rozov, the time from 50 to 10 thousand years before us is marked by the existence of a simple language. This is actually an emerging, but so far fragmented and not yet clearly structured, algorithmic toolkit for generating speech. It may have resembled what is described by the eminent researcher Daniel Everett as the Pirahã language (Everett 2017; Everett 2018).

However, it is difficult to reliably judge this based on Everett's publications alone. Unfortunately, I did not have the opportunity to seriously study it in order to confidently judge the strength of the arguments for the absence of recursion in this language. Perhaps some markers or communication customs were simply not noticed. In any case, logonomic constructions were definitely not taken into account.

With the simple language emerging in the Language revolution semantics was still rudimentary, syntactics continued to be fragmentary and unsteady, and overarching pragmatics[11], which was to complete the building of a universal grammar, was just emerging. Gradually connections between deixes, syntactics and pragmatics shaped up. It was reinforced by recursive looping afforded by pragmasyntactics. Finally, closer to ten thousand years before us, simple languages finally acquired a form quite similar to those of today.

11 Pragmatics serves as both the initial precondition of semiosis and its ultimate completion.

ORIGIN OF LANGUAGES AND LANGUAGE FAMILIES

The emergence of human languages as we know them is very recent. Most probably about 12 thousand years ago a developed system of oral language was formed (Sterelny 2011). The history of language families and proto-families begins only 7-5 millennia ago (Rozov 2021; Rozov 2022; Ilyin 2022). Georgy Starostin pushes it closer to us by 5–6 thousand years before modern times.

To sum up, between 12 and 5 millennia ago, cascades of changes took place, leading to the formation of language families and the beginning of their history.

In general, there can be little doubt that the most important evolutionary content of what happened was the arrangement of grammar. It was gradual.

It is extremely tempting to follow Alexei Losev along the ladder of typological transitions, outlined by him in his brilliant work on the evolutionary typology of languages known to us and the propositional functions of thinking, and grammatical structure, including the development of the case system and predication. Its main results were published in the form of an article (Losev 1982a) and notes for a course of lectures (Losev 1982b). According to A.F. Losev, the evolutionary phases of transformations of grammatical, as well as social, logical and other subjects became the incorporated grammatical structure, binomial incorporation, pronominal, possessive, ergative, affective, locative and, finally, the nominative (modern) system. At the same time, this is also the evolution of the case system from genitive to nominative. This is the history of the formation of human subjectivity. Of course, this exceptionally beautiful scheme requires verification and clarification in light of new and recent data from linguistic typology. However, the general trend was captured brilliantly by Losev and can serve as a general guideline. Did the development of languages stop there? Can we consider that evolution has stopped? Most probably it still continues due to provisions and workings of multifarious kinds of languaging.

LANGUAGING OF PERMANENT LANGUAGE REVOLUTIONS

The subsequent evolution of languages is interrelated with the emergence of new types of multimodal languages with ever new accumulated factures or textures of speech[12]. They are methods and devices for fixing and reliably transmitting speech, using the options beyond and above that of ephemeral 'voice' or audio-vocal facture of speech. Probably one of the earliest cases of new factures was the creation of prosodically fashioned poetic and ritual speech. This invention of times immemorial made tribal communication relatively stable and able to surpass moments of speaking. It established communication links between spatially or temporally separated individuals and populations. Further factures of speech involved the utilization of material means and vehicles of communication, including diverse tokens and event systems of the token-based message–making. The surviving examples include memory sticks of Australians, quipu (also spelled khipu) of South American Indians, knotted "writing" in Central America etc. All those innovations eased the burden of some problems, created new opportunities, and therefore influenced languages as a whole.

About five thousand years ago, writing was born and the stage of oral and written speech began. Only the inscriptions appeared sequentially, then the recording of complete texts. The manuscripts and books included maps and illustrations. However, the term text (textus) itself did not yet exist, much less a corresponding phenomenon. It appeared just five centuries ago when the Gutenberg Revolution opened up the possibility of printing texts, maps and illustrations. Sometimes they talk about a new stage, but it is more appropriate to consider it only the final phase of the stage of writing with the possibility of mass copying. A little later, the paired concept of text and context appears.

About a century and a half ago, with the advent of sound transmission and sound recording, a new stage of multi-factured communication emerged. Speech began to integrate with visual, sound and other methods of communication. The still ongoing transition to this stage is unfolding before our eyes. It illustrates well the features of developmental transitions.

REFERENCES

Aquinas, T., 2005. *Commentaries on Aristotle's "On Sense and What Is Sensed" and "On Memory and Recollection*. CUA Press.

Aristotelis, 1596. Libelli Aristotelis de Sensu et Sensilibus Castigata versio et Analysis Logica. Francofurti: apud M. Zachariam Palthenium.

Aristotelis, 1848. Opera omnia; graece et latine, cum indice nominum et rerum absolutissimo. P.: Didot.

Austin, J. L., 1962a. How to Do Things with Words. In Urmson, J. O. (Ed.), The William James Lectures Delivered at Harvard University in 1955. Clarendon Press.

Austin, J. L., 1962b. *Sense and sensibilia*. Reconstructed from the manuscript notes by GJ Warnock. Oxford: Clarendon Press.

Bezemer, J., Jewitt, C., 2018. Multimodality: A guide for linguists. *Research methods in linguistics*, *28*, 1–3.

Binkelmann, C., 2019. Wechselwirkung im Spieltrieb. Schillers Konfliktuöser Bezug auf Fichte. (Briefe 14 bis 16). In Stiening, G. (Ed.), *Friedrich Schiller: über die*

12 The terms *facture* (cf. obsolete meaning "manner of making or doing anything" and *texture* ("the quality given to a work of art by the composition and interaction of its parts") denote ways and means of producing messages including the matter-energy substances utilized therein and the techniques of their formal processing.

ästhetische Erziehung des Menschen in einer Reihe von Briefen. Berlin, Boston: Walter de Gruyter GmbH & Co KG.

Brown, D., 2007. Is Descartes' body a mode of mind? In *Forming the Mind: Essays on the Internal Senses and the Mind/Body Problem from Avicenna to the Medical Enlightenment*. Dordrecht: Springer Netherlands, pp. 263–281.

Brown, D., 2014. The Sixth Meditation: Descartes and the embodied self. In Cunning, D. (Ed.), *The Cambridge companion to Descartes' Meditations*. Cambridge University Press, pp. 240–257.

Brown, D., 2016. Objective being in Descartes: that which we know or that by which we know? In *Representation and objects of thought in medieval philosophy*. Routledge, pp. 135–153.

Buyssens, E., 1942. De l'abstrait et du concret dans les faits linguistiques: La parole—le discours—la langue. *Acta linguistica*, 3(1), 17–23.

Cartesius, 1641. *Renati Des-Cartes Meditationes de prima philosophia, in qua Dei existentia et animae immortalitas demonstrantur. Parisiis apud Michaelem Soli.*

Cecchi, D., 2010. Heidegger on Schiller, Arendt on Kant. In *Schreiben Dichten Denken*. Klostermann, pp. 113–126.

Chamberlain, C., 2020. What Am I? Descartes's Various Ways of Considering the Self. *Journal of Modern Philosophy*, *2*(1).

Cowley, S. J., 2009. Distributed language and dynamics. *Pragmatics & cognition*, *17*(3), 495–508.

Cowley, S. J. (Ed.), 2011. *Distributed Language*. John Benjamins Publishing, pp. 1–230.

Cowley, S. J., 2021. Ecolinguistics reunited: Rewilding the territory. *Journal of World Languages*, 7(3), 405–427.

Cowley, S. J., Gahrn-Andersen, R., 2022. Simplexifying: harnessing the power of enlanguaged cognition. *Chinese Semiotic Studies*, *18*(1), 97–119.

Davidson, T. M., 2003. The Great Leap Forward: the anatomic basis for the acquisition of speech and obstructive sleep apnea. *Sleep medicine*, *4*(3), 185–194.

Deligiorgi, K., 2020. Kant, Schiller, and the idea of a moral self. *Kant-Studien*, *111*(2), 303–322.

Diamond, J., 1989. Dawn of the Human Race: The Great Leap Forward. *Discover*, *10*(5), 50–60.

Everett, D., 2017. *How language began: The story of humanity's greatest invention*. Profile Books.

Everett, D. L., 2018. The role of culture in language and cognition. *Language and Linguistics Compass*, *12*(11), e12304.

Halliday, M. A. K., 1978. Language as social semiotic: the social interpretation of language and meaning. L.: Edward Allen.

Hjelmslev, L., 1969. *Prolegomena to a Theory of Language: Transl. by Francis J. Whitfield*. University of Wisconsin Press.

Hjelmslev, L., 1993. Omkring Sprogteoriens Grundlæggels. Travaux du Cercle Linguistique de Copenhague. Vol. XXV. Copenhagen: Reitzel.

Hodge, B., Kress, G., 1988. *Social semiotics*. Ithaca (N.Y.): Cornell University Press.

Hodge, B., 2016. *Social semiotics for a complex world: Analysing language and social meaning*. John Wiley & Sons.

Hoffmeyer, J., 1998. Surfaces inside surfaces. On the origin of agency and life. *Cybernetics & Human Knowing*, *5*(1), 33–42.

Huizinga, J., 1949. Homo ludens: A study of the play-element in culture. London, Boston and Henley: Routledge & Kegan Paul.

Huizinga, J., 1940. Homo ludens. Proeve fleener bepaling van het spel-element der cultuur. Haarlem: H. D. Tjeenk Willink & Zoon.

Ilyin, M., 2020. Emergence and advancement of basic human capacities. *Linguistic Frontiers*, 3(2), 3–20, available at: < DOI: 10.2478/lf-2020-0010 >.

Ilyin, M.V., 2022. People shaped themselves from animals by recursion, reference and linguistics. METHOD: Moscow Quarterly of Works from Social Science Disciplines. – M.: *INION RAN*, 2(2), 41–81, available at: < http://www.doi.org/10.31249/metodquarterly/02.02.05 >. (In Russian)

Kant, I., 1770. De Mundi Sensibilis atque Intelligibilis Forma et Principiis. Regiomonti: Impensis Io. Iac. Kanteri.

Klein, R. G., 1995. Anatomy, behavior, and modern human origins. *Journal of World Prehistory*, 9(2), 167–198.

Klein, R. G., 1999. *The human career: human biological and cultural origins.* Chicago: University of Chicago Press.

Korisettar, R., 1998. *Early Human Behaviour in Global Context*. Routledge.

Kress, G., 2009. *Multimodality: A social semiotic approach to contemporary communication*. Routledge.

Lehmann, W., 1986. A gothic etymological dictionary. Based on the third edition of Vergleichendes Wörterbuch der Gotischen Sprache by Sigmund Feist. Leiden: Brill.

Lindly, J. M., Clark, G. A. , Bar-Yosef, O. et al., 1990. Symbolism and Modern Human Origins [and Comments and Reply]. *Current Anthropology*, 31(3), 233–261.

Losev, A. F., 1982a. On the propositional functions of the oldest lexical structures. In *Sign. Symbol. Myth.* M.: Publishing House of Moscow State University, pp. 246–279. (In Russian)

Losev, A. F., 1982b. On the types of grammatical sentences in connection with the history of thinking. In *Sign. Symbol. Myth.* M.: Publishing House of Moscow State University, pp. 280–407. (In Russian)

Mehigan, T., 2020. Schiller after Kant: The "Unexpected Science" of the Briefe über die ästhetische Erziehung des Menschen. *Kant-Studien*, *111*(2), 285–302.

Mellars, P., Stringer (Eds.), 1989. The human revolution: Behavioural and biological perspectives on the origins of modern humans, vol. I. Edinburgh: Edinburgh University Press.

Orel, V. E., 2003. "*þenʒaz ~ *þenxaz". A handbook of Germanic etymology. Leiden: Brill.

Roebroeks, W., Conard, N. J., Van Kolfschoten, T. et al., 1992. Dense forests, cold steppes, and the palaeolithic

settlement of Northern Europe [and comments and replies]. *Current anthropology*, *33*(5), 551–586.

Rozov, N. S., 2021. Origin of language: coevolution of communicative concerns and sign structures. *METHOD: Moscow Yearbook of Works from Social Science Disciplines,* 11, 162–193.

Rozov, N. S., 2022. *Origin of language and consciousness. How social orders and communicative concerns gave rise to speech and cognitive abilities.* Novosibirsk: Manuscript. (In Russian)

Rozov, N. S., 2023. *The Origin of Language and Consciousness: How Social Orders and Communicative Concerns Gave Rise to Speech and Cognitive Abilities*. Cham: Springer Nature Switzerland.

Russell, B., 1918. *Mysticism and Logic and other essays*. Longmans, Green and Co., London.

Saussure, F., 1959. *Course in general linguistics*. N.Y.: Philosophical library.

Schiller, F., 1795. Über die ästhetische Erziehung des Menschen in einer Reihe von Briefen. *Die Horen*, 1(1), 7–48, 2, 51–94.

Sériot, P. (1986). Langue russe et discours politique soviétique: analyse des nominalisations. *Langages*, (81), 11-41

Sherratt, A., 1997. Climatic cycles and behavioural revolutions: the emergence of modern humans and the beginning of farming. *Antiquity*, *71*(272), 271–287.

Steffensen, S., Cowley, S. J., 2021. Thinking on behalf of the world: Radical embodied ecolinguistics. In Wen, X., Taylor, J. R. (Eds.), *The Routledge handbook of cognitive linguistics*. London: Routledge, pp. 723–736.

Sterelny, K., 2011. From hominins to humans: how sapiens became behaviourally modern. *Philosophical Transactions of the Royal Society B: Biological Sciences*, *366*(1566), 809–822.

Thibault, P.J., 2022a. Distributed languaging, affective dynamics, and the human ecology Volume I: The sense-making body. Routledge.

Thibault, P.J., 2022b. Distributed Languaging, Affective Dynamics, and the Human Ecology Volume II**:** Co-articulating Self and World. Routledge.

Waibel, V. L., 2020. Feelings, morality, human beings seen holistically: a dialogue between Kant and Schiller. *Feelings, morality, human beings seen holistically: a dialogue between Kant and Schiller*, 87–99.

Wittgenstein, L., 2009. Philosophical investigations . Anscombe, G.E.M., Hacker, P.M.S., Schulte, J. (Trans.). — Rev. 4th ed. Oxf.: Blackwell.

Zolyan, S., 2019. General sociolinguistics, social semiotics and semiotics of culture–ex pluribus unum? Forty years after Language as Social Semiotic. *Σημειωτκή – Sign Systems Studies*, *47*(3–4), 400–419.

Return to front page ↑