



# The essentialness of diachrony

#### Francisc Gafton\*

Faculty of Letters, "Alexandru Ioan Cuza" University, Bd. Carol I 11, 700506 Iași, Romania

Article info	Abstract
History:	Natural entities—plants and animals, on the one hand, society, language, and
Received December 21, 2014	culture, on the other—emerge through an assiduous diachronic effort, respond
Published January 13, 2015	to diachronically developed needs, exist and function diachronically. However,
	through the instruments at his disposal, man can only perceive and grasp the
Key words:	"fragment", seizing it for a prolonged instant, which explains his objective ten-
organism	dency to segment the spatiotemporal reality according to his own proportions
evolution	and abilities. Reality itself, however, cannot be subjected to the unnatural se-
diachrony	gregation of one of its own products and elements, and cannot be fully com-
synchrony	prehended in any other way than how it exists: as a whole. At the end of the
	synchronic road, what offers comprehension and understanding of the onto-
	logically-becoming whole is the path of the diachronic method.

"The theory of natural selection is to be accepted not merely as a law of biology as such, but as a principle of the natural world, which finds appropriate application in all the sciences of life and mind." (James Mark Baldwin)

#### 1. Introduction

Human generations naturally perceive only the present they live in, that of survival, even though their profound, real nature is diachronic. Just as each new cardiac cycle is necessary for life, each new step unfolds in the image and the wake of its predecessor, and as, in each new generation, the same gene transmits the same information and determines the same process or capacity, a complete and real existence is not possible without the continuous understanding and recollection of the diachronic dimension, of the non-hubristic truth that each individual is merely a cell whose life has no meaning, nor real existence, outside the life of the organism; that everything has its starting point in the past, and that true understanding can only come with the completion of the evolutionary path. For this reason, the complete present and the potential for a complete future reside in the present that has assimilated its past.

## 2. The structural-functional dynamics

Entities such as the vegetal cell, the animal individual, or society itself are organisms that—beyond their degrees of complexity—share common sets of structural-functional and behavioural traits. The constitution of a cell, or of any other kind of natural entity, is in the image of its progenitor and is the product of prior processes; from a structural standpoint, entities are resultants of states and processes that precede them. The cell functions in accordance to its inherited structural capacities and to its own needs, relative to the requirements of the bio-spatiotemporal ensemble of which it is part; from a functional standpoint, entities are resultants of the use of these structures, determined by the interaction with the environment, that is, adjusted by the entity's internal needs in connection with the external requirements.

<sup>\*</sup>Email address: algafton@gmail.com.

Adaptation of an organism occurs within the limits set by its structural equipment, through the conversion/overloading of existing structures to/with new functions. Structural modifications might be generated by prolonged unidirectional use of the structures under constant pressures from internal and external demands. Adaptation is the answer of the organism, by means of its structure, to both its internal needs and the requirements of the environment.

Biological systems—though not exclusively them—do not inherit their structure as an immutable element, but as a framework capable of adapting itself to possible internal needs and future external requirements. In turn, functions are only inherited as virtualities, and are then determined by the possibilities offered jointly by the structure and the actual demands of reality.

Structures and functions do not follow a rectilinear motion. A simplified but realistic model would show that in an environment with balanced demands the structure of one generation results from the consolidated (through collaboration and conflict of the elements) structure of the previous generations, its functioning being similar to that of its predecessors. In a demanding environment, or in one whose accumulated traits surpass even its own ability to maintain its inherited constants (the environment being nothing but the result of a multitude of coexisting systems, at different levels every organism being itself both an environment and an organism), the structure of a generation is in essence the same as above, although it starts being stretched in the direction of certain adjustments, introduced by the accommodation to intense requirements accumulated over time that have surpassed the equilibrium and resistance thresholds of the former structures. Certain accumulations of factors and of qualitative changes in the environment result in functional requirements that can only be fulfilled by structural adaptations. If the pressures imposed by the requirements of the environment surpass the capacity for response of the structure, the internal needs surpass the structure's limits to overload or (partially) convert, and the most efficient solution might be change. The exceeded structures transmit their stilluseful traits, to which the new structures add new functional solutions and answers, in accordance to the requirements that had initiated and determined the change. After a certain period in which functional requirements continue to induce the same functional needs, new generations will come to inherit the new structural data, new functional valences, a new equilibrium settling in at the new level.

There is, therefore, a certain (spatio) temporal disparity between structure and function. The former constitutes a material support and a form derived from prior structures. Serving the purpose of exchanging matter and energy with the environment (as well as with other systems) aimed towards survival, the structures of a dissipative system must possess the ability to process their constituent material, and ultimately to be adaptable to the ways of existence and operation of the environment. The accommodation of a structure to the requirements of the environment is modulated and regulated by the use of its functions, but it can only occur within the limits given by the structure's internal potential. The latter is a way to exercise functions that are both subsequent—corresponding to that structure—, which fulfil internal needs, and consequent—allowed by that structure—, which fulfil the requirements of the environment and of the interaction with it.

Given the structural-functional traits of the organisms, as well as the ways in which they connect to sub- and superordinate systems, the rates of evolution occurring at different levels are differentiated: structures are more stable than functions, and primary elements are more stable than derived ones. For instance, perceptions and impressions change more slowly than the means of translating them through language into thought, and language forms change more slowly than thought contents. In linguistics, although oscillations and torsions can occur along all

compartments—their distribution depending on the period and on the dynamics of the linguistic norm—, the structure, i.e., the element of stability and that gives identity, resides in the phonetic and morphological levels, while syntactic dynamics and most of all semantic adjustment constitute the variable, dynamic component of language. In spite of its drawbacks, the role of this disparity is to ensure systemic continuity and identity, just like during walking the body never leaves the ground completely, although its stance changes continuously.

Over the course of generations, the structure becomes a construction—partially given, continuously adjustable—that facilitates the interaction with the environment through the use of the functions<sup>1</sup>. Established on older principles, updated by newer needs and requirements, constructions are apt to exercise functions that correspond to a preexisting system, as well as new functions meant to satisfy a set of current requirements.

It follows, then, that living entities forming a community in a given environment and in a given period are—structurally and functionally—resultants of organic and interactional processes that occurred historically. These processes concern the integration within the environment and the adaptation to it, the suppleness of structural-functional traits allowing the entities to adapt to the environment, and even to change it. Since they originate from a line of adaptations that answered tangible factors—initiators of external requirements that imposed internal needs—traits are dynamic, variable, and evolutional.

In the context of a dynamic environment that imposes adaptive evolution, the ability to store information is limited; the accumulation of an optimal quantity of information is a stringent necessity, and is directly proportional to the organisational and functional complexity. Additionally, the differentiation and specialisation of the system's components increases the degree of structural interdependency, of organisational complexity, and the integrity of the organism, which in turn increases the internal needs with consequences in the system's response to external requirements. This given fact of internal dynamics, in relation with the external constraints, is able to challenge the stability of the organism, since the tendency towards dynamic equilibrium—an adaptive response to the environment—and the auto-adjustment—a struggle towards internal equilibrium on the background of the external interactions—generate entropic effects. A state of equilibrium is maintained in relative fluctuation, since the external requirements may surpass certain thresholds which can only be answered through structural-functional changes. Moreover, to the organism's efforts towards a direct response, internal needs for calibration or even progress can appear (the latter being anticipative towards the external requirements or ameliorative of the internal structures and functions). The solution to this problem implies new efforts towards re-equilibration, which may be achieved on a different evolutional level, but only temporarily, since new demands will always challenge the evolutional process of the matter.

Although the identity of organisms seems to be in a continuous process of becoming, in the conditions of a dynamic and demanding environment their identity reveals both a tendency towards preservation and adaptation abilities. The typical feature of organisms is organic continuity and identity with the species: the constitutive material, the structural and functional principles remain unchanged, regardless of the generated patterns and the requirements to which they are subjected.

## 3. The fundamentality of evolution

The prospective look from a certain standpoint reveals that adaptive motions respond to certain internal needs for recalibration, as well as to external requirements for accommodation; adaptation is not a solution that targets durability or directed evolution, but is the most efficient way of concrete, opportune,

<sup>&</sup>lt;sup>1</sup>Organisms are not isolated entities, but part of the environment in which they exist; interaction is therefore vital—not only as a necessity for survival, but as a condition for existence.

and efficient adjustment to the impositions of reality, in order to preserve one's existence. Things are as such because natural constructs do not occur according to a plan or towards a goal (of any kind, much less anthropic, built in view of an ideology, a morality, etc.). The perfection of an organ, the harmony between its parts, their balanced conjunction, their efficient operation are not goals in themselves, but rather ephemeral results that fulfil pressing needs, serving to the optimal adaptation of the organism to the requirements of reality, in order to ensure efficient survival, in relation to both the self and the environment: for oneself, but as an integrated part of the environment.

The configuration of the organism (as resultant of the interaction between structures and functions) and its challenge-response relationship with the environment (as resultant of the dynamics between internal needs and external requirements) are not only states bound to experience change, but also seeds for change. Thus, the level of endowment and adaptability, both of them in connection with the environment, are related to the imperative character of internal and especially external demands; the force of the demands and the reaction of the organism's possibilities and abilities to this conjunction determine the strength of the response. This response is a reflection on the level of endowment and adaptability, on the capability of the organism, and it materializes the investment of energy, regulating the rate of fulfilling the demands, the accuracy of restructuring, and the correlation with other demands. The extent of this process is given by the number, the characteristics, and the needs of the elements at play, by the structural and/or functional complexity; at a structural-functional level, the process is of such a nature that—regardless of the anatomo-physiological complex—it follows a path that targets the results of interactions between the parts, in relation with the requirements.

In other words, the process is not "concerned" with the constitutive and functional accuracy of a part or organ, but targets the functional efficiency of the organism; the correct conjunction of the parts of the ensemble and the efficient correlation of functions are mere consequences of the ultimate stake: the adaptation of the organism to the environment in order to optimise its existence.

This entire interplay may appear random, but it almost certainly occurs in accordance to specific principles or laws. In this way, biological and social entities interact and coordinate their attributes and behaviours, forging a functional structure.

The retroactive look towards some point allows one to understand the ways in which through its actions the human being has been able to better its integrative and existential activity as part of a larger organism. Just like the society to whom he belongs, the individual is a continuous entity—of course, at the level of its existence—, and through the intra- and intergenerational relationships he is a step in a sustained process. He is congruent to his contemporaries, though in the sense of an alternative entity from within the same reality—itself subject to the game of evolution, identical in essence, nonidentical by accident, appearance, and becoming. Through the interplay between stability and variability, one is identical to oneself under certain aspects, but has adaptive and evolutionary abilities through which he loses his identity at a certain level, in order to improve it at a different one.

The existence of a component endowed with specific structural-functional traits is meaningful in so far as its traits facilitate the interaction with other similar components as part of a superior structural-functional entity. The superiority of the resulting entity stems from the structural-functional quality of its components, as well as from the quality of the result of their interaction. The cells (on any level) may become constituent elements, behaving as such, interacting and forming complex and varied structures. As part of the interaction between cellular structures, accommodation of the constituents may occur; here, however, the element belonging to multiple levels or even to complex structures has to undergo a more complex adjustment: not only an adaptation to other elements on the same level, or to requirements of that level, but also to a set of requirements induced by the activity on all levels.

However isolated an individual would consider himself, and whatever auto-conservation tendencies he would exhibit—all natural in pursuit of the optimal modalities of existence, at the highest qualitative level, in order to ensure descendants of the highest quality—, the real fulfilment of its existence derives from understanding that his life is merely a stage in the existence of the amino acids that—for a brief while—form him. In truth, this is the only form of immortality, uncertain but achievable.

A principle of the living world—less so in the case of a genetic defect—is that the fulfilment of conditions for individual survival leads to the individual's participation in the life of the community or the species<sup>2</sup>. This is not calculated, but naturally given.

For this reason, fulfilment of personal existence is attained when the inherited tradition is capitalised in the highest degree, and then—after being enhanced with the best qualities generated by one's own existence—passed to the descendants in the most adequate and assimilable forms and ways, equipped with the best-adapted potentialities to continue the existence. Existing through the chain—perhaps more than the chain exists through its links—, each link must intensify and multiply the potential attributes of the chain they form (and not only to which they participate).

To disregard the structural-functional complexity of the superordinate organism and the relations enacted within the whole complex might allow for a certain period of development and calm, but these would only be apparent—and merely consequences of the organism's auto-adjustment functions. These functions of adjustment would remain active exclusively on the basis of the previous accumulations and only as long as the reality dynamics allow it, in the presence of unchanging demands and requirements. Ignoring the organicity and historicity of processes is a certain path to catastrophic events—also a natural law.

This necessity may be alleviated by the fact that, due to natural variability and adaptation to reality, the starting points of the generations are not always identical, being subject to dynamics, at various intervals of time the accumulations becoming sedimented and then embedded into the genes. This peculiarity of evolution is probably the most deceptive of all, since it lays for individuals and generations the trap of relating only to their contemporaneous realities.

## 4. Synchrony as an instrument of diachrony

The world may be observed and analysed, thought, interpreted and understood from two perspectives: one lays the detail or part under the microscope, placing the investigator on the illusory position of an external and objective observer; the other contemplates the organism and the world, both in the process of becoming, while considering the investigator as congener of the pursued ontological becoming. Due to the nature of the object, of the targeted goal, of the path taken and of the position of the observer, the two perspectives are fundamentally different.

When applying the synchronic method, the researcher dissects the organisms and processes, lays them out on his desk, examining and analysing them much like a receptor and analyser, following the structural

<sup>&</sup>lt;sup>2</sup>This is the real life in a nutshell. Each level of existence may be perceived synchronically, but it exists diachronically. Cells, tissues, organs, individuals, communities—they are all living matter and they exist, but none of them matters, nor have they real existence outside their participation to a superior form of existence, and to its adaptation, survival, reproduction, and evolution.

Due to certain peculiarities of the language-thought conjunction, people may perceive themselves as isolated individuals to such an extent that the tendency of parasitizing the community appears (that is, of taking advantage of the natural tendencies of the group to aggregate in the natural flow of diachronic existence). After the emergence of vocalisation (in living organisms) and the development of language (in humans), man observed that language can be reified and thus act and produce effects in the real world. After language served—with immense benefits—the purpose of coordinating actions within the social organism, its capabilities to induce behaviours have been exacerbated and misappropriated, especially according to the desires and needs of the individual whose language had acquired the most prestige.

detail, the articulation, the context and effects, in order to discover traits, to make descriptions and typologies, offering consistent definitions. The researcher connected to the diachronic perspective seeks to grasp the existence and becoming of organisms and processes, at a reasonable level of complexity and depth, in order to obtain, in a way similar to that of the brain, the understanding of reality. By following phylogenesis and ontogenesis, he seeks to fathom the relations and essence of organisms and processes, in order to gain understanding of existence and becoming.

The synchronic perspective may lead to understanding the structural detail placed under the microscope for static inspection. Even *in situ*, though, the synchronic analysis cannot seize the motion, that is, life, for it is inherently a photographic snapshot of the moment. By observing two successive moments, or even all the moments of a certain stage, it can only perceive structural differences between them, and only by reason can it capture the dynamics of these differences. The synchronic analysis cannot offer conclusions of diachronic rank, since the juxtaposition of static moments cannot generate temporal flow, just like the juxtaposition of excised cells does not generate a living tissue. By definition, synchronies cannot be summed up, because the synchronic analysis pulls the object out of temporality and expunges the motion, whence the resolute and insuperable limits of synchrony.

The diachronic perspective is less sensitive to structural details: being suitable for the contemplation of existence, processuality and becoming, it cannot erase the object since it observes the becoming, follows the adaptive and evolutional motion of structures, their interrelations and operation, beyond which it looks for existential principles. The observation and analysis of a present does not lead to its real understanding, but merely to its sequentialisation in thought. At the end of this process, though, it is imperative for that present to be rethought in its living dimension, a fact that can only truly occur after a change of perspective. Only thus can one discover and understand the history of the becoming of reality that has come to be that present<sup>3</sup>; only with the knowledge of this evolution one obtains the premises of true understanding of any reality.

Focused on an object carved out of its context, the synchronic analysis eventually ends in a point (however deep). By pondering upon the process of becoming, the diachronic analysis follows motion ad infinitum, continuously seeking for its principles and laws. The processual and dynamic-adaptive character of reality makes it impenetrable save through a dynamic-integrative perspective.

Given the ways in which these two types of perspective and analysis are structured and operate, the change of perspective imposes a change of instruments and implies a procedural change in data interpretation and conceptualisation, which means that the two approaches are not compatible or simultaneously realisable. For these reasons, the attempt to obtain the results of one with the instruments or means of the other is flawed, and the replacement of the diachronic analysis with the synchronic one, or the forsaking of the latter is detrimental and destructive.

Even though elements can only be observed individually and in isolation, the synchronic analysis is ill-suited to offer a unitary understanding of either the elements or the processes of reality, since it is unfit to capture integrality and processuality. It cannot attain the understanding of the fact that the fight of the individual organism, in competition with other organisms, gives synchronic consistency to a being governed by diachronic continuity. Just as the aspect or taste of a fruit does not give rise in the human conscience to the fact that these are only appearances of certain nutritive elements, but, on the contrary, yields sensations and reflections that target and sustain the moment, the apparent and efficient framework provided by synchrony does not impose the search for its essences.

Synchrony may seem a practical way of existence and manifestation of diachrony, its instrument and material form. Yet, it has no real existence, just like the second or the metre, but it is both a perception that facilitates human action inside its existential framework, and a convention supplying useful results at the immediate existential levels, and rarely at more profound ones. As an imagined adjustment of reality

<sup>&</sup>lt;sup>3</sup>The diachronic method thus brings the imperative correction that no state must be analysed, interpreted, and judged solely from the perspective of the observer's present, this being a fundamental error in all regards.

to human proportions, and as a working hypothesis, synchrony is easy to perceive—for it is fragmented—and to handle—for it fragments—; it allows for sections of reality to become manageable, but in isolation from their organism. The indispensable character of the synchronic perspective and method is not only a consequence of its coincidence with primary means of perceiving and understanding reality, or of its manoeuvrability<sup>4</sup>, but stems also from the complexity and difficulties that characterize the diachronic perspective and method. Synchrony perceives day and night, systole and diastole, flux and reflux, while diachrony perceives the cycle (circadian, cardiac, tidal), for the former sees the moment in space and seizes the existence, while the latter understands the whole in time and encompasses the existence<sup>5</sup>. For this reason, the synchronist is always ready to describe, while the diachronist takes upon himself the burden of explaining; the former sees the structure and appearance, the latter grasps the signification and essence.

#### 5. Diachrony as a modality of existence

The traits of a species, shared by all its individuals, are implicitly transmitted in a natural way. Further special traits, acquired by the predecessors through intense interactions with the environment, may at one point be added by the organism to its own traits. Changes alleviated or intensified synchronously might persist and survive chronically, becoming and establishing a new state that imposes new conditions for survival, which in turn demands adapted and coherent structural-functional changes. Adaptations may be retained by the (individual or social) organism, which thus builds itself up diachronically; the phenotypic acquisition is a modification demanded by the adaptation to a number of changes that have generated a qualitatively new state.

The informational component of living systems is subject to the principles of both economy and efficiency: the capacity for data storage is proportional to the requirements, while the developments allowed by the existing potential are sufficient for adaptation to the conditions of life. The fidelity of transmitted, inherited, and used information ensures stability (and, implicitly, identity) of both individuals and species. One of the means to ensure this fidelity is redundancy, which must however occur in reasonable degrees. It is relevant that this mere energy-consuming procedure is an exponent of the imperative character of continuity, that is, of maintaining identity. Part of this requirement is solved through the evolution of content and functions (through their evolution, replacement, and assignment to one and the same form).

Just as humans distinguish themselves on the basis of their own historical evolution, so do words differ based on their ascendency, their usage values, and the connexions (within a lexical family, a semantic field, or of synonymic, antonymic, paronymic, etc. nature) formed during their existence. In this respect, together with one of the results of historical evolution at the form and meaning level, i.e., the (synchronic) polysemy—an economical means of organisation and function of language—, particularly relevant is the (diachronic) semantic evolution through change or coexistence of meanings (deep within a language, or stemming from language contact). Although situations of this kind are fairly numerous, the facade of their effects giving the appearance of variety, their inner mechanism is the same, with their perceived effects (classified as metonymy, metaphor, synecdoche, etc.) resulting from associations generated by cognitive and mental processes.

a) In contrast with one type of polysemy such as that of Rom. *cap* 'head', which during its existence has aggregated a number of meanings through associations and usage, the verb *a socoti* bears meanings such as 'to count, to compute', and 'to consider, to take into account', all permitted by their connection to the primary meaning, or by the possibility of substituting the given words in certain contexts; this can be observed in a number of languages (Fr. *compter* 'count' and 'reckon', Germ. *zählen* 'count'

<sup>&</sup>lt;sup>4</sup>The synchronic perspective is the primary means of perceiving and understanding the world, the synchronic analysis being the analytical instrument which perspective creates for itself, in order to obtain clear, efficiently-operational images. It is important for this material to then be given as such to the superior, "whole" way of analysis, because remaining stuck in the synchronic perspective equates to ignoring the laws of evolution, based on which the entire reality exists and operates.

<sup>&</sup>lt;sup>5</sup>A structure is describable, being a slice of reality operated on and analysed by a static observer, while a motion is traversable.

and 'reckon'), as required by thought and social habitudes, and allowed by a historically-established language, in relation to thought and society, not the other way around<sup>6</sup>.

- b) On a linguistic level, the logical and semantic relation between the content of various notions may take the appearance of synonymy, which is a mark or index of the relation between words, not necessarily at a paradigmatic level, but at a syntagmatic one. This class may be illustrated by quasi-synonymic series such as: a încerca 'to try', a proba 'to verify', a testa 'to test', a dovedi 'to prove', verbs lacking a genetic relation to each other, but with spheres containing common or coincidental overtones; usage has valued the possibility of contextual synonymy by substituting forms in order to match their overtones to the contextual and communication requirements at hand.
- c) The verb *a decima* 'to decimate' used to designate a disciplinary method—employed by the Roman Army to punish units or large groups guilty of capital offences—that resulted in a ten percent reduction in personnel, the victims being chosen by chance. In this way, a group of e.g. deserters were put in the situation of suffering—though partially—the same fate that might have awaited them, had they confronted the enemy. This behavioural correction, elaborated for its survivors, targeted the fact that soldiers face death through the very nature of their duty, fighting being in any case preferable. The percentage was designed to balance a large number of survivors with a high degree of efficiency. Over time, this practice—devised and applied in a specific period, with specific mentalities and practices—has naturally come to be perceived and reconsidered through the norms of the various successive periods. In this way and for this reason, the term has come to change its significance, then its meaning, nowadays *a decima* conveying just 'to massacre, to kill in very large numbers, to exterminate', the original meaning becoming specialised, and then erudite<sup>7</sup>. For different reasons, but in the same procedural way, Lat. *familia* generated the form of Rom. *femeie* 'family' (now 'woman'), which then evolved abandoning its etymological meaning, keeping the one that referred to just one of its purported elements, 'wife'<sup>8</sup>.
- d) The solar *cadran* 'quadrant' initially designated a rectangular shape, whose subsequent change to a circular one did not lead to the adjustment of the word; in the same way, the noun *soldat* 'one remunerated with the coin called *sold*', 'soldier' did not become \*bănat (cf. Rom. ban 'money', also the Romanian currency), and marfă 'goods, merchandise' (< Hung. marha 'cattle') no longer bears a link to 'barter' or to payment in cattle, though it keeps referring to an "economic concept".
- e) Many semantic evolutions begin with changes towards simplification, by means of loss of nuances (sometimes central, often subtle, rare in usage, and diastratically differentiated), of interchange with a partial synonym, which is then replaced by the new term. The nucleus of this class is the situation in which a form borrowed from another language or social stratum is overloaded with the predominant meaning of an existing form, the latter being subsequently marginalised, eliminated, or forced to find new meanings, contexts, and possibly nuances and values<sup>9</sup>.

The above examples point out to situations in which a) a trait (not necessarily fundamental, representative, but obvious in some way) comes to dominate the conceptual content of the word, to engulf overtones from semantically-correlated concepts, and to consequently determine the semantic correlations and contexts

<sup>&</sup>lt;sup>6</sup>A word such as *seamă* (< Hung. *szám* 'number') occurs in expressions such as: *de-o seamă* 'alike', *a băga/a lua în seamă* 'to regard', 'to take notice', *pe seama* 'based on', 'on the account of', *a-şi da seama* 'to realise', 'to understand', *de bună seamă* 'of course', 'without a doubt', *a ține seama* 'to consider', 'to take into account', *o seamă de* 'several', 'a number of', widely known, used, and functional, though lacking the etymological value of Old Rom. *s(e)amă* in the mind of the speaker. The noun should bear meanings such as: 'count, quantity, amount, importance, way, purpose', all generated by their possible relations with 'number', the original meaning of *seamă*. However, when asked, the average speaker will not know the independent meaning of *seamă*, nor its contextual one, despite correctly using the expressions; an understandable fact, given that the word (it is difficult to appreciate whether *seamă* still bears all the attributes of a noun) only appears as part of certain structures, lacking the independence of a normal auto-semantic word.

<sup>&</sup>lt;sup>7</sup>For the complexity of such evolutions, see Gafton (2014a).

<sup>&</sup>lt;sup>8</sup>For an actual case of grammaticalization and evolution of nuances, see Gafton (2011).

<sup>&</sup>lt;sup>9</sup>For examples of such situations see Gafton (2014b)

of the term; b) due to semantic connections between some of their meanings, different words may enter a relationship of contextual synonymy (sometimes under the influence of another language) all the way to overtaking of contexts (initially improperly); c) the perspective and conception on the designated reality changes; d) the reality itself changes; e) simplifications in thought occur, implemented upon the language especially through the abrupt and unjustified (by needs) expansion of the sphere of users of the word. The economy of language (in the form of polysemy, possibly with subtle appearances, acting in the direction of recycling the material) is manifested through the resilience of structures and the volatility of content, with the disposition for keeping and reusing forms, in a context where the affective, conceptual, etc. content is subject to the dynamics of thought and society.

A universal principle with economical causes is that structures are more resistant than contents and functions. It seems that the effort of replacing them only rarely pays off, and the tendency is to resort to nuancing, change, replacement of contents and functions, the adjustment or replacement of structures being the extreme solution. This can be observed in language, in the anatomic-physiologic evolution of all living matter, as well as at the cultural-spiritual level; in all these cases it is most difficult to give up the form, regardless of the dynamics experienced by functions and contents.

Metaphor seems to have always been the preferred way of naming reality. Although the behaviour of speakers depends on the size of the communities, their synstratic configuration, and their social and mentality history, the means of denomination via metaphors are in general efficient—due to their transparency and expressivity—, and at hand—due to the celerity with which, by means of analogy and the intuition of reality, language brings the unknown into the sphere of the known. Metaphor reflects the stage of knowledge (often derived from perceptions on which one has reflected with insufficient and inadequate knowledge and instruments). Even when successful at perfectly conveying intuitions—the path of rational knowledge rendered through complex and nuanced linguistic expressions being much more demanding for both thought and language—, through their sheer abundance, metaphors indicate a means of communication reflecting the truth that reason is in fact not an innate trait, while perception is; that intricate linguistic communication is not a given, but an acquisition kept by constant efforts. One can observe that at the heart of the living organism is the reaction to internal and external requirements; carrying such an orientation, self-awareness and will are only sporadically able to activate communication through a rational and conscious targeted effort<sup>10</sup>. A significant fact in this regard is that in specialised language—such as scientific language, and not just when used for popularization—metaphors are meant to activate the receiver's reflexes through analogy with known ideas, often employing deliberately and explicitly expressive usages.

One could believe that once science elucidates its objects of study at least to the same extent as its terminology, it arrives at a neutral terminology, and before that point language follows the inquiries of thought (a more suitable and efficient way of suggesting intuitions of reality). Language, however, does not easily give up the forms it has created, and the proportion between relinquishing and borrowing terms, and purging metaphors of their imaginative-figurative component is much more balanced than it might seem at first glance. When the metaphor wanes, perishes, or is overwhelmed and invalidated by reality, the word endures as instrument and medium for communication. Moreover, in the case of borrowing new terms, these will also have been, more often than not, metaphors relieved of their expressive imagery. The class that carries this process to its legitimate conclusion is grammaticalization, via de-semantization and

<sup>&</sup>lt;sup>10</sup>The syntactic and lexical barriers of usage and norm set by language stem from the ability of materialising thought through language, from the way in which language has progressively developed, from the way in which the need for knowledge and communication has been satisfied through the shared effort of the community—more prone to feeling and to speaking, less so to reasoning.

de-categorization, aided by intensive usage of forms in fixed contexts<sup>11</sup>. Biologically, it is relevant to mention the relatively small morphological difference between the anterior limbs in vertebrates (at present time or compared with other geological epochs) in contrast to the considerable difference between the abilities and functions of the anterior limbs in ancestors of *homo sapiens*, and the refined usage skills of the same parts in our species. At the cultural-spiritual level, where structures function almost exclusively based on rituals and ceremonies, the same differentiated evolution of form and content occurs: forms tend to survive, while contents are modulated by the changes of reality<sup>12</sup>.

In the same way, genetic debris<sup>13</sup> (mainly a consequence of mutations and substitutions) is the mark of a certain hesitation in eliminating genes that have become useless, of a prudent lack of synchronisation, at a somewhat slower rate than that of absorbing new acquisitions. Although such a burden may be considerable, its role is important, as it may efficiently amplify some adaptive abilities and some identity traits; an auxiliary effect is that it acts as model and pattern for the rate of natural evolution, in the conditions of an environment that can at first initiate a number of changes, and then reappear in a fluctuating and capricious manner; maintaining the identity and stability is more intimately related to existence than variability and adaptive change<sup>14</sup>.

From the standpoint of mentality and culture, we are again dealing with a gradual development, through additions, acquisitions, accommodations and adaptations to reality in the framework of the community and society. The identity of a civilisation as a whole is not given by its strictly natural aspect, by the material canvas from which a minimally-functional structure emerges, but by additions that stem from the intimate weaving of that fabric, from the accommodation to the environment, as well as from some accommodations through addition and adjustment generated by contact with other civilisations. In time, the quantity of knowledge transmitted to successive generations increases: not proportionally to the actual rate of knowledge growth, but with the rate of sedimentation and consolidation of validated acquisitions (the two do not even coincide in theory, due to the lack of diachronic vision of society, stemming from typical tendencies of synchronization<sup>15</sup>).

If the traits believed to differentiate humans from other animals in order to provide them with the illusion of uniqueness (language, empathy, thought, forethought, tools, culture, etc.) remain debatable—in spite of permanent redefinitions that serve no other purpose than to support the presumed thesis—, one could consider an element capable of operating and demonstrating a

<sup>&</sup>lt;sup>11</sup>For this phenomenon in general, and for a number of situations relevant for Romanian, see Heine & Kuteva (2002), Hopper & Closs Traugott (2003), Popescu (2006), Milică (2010), Niculescu (2011), Uşurelu (2011).

<sup>&</sup>lt;sup>12</sup>See Loisy (1920), Bell (1992, 1997), Turner (2008).

<sup>&</sup>lt;sup>13</sup>This expression refers exclusively to genetic sequences responsible for structures or functions that were once active, but have been rendered useless as a consequence of changes in the environment. It does not refer to actual atavisms, still potent and accidentally activated, but to unused elements that are still present in the genome.

<sup>&</sup>lt;sup>14</sup>Stability is one of the fundamental conditions of identity. The continual bringing into discussion of already-settled aspects, hesitation in concluding effective but parched ideas, de-mythicization of aspects that are temporarily preserved for luckier (in a methodological sense) and wiser generations down the road, forcing of instruments that are not required by the state of knowledge or expansion requirements, and problematization, result in dissolution of identity and undermine the energies of the organisms.

On the other hand, a coherent, healthy, and viable construction requires adjustments and reconsiderations from the perspective of structural systematics, of the efficient operation of the system in relation with the environment and the dynamics of reality. Normally, this happens automatically, not on the basis of an ideological agenda, since small and large organisms alike are cybernetic, just like the Universe that generates them. Conscious intervention can only be misleading, as it constantly undermines the natural order and unjustifiably favours what is done towards an ideologically-oriented purpose.

<sup>&</sup>lt;sup>15</sup>These natural tendencies appear due to natural forces exerted conjunctly by the propensity towards the state of minimum energy, and to fulfilling proximal and intermediate needs rather than "ultimate" and "final" goals. It is more accessible to focus on what is visibly and immediately beneficial, rather than on what could be useful in an uncertain future, just as it is more tempting to satisfy a need that results in immediate gratification than to delay the latter until the final result is achieved.

fundamental difference—even though it is acquired in a processual-historical way, without being fundamental or generated by the process of humanisation—between humans and other animals. Within a small community and under the fragile condition of keeping the diachronic identity of the group, many animals endowed with abilities of observation, memory, and analysis, as well as with relatively complex and nuanced means of communications, may aggregate information and behaviours in the form of a "culture" and may transmit certain practical knowledge and vital habitudes between generations. As this condition can only be satisfied intermittently, animals must periodically "start over". Owing to certain developments in his abilities to communicate, the human being benefits from a sustained process of cultural transmission between generations. This consequence—from which many others stem—is predicated on the previously-acquired ability of storing knowledge in ways and recipients superior to the memory of individuals or of communities. For this reason, periods of regression succeed periods in which humankind ignores its cognitive heritage, or interprets and uses it in a superficial way.

In order for this entire process to work, for the society to be shielded against replication errors (i.e., errors in reading, interpreting, and following the instructions), against the errors of a product's setting in act and of conceiving new products, it is necessary for that civilisation to be in full possession not only of the crucial products, but of the entire organism that has generated those results. The only way that protects against such errors is the one offering the possibility and ability for cognitive and cogitative comprehension, and of understanding the ensemble of the entire epistemic and gnoseologic social organism.

The needs for understanding the whole—imperative in specific situations—may impose a descent to the level of detail, in order to understand the structure of an organism, a system, an organ, a tissue, a cell, then a further descent to the level of detail of the component, to understand the anatomy, physiology, and dynamics of the detail turned into organism; at the end, it is critical to revert—with all the acquired information—to the level of the whole, through which everything exists. This is the only way to prevent errors of understanding, interpretation, and action—that occurred in previous evolutional stages of the society—from reoccurrence and dogmatisation.

Given the continuity of the processes in the Universe, existence is essentially and by definition diachronic and in constant becoming, while rest and stasis are equivalent to nonexistence.

Synchrony is a theoretical, working hypothesis, a method of approaching the living world, a moment in which one assumes things to be at rest in order to observe them. Considering the extent of the human being's operating parameters, as well as the traits of certain realities such as society and language—which like any organism **exist** synchronically and **become** diachronically—, the utility of synchronic analysis is real. As a detailed descriptive observation, it can provide knowledge about material properties and its structural layout, in order to estimate its propensity for aggregation and adjustment to the requirements of the whole, such that—once structurally aggregated—the material can take on its functions in the most efficient way and contribute to the functioning of the whole. While considerably more difficult to follow, the diachronic path gives not only understanding of how language, thought, society, and the material world are structured, established, and operate, nor is it just a consolidating synthesis; instead, it also allows the observation and comprehension of processes that govern the existence and evolution of living organisms.

#### 6. Conclusions

Independent of the time span it can measure behind it, a community can only acquire the clear conscience of diachrony reflectively, not reflexively. A community developed in a certain environment and within a range of parameters experiences various formative interactions and acquires a certain structural organicity that gives it a level of functional coherence. Participating in the environment, the community may come

to influence it to a certain extent, and can set its own templates of movement, and even of evolution. All this can ensure survival, perhaps even continuity, but not diachronic evolution.

Due to the structure and functioning of its basic amino acids, a line of generations cannot follow another while ignoring either of their effects, results, and products, and cannot establish a new line while disregarding the quintessence of this succession. Generations cannot disregard this chain without suffering cancelling effects, not even when guided by successive syntheses that eliminate links already assimilated in various degrees. Removing steps based on their imperfection and retaining only the crucial points go against the very mode in which the processes of transmitting genes and of constructing organisms by responding to stimuli, as well as development and evolution themselves occur. It is an auto-cancelling type of synchronic evolution, since it removes "synchronies" from diachrony.

Free of the illusion of familiar and ever-surrounding synchrony, and with a retrospective look at the path that lies behind him, the human being is able to understand the organicity and integrality of reality and to study it prospectively. To reach this point, one must accept being merely a cell within a millenary organism, which has adjusted its structures and functions in response to its interactions with the environment. Only through this process does the human being acquire a historically developed wholeness that reflects the diachronic nature and the dialectic at the heart of any natural entity, and hints towards the vital necessity of acknowledging—in a conscious, complete, and constant manner—one's fundamental and essential nature. Ignoring this truth leads to Sisyphean futility in any enterprise and to meandering slowness or haste; any attempt to negate the historical and processual character of the structure and to exacerbate the synchronic function constitutes a fracture of the asynchronous relation between structure and function.

### **Bibliography**

Bell, C. (1992). Ritual Theory, Ritual Practice, Oxford University Press.

Bell, C. (1997). Ritual: Perspectives and Dimensions, Oxford University Press.

Gafton, Al. (2011). Donc, in "Language and Literature – European Landmarks of Identity", 8, p. 15.

Gafton, Al. (2014a). Avatarii evolutive ale conceptului 'a educa' în textele vechi românești, in "Dacoromania", XIX (1), p. 53-67.

Gafton, Al. (2014b). Social dynamics and the linguistic norm, in "Diversité et identité culturelle en Europe", XI (2), p. 7–24.

Heine, B. & Kuteva, T. (2002). World Lexicon of Grammaticalization, Cambridge University Press, CrossRef.

Hopper, P.J. & Closs Traugott, E. (2003). Grammaticalization, Cambridge University Press, CrossRef.

Loisy, A. (1920). Essai historique sur le sacrifice, E. Nourry, Paris.

Milică, I. (2010). Grammaticalisation et expressivité, in "Revue roumaine de linguistique", LV (3), p. 301-312.

Niculescu, D. (2011). *The Grammaticalization of the Future Tense Forms in 16th Century Romanian*, in "Revue roumaine de linguistique", LVI (4), p. 421–440.

Popescu, I. (2006). Timp și limbaj: introducere în lingvistica lui Gustave Guillaume, Institutul European, Iași.

Turner, V. (2008). The Ritual Process: Structure and Anti-Structure, Aldine Transaction Press, New Brunswick.

Uşurelu, C. (2011). *La grammaticalisation des opérateurs factitifs en roumain*, in "Revue roumaine de linguistique", LVI (2), p. 159–166.