

FORESIGHT AND MULTIDISCIPLINARITY

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Abstract. *Starting from the mere finding that foresight and retrospective coexist in space and time, the content of present article scenarizes a number of the meditative and interrogatory moments, or astral moments, of the future. The correlation with multidisciplinary is inherent in the nature of foresight and its mirror image, defined by opposition as a retrospective. In its central part, the article lists a set of twelve significant generative moments of foresight with meditative, and also explanatory intentions for the most part, which moments demonstrate the multidimensional association between foresight or prospective and multidisciplinary. Some final remarks are placed in the space-time which is perpetually suspended between the present and the future, but also in the essential sense of foresight, already exemplified, typical of the councilors in the decisions for the future.*

Keywords: *foresight, prospective, retrospective, multidisciplinary, complexity, simplicity.*

1. INTRODUCTION

“For, in a certain manner, all that is present is the seed of that which shall come forth out of it” (Epictetus)

There is no special area, nor a distinctive time of foresight (and/or prospective), but, instead, space and time interweave or even harmonize prospective and retrospective. The complex spatial-temporal multiverse of the future carries, in its meditative and interrogatory moments, or in its astral prospective and retrospective moments, an increasing number of potential universes, which that to surpass the finite sphere, which are hard to scenarize, in the present, still not highly absorbant of technology, education, cultures and civilizations apparently only intelligible and translatable, from a growing and more intense distance, from which any attempt is positioned to scientifically intuit future. Both prospective and retrospective unimaginable symmetries and asymmetries are placed in key space- times. Such an example, located in the regional timeline, is represented by a cultural edifice such as the Princely Church in Curtea de Argeș, where the retrospective pictorially presented on the right wall is identified and authenticated through the uniqueness the declarative moment of the identity of Jesus Christ in accordance with the Beloch census (AD 14), and, on the walls of the stoup, prospective appears through the faces of saints and priests, and anticipates a pictorial portrait perspective more than one hundred years before the mature schools of the European Renaissance, being kept as relevant forward-looking images at the Vatican to this day. The reminder of the present paper includes, subsequent to the introductory section, arguments of an intense correlation of foresight with

multidisciplinary, an association that pertains to the very nature of foresight (and/or prospective) and its mirror image, defined by opposition as retrospective, then, in the central section, it places a set of mainly rhetorical questions in order to validate the indestructibility of a mechanism of connections between foresight (and/or prospective) and multidisciplinary. A final remark suspends the time-space variable, which is specific to foresight (prospective), perpetually lying between the present and the future.

2. MEDITATIVE MOMENTS COVERING TWELVE INTERROGATION DIMENSIONS IN THE FORESIGHT – MULTIDISCIPLINARITY RELATIONSHIP

As a structural and synthesis science of the future, foresight postulates a multidisciplinary vision or approach, and focusses on the problems to come, facing the futures researches in a systemic way of thinking. The system structure of the foresight research is outlined at several subsystems or levels: a) the first foresight structure is placed at the level of the reality or natural system because of the integrated scientific research, technological investigation, economic development and social or educational understanding factors; b) the second system structure is apparent at the level of the method and model, as the researchers deal with an integrated methodology approach with modelling way of simplifying reality, generating a cohesive methodological and modelling structure, rather than an isolated one; c) the third system structure is an average level of the foresight reality - method – model relationship: the method and the model create together the foresight structure and the equilibrium of foresight reality and thus determinates the specific methodological and modelling structure; d) the final foresight system structure is also apparent in the relationship between the theory and the application, involving elements of scenario foresight evaluation, foresight probabilities and foresight management.

The law of large numbers confers the balance and realism necessary for foresight, by simultaneously appealing to the opinions of optimistic and pessimistic futurologists, provided in the flimsy and almost invisible temporal-space seam of the present, placed between the mirrors of the retrospective and the prospective. The etymological or notional dimension of the multi-significant becoming and progress of foresight is set in its first meditative and investigative moment. Foresight is thus placed in a complex reunion of visible circular meanings (Figure 1), and also pluri-lingually, starting from the multi-millennium-old Greek term *prognosis*, and going up to the complex Anglo-American notion of constructing scenarios of the future, without however including relative paradoxical conceptions, which constantly nuance it (*black swan, wild cards, weak signals*, etc.).

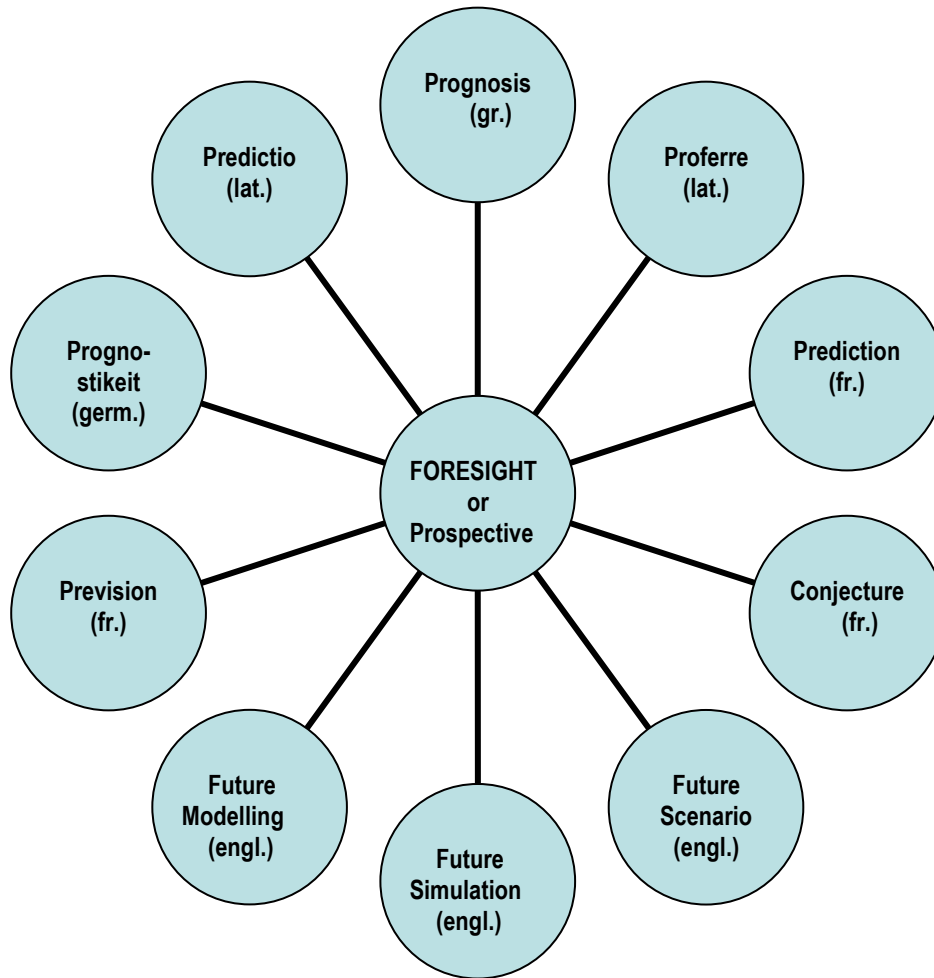


Fig. 1. Foresight or prospective: plural meaning and plethoric etymology

The multidisciplinary coverage of foresight or prospective represents another moment of reflection, and is evidenced by the broad spectrum of the disciplines and objects it simultaneously covers, which find expression in the concern for the future and the multiple aspects derived from that (the future as a multidisciplinary study object): from *futurology*, as a generic trans-disciplinary domain, or by definition, to *proference* as a particularisation of futurology in narrower studies of the future, from *prognosis*, as an expression of the future in economic sciences, to *sociological prediction* or demographic *projection*, from social *prediction* in general to *conjecture studies* with multiple or different interdisciplinary implications, from *predictive* approaches or cross-disciplinary *prognosis* of major events, to forecasting natural disasters and *mitigation* aimed at survival, scenarization of the future, etc.

All these specific approaches of a qualitative and quantitative nature to the future are to be found in the prospective step, which is more complex, more structured, more strictly hierarchical and scenarized than any of them considered individually. In the third meditative moment, foresight also addresses language as an argument of a future anticipated accurately and honestly with regard to trans-, inter-, cross-, and multidisciplinary scientific significance.

Contemporary software reveals a certain tendency in the language of the future towards English terminology, demographic developments add linguistic hypotheses of ideogram-based language, religion and religiously based birth-rates make them get closer to Arabic, and the indicial signs of the new technologies radically complicate the prospective of the scientific language of the future. The scenarization of communication generates a fourth, fastest anticipating moment in foresight, starting from the complexity of the Internet, the new meanings of information, the fake news phenomena, the manipulation of information, the achievement of a critical mass in communication, the ever more rapid change of communication support, freedom and democracy in general.

The prospective of communicating by cancelling the face-to-face ancient dialogue, with a Socratic role in forming an honest kind of thinking, has surpassed Warren Weaver and Claude Shannon's information mathematics, going beyond the anticipated space of excess communication focused on *tautism* (i.e. autism and tautology – with Lucian Sfez), redundant and even obsessive, but especially apparently chaotic or confused, often compared to the course of the billiard ball...

A fifth argument of foresight multi-disciplinarity arises from meditation on timeline, not at all tamed and brought to the mere linearity specific to the beginnings of prospective, maximally condensing the present in a tiny seam between the past and the future, and becoming practically more explicit in the analysis of the variable space-time over the last millennia. The correct anticipation of the future has extended the cohabitation space and the demographics of the human species, covering the Earth and preparing the possibility for man's exodus in the expanded space of the Universe. Jacques Attali links the space-time evolution of mankind, or the timeline of any prospective of human society, to port cities as a pragmatic multi-disciplinarity of language, information, economic and technological openness... In foresight port-cities have become new planets, and soon they will be new universes.

The cross-disciplinarity of prospective describes another important meditative moment. Foresight unites dozens and dozens of methods from all sciences concerned with evolutionary variants, from biology to physics, from econometrics to finance econometrics, from sociophysics to bioeconomics, etc.

Foresight means simultaneously extrapolation and intrapolation, experiment and simulation, scenario and modelling, probability and possibility, fuzzy and neutrosophic logic, etc. Prospective also develops a seventh broad interval of reflection on the trans-, inter- and multidisciplinary of models, sometimes even without their being supported by a fully mature theory – which is however scientifically validated by the evolution of reality.

Indeed, what characterizes the prospective model is in fact the successive and implicit multi-modelling caused by the very large number of endogenous and exogenous variables, the residual variables appropriate to the stages or phases of foresight, the scenarized steps and the argumentation of simulation or experimentation.

Knowing the truth of successive approximations and validations, graphically and ironically expressed by Voltaire in his *Candide or the Optimist*, by the now famous saying that we do not live at all in the best of the possible worlds, and admitting the Shakespearian solution according to which there is nothing bad in this world that thinking cannot turn into something good, we come to the conclusion represented by successive and alternative modelling, successive multi-modelling having low thresholds of error.

Prospective is also born from a meditative moment when humans are totally sincere towards nature, which gives them realism, as Epictetus says: "For nature only leads to virtue, and evil is brought by men...", but also an expectative or reflexivity according to the same ancient sage, as "nature gave humans one tongue but two ears, so that we would listen twice as much as... we talk".

A pro-nature perspective is open to the maintenance of the balances of the human external environment, centered on human destructive or unbalanced non-intervention, which is to be inferred in the universe.

A ninth meditative moment of foresight favours the natural imagining of the limits and error thresholds of prospective and the specific extensions of multi-disciplinarity.

The test of normal data series distribution represents the first strictly Gaussian example of validating or invalidating

the bases of a future born in the seam of the present from the information and behaviour of the past, and the multitude of the possible theoretical and practical distributions invariably expands the solutions of prospective.

A more attentive systemic thinking has enabled prospective to systemically structure reality under the pressure of aggregation, which adds relational quality elements between subsystems, thus generating a tenth significant moment of foresight scanning in a multidisciplinary context.

The last two moments described in this paper, and relating to foresight evolution, refer to the introspection into the simplicity of prospective, in response to the growing complexity of the amplified realities (the simultaneous meditative approach to the increased complexity of reality in parallel with the simplicity of the investigation and the solutions, *simplicity* designating, simultaneously, simplifying complexity) and the overlapping contexts of investigation stratified as foresight, and the example the criterion-based overlaps of the EU, NATO, globalization, etc. type is eloquent as far as the practical difficulties of the prospective are concerned.

3. SOME FINAL REMARKS

There is a logical course of the complex prospective that overlaps several deductive chains, describing a multiverse of universes prospected in a distinct and aggregative manner, within the context of a set of survival or harmonization thresholds. It is stage-directed, being initiated in the foresight by the emergence of the hypothesis, testing and final validation / invalidation of the hypothesis, followed by the anticipated reality-model-prognosis of evolution/involution, extended by the step of the scenarios and anticipated constants, as well as by the selected variants of the prospective, and ending in the assessment of balances and imbalances, as well as future acceptable thresholds. Zak and his moral molecule describe foresight potentialities that are opened even in the area of constantly changing ethics or morality...

The specific approaches devoted to the future by Alvin Tofler, Francis Fukuyama, Jacques Attali and Yuval Noah Harari are a few complex examples of amply scenarized multi-disciplinary prospective, focused on decision-making counseling in macropolitics of major powers or economies like the US, France or Israel.

In all of the above, time is multidimensional, and the primacy of scenarios and soft power dominates the classical military, economic, cultural, etc. vision.

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