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Poetic Logic



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Abstract:

Poetic logic is the generative art of connection between a past and a future time. In logical terms, we need a structure of connection, not deductive or inductive, but *abductive*: the only one able to perform a not linearity following an interpretation. The main topics of the generative process are:

Vision as the ability of delineating characters as *concrete* AI aims to gain;

Imagination as the construction of an idea/code *executable* during the GA process; **Memory** as the possibility to gain *recognizable* variations as results. of the same ideas/code. Concrete, executable, recognizable are the main characters of each GA process. The generative process performs a double resonance between:

- 1 Sounds / Words
- 2 Numbering / Shapes

These structures are open to an interchanging between themselves. G.B. Vico, "*La Nuova Scienza*", 1725 – G. Leopardi, *Il fanciullo e L'Antico, 1832* E.v. Glasersfeld, "*The incommensurability of scientific and poetic Knowledge*" 1970 **Exempla for:**

1 - Painting/ Word:

Piero della Francesca, *"FLAGELLAZIONE"*, 1460 P.Bruegel, *"12 PROVERBS"*, 1558 - *"NETHERLANDISH PROVERBS"*, 1559 Tiziano Vecellio, *"ALLEGORY OF PRUDENCE"*, 1565

2 - Word/Sound/Live-Painting: Pasolini "LA RICOTTA":

Proximity: investigation about Piero della Francesca self-portraits – *Character/Feature*



Keywords: poetic, logic, abduction, proverbs, variations, character/feature

Poetic Logic

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The generative process performs a *double* resonance between:

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1 – Abduction

Poetic logic is a process able to work by following the term of abduction coined by *Charles Sanders Pierce* in his work "*The logic of science*". As he said, "[a]bduction is the process of forming explanatory hypotheses. It is the only logical operation which introduces any new idea"abduction encompasses "all the operations by which theories and conceptions are engendered". [1] The proper place of Pierce concept of abduction is in **the contest of discovery**. For a long time, there were several discussion from *Harry Frankfurt*, (1958) to Schurz (2008) and so many others still today, about how it is possible to control the entailment of the *idea* in the logical abductive process.

We can define the acting of *idea* as the ability in connecting in a new *vision* the past toward an *imaginative* future following a poetic structure as words, sounds, figures, architecture fragments, pictures, smells, movies segments as impressions, performed on our *memory*.

The new art generation is always a memory product.

Following my passion for poetry, I tried to define the character of the *idea* as a *poetical* structure, performing the methodology of a GA process in *"The environmental design of morphogenesis"* written by *C. Soddu* and me, (1992)

2 - Generative Logics

We can define art as a discovering process where we try to tale our *impressions* of world, defining some *characters*, as our creative logic *expressions*. Already Plato, after all, said that the whole philosophy starts with *the wonder*. The definition of a poetic logic is a process of our mind following step by step:

1 Vision

2 Memory

3 Imagination

The sequence 1, 2, 3 are not linear. This means that the starting point of the process may be memory or imagination or vision and so on in all their combinatorics.

By a side, the process run between two structure: **significant** (philology/orthography) and **significance** (philosophy/sound voice), for defining *characters*, also in opposite in significance, by the other side for gaining an *interpretative idea*, *open*, *adaptive and flexible*.

In fact, if we perform *our vision* as a point running on a *circle* and going toward the centre, we know that the distance is always the same. If we put our point of view on a generative *ellipse*, running on, the distances between two centres *changes*. The first distance between the point of view and the first ellipse centre, as a *memory* point, outlines a site of *significant* data, as a storage of our *vision*; the second centre becomes the *imagination* site, as *significance* for gaining new visions between reality and visionary action. When in our life the 2 polarity, memory and imagination, come back to only one, we gain *panic*.Sa

3 - Poetic logic definition

Still to-day, in our digital civilization we associate the word poetic only to the literature world. In reality, poetic logic is the main structure of every scientific artwork.

Poetic logic works as a generative art of discovering by a process from past toward future; following an interpretation as a new ideas able to gain characters fixed as a starting point of the generation as first **aims** of the process

We can call this generative process:

Futuring past, as a poetic challenge for building a quality in continuum of our artificial ware. Each culture in the world rises from the art of orality by performing languages as results of an open **generative** process. This complex structure of so different human sounds is the main Humanity identity.

Ong defined our digital civilization as a second orality. Tools changed for that literature is not the dominant tool of culture anymore, but poetic logic remains as indelible quality in every form of communication. We immediately recognize it in every media expression; in fact, our attention rises steeply when we discover it in every digital communication. The art of poetry had problems of surveying for new defined concepts connected mainly to the configurations of art as a random anonymous result. This performed a losing process of its main character of authorship, following in each university of western world the grid: *"Art and author are dead!"*

The main difference is possible to identify in the strong passage from relations in art mainly of quality (poetic) into relations based only on quantity, that are very easy to control with industrial devices, following designed ad hoc structures.

Poetic logic is the **underground structure** of any artwork: a text, a painting, a sculpture, a building, a town, a landscape etc.

For discovering this structure it is necessary **an interpretation** of the reference contest in which our idea is performing.

In music the structure is *lo spartito* (the score), where for playing are fixed the characters of *how* to interpret the musical text in playing, by following words/adjectives in Italian, the most adaptive significance language for sounds. In similar way, we design transformations rules as algorithms connected from our poetic idea in a double connected process.

4 - Poetic logic and ALGORITHMS

To make exercises with algorithms can be amusing, but it is unable to define any poetic result, able to produce emotional impressions.

For innovating, we need to discover connective procedures from the past time. This seems to be the principal condition of generative art: *futuring past.*

The GA methodology connect dynamically by a side the complex world of *vision, imagination* and *memory*; by the other side the perspective art discovered in *Renaissance* defined by a point of view, a ground line and an horizon, connected by a direction as significance.

This imaginative and scientific art was expressed, with a deep complexity, still to-day to discover, especially by *Piero Della Francesca*.

5 – Gian Battista Vico, "La Nuova Scienza"

In *"La Scienza Nova", 172*5, GianBattista Vico termed for the first time *Poetic Logic* as the ability of human mind to create metaphors. This process allows us to make connections between elements that would be otherwise unrelated.

In fact, Vico defined with the *poetic logic* expression the way with which in the heroic age men interpreted the world, because their knowledge was not only *rational*, performed by intellect, on the contrary *fantastic* because effected with *imagination*. Human beings start in expressing their imagination by tales song.

Vico performed a strong connection between the world of tales and reality as *a double system* between imagination and science, by delaying the poetic knowledge in its autonomy, in totally contrast with the tendency of his time. For this reason, we can call Vico as the beginner of the modern aesthetic and as the founder of an autonomous vision of art.

The origin of words are imaginative word, in contrast with the porous words of our time, as fast sponges.

In fact, Vico affirms that the words have some original stamps that characterize them and with that to pay count, if we want to think.

To think is not possible if not through the language. I cannot have an idea if not by language. At the "*New Science*" origin, there is the barbarity that can always return. "*Word is not everything, it postpones to the grid, to the sound and it cannot exhaust its native origin*".

"Logic derives from the word **logos**, that in primis and prompter becomes in Italian **tale**. Greeks and Latins had called logos as **mutus**; that in mutable times becomes **mental**. So logic from logos means and **idea** and **word**."

Word is able to foresee with the courses and the recourses of history.

It is unfathomable for its nature as history.

Word is born not for defining, but **for expressing** and it always has a relationship problem list with the thing. In the word, the thing can appear only as *phenomenon*.

For understanding the word the philology, the etymology are not sufficient, **imagination** is necessary for performing the imprinting of the words sounds by Dante, Virgilio... as an exercise of *mobility* between proximity and distance.

Immediately we say: **proximity** is in *a thinking* that puts toward the centre the dimension of *poiesis*, and it is in a *looking* for its roots and its ways in the ancient time.

6 - Proximity: "The child shining" from Vico/ Leopardi until Kubrick

There are places of the search of Vico - from "Six Orationes" to "De antiquissima Italorum sapienti", to "The New Science "- in which a weaving of questions shapes him, that will be also for Leopardi substance of a thinking and of a poetic aging.

In Vico there is a recognition of a knowledge, in the ancient time, founded upon the poetic perception, that inventive and creative of the world is. The appeal of a mutual implication relationship between *philology and philosophy*, around certain and true: from where it grows the attention to the language as precious universe *for all the forms of knowledge*. The recognition that exists a sort of *"mental dictionary of the sociable human things",* felt by everybody, and inside this to feel universal there is *the unfolding of languages*, *of their variety, plurality and dissemination*.

In contrast, the hidden power of our time transforms this mental social concept in a reality of people connected by adding their singular names in structures as social net etc. in which every singular identity disappears, emerging only the quantity of connections. There words run free without any deep significance, consumed only in fast way.

We discover in Vico the point related to the ancient wisdom. It is founded "... inside the fables, in which, as in embryos or matrixes, it is discovered to have been rough all the secret knowledge". There is a young humanity from the strong imagination, manufacturing of knowledge. There is the wonder, the senses, the effects "of the natural appearances" that blind the minds with the bright images: "the sturdiness of the senses handed liveliness of imagination".

The ancient poetry not as disguise aware of truth but as aurora of a wisdom.

For Leopardi too, the poetry of the ancient times does not hide truth, it is direct proximity to the nature, listening of its voice, mimesis of a physics.

In Vico and Leopardi we discover a knowledge, also religious, founded upon a metaphor: "... the world and the whole nature are a big intelligent body...". This is able to perform a relationship between poetry and philosophy and a tension between the two ways of knowledge (comparative disposition, faculty to gather the relationships hidden among the most distant things, imaginative attitude). This is a search of a new time - an overphilosophy - in which the knowledge of the "whole and of the intimate of the things" produces a regeneration as the exercise of a thought in poetic acting.

Poetic wisdom is the genealogical representation of the ancient time, or better of the origin, of the passage after the mute language and the language of heroes to the language of men.

In poetry, they defined in first aim what it is trace of the origin, that is of the song, of the voice, of the rhythm, of the musical element, of the orality that precedes the writing and for this is poetry intended by popular people.

"The poetry was lost from the popular people through the writing", (Zibaldone).

About metaphor ("The New Science", book II, II section) Vico says that: "It is more praised, when to the foolish things it gives sense and passion. The first poets gave bodies to animate substances, only of so much of what they were able, that is of sense and of passion, and in this way they did the fables of it; for this reason every metaphor made in this way becomes to be a short tale."

About dignity, XXXVII of the first book of The New Science : "The most sublime job of poetry is give sense and passion to the foolish things and it is ownership of children of taking not animated things among their hands and, amusing themselves, to speak them as if they were alive . This philological-philosophical dignity demonstrates that men of the young world, for nature, were sublime poets".

"In children it is vigorous memory: then vivid it is to access to imagination, that is memory or dilated or composed. This dignity is the principle of the evidence of the poetic imagines that owed to form the first child world."

Now we live an inverse procedure.

If men at the beginning were all poets, now men escaped totally to any vision of Nature beauty, also if this continues daily in generating endless beauties. We lose more and more to discover and to love them. This is our reality. We do not have any tools, that allows us to transcend the pseudo limit of reality for discovering the underground sonority that it is anywhere around us. Today we succeed in listening only to the artificial voice of the translated things. We are in totally habit of this **passive** sound.

If feeling is the language of truth, without imagination, the language does not draw the poetic threshold, in whose vibrations and resonances there are the trace, if not the presence, of the natural word.



This is a picture of the masterpiece *Shining* by S. Kubrick as a great example in our cultural time of the child ability in performing an *imaginative voice*, connected to our complex human identity.

"Nature cries because it is deprived of language" (Sprachelose)",

W. Benjamin. The poet resounds in his language - human language - this lament, a lament that is *rustling, murmuring, crying*.

7 - - Translation from past toward future

"Incipit is there where we arrive" Hans Urs von Balthasar

A translation from the industrial era to our new digital civilization strongly marks the building of past equal artefacts toward a progressive rediscovering of unique unrepeatable objects, designed as in Nature.

Uniqueness is the main character of poetry and of the human life for the simple reason that until now we are born in two people and we die alone, and if we are a result of a love act, and if we are an artificial genetic result.

Moreover, this is forever, incontrovertible.

The passage from a technological into a digital language chanced in deep all the communication shapes. Processing art in our times puts the main question: "Can the digital innovation change the whole procedures and rules of the creative process? Obviously, in total way.

In fact, today, the poetic tools characterize an unstable paradigm in all media from press to cinema, from poetry to digital art and architecture, being only a result of precariousness. *Evolution?* Certainly, with the disappearing in poetry of the character of words as stones in our memory. Old words deconstruct their structures in young

generations, running toward a weed assumed with explosive strength, as lightings in full day. All new words seem generated in a false new of changing, because are connected to past in simplified way. So we say good-by to our lost poets in continuous research of the literature "un-perfect knowledge".

Now digital innovative evidence is in the availability of data: these are available immediately in open continuous number.

The processes of selections are analytical and they are able to identify only the same equal without any hidden significance in an undertone similarity toward new open connections. The internet research about a word works only on the same significant correspondent to the researching word. Naturally, in this selective criterion, *significant* and open peculiar *significance* became very distant, unattainable. For this reason, the necessity to define new selective criterions is evident, being this relationship the basic structure of each creative process.

8 – Tenores song, a generative process in performing words

Tenores from Sardinia are able to perform the rhythm of playing in *discontinuous way*, following *different characters* in the same sound sequence.

They sing an ancestral sound for performing words, following the wind.

This performing song belongs to one most ancient structure of music, declared by Unesco patrimony of Humanity.

The double structure works:

1; 2- 2b; 1a

1 - 1a = Tenor and Falsetto

2 - 2 b = Bass and contra, toward *harmony*

This is a structure of morphogenesis: incipit, performing syllables in imitations of animals sound toward *Harmony*, falsetto.

The song follows in spiral way, *ad continuum*.

9 – Exempla of poetic logic as complex art of connections



This is one of the most enigmatic painting by Piero della Francesca, font of endless interpretation. For many centuries, the painting was abandoned. It was rediscovered by Johann David Passavant only in 1839 in the sacristy of the Duomo of Urbino, In his rediscovery script, Passavant declared to have found Piero signature and the writing "Convenerunt in unum, "nearby" to the group of the three figures (may be on the frame)

.These are then *disappeared*.

The sentence is drawn by the Salm II, that belongs to the service of holy Friday, reported to the Passion of Christ. This becomes the secret key for any congruency interpretation of this so mysterious artwork, that after the rediscover was and is object of many possible interpretations:

Roberto Longhi that defined Piero"The poet of shapes", Carlo Ludovico Ragghianti, Alfredo Venturi, Eugenio Battisti, Henri Focillon, Kenneth Clark, (1951), that called The Flagellation by Piero 'the greatest small painting in the world'. Marilyn Aronberg Lavin, that wrote Piero della Francesca: The Flagellation. David King, Sir John Pope-Hennessy in The Piero della Francesca Trail, Carlo Ginzburg, (1985) in The Enigma of Piero. Aldous Huxle and so on.

The interpretations of Piero artworks are exercises of poetic logic, for gaining results in very different ways, but all possible interpretations are congruent to Piero's artwork. Interpretations may be too much realistic or simplified, but true. On the author's traces for unveiling the logical connections, also those unexpressed for pure aesthetical pleasure of discovering.

2 - P. Bruegel the Elder "12 Proverbs"-"Netherlandish Proverbs", 1558/59





According to the Columbia Encyclopedia, a proverb is a short statement of wisdom or advice that has passed into general use. More homely than aphorisms, proverbs generally refer to common experience and are often expressed in metaphors, alliteration, or rhyme. Pieter Bruegel the Elder completed a series of "Twelve Proverbs"(1) on individual panels. Then he also made "Netherlandish Proverbs"(2), that is thought to be the first large scale representations of this genre in Flemish painting. These proverbs are of two types: those which were demonstrating the absurdity of much of our behaviour; and more serious proverbs illustrating the dangers of folly. The scene is on humans and animals and objects, W. Fraenger (Der Bauernbruegel und das deutsche Sprichworl, 1923) studied and therefore translated in relationship to the general northern folklore (3).

The poetic structure of these paintings is comparable to the treats awaiting foreigners in Alice in Wonderland and Gulliver's Travels. Their basis of fantasy is the presentation of *an assortment of familiar things in an unexpected way*

He poked fun at human life and folly by translating into visual images ordinary, everyday expressions that would strike home immediately to his Flemish audience.

3 - Tiziano Vecellio, "ALLEGORY OF PRUDENCE", 1565



The three heads allude to the three ages of man: *youth, maturity and old age*. The inscription is performed in three sections, associated with the respective heads underneath.

The left head resembles Tiziano himself in old age; the bearded central man has been thought to represent his son *Orazio*, while the youth may depict his cousin and heir, *Marco Vecellio*.

The triple-headed beast - wolf, lion and dog - is a symbol of prudence.

The painting has acquired its present name suggested by a barely visible inscription, *EX PRAETERITO/PRAESENS PRUDENTER AGIT/NE FUTURA ACTIONÊ DETURPET* ("From the experience of the past, the present acts prudently, let it spoil future actions").

10 - Pasolini, La Ricotta, diacronicity in vision and in sound



P.P.Pasolini on "La Ricotta set"

"The poetry language is an outside language. Its inside and permanent characteristic is the diachronic structure. The poetry time is the remote, the imperfect or the future time. The next past is impossible (as it is typical in the today's use of Italian): the present is possible as dramatization of the past, or rather as historical present. The present of the diary too, is not but a fiction: in reality, the same poet soul is in revocation. Shortly, poetry has to gain itself on the time myth: to stretch a veil of time on the things said, or past or future. In such diachronic structure, its tendentious meta-historicity can be conceived, otherwise as of a type ambiguously spiritualistic. You understand that its irrationality (what it is concretized in the time myth), such it is only apparently: it is not but a revocation or **a logical elliptic prediction**. The intuition is not but some jump of logical thought. That is why every poetic action or generically intuitive is always referable to a rational ideology.

"The RICOTTA" is one of the most complex expression of poetic logic gained in art. There are contemporaneously: *cinema, painting, music and literature*. This is a medium-length film by *Pier Paul Pasolini,* 1963, inserted inside the episodes film *Rogopag - Let's Wash our brain*. The core of Pasolini investigation stars from these 2 paintings:



1 - Giovan Battista di Jacopo di Gasparre, known as *Rosso Fiorentino*, *Deposizione*, 1521 - Volterra, Pinacoteca Civica

2 - Pontormo, Deposizione, 1525 - Firenze, Santa Felicita

In both paintings, it prevails *complexity, innovation, uniqueness.*

These painting are an ancient example of GA

In Pontormo (2), the complexity is expounded through an ascending movement, as a "*inexplicable knot*", (L. Venturi, *History of the Italian art*, Milan, 1932) of very light figures, without weight. In fact, the arrangement of the plans makes fulcrum and raises itself entirely leaning on the young placed in low. All is behind an unnatural background, that it is indefinite, made exception for **the only grey cloud**.

As for the composite elements of the painting by *Rosso*, the linear articulation is as many complex, making not lever on its "lightness" but on one "*net from the sweaters firmly hooked*" (Kusenberg, "*Rosso Fiorentino*", Paris, 1931). Ciardi about the intention has spoken in "*The Rosso Fiorentino*. *Reality and Vision*", Volterra. In both the paintings a meticulous attention it is noticed for the dresses of the characters (especially *Maddalena* in the picture by Rosso) and above all their postures, that individualize *horizontal, diagonal and vertical lines* in which to divide the representations.

It is on the intense dramatization of the event and on the spiritual share that it implicates, that the two authors assemble their own attention.

In the painting by *Pontormo*, *the man with the green hat*, almost imperceptible on background *is the same artist*. With the fixed look toward the outside of the painting, as he seems to go out of the painting space, he risks himself, to evidently voice the proper one strong emotional share.

In the other painting, *the young man with the red hair* in closed-up, that *hides the face among his hands* for the desperation. This act has been defined by Ciardi a "*denied self-portrait*" of the artist: also in this case the painter has opted for a personal involvement in the represented event, with the purpose to underline his own intense emotional share. This was a very important interpretative key for performing the interpretative gen-system by Pasolini.



2 Live variations in La Ricotta of the 2 original paintings

Pasolini was in Bologna a student of *Roberto Longhi* and especially in this film, he demonstrated to have very well understood his lesson. The double process of his abduction on the two paintings gains in his mind an incredible fascinating *idea*: to use *live* the actors voices and his own director voice too, filming the reconstructions performing of the 2 paintings. It is an explosion! Pure generative art. For these scenes, he had great problems with Justitia and terrible critics on newspapers

Starting from this *chaos*, he arrived in the film sequences to a perfect *order*. His movie translation of these 2 painting masterpieces gained its maximum with the voice of Mary, declaiming an ode by *Jacopone da Todi*, accompanied by *Domenico Scarlatti* music. Sublime! It is really a great expression of generative art from past to future.









8 - Film sequences

11 - The art of discovering: Piero della Francesca, the poet of shapes

A friend in need is a friend indeed.



Piero Della Francesca, 5 self-portraits

Vasari, Biographies [3]: Piero makes to know us in this obscurity how much it is important to imitate the true things, and the working in removing them from the really. Which having done very well, he has given cause to modern age to follow him and to arrive at that highest degree, where are seeing the things of our times. In this same history, he effectively expressed in a battle the fear, the animosity, the dexterity, the strength and all the other affections that in those people it is possible to be considered that they fight, and likewise the accidents with an almost unbelievable massacre of wounded, of fallen and of dead people...



Flute Player in the "The battle of Eraclio e Cosroe"

Homage to Piero della Francesca, the father of all generative artists

Following "all the other affections that in those people it is possible to be considered", (Vasari); and some traces of investigations made by me from many years, I discovered some poetic logics on *Piero 5 self-portraits*, by my impressions of characters: *imprinted, lonely and sympathetic*, performed in his five self- portraits. So I read the Piero face as a new his self-portrait, in "The battle of Eraclio e Cosroe" inside The History of the True Cross", in the face of the musician playing the flute with a **Byzantine hat**. This process follows two parallel structures one objective connected to features, and a second connected to characters. These lines perform the idea, but we need new extra elements for demonstrate in deep the hypothesis.

The attribute Byzantine made my mind running in Orient. My vision connected in my memory the song of Phoenix and my imagination was able in this generative process to identify the face of Piero. He is imitating the song of Phoenix for dispersing the hate and the horror with his melody, following his great heart so full of love and science to design rules and procedures of *"La pittura Chiara*", the great art and science gained by a human being.

This discovery is not only a tale, it is true. The second step of demonstration is just configured by me. In this generative process, I followed two parallel structures: one objective connected to *features*, and a second connected to *characters*. These lines perform the idea, but we need new extra elements for demonstrate in deep this hypothesis. But this is another paper!

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