THE EMERGENCE OF CYBERNETICS IN SEMIOTICS.
CASE STUDY: ART, POETRY AND ABSURD THEATRE

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ABSTRACT

It is shown in this paper, some results on cybernetic modeling and Informational Statistics application who are presented for sustaining the perfect narrative love poem, Evening Star or Lucifer of Eminescu, the antenarrative of Eugène Ionesco and of critical visual aesthetics and antenarrative spectrality described by David Boje [3] regarding Empire Reading of Manet's Execution of Maximilian.

Cybernetics concepts of feed-before, feed-forward and feed-back could reveal the narrative behind the antenarrative creating of a theatrical play.

It is shown in this paper, some results on fuzzy modeling and Informational Statistics application who are presented for sustaining of critical visual aesthetics and antenarrative spectrality described by David Boje regarding Empire Reading of Manet's Execution of Maximilian.

The combination with planning statistical experiments and Informational Statistics make fuzzy membership function a new approach for antenarrative analysis independent of initial conditions. This feature allows new arguments obtained by measuring the informational gains to be discussed in art, literature or conversation.

This approach can be used to obtain either complete or generalized synoptic ideograms. Several simulations or scenarios could be carried out to illustrate how the methods' combination clarify the „black box" of understanding complex processes in Art.

Keywords — Informational Statistics, Factorial Experiments Antenarrative, Non-communication, Relationship.

NARRATIVE VERSUS ANTENARRATIVE ANALYSE OVER THE BEST LOVE POEM OF EMINESCU

There are many years since *Luceafarul* by *Eminescu* has excited us from a different point of view than has done it with those who are passionate of literature, of culture history, with philosophers or with those who have graduated high school. We were surprised by the inside symmetry, the balance between individual and general, analytic and holistic, making me to consider the Poem a model on which you can apply statistic instruments with the most subtle possible experiments

The love Poem is a perfect example of narratives as traditional written material meaning that take a more linear insights to information, whereby everyone moves sequentially through stanzas and distiches and providing a beginning, middle content and end reading.

Contrary, in our modern life, antenarratives appears on the Web, were the individuals will not be following the same structure or pattern of finding information in the same way. Because the Web is a wide-area hypermedia system aimed at universal access, we illustrate like that:
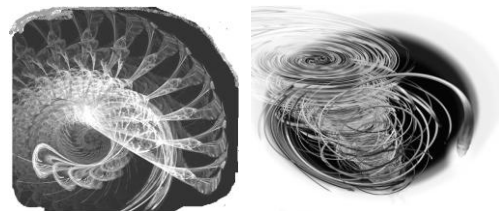

Figure 1 - narrative and antenarrative

A **narrative** is a concept, composed and delivered in any medium, which describes a sequence of real or unreal events.. The relations' functional durability is given by their **repeatability**. A major purpose in science is to allow natural phenomenal prediction. This goal is attained by discovering the systematic relations between predictive variables (independent, by cause, impulses) and external variables, obtained as a result (dependent, endogens, effect, reaction).

The "**Evening Star**" ("**Luceafarul**") by **Mihai Eminescu**, a 98 stanzas (102 originally) sets the world record for the **Longest Love Poem** appears on Web as "The Legend of the **Evening Star** ("**Luceafarul**") **Lucifer**, **which** is a story about a young princess who prayed to the evening star each night. The Evening Star falls in love with her and is willing to give up his immortality, but realizes that the pure love he has for the young girl cannot be sustained in the mortal world".

If the predictive variables data variation corresponds in the same way or in the same time with the result variables data variation, it is a potentially functional relation and it is possible to predict the result that we haven't found out yet knowing only the independent variable value. Unfortunately, we are fighting with all kind of error sources which come from the environment from which we have extract the data, from the mistakes connected with the identification of some accidental relations,

calculus errors or approximation, from the existence and the not including in calculating of many sources of simultaneous influence and others.

That's why, I propose the approaching by quantitative methods to be by statistic probabilities, algebra or mathematic analyzes. But how can we see that the relation is caused or not by chance (error)? Most of the time the method that the scientists use in a better-organized version of common sense.

What for example, is *Lucifer* relationship with his Demiurge? His love? His Catalina? His job? His parents? His life style? And his position? Each relationship existing on a continuum from mundane to crucial, and varying according to circumstances over time, „tells or recounts" an aspect of his nature. What, to use an analogous situation is the Eminescu Genius's relationships with its drama Poem? Its characters? Its community? Its experiences? Its education? Its fantasies? And its communication abilities?

The question could be asked, „*Does each relationship „tell or recount" a potentially significant and in many ways unique aspect of his (its) nature? "*The argument is extremely persuasive that it must. *As in management terms, the study of relationships, is preparation for understanding the implications of those threats or opportunities that affect individual or organizational success (survival)* Butler, Mihaita [4].

The operative word in analyzing the Poem is „**relationship**". The relationship concept, albeit simplicity itself, has tested any manner of perspicacity to which many authors may previously have laid claim. What, for example, is a relationship? Where is it found? How and When does it occur? And why? Finally, what purpose does the investigation of such a nebulous concept serve?

Classifying relationships challenges the imagination and exhausts the challenger. Relationships are political, economic and social or literally, existing without number in the environment. On the other hand, they can be physical or metaphysical, predictable or unpredictable, good or bad, progressing or regressing, mundane or crucial…, or just plain ornery. We will search for meaningful relationship in the jungle of the AP—HP Matrix, with only „defining attributes" as our flimsy snare [4].

The concepts advanced suggest:
1. The importance of relationships,
2. A method of classification for management action-structural relationships, and
3. Application of this method for studying of management in systems.

We offer a number of axioms manipulated like parameters and useful for hypothesis testing affecting managerial relationships:
1. Some relationships become essential at given times (times of opportunity or threats)
2. All relationships are dynamic and vary in significance according to implicit (instinctual) or explicit (stated) goals.
3. There are too many potential relationships to closely consider all at once.
4. Some essential relationships can be identified based on their Defining Attributes vis-à-vis the stated goal.

5. All relationships are made up of at least two or more variables.
6. Complexity is a function of the number of variables and the understanding (i.e. knowledge and experience) of each.
7. Studying relationships assumes that observations take place at both levels of the specific relationships (how one variable affects all the others).

THE SHORT PIECE, FOURSOME OF EUGÈNE IONESCO ANOTHER APPROACH: INFORMATIONAL STATISTICS CHALLENGE

The Father of the Absurd Theatre, Eugène Ionesco's build the perfect antenarratives. Antenarrative shifts from "What's the story here?" meaning introduction, story and end incidents, to questions of "Why and how did this particular story emerge to dominate the stage?" meaning to "shift from linear, coherent narratives to emergent behavior of nonlinear, interactive, and fragmented antenarratives".

Referring at *The Chairs (Les Chaises),* the Father of the Absurd Theatre said that the subject of the play „is not the message, nor the failures of life, nor the moral disaster of the two old people, but the chairs themselves. That is to say, the absence of people, the absence of the emperor, the absence of God, the absence of matter, the unreality of the world, metaphysical emptiness. The theme of the play is nothingness" But Ionesco knew there's more to nothing than meets the eye. So we see their unseen guests. The actors make the unreal real, and vice versa.

In the program for the original production, Ionesco writes, ''As the world is incomprehensible to me, I am waiting for someone to explain it.'' As the idea of a theater of the absurd evolved it developed into a literary form that explored the futility of human existence. ''*The Chairs* came to be seen as a seminal example of the genre, highlighting the loneliness and futility of human existence''.

Instead, the theme of the short piece *Foursome* (*Scène à quatre)*, we find out using Informational Statistics and other quantitative methods, is the Grand Illusion. Contrary as in *The Chairs*, on *Foursome* the actors make the Ionesco's concrete void, the visible invisible.

We define the Profile of Performer's stage behaviour as consisting of a number of states: (1) communicating with only one player (three states); (2) being on stage in silence; (3) communicating with two players; (4) communicating with three protagonists. Informational gains are obtained by measuring the influence of others presence or action (e.g., dialog) over the overall Profile of Performer's stage behaviour using Information Theory and Informational Statistics besides factorial experiments:

Our results: One man walking around a table with a flowerpot on it, while making assertions and denying them, being simultaneously ego, an alternative ego and superego, fantasizing about Pretty Lady while he awaits her and she never appears. **Our opinion: FOURSOME is a vast metaphor for the multiple and conflicting elements within a single human character.**

Does Informational Statistics reveals the play Palimpsest of Eugène Ionesco? For comparing the short piece, Foursome versus The Chairs we chose to develop synthesis (Matrix) of Analytical Paradigm (actions in rows) and Holistic Paradigm (system components in columns) for looking "at a glance" over the core of the play, employing cybernetics and utilizing concepts such as: **environment, feedback**, **input, output, goal, information, entropy, energy** and **attributes** for example.

So, two performers, Dupont (we codify by **Dp**) and Durand (we codify it **Du**) incessantly (we codify **Rp** – repetition, replication) volley "*But I said yes*"/"*But I said no*," (we codify **Assertion/Denying**). Another fighter of words, Martin (codified **M**), joins them (we codify it as **two,** when they spoke or someone communicate with them simultaneously in the same scriptline) reminding them repeatedly (**Rp**) to "mind the flowerpots", (**attn**-attention, **Flowers**) while expanding the disagreeing duo (**two**) into a brawling trio (we codify it as **three,** when they spoke or someone communicate with them simultaneously in the same scriptline). Finally, an unsuspecting woman, Pretty Lady (codified as **PL**) enters and, after entreating the men to stop fighting, has her limbs ripped from her body....and so.

Table1. Pseudo Matrix – cube of three level information

Primary Level		Generic Relationships				
		1	2	3	4	5
P	Activities	**Author**	**Du**	**Du**	**M**	**P L**
I	Communic.	I:1	I:2	I:3	I:4	I:5
II	Presence	II:1	II:2	II:3	II:4	II:5
III	Assertion	III:1	III:2	III:3	III:4	III:5
IV	Denying	IV:1	IV:2	IV:3	IV:4	IV:5
V	Questioning	V.1	V.2	V.3	V.4	V.5
Secondary Level						
Behavior' states, one way communication						
Dp - Du	Dp - M	Dp – PL		Dp with two	Dp with three	
Du - Dp	Du - M	Du – PL		Du with two	Du with three	
M - Dp	M - Du	M – PL		M with two	M with three	
PL - Dp	PL - Du	PL – M		PL with two	PL with three	
Third Level						
Informational energies		Confirmed weak relationship				
Conditioned informational energies		Confirmed strong relationship				
Informational correlation coefficient		Nonexistent relationship				
Association by Cramer'V coefficient		Hidden relationship by the third variable				
Fisher in 2^2 statistic experiment		Spurious relationship				
		Positive interaction				
		Negative interaction				

What we found? From the informational statistics and academic points of view, where studying and learning take place respectively, *that the need   for a method by which the classification of   script-system management-actions and structures RELATIONSHIPS can be shown and investigated, is very great.*

The situation could be like to two performers on a stage, management actions (analytically) on one side and structure (holistic) on the other side. There is a dialogue to be sure, but the substance of their lines leaves us wondering about their relationship. It is, after all the essence of the Play.

Arguments for being Dupont, Durand and Martin only One persons in the light of Informational Statistics:
The global importance of player's behavior is given multiplying the intrinsic information (from the states' of performers, the normalized information energy) and the extrinsic importance (given by the author's number of scriptlines) and here are two extreme possibilities:
    1. the energy of one state is great, maximum, and the information given is that one state exists for sure but the global importance is small because it is happened rarely (few lines);
    2. the energy is dissipated in all states and the value is very small but some frequencies of states happened often.

Table 2. Global importance of *Foursome'* s performers

Name	en.	Scriptlines	multiply	Inform.
Du	0,327	162	52,9	28 %
Du	0,315	162	51,0	28 %
M	0,470	112	52,6	28 %
P L	0,660	46	30,3	**16 %**
Sum	x	x	187,0	100 %

(84 % bracketing the three 28 % rows)

As we see in the last column of table 2, the importance of men is intriguing, it is identical and The Pretty Lady had the smallest importance. **If all are in One, his character receives 84% from the global importance of the play.** Taking into consideration that the Pretty Lady communicates very little and the important state of she is only to be present in 46 script lines (including 39 of silence!) the importance is small (only in the mind of **One**).

PROCEDURE   FOR   PLANNING   FACTORIAL EXPERIMENTS 2^3
 In the case study of Manet's Execution of Maximilian we propose to look into WWW and find stories (narration) and take advantage that the web is nonlinear by nature and by design, meaning that you can jump in time from topic to topic, document to document, and site to site.
The most salient of fuzzy models are using (1) the intermediary value (common knowledge) and (2) not the intermediary value is important, but the extreme ones.

In the following we illustrate an application of one methodology based on: (a) planning statistical factorial experiments 2^3, (b) using fuzzy membership function as *minimum, intermediary, not intermediary* but extreme values are important, (c) finding interactions of zero, one and two order between three attributes, (d) measuring relationships information gains with Informational Statistics, (e) identifying strong, weak, false, hidden or spurious relationships between the A, B, C attributes, some identified during step (a) procedure, planning statistical factorial experiments 2^3. The challenge of this approach in this paper is that we try to illustrate the dynamics of narrative and antenarrative and their relation to stories told about *Empire Reading of Manet's Execution of Maximilian,* as aesthetic theoretists, David Boje [3], Georges Bataille [2], Neil Larsen [6], who argue different ways of viewing the aesthetics of Manet's *Execution of Maximilian.* In the first version, the firing squad is dressed in rebel republican army; in the second version the uniforms are French; a wall appears and remains from the 3rd version; in the 4th version sombrero appears and some saying that is a critique of Napoleon III's failed Mexico conquest.

Figure 2 - Frequencies and Fisher test results

Reviewing Stage of Attributes

The young Emperor of Mexico, Ferdinand Maximilian, was executed/assassinated at Queretaro, the June 19th 1867, alongside two of his generals, Tomas Mejia and Miguel Miramón. Manet based his historical painting *Execution of Maximilian* on eyewitness reports printed in European newspaper. This could be assimilated as antenarrative. In David Boje writings, the antenarrative is defined as "a bet and a prestory that can be told and theatrically performed to enroll stakeholders in ways that transform the world of action". Antenarrative shifts from "What's the story here?" meaning a beginning, middle and end incidents, to questions of "Why and how did this particular story emerge to dominate the stage?" meaning to "shift from linear, coherent narratives to emergent behavior of nonlinear, interactive, and fragmented antenarratives" [3] On the other hand, fulfilling the traditional visual narrative of empire, more iconic images that appeared in the press and circulated as postcards presented Maximilian as a hero.

Narratives as traditional written materials take a more linear insights to information, whereby ones moves sequentially through a document meaning a beginning, middle and end reading. Antenarratives appears on the Web, individuals will not be following the same structure of finding information in the same way.

Results using factorial experiments 2^3

The Figure 2 represent the data arranged for using the factorial experiments 2^3 and the relationships of order zero, one and two, A, B, C, AB, AC, BC, ABC. As can be seen, Fisher coefficients shows that, no matter other variables, the common knowledge is that *Maximilian was executed* Fa equal to 121,19 is greater than Fisher (1,7) which is 5,59 and this collective knowledge is given by aestheticians with the *same views as Manet* in an *antenarrated* process, Fisher coefficient Fbc = 23,25 greater also than Ftab = 5,59.
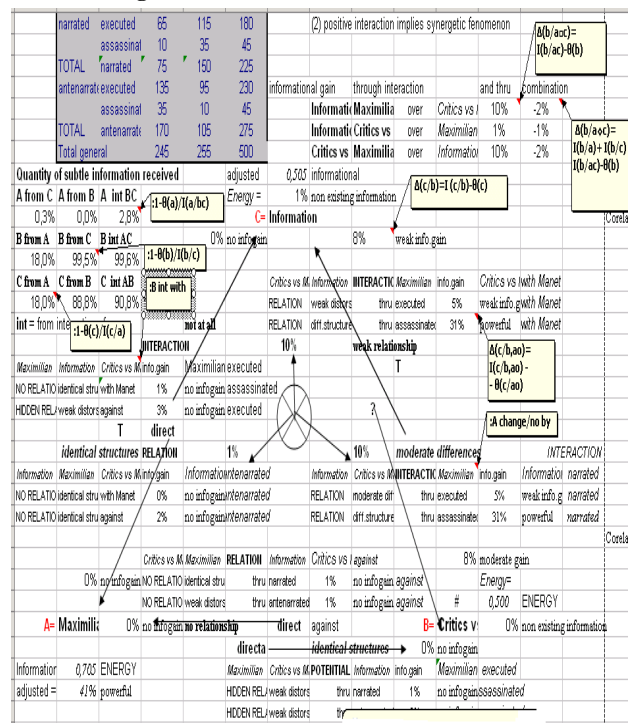
Results using Informational Statistics

Figure 3 - Informational Statistics results

If we follow, the only arrows with informational gains, between B-C, Critics - Information we see aestheticians with the same view as Manet are believing that Maximilian was assassinated

and they received this information from stories narrated. The most interesting line in this ideogram with arrows is the last lines where it looks like there is no relationship between A- B but C (source of Information) has CHANGE POTENTIAL from *executed* to *assassinated*

In this article we hope to demonstrate that applying such interstitial methodology the obtained results are very promising for analyzing any communication, narrated or antenarrated that has a fo of a conversation and make statistics useful in dealing with conversation analysis. Using it to map out other opinions, or real life situations, real life reports, other pieces of literature as Poetry or Absurd Theatre. Just to see what outcomes one gets

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