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The Interference of Contraries: Pius Servien's Case¹

“Il ne suffit pas de considérer en M. Servien la remarquable coexistence d'un savant et d'un artiste alternatifs. La grand valeur de son heureux effort est le produit de ces deux phases.” (Paul Valéry)

1. Introduction

A predecessor of modern scientific aesthetics, a forerunner of poetics and mathematical linguistics, semiotics, mathematical models in poetical language, a real Renaissance spirit and a genuine humanist², Pius Servien (Pius Sherban Coculescu) deserves to be better known to the scientific world.

Therefore, our paper's goal is to focus on - for different categories of scholars (mainly those who are interested in multidisciplinary subjects, in the “interference of contraries”) - the personality and the major achievements of a Romanian aesthetician who did extensive research work on and dealt with interdisciplinary subjects in his books. Interdisciplinarity –one of the essential features of modern studies – had a special significance for Pius Servien from the time of his early books. Almost one hundred years ago, in the beginning of the 20th century, he was one of the rare scientists involved in various fields and domains of knowledge. Thus, Servien had the ability to combine poetry

with mathematics, philosophy with linguistics and physics, and was successful at connecting the two the contrary approaches of art and science.

Born in Romania in 1902 to the family of a well-known professor and founder of the Romanian Institute of Astronomy, Șerban Pius Coculescu (Servien) spent a great part of his life in France and wrote most of his books in French. He attended Sorbona University, studying philology, and was equally interested in physics, mathematics, philosophy, besides literature and linguistics. In 1930, Servien defended his doctoral dissertation, “Les rythmes comme introduction physique à l’esthétique.” As a researcher at the “Centre National de Recherches Scientifiques” in Paris, he was the coordinator of the Herman Publishing House’s collections entitled “Actualités scientifiques.” He also taught some courses on poetic language at “Collège de France”.

His first volume, published in Romanian and then translated into French, *Introduction to a Way of Being (Introducere la un mod de A FI, 1927)* was, as Victor Ernest Masek wrote in his Preface to the Romanian edition of Servien’s *Aesthetics/ Esthétique* “the first work in which the two tendencies and spiritual hypostases merge; the original personality of Pius Servien was born from this happy combination: the visionary – the dreamer poet and philosopher, – on the one hand, and the scientist whose curiosity was founded on the rigor of mathematical investigation, on the other hand.”³ For a preliminary understanding of this statement, the very titles of his books can give a general image about what kind of domains Servien approached.⁴

2. The Interference of two Opposite Fields: Art & Science

“In order to observe the common laws (of Pindar’s and Beethoven’s lyricism) it was enough for me to unite two powers which throughout centuries looked at each other as two strangers: Science & Poetry.” (Pius Servien)

Chronologically and from the point of view of their contents, the two major poles of Servien’s work are his two books: *Introduction to a Way of Being* (1927) and *Aesthetics* (1953), the former presenting the directions, and the latter making a synthesis of his ideas.

In the *Introduction to a Way of Being*, going back to the sources, to ancient philosophy, Servien recommended some “themes of meditation” on reality, absorbing ideas from various disciplines such as epistemology, ontology, theory of language, anthropology, aesthetics etc.

As an emblem of his own *way of being* – a tenacious researcher, “digging” in opposite fields, explaining the large area of his domains of interest, Servien entitles the first chapter of his *Aesthetics* “Science and Art,” writing a subchapter “The Scientific Spirit and the Works of Art.” The author underlines that for thousands of years scientific aesthetics could not be founded because there was no person with equal expertise in the two principal domains of human activity – art and science. In a poetical manner - which

characterizes the entire book- he expresses his opinion, saying that aesthetics “cannot be born without an exchange between two sparks.”⁵

In his argumentation, Pius Servien relies on the idea that we should not divide people into two categories: those who have a scientific calling and those who are inclined towards art, because

among those who are considered belonging to the scientific *race* there are many who are very familiar with poetry, art and music.” (...) ⁶ (44).

One of the most important enthusiasts of Pius Servien’s work, Paul Valéry, comments on Servien’s volume of poetry – *Orient* – and considers the author a person who had two intellectual natures (“deux natures intellectuelles”⁷). Valéry remarked the specificity of Servien’s work (in Pascal’s tradition⁸) considering it to be an original combination between sensibility and intelligence. Knowing Servien’s whole activity, Valéry started from the idea that “a combination – in the same person – between the forces that make an authentic poet and those that distinguish a real geometrician is extremely rare.”⁹ Thus, he highlighted the individuality of the Romanian aesthetician’s way of thinking. That is the reason why the important French poet considered Pius Servien a “case,, seeing him both as *a scientist and an alternative artist*.

The aesthete was fully aware of the novelty of the ideas in his books and directed the reader's attention to them writing consciously about the "new paths in research / opened."¹⁰ As an argument for those scholars who did not believe in this new aesthetics, or for the skeptics, Pius Servien gave Pascal's work as an example, considering him "one of those (scientists) who unified the forces of beauty and science." Servien also underlined that Pascal was the scholar (together with Fermat and Huyghens) "who inaugurated the glorious career of the theory of probabilities. He congratulated himself – Servien continued – on the birth of the new science, *the geometry of dice*, merging the uncertainties of hazard with the certainties of mathematics and he extended the demonstrations borrowed from the new science to theology." (47).

Servien pleads in his aesthetics – directly or indirectly – for a scientific character of the literary or artistic work showing that all artists have to be aware of the internal mechanism of producing art, because they start their creation knowing some general set of laws in the domain. He considered a main feature of creative writing the fact that no great artist could totally ignore the specific rules of his field, and these rules belong to the scientific language. Servien himself had an experience as a poet¹¹. For this reason there is no doubt that he wrote poetry that could be "at the same time learned and warm"¹² - as Paul Valéry characterized it.

3. The Two Poles: Scientific & Lyrical Languages

Therefore, Servien was aware of building a new aesthetics, and he made comments upon the process of creation (based on his acquaintance with the techniques of artistic works)

making the distinction between *scientific language (SL)* and *lyrical language (LL)*. “The first results I’ve published both in aesthetics and in the theory of probabilities are connected with this separation I’ve done between these two domains of the language, which I’ve called Scientific Language and Lyrical Language,”¹³ Pius Servien informed his readers from the very beginning. Sometimes he called *SL - common language* which, together with *lyrical language*, built up *total language*. “*SL* is only a limited part of total language,” Servien insisted in his work (57).

This distinction of the two categories of language and their analysis can be considered the main ideas in his books, a real red thread of the aesthetician’s research work. In *Aesthetics*, he defines *SL* as an ensemble of phrases which have equivalents (“in science any sentence is liable to be used in the scientific discourse”) and have the same meaning for readers; he continues with the idea that any scientific phrase can always have a chain of equivalents without changing the meaning of the sentence.

Servien situated Lyrical language (*LL*) at the opposite pole, with altogether different characteristics, where “the characteristics of the first cannot be discovered, but completely contrary ones.” He named this “new pole lyrical language.” (57) Further below, he sustained his theory giving a few examples in parallel:

a) The possibility to substitute a word for another word (for example *East* for *Orient*) with no changes in the phrase’s meaning in *SL*, while in *LL* any substitution is impossible (as in the verse *Dans l’orient desert quel devient mon enunui*). Another

example could be the word “sea”, and the explanation is that “if in a scientific text it can have a unique denotation, in a lyrical phrase its meanings are infinite” (58).

Thus, in modern poetry at the thematic level (the level of the signified/*significat*), poetry discovers the poetical connotation of the scientific theories (astronomy, geology, biology, astrophysics, mathematics, semiotics, linguistics etc) and is able to value them in some metaphorical contexts. At the lexical level (signifier/*signifiant*), Poetry recycles peripheral language, the “exotic” language of the different sciences, realizing some “lexical galaxies” according to the phonetic principles of the signifier.

b) From an individual case – the substitution of a word – Servien arrives at a general circumstance – the sentence which doesn’t allow for equivalents in *LL* and the conclusion is: “in a lyrical sentence the meanings of a word are countless”; *LL* is in possession of the whole game of vocabulary and syntax, while *SL* cannot be expressed using all the words and the entire syntax.

“His ambition was to consider and treat aesthetics as a bridge between the two languages, one where the rhythm is essential and the phrase is untranslatable; the other, quite the opposite, is translatable, a-rhythmic, and always accompanied by endless admitted equivalents”, wrote Valéry about Servien’s “theories” regarding the syntax. “Restricted in vocabulary, *SL* is restricted in syntax, too; for example, it has no vocative and no optative. These words (“God”, “beauty”, “delight/ pleasure”) and these moods are, on

the contrary, the *LL*'s characteristics", emphasized Servien his point of view regarding the two categories of languages. (58).

The distinction between the two poles (two languages) can also be observed at the level of *rhythm*. In his enthusiastic appreciation of Pius Servien's poetry and theories of language, Valéry focused on the idea that Servien discussed in his work the only constituent of lyrical language which cannot be defined *-rhythm*. Further on, Valéry underlined that the aesthetician wrote in this domain "the most profound study that could have ever been written."¹⁴

"For the first pole, the meaning of the phrase is independent of the rhythm and, generally speaking, it is independent of the sonorous level. At the opposite poles, there are only meanings-rhythms, indestructible bonds", Servien points out, and then he adds:

c) "*SL* can be entirely translated, different languages having coincidences in this area. At the lyrical level two languages have no points of coincidences, so all conversion is based on some vague correspondence." (58).

4. Echoes of Pius Servien's aesthetics

Despite his important contribution to a new aesthetics and especially to the new theories about human language, the great significance of Pius Servien's aesthetical approach was not very well studied and spread. The first book, which reconsiders Servien's role in the scientific aesthetics, was signed by a contemporary researcher, Professor Solomon

Marcus. His book, *Poetica Matematica/ Mathematical Poetics*, re-establishes Romanian scholar's priority in the mathematical model of poetical language. In another book, *Arta si stiinta/ Art and Science*, Solomon Marcus devotes the largest chapter (about 80 pages) to the difference between *Scientific Language* and (as he calls it) *Poetical Language*. The author starts his analysis with Servien's most important theory about "the two poles of human language" and describes in detail – according to Servien – the main characteristics of the two languages. Then, Solomon Marcus goes further in his investigation and concludes: "every (human) phrase belongs to *LL* (so we have to admit there are no non-poetical phrases) and *SL* is only a part of *LL*". Later, Solomon Marcus asserts that $SL=LL$. In other words, "every phrase is liable to these two hypostases: one belonging to *SL* and the other to *LL*." Further on, Marcus's examples are based on Baudelaire's and on Tudor Arghezi's, an important Romanian poet's verses, these two writers succeeding in "incorporated in *LL* many phrases which were considered non-poetical." The conclusion of Solomon Marcus' thesis is that "many other phrases considered today non-poetical will be inserted in a context that can offer them a poetical status tomorrow."¹⁵

5. Conclusion

Servien founded a new type of aesthetics, capable to speak about its subject in a scientific language. Today, we can assert without any doubt that Pius Servien had significant contributions to the development of modern scientific aesthetics. His role in the development of many different disciplines is also indubitable. A confirmation of this comes from the well known theoretician of "the gold number," Matila Ghyka, who, in his books (such as *The Gold Numbers*, Gallimard, 1931, *Essay on the Rhythm*, Gallimard,

1938 etc) recognized in Pius Servien a scholar who opened many scientific paths. Nowadays his ideas and theories are considered basic assumptions for major modern disciplines such as poetics, mathematical linguistics, semiotic aesthetics, and many others.

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¹ The title of this paper has two sources: first – the book of a Romanian scholar specialized in mathematical linguistics, Solomon Marcus (a member of the Romanian Academy) and second – Paul Valéry’s postface to *Orient*, Pius Servien’s book of poetry, entitled *Orient suivi de Le cas Servien par Paul Valéry* (Paris: Gallimard, 1942).

² According to Paul Valéry (who considers Servien a ‘wit’, “un homme de l’esprit”), a definition of real *humanism* consists of *an equilibrium between knowledge, will and power*. (*Le cas Servien*), 98.

³ Ernest Mashek, “Cuvant inainte” (Foreword), Pius Servien, *Estetica* (Bucuresti: Editura Științifică și Enciclopedică, 1975), 19. (all quotations are my translations, M. A.).

⁴ *Essais sur le rythmes du français* (1925), *Introducere la un mod de a fi* (*Introduction to a Way of Being*) (1927), *Introduction a une connaissance scientifique des faits musicaux* (1929), *Lyrisme et structures sonores. Nouvelles méthodes d’analyse des rythmes appliquée à Atala de Chateaubriand* (1930), *Les rythmes comme introduction physique à l’esthétique. Nouvelles méthodes d’analyse et leur application notamment à la musique, aux rythmes du français et aux mètres doriens. Avec une remarque de Paul Valéry* (1930), *Le langage des sciences* (1931), *Principes d’esthétique. Problèmes d’art et langage des*

sciences (1935), *Les langage des sciences* (1935), *Sur les fondements des mathématiques* (1939), *Le choix au hasard. Mesure d'Égalité physiques et Calcul des probabilités* (1941), *Vers une nouvelle forme du calcul des probabilités*, (1941), *Base physique et base mathématique de la théorie des probabilités, vers une nouvelle forme de la théorie* (1942), *Orient suivi de Le cas Servien par Paul Valéry* (1942), *Sur le fondements de la physique mathématique* (1943), *Sagesse et poésie* (1947), *Esthétique* (1953), *L'artiste (Essai)*, 1957.

⁵ Pius Servien, *Estetica*, (1975), 19.

⁶ Pius Servien, *Estetica*, 44.

⁷ Paul Valéry, *Le cas ...*, 89.

⁸ “Pascal was the first who draw a parallel between *la finesse* and *la geometry*.” (cf. *Orient suivi de Le cas Servien par Paul Valéry*), 85.

⁹ Paul Valéry, *Le cas...*,88.

¹⁰ Pius Servien, *Estetica*, 38.

¹¹ He published in 1920 a volume of poetry *Curgand clepsidra (Leaking Hourglass)* and in 1942, *Orient*, a book highly appreciated by Paul Valéry.

¹² Paul Valéry, *Le cas...*, 85.

¹³ Pius Servien, *Estetica*, 54.

¹⁴ Paul Valéry, *Le cas...*93.

¹⁵ Solomon Marcus, *Arta si stiinta* (Bucuresti: Eminescu Publishing House, 1986), 83.