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The Lyrical Equation *in the Poetry of Euclides da Cunha*

Lais Peres Rodrigues – Rio de Janeiro State Department of Education,  
[laisperesrodrigues@gmail.com](mailto:laisperesrodrigues@gmail.com)

### Summary

This article investigates the lyric poetry of Euclides da Cunha based on the hypothesis of the "lyrical equation," understood as a structuring principle of a poetics founded on the tension between science and imagination. In dialogue with the reading of Ronaldo de Melo e Souza, especially concerning the notion of geopoetics and the dynamic polarity between reason and sensibility, the study demonstrates that Euclides' writing rejects both scientific objectivism and exacerbated aesthetic subjectivism. The analysis focuses primarily on the sonnet "Lyrical Algebra," in which the poetic subject dramatizes the conflict between the "atrocious ice" of mathematical abstraction and the "fervent bosom" of amorous experience, transforming the algebraic "X" into a symbol of existential synthesis. The formal examination reveals how repetitions, nasal sonorities, and spiral structure reinforce the state of intellectual fatigue and the search for equilibrium. The article expands the discussion by incorporating a reading of "Lirismo à disparada" and "Num minuto de calma," poems that reiterate the oscillating movement between calculation and lyricism, between idealization and concreteness.

The dialogue with German Romanticism, especially Goethe and Fichte, as well as with Baudelairean echoes, allows us to situate Euclides in the in-between space of diverse traditions, revealing the complexity of his historical insertion. It is concluded that the "lyrical equation" constitutes an epistemological metaphor that expresses the complementarity between the sensible finite and the intelligible infinite, configuring a unique poetic modernity in the Brazilian context.

**Keywords:** Euclides da Cunha. Poetry. Modernism.

### Abstract

This article investigates the lyric poetry of Euclides da Cunha based on the hypothesis of the "lyric equation," understood as a structuring principle of a poetics founded on the tension between science and imagination. In dialogue with the reading of Ronaldo de Melo e Souza, especially concerning the notion of geopoetics and the dynamic polarity between reason and sensibility, the study demonstrates that Euclides' writing rejects both scientific objectivism and exacerbated aesthetic subjectivism. The analysis focuses primarily on the sonnet "Lyric Algebra," in which the poetic subject dramatizes the conflict between the "atrocious ice" of mathematical abstraction and the "fervent bosom" of amorous experience, transforming the algebraic "X" into a symbol of existential synthesis. The formal examination reveals how repetitions, nasal sonorities, and spiral structure reinforce the state of intellectual fatigue and the search for balance. This article expands the discussion by incorporating a reading of "Lirismo à disparada" and "Num minutón de calm," poems that reiterate the oscillating movement between calculation and lyricism, between idealization and concreteness.

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## 1. Introduction

Euclides da Cunha's critical reception has primarily established him as the author of *Os Sertões*, a work situated at the intersection between scientific essay, literary narrative, and interpretation of national formation.

However, his poetic output remains relatively marginalized within academic studies.



**Year VI, v.1 2026 | Submission: 20/02/2026 | Accepted: 22/02/2026 | Publication: 24/02/2026**

Euclidean, despite constituting a privileged space for understanding the intellectual dynamics that

The entire structure of his writing... If, in essay writing, science and literature already articulate themselves in productive tension, in lyric poetry this tension assumes a concentrated, symbolic, and self-reflexive form. It is in this...

The territory that is outlined in what this article calls the "lyrical equation".

The notion of lyrical equation is not limited to the presence of mathematical vocabulary in poetry, nor is it a simple metaphorical game between calculation and feeling. Rather, it is a principle. It is an epistemological and aesthetic framework that organizes Euclidean writing as an attempt at synthesis between poles. It is a synthesis of two traditionally dissociated by nineteenth-century culture: reason and imagination, objectivity and subjectivity, finite sensible and infinite intelligible. In problematizing the excess of both "objectivism" and "subjectivism," as discussed by Ronaldo de Melo e Souza, Euclides inscribes his poetry in the in-between space of multiple traditions — from German Romanticism to French symbolism — without fully submitting to any of them.

Starting from the analysis of the sonnet "Lyrical Algebra" and expanding the reading to poems such as "Under the headings "Lyricism at an Ascent" and "In a Minute of Calm," this study investigates how Euclides da Cunha's lyric poetry... It dramatizes the modern impasse between inspiration and reflection. It is argued that the "lyrical equation" functions as a structuring metaphor for a unique poetic modernity, in which calculation and song... They do not cancel each other out, but rather create tension and complement each other. In this way, the poetry of Euclides da Cunha reveals itself not as a marginal appendix to his work, but as a conceptual laboratory of an aesthetic. It is founded on complementarity.

## 2. Theoretical Framework / Results

The theoretical framework of this article is primarily based on the interpretation proposed by Ronaldo de Melo and Souza in "The Geopoetics of Euclides da Cunha", a work that interprets Euclides's production as a result of a constitutive tension between science and poetry, reason and imagination, observation and inspiration. Euclides rejects the nineteenth-century paradigm that rigidly separated art and science, aligning himself with... if before the German Romantic tradition of the Jena school, influenced by Goethe, Humboldt and Fichte. From this perspective, life is governed by a dynamic polarity: unity that duplicates itself and duality, which becomes unified. This concept supports the central hypothesis of this study: that Euclides' lyric poetry becomes... structure as an "equation", that is, as an attempt at synthesis between apparently distinct poles. It is antagonistic.

The dialogue with Bernucci and Hardman reinforces this interpretation by highlighting the complexity. The historical and aesthetic aspects of Euclides' poetry are marked by multiple affiliations—Romantic, Symbolist, Parnassian ideas — without being reduced to any of them. The critique of "scientific objectivism" and of "Extreme aesthetic subjectivism," as formulated by Souza, becomes a key interpretative tool for the analysis.



**Year VI, v.1 2026 | Submission: 20/02/2026 | Accepted: 22/02/2026 | Publication: 24/02/2026**

of poems such as "Lyrical Algebra", "In a Minute of Calm", "Lyricism at a Glance" and "Doing verses". In all of them, one observes a dramatization of the conflict between excessive calculation and The vertigo of emotion, depicted by images such as the "atrocious ice," the "Sahara," the "fervent breast," the "tear" and the "brilliant X".

As a result of the analysis, it is found that the "lyrical equation" is not merely a device. Metaphorical, but a structuring principle of Euclidean poetics. The articulation between melopoeia and phanopoeia. and logopoeia — in the terms of Salete de Almeida Cara and Ezra Pound — reveals an aesthetic project that It integrates sound, image, and idea under reflective control. It can be concluded, therefore, that the poetry of Euclides da Cunha establishes a unique modernity, founded on the complementarity between the finite. The sensitive and the intelligible infinite, converting the tension between science and lyricism into a driving force for creation. aesthetics.

### 3. Materials and Methods

The theoretical framework of this study is structured primarily on the interpretation proposed by Ronaldez. de Melo e Souza in *Euclides da Cunha's Geopoetics*, especially concerning the notion of Dynamic polarity between reason and imagination. For Souza, Euclides distances himself from the paradigm. nineteenth-century figure who established the separation between art and science, aligning himself instead with the German Romantic tradition — notably Goethe, Humboldt, and Fichte—who understand life as a polarized unity. From this perspective, duality does not imply fragmentation, but rather a constitutive tension that tends towards synthesis. The concept supports the article's central hypothesis: the "lyrical equation" as a structuring principle of Euclidean poetics.

The dialogue with Leopoldo Bernucci and Francisco Foot Hardman reinforces this understanding. to highlight the multiple insertions of Euclides' poetry within the historical-literary context, marked by echoes Romantics, Symbolists, and Parnassians, but resistant to one-sided classifications. The critique of The conflict between "scientific objectivism" and "aesthetic subjectivism," recurrent in the author's theoretical texts and highlighted by Souza, offers an interpretative key for reading "Lyrical Algebra," "Lyricism to "Sprint" and "In a moment of calm."

The results of the analysis demonstrate that, in "Lyrical Algebra," the opposition between the "atrocious ice" The union of science and the "fervent bosom" of amorous experience is formally structured through Repetitions, predominance of nasal sounds and spiraling movement, culminating in the "brilliant X", symbol of existential synthesis. In "Lyricism at its peak", the anti-clerical irony and the dialogue with Voltaire and Comte address the conflict between rationalism and transcendence, resolved through lyricism. concrete aspects of love. Already in "In a Minute of Calm," the subject equates ideal and reality through... The image of a tear, which encapsulates sensitivity and reflection.



Year VI, v.1 2026 | Submission: 20/02/2026 | Accepted: 22/02/2026 | Publication: 24/02/2026

Therefore, the “lyrical equation” is not merely a metaphorical device, but an epistemological metaphor that It expresses the complementarity between the sensible finite and the intelligible infinite. The poetry of Euclides da Cunha Cunha thus reveals a unique modernity, founded on the rejection of excesses and on integration. A productive blend of calculation and singing, science and imagination.

#### 4. Results and Discussion

In this life, in whichever path one takes, whether in scientific research or in...  
Whether in artistic contemplation, or in its countless aspects of practical order, we must submit  
Let our imagination complement our observation, but in such a way that the latter does not negate the former. (Euclid)  
da Cunha, in “Castro Alves and his time”)

Being caught between inspiration and reflection places Euclid between two abysses: that of creation and that of...  
knowledge. According to Ronaldo de Melo e Souza, in *A geopoética de Euclides da Cunha*, in  
Contrary to the most common educational project in the West during the 19th century, which separated science...  
Regarding art, the writer from Rio de Janeiro aligns himself with the Jena school, responsible for disseminating “the conception  
Goethean theory of the complementarity of the one, the dual, and the many as rulers of cosmic life.  
This polarity of life signifies a unity that duplicates itself, as well as a duality that...  
“unifies” (Souza, 2009, p. 189), so that the human being, as a dual essence, could only  
To achieve the whole would be to unite the reason of science and the reason of poetry.

By analyzing Euclidean thought based on letters, theoretical texts, short stories, chronicles,  
*in Os Serões* and even in his first published text, published in the year he wrote *Ondas*, “In  
“Journey,” Souza argues that there is an authorial discourse in the writer, which runs through his production, combining science  
and art. It is possible to say that, also in his poems, Euclides seeks the  
totality arising from subjective and analytical duality.

Euclides, a poet of the in-between space, incorporates into his poems what Souza will call in  
other texts from his production of “critical self-reflection on thoughtful poetry or poetic thinking”,  
which “means feeling what you think and thinking what you feel.” This thought establishes “the foundation of  
modern lyric of Baudelaire, Rimbaud, Verlaine, Mallarmé and the other poets who poemize the  
“a consortium of the vigor of inspiration and the rigor of reflection” (Souza, 2009, p. 182). In fact, this is a  
A theme that, according to Bernucci and Hardman as well, would increasingly dominate Euclides's poetics.  
(Bernucci; Hardman, 2009b, p.340). According to the organizers of his complete poetry, it is possible  
to see Euclides resolving the impasses that this duality produced in him and in his writing, throughout  
of his poems (Bernucci; Hardman, 2009b, p.42).

The uniqueness of the Euclidean style becomes evident when aesthetic subjectivism and the  
Scientific objectivism is equally excluded from his fictional and non-fictional texts.  
(Ronaldo de Melo e Souza, in *The Geopoetics of Euclides da Cunha*)



Year VI, v.1 2026 | Submission: 20/02/2026 | Accepted: 22/02/2026 | Publication: 24/02/2026

The sonnet we will study next has at least two manuscript versions with alterations, mainly in its title, one version being entitled "Lyrical Algebra" (1884), found in the notebook "*Ondas*," published by the author in 1887 in the "*Revista da família acadêmico*," and another, "Algebraic Love" (1885), with a manuscript located in his notebook. Note that the importance of this poem for the writer, since he revisited it at different times throughout his career. of his life and led to its publication. In this article, we chose to analyze the first version, as it was the first one. which the writer chose to publish in 1887.

In this poem, for the Euclidean lyrical self, the search for an excess of reason, which we could... To call it, using Souza's term, "scientific objectivism," does not allow one to observe the reality in its totality. The poet unveils his final lyrical work as a dual construction, a "lyrical algebra" of life, shaping a subject who finds the "X" in the equation, the essence of poetry and of existence; when it decides to ask for the "warm" help of the creative space of "brilliant" verses, of "Aesthetic subjectivism," in order to rid oneself of the "atrocious coldness" of "cold and vain science" and its abstractions. In "Lyrical Algebra," the subject formulates an equation for his life, first rationalizing his thoughts and then... Seeking emotion.

Lyrical algebra

I have just finished studying... cold and vain science.

The ice, the terrible ice, still chills my mind.

I have just torn off my burning brow.

From the cruel pages of a book by Bertrand.

It was certainly very sad and very cruel.

May this atrocious Sahara, without auras, without morning, be a terrible place.

Algebra created the mind, the soundest soul.

He falters and falls within it – without a bright dream...

18

I've just finished studying and I'm pale and tired.

I have torn away the veils from about ten equations.

– I'm full of spleen, full of boredom and chalk...

It's time, it's time then – trembling, loving –

Go – to rest in her fervent bosom

And to find in his gaze – the dazzling X!...

1884

(Cunha, 2009c, p.175)

"Lyrical Algebra" is structured around the dual interplay between what imprisons, mental overload, And what liberates the lyrical self is the sentimental experience. The poem is the result of an equation that structures...



**Year VI, v.1 2026 | Submission: 20/02/2026 | Accepted: 22/02/2026 | Publication: 24/02/2026**

The verses, in spiral form, twist and turn, demonstrate the lyrical self's weariness from the burden.

excessive mental focus, until reaching the outcome, X. This structure approximates...

The idea of dizziness, brought on to the subject who has undergone so many hours of analysis: "the ice, the ice."

"Atrocious, it still chills my mind." With the repeated words, the verse conveys the idea of

The speaker's weariness of dwelling on a question for a long time in order to solve it.

with the paralyzing sharpness of ice, caused by excessive mental exercise. Other verses also propose returns based on

repetition of words, such as: "It's time, it's time for – trembling,

"Love." However, in this case, the repetition accelerates the last stanza and conveys the subject's anxiety.

to consider the matter that troubles him closed.

In terms of sound, this poem is marked by the predominance of nasal sounds, such as

highlighted in the words: vain, mind, ardent, Bertrand, being, morning, healthy, verdant, tired, torn away,

dream, well, trembling, to rest, *spleen*, and to tear off. This choice of phonemes contributed to him

expressing the lyrical self's imprisonment in the face of excessive abstraction, demonstrating the confinement and

The boredom caused by mental overload.

In this sonnet, eroticism is exalted, especially in the last stanza, when the lyrical self...

He speaks of encountering the "fervent breast," which will leave him "trembling," as also happens in pleasure.

...to unravel the questions by tearing away their "veils," which leave him with a "burning" brow. It becomes clear, then, that

both thought and amorous experience are connected to the eroticism of the poem. It is

It is possible to point out that the relationship softens the subject, makes him tremble, while reasoning

Freeze your mind.

In the encounter mentioned in the last stanza, we perceive an ambiguity when the "I"

The lyrical phrase suggests that she will "rest from it" and "find something in her gaze." In this case, it may be referring to...

its own "cold and vain science"; then, it says that it will only unveil the result of so many layers of

thought, from the "veils," by giving oneself a break from the mental plane and moving to experience love.

In a lecture given at the Centro XI de Agosto, entitled "Castro Alves and his time",

Euclides advocates a way of constructing text that combines science and art, grounding his...

The argument contrasted the infinitude of poetry and mathematics, claiming that it was, in

In the past, he was an "obscure and persistent mathematics student," but life's course had made him so.

modify its characteristic. Observe the following fragment:

That is to say: precisely when the picture of this life appears most lovely to us, and its

Vigor springs from the same anxiety to live; I had to contemplate the empty and still universe.

— all lights turned off, all noises extinguished, all things gone,

matter itself has disappeared — so that in this abstraction, bringing us closer to chaos,

the form, in its irreducible aspects, and the number and remain as unique attractions.

Completely inexpressive signs. Well then; leafing through my old ones a little while ago.

notebooks for transcendental calculus, where dry and recursive integrals are plotted in the manner of



**Year VI, v.1 2026 | Submission: 20/02/2026 | Accepted: 22/02/2026 | Publication: 24/02/2026**

Poorly drawn caricatures of sphinxes, and where infinity, so captivating in its meaning...  
imaginative, or metaphysical, it is drawn, dryly, with a figure eight lying on its side, a number that...  
It crushes, visibly revealing the weakness of our intelligence, spinning and spinning again.  
in the torture of imprisonment, by the endless and endless turns of that sad symbol.  
decayed — turning those pages, singular surprises leap out at me (Cunha,  
2009b, p.563).

In this excerpt from the lecture, as in the sonnet, we see that, for the poet Euclides, only  
Objectivity is insufficient to achieve the transcendence of imagination and mathematics itself.  
Both are immense abysses. The author, starting from the inversion of the number eight to represent infinity,  
It illustrates a way to achieve the greatness of human creative capacity using only one.  
The number eight. Only through creativity, capable of imagining the number eight "spinning and spinning again," can  
it be seen as a symbol of infinity transcending rationality. In "Lyrical Algebra," there is a  
thematization of the inability of excessive brain effort to find meaning on its own for  
The general issues of humanity; one needs to have emotional experience.

Mental abstraction, for the subject, fits within the vastness of the Sahara; he admires it, but it is...  
exhausting. The lyrical self seeks another ideal equation, one that contemplates the science that chills the mind.  
and also a "fervent breast," for only in the composition of this lyric can one find the "shining X."  
First and foremost, there is a desire to trim excesses and live between abstraction and action.

The images presented in the poem, both the Sahara and the ice, convey a vision of land.  
unfinished, of a land in gestation. According to Souza, Euclidean thought, in general, stimulated  
By Humboldt, he develops a geopoetic theory of the horizon, in which the human vision of  
world. The horizon suggests the potential infinitude of what lies beyond visible limits and is defined  
as an image that inscribes the rigor of intelligible thought in the vigor of sensible plenitude, in a way  
that the world always presents itself in perspective: "On the horizon, two worlds intertwine, one that  
One sees what lies beyond, another that is imagined beyond the line that delimits vision. Always visible to the eyes,  
never accessible to the steps" (Souza, 2009, pp. 31-33). Since algebra is a "terrible Sahara," one could only...  
to reach it on its horizon with the help of sensory fullness, starting from the imagination of what exists.  
Beyond what can be seen.

"Lyrical Algebra" promotes the search for the total origin of man, a heterogeneous being capable of...  
To unite and not to dissociate. In accordance with the Goethean conception, with which Euclid shared his views.  
In the Jena school, life is governed by duality, which sometimes unifies a duality, and sometimes duplicates a unity.  
And only in this way, starting from this polarity, would man achieve wholeness (Cf. Souza, 2009, p.189).  
In the following excerpt, in a letter to his friend Escobar, the author writes about his poetic thoughts.  
He is a double writer and defines himself as a writer of "rebellious and dreamy intelligence" because he submits his  
Studies are more positive than idealizations, which is why he is an "incorrigible romantic":

I am the same incorrigible romantic. I subject idealization to the most positive studies.



Year VI, v.1 2026 | Submission: 20/02/2026 | Accepted: 22/02/2026 | Publication: 24/02/2026

I envelop it in the cyclical nature of numbers, I crush it under the weight of the most objective questions – and  
She revives me, ever greater and more triumphant. Now, in this era of "great leveling,"  
perhaps the refinement of a rebellious intelligence truly has a providential function and  
dreamer (Cunha, 1997, p.358).

In order to achieve the whole in "Lyrical Algebra," man should contemplate his objective side and  
subjective. When Euclides defines his writing as the result of the union of the rational part of the psyche with  
The dream, it demonstrates, once again, the poetic in-between space that I would like to reach.  
According to Ronaldo de Melo e Souza, the writer, in the conference about Castro Alves, points out that  
The non-existence of a boundary between the scientist and the poet because he conjectures that scientists also  
They romanticize, as, for example, in chemistry, when they analyze the "imaginative symbolism of  
"atomic architecture of their simple bodies" (Cunha *apud* Souza, 2009, p.161). Therefore, one can  
to see the algebraist also as a poet, and the poet, who does not let himself be carried away by the excess of  
Subjectivism, like an algebraic one, thus realizing the science of letters.

According to Bernucci and Hardman, in "Before the Verses," Euclides' preface to the book  
*In his poems and songs*, Vicente de Carvalho emphasizes the sublime romanticism in modern art.  
that "chance, chaos and dreams can be part of both scientific and artistic thought" (Bernucci;  
Hardman, 2009d, p.307).

Reflecting on Euclidean thought, which combines chaos and dreams with ideology.  
According to Souza, whether as a scientist or a poet, especially as a scientist and poet, no.  
For Euclid, it was only important to observe "with the monocular perspective of solidified concepts." That was  
I need to reconcile poetic imagination and scientific observation; otherwise, the solidity would dissolve.  
of the concepts in the fluidity of the images, not obtaining a genuine vision of the world (Souza, 2009, p.121).  
Euclides, when he creates and thinks about literature, reconciles man with the principle of formation and  
The constant transformation we undergo in life is the same transformation that nature also undergoes.  
The Sahara is constantly transformed by its dunes, just as glaciers melt or recede.  
They harden. Man, in constant change, is dual and only in a dual way, as poet and scientist.  
You will be able to understand your surroundings, which are also diverse.

In the third stanza of the poem "Lyrical Algebra," the term "*spleen*" can be used to refer to Baudelaire's book "*Le spleen de Paris*". The lyrical voice of "Lyrical Algebra" also...

It becomes dizzying with melancholy and immensity, as in Baudelaire, reaching, in its totality, *spleen*.  
an immense wave of boredom, covered in chalk, a variant of the element calcium carbonate, a possible symbol  
of an existential void. This connection with the French poet is also pointed out by Bernucci and  
Hardman, in discussing that this sonnet is "perfect in its architecture that splashes Baudelairean echoes" (Bernucci; Hardman,  
2009, p. 224). It is also important to highlight that, in the facsimile of the manuscript of the variant of "Lyrical Algebra", that is,  
in "Algebraic Love" (Bernucci; Hardman,  
2009, p.380), the terms "spleen" and "chalk" appear underlined, gaining prominence as the words



most important aspects of the sonnet for the writer.

According to Bernucci and Hardman, Euclides' poems exude the poetry of Baudelaire and, Despite this, they often point in a romantic direction, indicating a certain complexity of examination of his verses: "due to his multiple insertions in the context of the literary history of the period and the difficulty, if not innocuousness, of attempts at unilateral classification" (Bernucci; Hardman, 2009, p.29).

Despite the Baudelairean influences found in his poems, Euclides, in "Before the verses," satirizes the "*poètes maudits*" (banished poets) by calling them "ignorant" for being unbelievers and incompatible with the new ideas of modern science. It offers a critique of Baudelaire and what He called it the nonsense of his "barbaric mysticism," as the French poet defined himself, for Euclides, perfectly, as "*un cimetière, où, comme des remords, se traînent des longs vers...*" 1.

The writer also claims that the last revolutionary phase of the poetry of his time had... characterized by the contrast between the decadence of those who fake writing poetry and the expansion of The aesthetic sentiment of humanity. But, for him, what many pointed to as the end of poetry is the the greatest demonstration of its vitality, excess, and imbalance; caused by the inability to to understand modern thought (Cunha, 2009a, p. 585).

In "Before the Verses," he argues that thematizing poetry was very important, but without... This would become an exaggeration. He further explains in his text about a "long chain of agitated people," He relegates to the Parnassians the "idiocy of their fetishistic cult of form," and to the Symbolists, the "madness of "His excessively subjective ideas." Read next:

It would not be difficult to show in the ideational deviation of Mallarmé, or Verlaine, as in the past Baudelaire's satanism, the fainting cries of all the irritable weaklings, recognizing- if they are unable to understand life in an era where the progress of natural sciences Interpreted by evolutionism, it reacts above all and transfigures everything, from the political order, where the economic dominance of ancient peoples is established, glorified in inspiration. From the prodigious work of Rudyard Kipling to moral philosophy, where the ultimate aristocracy arises. of the strong man, glimpsed through the stunning vision of the genius Friedrich Nietzsche. Then We would see, despite the blasphemies of so much convulsive verse, how a false skepticism can... signify the last attempt at the retrograde deistic explanation of the universe (Cunha, 2009a, p.584).

Euclides' poetic thought combats exaggeration in themes and form, whatever it may be, sometimes leaning towards scientific reason, sometimes towards imagination. The subject of "Lyrical Algebra," which gropes between two abysses, that of the psyche and that of experience, after carrying out a profound abstract analysis. of calculation, wanting to rest in fervent breasts, to perform an equation between abstraction and the tangible. produced by human interaction; without abandoning the sonnet as a field for the calculation of letters, architecting lyrical algebra, which we can proclaim as a science of existential calculations. represented by verses.



Year VI, v.1 2026 | Submission: 20/02/2026 | Accepted: 22/02/2026 | Publication: 24/02/2026

In accordance with his idea of the in-between space between science and art, poignant in this poem, in The following excerpt, taken from the conference "Castro Alves and his time," is another example of Euclides weaving together considerations on the reconciliation that his reflection sought to achieve and which he considered ideal in the act of Poetic architecture, neither mystical nor empirical:

That is, the facts, gathered by science, should not be lumped together into a heavy and arid erudition, and We should only have the value that derives from their laws; that the models, or objects of ours artistic insight, do not submit to such extremes to the material order, which extinguishes us. the profound feeling for nature, diminishing us in a shallow realism; and that the demands utilitarian aspects of practical life, the yearning for success, the noble desire to win with the resources available. that grow, rising, from wealth to talent, may they not end by closing their hearts to us and drying up our spirits, leaving us without the inspiring sources of affection and... our fantasies. Neither mystical nor empirical (Cunha, 2009b, p.580).

In this passage, the poet-engineer proposes pruning the excess of reason and the excess of imagination, based on the exercise of the dual man. In "Lyrical Algebra," from the perspective of the student of A mathematician who spends hours deciphering the equations in Joseph Bertrand's books, the person doesn't... It disentangles itself from the abstract, contemplates the horizon of the "atrocious Sahara," with mathematical exercises, no. Reaching for what lies beyond what can be seen on the horizon. One imagines what lies beyond, but It's impossible to get there, because the subject is frozen, there's no "vibrant dream" in the mind that It falls into the Sahara because they are not realized. The dream only comes alive when it is realized within. fervent. The veils of our unconscious are torn away in an attempt to unravel the equations of our thoughts.

For the lyrical self, the experience of touching the "fervent breast" can reveal the "radiant" "x". Unlike white chalk, the final "x" fills in, gives completeness to the lyrical self, which, in its Duality, both algebraic and poetic, became one after the encounter with the "fervent bosom." Hence, one sees- I understand that the poet subjects reason to the scrutiny of emotions, and vice versa, without one negating the other. In In a letter from 1904, Euclides writes:

Even today, at Mesquita's request, I tried to sketch a brief outline of the agitation of Independence – but I couldn't write anything, under the anguish of this endless screw that... It goes all over your head. On the other hand, an astonishing intellectual overload! Only I breathe sines, cosines, tangents, and everything that is dry and brutally tasteless in mathematics. I'm seeing that one day I'll wake up undone by a square root... (Cunha, 1997, p.227)

Euclid's ironic reference to insufficient and insipid mathematics also reminds us of a Souza's observation about the thought of the German philosopher Schlegel, for whom Euclides had great admiration. much admiration: "the sensible finite and the intelligible infinite are two poles of the same unity Polarized. Thesis and antithesis constitute the polar tension between finite appearance and infinite idea. A "A nostalgic awareness of the infinite is balanced by the concrete experience of the finite" (Souza, 2009,



**Year VI, v.1 2026 | Submission: 20/02/2026 | Accepted: 22/02/2026 | Publication: 24/02/2026**

(p.181). In this case, we can say that the experience of love and mental abstractions, combined, will be "finite appearance and infinite idea."

In the following poem, "Lyricism at an Ascent," written in 1889 and published in the *Journal of* In 1908, during the book "*Commerce*," the lyrical voice encounters Voltaire and Comte, bastions of the Enlightenment and Positivism. respectively, "right on the Milky Way boulevard".

Lyrical outbursts

I am certainly an abominable being.

Whom no penance can save.

I don't take my hat off to Divinity...

"And they say I lost the Morning Star"...

He's so addicted that even tonight,

A platoon of laughing seraphim

Right on the Milky Way boulevard

He arrested me because I was drunk... on dreams!

Scandal in heaven! All the saints,

Losing the consecrated composure

They threw stars at me, like stones,

And they laughed their heads off.

An outrageous affront... and how!

The Supreme Prosecutor, in this emergency,

He could not contain the seraphic boys,

I reported Providence to the police.

I did well. The feud is old. It's been going on for a long time.

Neither I, Voltaire, nor Comte attempted it.

We may have to go for a walk at night.

In the great blue square of the Firmament.

If we do that, the lanterns will go out.

Of the suns, in a swift and momentary eclipse,

And we find ourselves in the darkness, amidst the kicks.

From the divine beast of the Apocalypse!

I'm not going there anymore, so... But what does it matter...

Why talk about these sad successes?

The heavens are closed to me: I have your gaze...

I don't even need God – because you exist!



Year VI, v.1 2026 | Submission: 20/02/2026 | Accepted: 22/02/2026 | Publication: 24/02/2026

(Cunha, 2009c, p.264-265)

The poem, imbued with irony, addresses the desire to unite science with imagination and the pursuit of... which the lyrical self faces for attempting to do so. In the first stanza, through "Estrela d'Alva" we have a duality of meaning. This term refers both to the planet Venus, located in the semantic universe thematized in the poem through other words, such as skies, eclipse, and Milky Way; It also refers to Lucifer, contrasting him with the deity that appears in the poem. According to the Bible (Isaiah 14:12), Lucifer, from the Latin *Lux fero*, means morning star, day star. a bright star, or the planet Venus itself, which is visible before dawn; as attributed to a person who carries the light. In this case, the lyrical self, who "does not take off his hat to the Divinity," According to what some say, he had "lost the Morning Star." In other words, for some, the man had lost his... a source of light that would guide him through the total darkness of the night, since Venus is the most celestial body... Bright in the night sky, reaching its greatest brightness a few hours before sunrise.

The two stanzas that follow show the subject being arrested and judged by "seraphim". "Smiling" and "holy," "consecrated" because he had surrendered to the intoxication of his dreams. The lyrical self, He then turns to Providence, which, according to the *Priberam Dictionary of the Portuguese Language* (2013), is the supreme wisdom with which God guides all things.

In the fifth stanza, the speaker clarifies that the feud is old and, ironically, says that it has been going on for a long time. Time cannot stroll with Voltaire and Comte through the "blue square of the Firmament," that is, through the sky. Blue, at night. It is understood that walking with the masters of the Enlightenment and Positivism, respectively, through a dark and hazy environment, but illuminated by the Morning Star, like that of dreams, it would be a crime.

The allusion to the Enlightenment appears again in the sixth stanza, when the poet, Voltaire and Comte go for a stroll in the Firmament, the "lanterns of the suns" are extinguished, and they are thrown into "darkness", kicked by the "divine beast of the Apocalypse". The image of sunlight coming from a lantern illustrates the consistency of this brightness, which manifests itself small, through the lantern, but comes of such a grand and eloquent star, the Sun. The last stanza shows a lyrical self resigned to no longer... To fly through the heavens, by virtue of the fulfillment of romantic love.

Just like "Lyrical Algebra," "Lyricism at an Ascent" also calls for a need for to unite rational and creative consciousness. In a clear allusion to Euclid's anticlericalism, the "lights" Divine ideas are disregarded by the lyrical self, since he lives in the "lights" of Voltaire and Comte, shrouded in darkness beneath the... From the point of view of religion and those who say that he lost the Morning Star, just as had happened with Lucifer. Similarly, the lyrical self ultimately chooses to distance himself from God and let go. By far, the other form of transcendence, the lyricism of the concreteness of material love, without to untie the hands of Voltaire and Comte.

I study day and night. I'm no longer a man: I'm a worry. The other day I dreamt I was a...

Year VI, v.1 2026 | Submission: 20/02/2026 | Accepted: 22/02/2026 | Publication: 24/02/2026

A real, positive idea, one of Plato's Ideas wandering the earth. (Euclides da Cunha in

Correspondence of February 6, 1909

The fear of plunging into the purely artistic abyss, or into the scientific abyss, also arises in Thematic choice that wanders between the immaterial and the material world. In the following poem, belonging to In the notebook "Ondas," the lyrical self, amidst the turbulent moment of commotion, traveling down the path of fantasy, cries out for the calm provided by reason. It is possible to perceive that, both in "Algebra" In the lyrical style, as in "In a Minute of Calm," the search takes place for tangible elements through the "fervent breast" in that one, and through the tear in this one.

In a moment of calm

I'm fed up with ideals...

Oh, rosy utopias  
that I erected in the cold mists  
of the desolate sandy plains...

– Stars that twinkle Amidst  
the dark Storms of agony –

I don't want you anymore...  
Dawns, illusions

Go... that the iron dike of  
passions may be broken...  
From pain, let the struggle  
begin. In the darkness – oh stars – go...

Let the tear remain!  
(Cunha, 2009c, p.140)

In this poem, the lyrical self is desolate and has lost faith in life; it no longer interests it to believe. In his old dreams. In his present moment, this individual is able to rationalize his feelings and realize that his ideals are illusions he constructed when emotion overwhelmed him. It is in the dry clarity, after the storms, without "dark mists" and without "rosy utopias," the lyrical self desires the vision of It's essential to fight the battle with pain.

As if emerging from a Platonic cave, the subject wants, without fanfare or hesitation, to close the eyes, contemplating the "darkness" and drawing inspiration from its shed tears. In "In a Minute of Calm," knowing how to see reality admits to having seen the ideal before. It is necessary to traverse the chaos of the sensible world to reach a kind of purity, only attainable through enlightened reflection. The subject destroys this ideal. to achieve the tangible, but this tangibility is only for a minute, out of all the hours to come. Once all the tasks are completed, only one minute is reserved for reason. All the other minutes are dedicated to construction. of utopias. Ideas fade, but pain and calm remain, which, equated with memory, will seek, in Experiences lived in the "desolate sandy plains," the serenity to transform past ideals into something Concrete: the tear.

It is noticeable, in this case, that there is neither abandonment nor excess of reason, since it is not possible To say that a situation whose end result is tears is devoid of sentimentality is incorrect; however, it does exist. The architecting of an equation between emotions and rational thought.



**Year VI, v.1 2026 | Submission: 20/02/2026 | Accepted: 22/02/2026 | Publication: 24/02/2026**

Even after emerging from Plato's cave, the subject still sheds a tear, provoked by...

Sensitivity balanced with reason. According to Souza, Euclides rejects "the predominance of Platonism in its dual metaphysical and scientific version." There is, therefore, "no antagonism of reason and imagination, responsible for the divorce of science and art" (Souza, 2009, p.177), as This was the prevailing way of thinking in the West at the time of the writer. Therefore, Euclides "dialogues" with distant interlocutors, such as the scientist-poets and poet-scientists of the Romantic school. German, particularly the group that formed around the work of Goethe, Humboldt, and Fichte" (Souza, 2009, p.177). His poetic thought wanders between the abysses of the sensible and of reason, without wanting to completely surrender to any of these perspectives.

It is possible to perceive, in "Before the Verses", that the author highlights a phrase from a naturalist, the which proposes that a man intimately connected with nature unites the ideas of an artist, a scientist and of a philosopher; comparing it to the idea of Fichte, who became known for recovering imagination in poetry (Souza, 2009, p.178):

Submitted to the unity of the universe, may we become ever more a miniature of it, and may we translate... without falsifying it, even though we envelop it in the symbolic veils of the most ardent fantasy. "At this point, All particular perspectives merge. Man is not – in isolation – an artist, poet, sage, or "It must all be this at once in some way, because nature is whole." The phrase is from a philosopher. naturalist. But it can be seen that she reproduces, today, after a century of intellectual activity, almost literally, the philosophical idealism of Fichte. This is understandable. And it follows from this approach that... Growing between tangible reality and creative fantasy, the poet, continually closer to thought, increasingly reflecting in the rhythm of its verses the vibration of universal life, each increasingly strengthened by a broad feeling for nature (Cunha, 2009a, p.441).

It is possible to see in this passage how Euclides recognizes fantasy as a force capable of... to shape the tangible and that is why he is so fascinated by the writings of Fichte, which legitimize "reason". as an aid to the inexhaustible productive action of the imagination." "In the dialogical exchange of force "It is from the unstable form of imagination and the stabilizing form of reason that knowledge is produced" (Souza, 2009, p.179). The "rosy utopias" and the "dawn illusions," to which Euclid refers in the poem, are useful To build a complete understanding of the world, it is resources that will shape reality.

The final rhymes of each verse in the quatrains of "Num minuto de calma" serve the purpose of to bring down the "barren sandy wastelands" of the lyrical self. Therefore, in the first two stanzas, the verses end in Embracing rhymes [ais] and [ias], with the aim of constructing a sound of deconstruction, it is seen that even the words that originate the rhymes are abstract or suggest abstract ideas. It is the Starting from the deconstruction of ideas in the initial stanzas, the tercet will build a new idea.

There is a hazy moment of transition in the tercet, marked by nasal rhymes [ões], which They represent a kind of climax of the poem, since they concentrate, in their two verses, the passage of Dismantling previous ideals to build new directions. Subsequently, in the second In the third stanza, the word "Ide" forms an internal rhyme with the final words of the verses.



**Year VI, v.1 2026 | Submission: 20/02/2026 | Accepted: 22/02/2026 | Publication: 24/02/2026**

The following words, “dique”, “lide”, “ide” and “fique”, appear between the nasal rhymes [ões] to announce the sound change that will follow. It is a foreshadowing amidst the closure that the nasals provoke in the  
The sound of the third verse.

The final rhymes become [ide] and [ique] and contribute to the building of what will be constructed. When the "iron dike," at the end of the tercet, is breached, what was previously built is revealed. Obscured by excessive emotion. The "iron dam" represents the eyes, which, metaphorically Locked in by "dawn illusions," they did not allow tears to flow or the struggle to take place. It hurts, so it needs to be broken so the water can flow out.

The importance of dismantling illusions in order to reach the reality of the tear is figured by the single verse that concludes this poem. According to Bernucci and Hardman, it stands out in In Euclid's poems, the final verse is separated as a single stanza, a rhetorical technique similar to... a *d'O's sertões*, which has a single sentence in its last chapter (Bernucci; Hardman, 2009b, p.212).

### **Final Considerations**

An analysis of Euclides da Cunha's lyric poetry has shown that the so-called "lyric equation" It is not merely a metaphorical device, but a structuring principle of its aesthetic conception and epistemological. Throughout the article, it became evident that the poet-engineer constructs his writing in within a productive tension between science and imagination, reason and sensibility, calculation and amorous experience. This polarity is not resolved by excluding one of the poles, but by its dynamic integration, in keeping with the German Romantic tradition and with the critique formulated by Ronald de Melo e Souza.

Reading "Lyrical Algebra" revealed how the formal structure of the sonnet, the predominance of Nasal sounds, the spiraling movement of the verses, and the culmination in the "shining X" figure symbolically, the search for synthesis between the "atrocious ice" of mathematical abstraction and the "fervent bosom" from sensory experience. In "Lyricism at its peak", the anti-clerical irony and the dialogue with Voltaire and Comte reinforces the rejection of religious or rationalist exclusivism, while in "In a moment of calm" It makes explicit the need to traverse the chaos of illusions in order to reach a form of lucidity that does not Cancel out the emotion. In all these poems, the lyrical subject reconciles abysses—that of the psyche and that of the lived experiences — transforming them into poetic material.

It is thus evident that Euclides' poetry achieves a unique modernity in the scene. Brazilian, in proposing an aesthetic of complementarity. Neither mystical, nor empirical; nor Purely romantic, nor strictly scientific, Euclides da Cunha occupies the in-between space of diverse traditions, rejecting unilateral classifications. The "lyrical equation" thus emerges as epistemological metaphor of a thought that conceives the sensible finite and the intelligible infinite as



Year VI, v.1 2026 | Submission: 20/02/2026 | Accepted: 22/02/2026 | Publication: 24/02/2026

poles of the same unity. By integrating calculation and song, reflection and inspiration, his lyricism reveals itself.

a true conceptual laboratory of a worldview in which science and poetry are not mutually exclusive.

but they illuminate each other.

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**Year VI, v.1 2026 | Submission: 20/02/2026 | Accepted: 22/02/2026 | Publication: 24/02/2026**

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