

Clear enigmas and hidden meanings: the *perpetuum mobile* of the ‘machine of the world’ motif in recent interartistic activity in Brazil¹

Alva Martínez-Teixeiro

Universidade da Coruña

E-mail: alva.teixeiro@udc.gal

<https://orcid.org/0000-0002-8156-7732>

DOI: <https://dx.doi.org/10.5209/aris.97600>

Recibido: 20 de agosto de 2024 / Aceptado: 7 de noviembre de 2024 / Publicación en línea: 8 de noviembre de 2024

Abstract. Out of its European Renaissance origins in the writings of Dante and Camões, the metaphor of the *machina mundi* first came to the fore in Brazilian literature in the canonical poem by Carlos Drummond de Andrade: the quintessential work of Brazilian modernism in its broadest sense, “A Máquina do Mundo”. The aim of this article is to explore the multiple, shifting possibilities inherent in the complex literary-cultural motif of the ‘machine of the world’ in current Brazilian art and literature. The text begins by looking at the comic epic poem *Por mares nunca dantes* by Geraldo Carneiro, before focusing on the different creative practices and appropriations of a series of paradigmatic variations on the theme from the opening decades of the 21st century: hybridity and interdisciplinarity in the poems *A máquina do mundo repensada* by Haroldo de Campos and “A quarta parede” by Marco Lucchesi; and interartistic intersectionality and creative duality in Laura Vinci’s verbal-visual sculptural installation “A máquina do mundo”, and Nuno Ramos’s photo-illustrated poetry collection *Junco*. The aim of this exploration is to interpret each of the works within the discursive historical-cultural context of the motif, and to analyse critically its presence in these rewritten and reconceptualised forms.

Keywords. Machine of the world; interdisciplinary and interartistic practices; contemporary world views; Brazil.

[es] Claros enigmas y oscuros sentidos: el *perpetuum mobile* de la ‘Máquina del Mundo’ en las recientes prácticas interartísticas brasileñas

Resumen. Partiendo de sus orígenes renacentistas europeos en los escritos de Dante y Camões, la metáfora de la *machina mundi* apareció por primera vez en la literatura brasileña en el poema canónico de Carlos Drummond de Andrade: la obra cumbre del modernismo brasileño en su sentido más amplio, “A Máquina do Mundo”. El objetivo de este artículo es explorar las múltiples y cambiantes posibilidades inherentes al complejo motivo literario-cultural de la ‘máquina del mundo’ en el arte y la literatura brasileños actuales. El texto comienza analizando el poema épico cómico *Por mares nunca dantes*, de Geraldo Carneiro, antes de centrarse en las diferentes prácticas creativas y apropiaciones de una serie de variaciones paradigmáticas sobre el tema en las primeras décadas del siglo XXI: hibridez e interdisciplinaria en los poemas *A máquina do mundo repensada* de Haroldo de Campos y “A quarta parede” de Marco Lucchesi; e interseccionalidad interartística y dualidad creativa en la instalación escultórica verbal-visual “A máquina do mundo”, de Laura Vinci, y en el poemario foto ilustrado *Junco*, de Nuno Ramos. El objetivo de esta investigación es interpretar las obras en el contexto histórico-cultural discursivo del motivo, y analizar críticamente su presencia en estas formas reescritas y reconceptualizadas.

Palabras clave. Máquina del Mundo; prácticas interdisciplinarias e interartísticas; cosmovisiones contemporáneas; Brasil.

Sumario. 0. Introduction. 1. From Renaissance transhumanisation to modern dysphoria. 2. Hybridising variations on the topos of the machine. 2.1. From the asceticism of ignorance to the ‘beauty’ of the quantum. 2.2. Sculptural distortion and eternity in transition (*tempus fugit*). 2.3. Ecometamorphosed deformity. 3. Hidden meanings and clear enigmas. References.

¹ This article is one of the outputs of the *Artistas Letrados e Letrados Artistas – Relações entre literatura e artes plásticas na modernidade contemporânea brasileira (AL-LA)* research project, financed by the Portuguese Ministry for Science, Technology and Higher Education Foundation for Science and Technology (FCT) (UIDB/00077/2020) and the Galician Secretariat-General for Universities (ED431B 2023/48). AL-LA is a joint endeavour between Centro de Literaturas e Culturas Lusófonas e Europeias (CLEPUL) at the University of Lisbon and Grupo de Investigación Lingüística e Literaria (ILLA) at the University of A Coruña.

Cómo citar: Martínez-Teixeiro, A. (2024). Clear enigmas and hidden meanings: the *perpetuum mobile* of the ‘machine of the world’ motif in recent interartistic activity in Brazil. *Arte, Individuo y Sociedad*, publicación en línea, 1-16. <https://dx.doi.org/10.5209/aris.97600>

0. Introduction

Love, love, love – the glowing hearth
that explains the world with an orgasm².
Carlos Drummond de Andrade (1992, p. 72)

The motif of the ‘machine of the world’ has been realised down through the centuries in a vast array of contexts, with different meanings and characteristics, not least of all in the art and literature of contemporary Brazil. Indeed, much like the musical *moto perpetuo* or science’s eternal search for truth, the limits of the concept seem endless.

Like classical literature, the image can be defined as a *perpetuum mobile* in a constant process of growth. Yet it also contains a sphinx-like quality due to its progressive incorporation of ambiguous meanings and illuminating riddles in its transitions over time and space and the *ad hoc* redefinitions of transformative appropriation. In fact, in terms of the world view it represents for each creator, the world machine in motion uses the external energy of its basis in the sociohistorical reality that influences and reformulates it, in addition to its own cumulative intrinsic symbolic potential.

Its recurrence in the culture and literature of Brazil, therefore, is not surprising, given the contemporary, modern nature of the country’s artistic production, one of the defining characteristics of which is the happy paradox of possessing a strong tradition of both anti-tradition and judiciously anthropophagic devouring of the other.

The interdisciplinary and interartistic approach used to examine the presence and reinterpretation of the world machine image in the examples of hybrid art practice proposed in this article is very much in keeping, in the first case, with established critical-theoretical practice in this area, and in the second, with new emerging methodologies for studying the expansion of literature into art, and vice versa. In fact, the exploration of interartistic creation raises numerous additional challenges owing to the othering and estrangement wrought by new materialities and meanings. This new reality requires a new approach: one of reciprocal, transitive metamorphosis, in which each component or reality is transformed, to a great or lesser degree, in a process of encounter with the other (Halpern, 2020).

For reasons of space and convenience, out of the vast seas and oceans of interartistic creative production in Brazil, the study navigates only within the realms of the literary and visual, and avoids the wider channels of outworn traditional theory and criticism. To understand the full complexity of interartistic practice today, the established approaches no longer hold. Mimesis, misguided *ut pictura poesis*, dialogics, and theories of addition or correspondence all cease to apply in the changing disciplinary landscape of expanded and diluted borders.

Furthermore, the study takes into account the communal perspective and consensual contribution of the internal and external contexts of the artworks examined, as well as their dialogue with and revival of past tradition. In the insightful words of Lygia Clark in 1975, these are works which “bridge the fissure of this separation” (1984, 33), whose analysis offers us the “poor knowledge of their interpretation”³ (1984, 17).

To give some examples of how this intricate interplay between time frames, texts and art forms is manifested in contemporary Brazilian art and literature, let us consider first the constant, repeated, differential recreation of Amazonian art and mythology, as witnessed (and, indeed, originated) by the canonical anthropophagic poetry collection *Cobra Norato* by Raul Bopp (1931). The same current is also reflected in two exhibitions held by Maria Martins in New York in the 1940s: in the first instance, in the correspondences between her sculptural representation of

² “Amor, amor, amor — o brasileiro radiante / que me dá, pelo orgasmo, a explicação do mundo”.

Nota bene: Throughout this article, all translations from different languages into English are our responsibility.

³ “ultrapassam a fissura dessa separação”, “saber pobre das interpretações”.

the Amazonian deities and her act of ‘anthropophagic’ recreation in rewriting in English the myths and legends portrayed; and in the second, in the transitive echoes between the tortured ‘confession-frenzy’ of a four-part erotic poem entitled *Explication* (in French) and the insuperably ekphrastic series of etchings created *ad hoc* for the homonymously named exhibition catalogue (Martínez Pereiro 2020).

The second example is the transcultural appropriation of traditional Japanese Noh theatre: the translator and founder of the Brazilian concrete poetry movement Haroldo de Campos’s heterodox ‘transcreation’ of *Hagoromo (The Feather Mantle)*, one of the most popular works of Noh, attributed to the 15th-century playwright Zeami Motokiyo; the literary-performative association invoked by Campos and Hélio Oiticica between the feather mantle and Oiticica’s famous *parangolé* capes; and experimental writing and painting by Nuno Ramos, inspired, once again, by the Noh play (Martínez Teixeira 2020).

The third and final example refers to the practices of contemporary art creators in Brazil from the 1950s onwards based on the “tropicalisation” of the legacy of Giorgio Morandi (his “metaphysics of the mundane”, and his exceptional and distinctive cultivation of the still life form) and their oblique influence “on the outskirts of the cloistered space of representation”⁴ (Morales Elipe, 2016, p. 13) on artists such as Ferreira Gullar (Martínez Teixeira 2018) and Iberê Camargo (Martínez Teixeira and Martínez Pereiro 2022).

1. From Renaissance transhumanisation to modern dysphoria

In the western world, the image of the ‘machine of the world’ was first established as a symbol of the journey through this world and another (and through writing itself) in pursuit of learning and perfection by Dante’s *Commedia* (first raised to ‘divinity’ by Giovanni Boccaccio in 1362 and known as such to audiences from the 16th century onwards) and by Canto X of *The Lusíads* by Luís de Camões.

From the Renaissance perspective of the latter, the contemplation of the mathematical physical (Platonic) and metaphysical (scholastic) realities of the machine offer the privilege and recompense of seeing and knowing: the symbolic euphoria of “Supreme Wisdom” (X, 76, ll. 2-3) to behold with fleshly eyes what things the future hath the power “to save from Mortals’ petty pride and science vain”⁵ (X, 76, ll. 3-4), thus marking the culmination of Vasco da Gama’s heroic rise – and with him the Portuguese people and all of weak humankind – from ‘earthly worm’ to all-powerful ‘demigod’. Dante encapsulates this same process with connotative precision in “Paradiso” by creating the verb *trasumanar*, ‘to transhumanise’ (I, v. 70), by which he expresses human beings’ transformation beyond the human, while at the same time acknowledging his inability to explain it even paraphrastically with existing words.

Under the light of transcendence, the symbolic content of the world machine in Dante’s scholastic metaphysical context is intimated in *Commedia* in the interpretative caveats expressed to readers, firstly in “Inferno”: “O ye in whom intelligence is sound, / heed carefully the teaching, which lies hidden / beneath the veil of my mysterious lines”⁶ (IX, ll. 61-63); and again in “Purgatorio”: “Reader, focus your eyes here on truth, / for the veil is now so thin, / that surely to pass within is easy”⁷ (VIII, ll. 19-21). As in Camões, therefore, the machine of the world is constructed as a super-celestial plane, upon which the human soul discovers, in the words of João Adolfo Hansen, “during and after the physical journey that is the ascetic’s path to anamnesis, the purification of a reminiscence of the fundamental essence that, when seen by the physical eye and contemplated by the intellectual eye of judgement, becomes the ecstatic, wordless vision of God”⁸ (2018, p. 309).

⁴ “tropicalización”, “metafísica de lo cotidiano”, “en las inmediaciones de la clausura del espacio de la representación”.

⁵ “Sapiência / Suprema”, “o que não pode a vã ciência / dos errados e míseros mortais”.

⁶ “O voi ch’ avette li’ ntelleti sani, / mirate la dottrina che s’asconde / sotto il velame de li versi strani”.

⁷ “Aguzza qui, lettore, ben li occhi al vero, / ché ’l velo ora è ben tanto sottile, / certo che ’l trapassar dentro è leggero”.

⁸ “durante ou depois de uma viagem física a que corresponde a ascese de uma anamnese, a purificação de uma reminiscência do fundamento essencial que, ao ser visto pelo olho físico e contemplado pelo olho intelectual do juízo, se dá como visão extática e sem palavras de Deus”.

Unsurprisingly, the revival in the 20th century of such a culturally and symbolically specific motif, either literally or approximately, proved problematic at best and inane at worst. As Georges Bataille denounced in his 1930 criticism of the excessive formalism of ‘purified’ French art, the derivative, localised ‘game of transpositions’ stripped language of its primordial symbolism. Yet formalist excesses were a trap that the playfully pessimistic and perceptively Pyrrhonian Carlos Drummond de Andrade could never, would never and did never fall into. Beyond its mechanistic world view and religious belief system, the topos of the world machine in its ancient sense presupposed an explanation of everything: of the complex, ambiguous relationship between the binaries of heaven and earth, universe and cosmos, culture and nature, poetry and science, knowledge and magic. Drummond, therefore, might be seen as a ‘luddite’ of sorts, standing against the faith and certainties of symbolic mechanisation: against change for change’s sake, against blind belief and sweeping tides of opinion, against totalising explanations, and against the destruction of natural omniscience of the world by technical-scientific progress.

It is generally accepted that Drummond’s “A Máquina do Mundo”, published in its definitive version in the collection *Claro Enigma* (1951), is the work that distorted and resignified the symbolic value of the *machina mundi* for the generations of Brazilian artists and writers that came after him.

The poem was first published on 2 October 1949 in the Rio de Janeiro daily *Correio da Manhã*. The final version, published two years later, introduces a number of small but significant Horatian changes of style and expression, all of which serve to reinforce the new thematic elements which Drummond incorporates into the reflections of his ‘disillusioned self’ on the ‘rocky road to Minas’: his sceptical refusal of “a reality that transcends” (l. 19), of “that total explanation of life”⁹ (l. 43), or of the knowledge of what he has lost, when he chooses to ‘weigh’ rather than to know¹⁰ (l. 95); and, in lines 55-60, as he shifts from the continuity of “to” to internalising “in”¹¹, his inclusion of animal, plant and, in particular, mineral life, substituting in this last instance the objective, external observation “of the rough substance of the ores” for a subjective, personified image of immersion “into the spiteful sleep of the ores”¹² (l. 58):

and everything that defines earthly being,
including the animals
and the plants, and is imbibed

into the spiteful sleep of the ores,
goes round the world and is engulfed again
in the strange geometrical order of everything

and the original absurdity and its riddles,
its truths standing higher than so many
monuments to truth;

and the memory of the gods, and the solemn
sense of death, which blooms
on the stem of the most glorious existence¹³
(ll. 55-66)

The poem ends epiphonemically with the lines:

Pitch blackness had settled

⁹ “toda uma realidade que transcende”, “essa total explicação da vida”.

¹⁰ “avaliando”, “sabendo”.

¹¹ “aos”, “nos”.

¹² “da rude substância dos minérios”, “no sono rancoroso dos minérios”.

¹³ “e tudo o que define o ser terrestre / ou se prolonga até nos animais / e chega às plantas para se embeber // no sono rancoroso dos minérios, / dá volta ao mundo e torna a se engolfar / na estranha ordem geométrica de tudo // e o absurdo original e seus enigmas, / suas verdades altas mais que tantos / monumentos erguidos à verdade; // e a memória dos deuses, e o solene / sentimento da morte, que floresce / no caule da existência mais gloriosa”.

on the rocky road to Minas,
and the machine of the world, repelled,

reformed piece by piece,
while I, weighing what I had lost,
continued slowly, hands slack by my side.¹⁴
(ll. 93-96)

Drummond thus situates us between ‘resignation’ and ‘loss’, just as Jorge Luis Borges would a decade later in *El hacedor* (1960), when he concludes in the closing lines of “*Inferno*, I, 32” that “the machine of the world is too complex for the simplicity of man” (or beast) and only “a dark resignation, a valiant ignorance” remains of what “could not be regained”¹⁵ (2005, p. 807): the infinite thing that had been received and lost in the inevitable transition from vertical celestial transhumanisation to the terrestrial horizontal transhumanisation of modern life *in extenso*.

2. Hybridising variations on the topos of the machine

In disavowal of such ‘dark resignation’, Brazilian artists and authors, particularly in the 21st century, have repeatedly sought by an array of expressive forms and practices to recover and reconstitute the layers of meaning within and around the machine, ourselves and the troubled world in which we live. Their endeavour follows Samuel Beckett’s (1983, p. 7) “Try again. Fail again. Fail better” principle, in diametric counterpoint to the errors of humanism, which, in the view of Philippe Sollers (1965, p. 13), ‘immobilised’ Dante’s *Commedia* and reduced it to “a cultural reference” and an eternal state of “torpor”¹⁶.

The first uninhibited reimagining of the metaphor was the seriocomic epic *Por mares nunca dantes* (2000) by Geraldo Carneiro. The poem depicts Camões on a voyage around the Cape of Storms making land, “by whim of the world machine” (2000, p. 183) and “some strange stratagem of the stars” (2000, p. 184), in modern-day Rio de Janeiro. The whole delirious tale of “chaos engineering”¹⁷ (2000, p. 183) is based on a biographical mistake by Voltaire regarding Camões in the first French edition of his *Essay on Epic Poetry* (1785), in which he claims the poet accompanied Vasco da Gama on his expedition to the Indies – 25 years before his birth!

The poem, thus, reformulates the trope of a bewildering ‘world turned upside down’ and invites readers to follow Camões’s carnivalesque adventures, (mis)fortunes and “apocalyptic follies”¹⁸ (2000, p. 22) ‘by seas – and loves – never before navigated’ to the lands of the Tupinambá, and to witness in fascination the skilfully humorous intertextual intertwining of lines and modes from Dante, Camões, Carneiro and Shakespeare in Carneiro’s own translation. Not only that, in anticipation of a quantum mechanical component, we, like Camões, are also treated to a view of the “sunset mayhap the mechanics of love / theory of quanta Hydra clepsydra”¹⁹ (2000, p. 194).

The following sections examine four more examples of the world machine idea in recent Brazilian art and literature, to illustrate the diverse, paradigmatic, hybridised reimagining of the metaphor in interartistic practice in Brazil today through the lens of three past masters.

2.1. From the asceticism of ignorance to the ‘beauty’ of the quantum

The cumulative weight of new meaning created by these interdisciplinary reinterpretations of the world machine metaphor has pushed back the established boundaries of the contemporary

¹⁴ “[a] treva mais estrita já pousara / sobre a estrada de Minas, pedregosa, / e a máquina do mundo, repelida, // se foi miudamente recompondo, / enquanto eu, avaliando o que perdera, / seguia vagaroso, de mãos pensas”.

¹⁵ “la máquina del mundo es harto compleja para la simplicidad de los hombres”, “una oscura resignación, una valerosa ignorancia”, “algo que no [se] podía recuperar”.

¹⁶ « a une référence culturelle », « torpeur ».

¹⁷ “por capricho da máquina do mundo”, “estranho estratagema astral”, “engenharia do caos”.

¹⁸ “pirações apocalípticas”.

¹⁹ “o ocaso o acaso a mecânica do amor / a teoria dos quanta a hidra a clepsidra”.

Brazilian literary space. As part of this reformulation of the prevailing epistemological narrative, the Plotinist panpsychic view that ‘everything thinks and feels’ removes from human beings their monopoly on emotional and intellectual perception by extending and diversifying it, *à la* Drummond, to animals, plants and even minerals.

In other words, the examples of contemporary interartistic practice discussed here revive and assert an ‘animistic physics’ of matter, *qua* Aristotle’s *physis*, against Descartes’s disdainful counter-conception of matter in terms of quantitative, mathematised ‘mechanical physics’. To paraphrase the spiritual philosopher Christian de Quincey (2022) in a dual axiom, their work involves a reciprocal and complementary materialisation of the mind and mentalisation of matter. Theirs is an acentric, or rather multicentric, model of existence that takes into account every feeling and thinking being and reality. Significantly, just as the French writer and thinker Paul Valéry called on modern physics to reconnect with the world of the senses, so Niels Bohr, Valéry’s contemporary and one of the founders of quantum theory, once stated that the language that we choose (that we are) is reflected in the answers we receive from nature. Nature merely reflects our own theoretical, instrumental shadow.

In contrast to the slightly unfeeling, unsensing, utilitarian pragmatism and uncertainty of Drummond’s sceptic, rendered in perfect decasyllable, 70-year-old Haroldo de Campos’s *A máquina do mundo repensada* (2000) in tercets presents an irreverent poetic commentary on the theme, in which he constructs a new discourse of the ‘riddle of the universe’ for the third millennium. Campos refuses the transcendence of any asceticism and all esoteric knowledge, parodies Dante and Camões and their Platonic-scholastic searching for the light, and denies Drummond’s resignation to loss, proposing in their place the ‘asceticism of ignorance’ of a new aestheticised metaphysics of what could be called Schenbergian quantum physics (after Campos’s friend, the astrophysicist and art critic, Mário Schenberg).

Campos’s new philosophy of science is preceded and predicted in a letter (23 February 1950) by Drummond to his son-in-law, the Argentinean poet Manuel Graña Etcheverry, in which he adverts to “a natural relationship, even synthesis, between science and poetry, which is philosophy. There is no science that does not end in philosophy, or poetry that does not meet it”²⁰ (Ferraz, 2016).

A similar union between science and philosophy occurs in the poetic thought of the all-knowing, multi-talented Marco Lucchesi, whose work combines the humanist (ethno)mathematics of Uribitan d’Ambrosio and the quarks and flavours of quantum physics. In regard to the latter, let us recall, firstly, the origin of the word ‘quark’, borrowed into science from James Joyce by the elementary particle physicist Murray Gell-Mann, from the line ‘three quarks for Muster Mark’ in Joyce’s enigmatic *Finnegan’s Wake*, a novel once described as a ‘a quantum leap into the darkness’; and, secondly, the six ‘flavours’ of quark according to quantum chromodynamics: ‘up’, ‘down’, ‘charm’, ‘strange’, ‘top’ (or ‘truth’) and ‘bottom’ (or ‘beauty’).

In the first version of his paradigmatic “A quarta parede” in *Alma Vênus* (2000), Lucchesi interweaves human love and the neoclassical tradition of Arcadian beauty – “laura, nise and glaura”, “musical / spheres / of Pythagoras”, “lauras / and jasmines” – with “the precious / and lovely lesson / of Mann and Bohr / and their sublime / mechanics”²¹ (Lucchesi, 2006, p. 263). In the final edition of the poem, however, published two years later in *Alma Vênus (Temporais)* (2008), in addition to wider spacing and different line breaks, Lucchesi replaces the contrastive, anachronistic neoclassical references of the earlier version with the “once discordant” exclusive beauty of the quantum world:

This was the precious

and lovely lesson

of Mann and Bohr

and their

²⁰ “entre ciência e poesia uma relação natural, se não quisermos falar de uma síntese das duas, que é a filosofia. Não há ciência que não acabe em filosofia, nem poesia que não vá ter a ela”.

²¹ “laura, nise e glaura”, “esferas / musicantes / de Pitágoras”, “lauras / e jasmims”, “a bela / e preciosa lição / de Mann e de Bohr / de sua mecânica / sublime”.

once discordant

now beautiful

sublime mechanics

The machine

of the world

fluctuates

in a thousand

pieces

particles flavours

And the void

floats

amid infinite

infinities²²

(Lucchesi 2019, p. 463-464)

In a chapter entitled “Doubt” of the novel *Adeus, Pirandello* (2020), Lucchesi writes that “[t]he sufferings of this world are lessened when we look towards the sky. The gods have left us. What remains is a sense of infinity. That is something”²³ (2020, p. 125). While at an ethical level, the author continues to wait and hope for Boccaccio’s *umana cosa*, at an aesthetic level, he uncovers in science the beauty of poetry in harmonious confluence with the beauty of physics and mathematics. That balance of scientific and poetic understanding is what leads him to dilute part of Paul Dirac’s well-known belief, recalled by Paolo Beltrame (2021), that “physics is the attempt to say what nobody has known before in such a way that everybody can understand it”, and to mitigate its obverse, that “poetry is obliged to say things that everybody knows in such a way that nobody can understand it”²⁴.

For Lucchesi, therefore, as for physicists, beauty can be simple, concise, natural and elegant. Equally, however, there must always be a component of libertarian unpredictability and asymmetry in beauty that allows it to overflow the boundaries of the Pythagorean-Platonic aesthetics of symmetry favoured by scientists. As Francisco Soler Gil observes, “the aesthetic intuition of physicists is by no means mistaken. The beauty of nature is essentially the element of symmetry and simplicity. But it is not only that”²⁵ (2018, p. 85).

²² “Esta foi a bela / e preciosa lição / de Mann e de Bohr / de sua mecânica / sublime / a / outrora dissonante / hoje tão bela // A máquina / do mundo / flutua / em mil / pedaços / partículas sabores / E o nada / sobrenada / entre infinitos / infinitos”.

²³ “[a]s dores deste mundo se atenuam quando olhamos para o céu. Os deuses nos deixaram. Resta um sentimento de infinito. E não é pouco”.

²⁴ “en física se quiere decir algo que nadie sabía antes en términos que todos podemos entender”, “en poesía se está obligado a decir cosas que todos ya saben en términos que nadie entiende”.

²⁵ “la intuición estética de los físicos no es, desde luego, errónea. La belleza de la naturaleza incluye esencialmente el elemento de simplicidad y simetría. Pero incluye más elementos”.

2.2. Sculptural distortion and eternity in transition (*tempus fugit*)

Moving now from the textual poetry of Campos and Lucchesi, this section and the next examine two examples of visual-verbal art and their reconceptualisation of the world machine idea: Laura Vinci's expanded sculptural installation of eternity in transition (*tempus fugit*); and the ecometamorphosed deformity of Nuno Ramos's (pseudo-)analogical 'book to come' (Blanchot, 2003). Both might be described as estranged "strange fruits", to borrow Florencia Garramuño's (2014) clever reworking of the title of a different work by Ramos ("Fruto estranho", shown at the Museo de Arte Moderno de Rio de Janeiro in 2010) for her book on the difficulty of definition and categorisation in contemporary Brazilian art.

Another reason for this focus on the visual as opposed to the textual *tout court* is that the so-called 'pictorial turn' sometimes leads us into the realm of material metaphor and to consider artistic reflection and self-reflection from a non-linguistic, non-literary point of view. It is for this reason that the art theorist W. J. T. Mitchell writes in his *Picture Theory* of the emergence of the pictorial turn "as a central topic of discussion in the human sciences in the way that language did: that is, a kind of model or figure for other things (including figuration itself), and as an unsolved problem"²⁶ (1995, p. 13).

Sculpture that 'leaves the pedestal' is a revolutionary act and in Brazil this tradition of disruption has been developing for over a century: from artistic genre to material-conceptual mode, mixed-media installation of all kinds, 'cannibalistic' performance, and, at the end of the 20th century, the disunity of unique experience and experimental uncertainty, and materiality and objectness as correctives and challenges to idea and format. As the art critic Bea Espejo astutely concludes, reflecting on the 'elasticity of the discipline' witnessed in the exhibitions *Escala: Escultura (1945-2000)* (2023), at the Fundación Juan March in Madrid, *Escultura expandida* (2022), at the Centro Andaluz de Arte Contemporáneo in Sevilla, and *El sentido de la escultura* (2022), at the Fundació Joan Miró in Barcelona:

At the risk of falling into the trap of definition, sculpture today is a hybrid grammar, a mixture of continuously escaping gestures and actions [...]; it is bound up with the language of the material, the maxim of sculpture to come. Above all, however, it is an attitude, an invitation to transform our perception about history, a possibility to expand our experience of life²⁷ (2023, p. 14).

A good individual example of the disruptive impulse within Brazilian visual-literary interart is "Davi" (Figure 1), part four of the subversive performance art installation *Opening* by Nuno Ramos, (re)presented in February-March 2023 at Galeria Francisco Fino in Lisbon. The work was originally planned to take place the year before as a "delirious" performance consisting of the reinauguration "on successive occasions with different (and fake) 'authorities'" (Ramos, 2023) of the giant bronze horse sculpture by Victor Brecheret (1939) in honour of the Brazilian military 'hero' Luís Alves de Lima e Silva, Duke of Caxias, in Praça Princesa Isabel at the heart of 'Cracolândia' in downtown São Paulo, but was ultimately censored and cancelled by São Paulo State Department of Culture. In "Davi", Ramos mechanises the procedures of his performance into a form of sculpture to create distance and a strongly comic-ironic sense of virtuality. Constructed in marble with silk fabric and a sound column, and activated using a mechanised pulley system, "Davi" is a hybrid work that explores the relationship between a discourse (literary and visual) and an object (sculptural and decharacterised).

²⁶ "un tema de debate fundamental en las ciencias humanas, del mismo modo que ya lo fue el lenguaje: esto es, como un modelo o figura de otras cosas (incluyendo la figuración misma) y como un problema por resolver".

²⁷ "A riesgo de tropezar con las definiciones, la escultura es hoy una gramática parda, mestiza, una mezcla de gestos y actos que parecen estar en constante fuga [...]; vive volcada en el lenguaje del material, la máxima de lo escultórico por venir. Aunque, por encima de todo, es una actitud, una invitación de transformar nuestra percepción sobre la historia, una posibilidad para ampliar nuestra experiencia de vida".



Figure 1. Nuno Ramos. “Davi”, *Opening*. Galeria Francisco Fino, Lisbon, 2023.
(Photo by Vasco Stocker Vilhena)

The rise and fall of the fabric activates the sound and words of Ramos’s “Davi in the Arno: an interview”, a dialogue between Davi – Michelangelo’s giant *David*, of whom only his footsteps in the pedestal remain – and an interviewer who has found him floating in the River Arno. In his responses, the statue talks of “time, fame, culture, nature, history, art, audience [...] of disappearing from the world, of being buried in the earth [...] in the hope that the disappearance will not be absolute. He senses that the return to oblivion is not the end”²⁸ (Marmeleira, 2023).

Into this state of the art of the subversive paradox of the sculptureless pedestal and the transformation of human scientific knowledge by the materiality of visual art, fits the literarily expanded neo-sculpture of Laura Vinci: “Máquina do Mundo” (Figure 2). Vinci, for whom “land art is a major reference” (2013, p. 208), moves our senses and our point of view, and draws once again on the meanings and symbols of Drummond’s world machine. The metaphor is recontextualised to reflect a certain ecologism and its meanings are objectified: the inexorable passage and devastation of time; the naturalised degradation of nature; the relentless erosion of mineral matter.

In response to a question from Guilherme Wisnik in relation to her work as “a continuum, with no beginning or end”, in reference to earlier echoes of the world machine motif in the installation “Ampulheta” (Hourglass) in 1997, Vinci replied that the *continuum* exists “with infinite horizontality instead of transcendent verticality” (2013, p. 206). Her “Máquina do Mundo” (‘replicated’ variously in the form of installations, dramatisations and exhibitions in 2005, 2007 and 2010) consists of a sculptural installation of marble/quartz dust, conveyor belt and dispenser, with an anti-utilitarian, anti-Fordist circular motion in which the passage of time modifies and transforms what tradition has constructed as immovable:

My machine transports each grain of marble almost individually in an ore-like silence, as though carrying the history of sculpture back and forth in powder form. Within that pile of marble dust may lie

²⁸ “Davi no Arno – uma entrevista”, “responde, divagando sobre o tempo, a fama, a cultura, a natureza, a história, a arte, o público [...] quer desaparecer do mundo, ser enterrada na terra [...] na esperança de que tal desaparecimento não seja absoluto. Pressente que o regresso ao olvido do tempo não será definitivo”.

the possibility of eternal sculptures. And it may reflect, grain by grain, our precarious transience²⁹ (Vinci, 2023).

Pointing to the expanded literary component of her work, Vinci also highlights the dialogue between her “Ampulheta” and subsequent “Máquina do Mundo”, and verse 41 of “Fragments of an apocryphal Gospel”, from the collection *Elogio de la sombra* (1969) by Jorge Luis Borges: “Nothing is built on stone; everything is built on sand, but we must build as though the sand were stone”³⁰ (2005, p. 1011).

Writing in the catalogue of the first exhibition of Vinci’s “Máquina do Mundo” at the Palazzo Delle Papesse in Siena in 2004, Rodrigo Naves notes of her work since “Ampulheta” (1997) that:

It is not by chance that, in this regard, Laura Vinci’s works are closer to the interventions of American *Land Art*. Artists such as Walter de Maria, Robert Smithson and Michael Heizer also deeply interested in this image of nature as a physical force and exteriority, even if they are always on the point of leading it into the unfathomable depths of the sublime³¹ (2004, p. 34).

The same interest and parameters of sublimated meaning – animal, plant and mineral – are revisited in “Máquina do Mundo”, whose conception the artist links explicitly to the aforementioned lines 55-66 of Drummond’s poem. The essayist José Miguel Wisnik also highlights the echoes of Drummond in the artist’s work when he dedicates his *Maquinação do Mundo: Drummond e a mineração* to “Laura Vinci, who intuited artistically the main theme of this book in her installation *Máquina do Mundo* (2004)”³² (2019, p. 7), in reference to his own analysis of the mining industry in the poet’s hometown Itabira as a symbol of the degradation and degeneration of life and nature, in what is an illuminating, transformative reinterpretation of Drummond’s work.

²⁹ “[a] minha máquina transporta quase que unitariamente cada grão de mármore, num silêncio de minério, como se carregasse para lá e para cá, em pó, a história da escultura. Todo aquele mármore talvez guarde, na sua pilha, possíveis esculturas eternas. E talvez comente, grão por grão, a nossa precária transitoriedade”.

³⁰ “Fragmentos de un Evangelio apócrifo”, “[n]ada está construido sobre piedra; todo está construido sobre arena, pero debemos construir como si la arena fuese piedra”.

³¹ “[n]on a caso l’opera di Laura Vinci può dirsi piuttosto più vicina alla Land Art americana. Anche ad artisti come Walter de Maria, Robert Smithson e Michael Heizer interessa fortemente questa immagine della natura come forza fisica e esteriorità, per quanto sai sempre sul pinto di condurla verso le profondità insondabili del sublime”.

³² “[a] Laura Vinci, que intuiu artisticamente a questão de que se trata este livro na sua instalação *Máquina do Mundo*, de 2004”.



Figure 2. Laura Vinci. “Máquina do Mundo” (front view of the ‘vault’). Palazzo Delle Papesse, Siena, 2004. (Photograph by Ela Bialkowska)

In addition to her individual sculptural work on the theme, Vinci has also pluralised her creative process as an artistic director by working collectively, visually and narratively to bring the work to the stage in *As Máquinas do Mundo*, performed five times between 2017 and 2019. As before, the play refers explicitly to Drummond’s machine of the world, but also to those found in a chapter entitled “The Delirium” in *Memórias póstumas de Brás Cubas* by Machado de Assis, and in extracts from the novel *A Paixão Segundo G. H.* by Clarice Lispector. The result is a spectacularly experimental, consistently and completely free way of seeing worlds in the rhythms and durations of time.

Not alone have her metaphorical reflections on the machine of the world been pluralised in her own work, however, but her (neo)understanding of modern life and the world around us has also been adopted and adapted by numerous other artists. These include, to name just two examples: Susana Anágua’s exhibition *Wait* at the Centro Cultural de Belém in Lisbon, in 2019; and *A máquina do mundo: Arte e indústria no Brasil 1901-2021* (Pinacoteca de São Paulo, 2021-2022), curated by José Augusto Ribeiro, a group exhibition of work by more than a hundred Brazilian artists covering 120 years of artistic (re)envisioning of the idea of a mechanised modern world.

2.3. Ecometamorphosed deformity

Just as Vinci’s reinterpretations of the world machine motif explore and reflect on the changes of state, transitions, transformations and metamorphoses of material elements, “[s]ome works by Nuno Ramos [...] deal with similar issues, which helps to understand the extent and richness of these problems” (Naves, 2004, p. 20). A case in point is the seeping of Vaseline from the rock in

Gota (1998): “only enormous pressure forces the most intimate aspects of nature to the surface”³³ (Naves, 2004, p. 20).

Another essential example in this regard from Ramos’s collective practice is poem 43 from the collection *Junco*, in which he quotes from lines 44-46 of Drummond’s “A Máquina do Mundo”: “olha, repara, ausculta: essa riqueza / sobrança a toda pérola, essa ciência / sublime e formidável, mas hermética, // essa total explicação da vida”. The lines are quoted exactly, but broken and spaced differently to produce a defamiliarising effect in the reader:

look
watch
listen

that surplus wealth of every pearl
that tremendous, sublime
yet hermetic science

that total explanation of life
(Ramos, 2011, p. 110)

Differences aside, Ramos’s hybrid amalgamation of text and image in *Junco* is every bit as radical as, for example, Lygia Clark’s reflective, conceptual, self-referential and experiential *Livro-obra* (1954-1964), or Oiticica’s premonitory, many-sided, almost digital ‘book to come’, *Newyorkaises: Conglomerado* (1971-1978).

The complex intersection and transitive, reciprocal dialogue between 18 ‘brutalist’ photographic images (a dead dog melding into the road, a rush, or it would be better to say a driftwood corpse washed up by the waves and swallowed up by the sand. Figures 3 and 4) and 43 poetic texts is a deformed form, but also strays into the shadowy territory where, in Flávio Moreira da Costa’s (2021, p. 205) words, “a dog is a rock / (when he’s dead on the ground)”³⁴, from “Divisão dos cães” in *O desastronauta* (1971). At the same time, the reciprocity and division of discourses in the book lead to endless overtones. In each of these ways, *Junco* addresses and bears witness to the symbolic dialectic between the omnipresence of finitude and the inexorable metamorphosis of matter: “a place where things sink into and receive one another. That’s kind of what these photos are, the memory of that place of passage and transformation”³⁵ (Ramos, 2017, p. 154).



Figures 3 and 4. Nuno Ramos. Photographs on pp. 116 and 117 of *Junco*, 2011.

³³ “[a]lcuni lavori di Nuno Ramos [...] affrontano gli stessi argomenti e sono utili per comprendere l’estensione e la ricchezza di questi problemi”, “solo un’enorme pressione forza i più intimi aspetti della natura a venire alla luce”.

³⁴ “[u]m cão é uma pedra / (quando morto no chão)”.

³⁵ “um lugar onde as coisas se afundam umas nas outras, recebem umas às outras. Aquelas fotos têm um pouco disso, funcionam como uma memória desse lugar de passagem e transformação”.

Ramos's 'thinking artist' rejects the riddle of the material and explores instead Drummond's resignation from a 'total explanation of life', his epistemological pessimism, and his rejection of the omniscient, omnipotent machine of the world's offer to resolve any 'clear enigma', as illustrated in poem 18:

I can't explain. I bite
or see the hard parts
moving like ants
(chocolate chip ice-cream
ash rattle).

I don't understand. I fly
like a trunk stepping
into its roots. I smooth
my feathers, witchlike
lean my broom.

I don't write. I live
like a felt urubu
still among the hard carrion
of these cars.
I knock on glass

that isn't there, but it breaks.
I seek in the blue centre
the exact womb
that exhales that fire
towards me

the last urubu in the world.
I pierce the void
and my eyelid
closes
into a shield when I attack³⁶
(Ramos, 2011, pp. 50-51).

In addition, however, Ramos also redirects and reconverts the 'traditional' world machine into what was referred to by readers even prior to *Junco*'s publication in book form as the "Machine of the dog (or rush) world"³⁷, as noted by Flora Sússekind on the cover flap of the book. The same epithet was later adapted by the ever-pertinent Júlia Studart for her review of the collection in the newspaper *O Globo*, in which she explains:

The political force of this book by Nuno Ramos is in the impasse between living being and the surrounding world; that is, between man, animal and a drifting, abandoned piece of world (a tree trunk) [...] because it suggests that we rethink the swirling sphere that has separated within man *what is man from non-man and what is animal from human*³⁸ (2012, p. 6).

³⁶ "Eu não explico. Mordo / ou vejo as partes duras / movendo-se como formigas / (sorvete de flocos / guizo de cinzas). // Eu não entendo. Voo / como um tronco pisa / raiz adentro. Aliso / a penugem, inclino / a vassoura, bruxo. // Eu não escrevo. Vivo / como um urubu de feltro / imóvel entre a carniça / dura desses carros. / Bato em vidros // que não há, mas derrubam. / Procuro no núcleo / azul o útero exato / que exala essa fornalha / até mim // o último urubu do mundo. / Furo o vácuo / e minha pálpebra / fecha / feito escudo quando ataco".

³⁷ "Máquina do Mundo Cão".

³⁸ "[o] impasse entre o vivente e o mundo ambiente está posto, ou seja, entre o homem, o animal e a deriva de um pedaço de mundo abandonado — o tronco de árvore — imprime a força política desse livro de Nuno Ramos [que] sugere repensarmos a esfera em rodopio que separou dentro do homem *o homem do não-homem e o animal do humano*".

3. Hidden meanings and clear enigmas

More and better could and should be said about the complex creations convened in these pages to explore the presence of the machine of the world metaphor in modern Brazilian artistic practice, and the progressive accumulation and multiplication of complex new meanings by the country's most recent generation of anti-traditionalists. In order to appreciate the full depth and strength of these works, therefore, we must persist in the Nietzschean art of reading properly, and in our critical, (co-)creative contemplation and theorisation of the (neo)literary materiality of these anomalous sculptures and 'spectacles'. In this regard, Nuno Ramos (2005) himself reprises Hélio Oiticica's idea of the "foundation of the object", explained by the latter as "work that is no longer the object as it was known, but a relationship that turns the known into new knowledge"³⁹.

What this short foray into the topic does highlight is that critical literary and art theory today are not yet equipped to explain the radical transformation and dislocation of these strange and estranging cross-disciplinary conceptions and creations. While it may be, as per Duchamp's famous retort to attempts to interpret his own work, that 'there is no solution, because there is no problem', it may also be that critical theory does not yet possess a sufficiently inclusive, paradigmatic critical formula beyond the cumbersome, complex process of explication: *explicating*, in the etymological sense of the word, to open out the different layers of meaning within the work, pleat by pleat, fold by fold.

In a very interesting essay by João Cezar de Castro Rocha, entitled "Notes on postmodern positivism. Or: All cats are crosses. Or: Anything goes in the crisis of the subject", the author reflects on Spitzer's definition of comparative philology in terms of critical distance and proximity, highlighting from the latter's analysis "a *twofold nearly* linking literary experience, critical analysis and anthropological dislocation", before asking: "Could this be a solution to the impasse"⁴⁰ (2016, p. 147). Certainly, there is much to recommend in his suggestion that the current crisis in literary and art studies may represent a "moment of freedom" in which to trial (and err at) new hypotheses and transform our mistaken claims into the new rules of a "method yet to be invented"⁴¹ (2016, p. 144). With its pearls and pitfalls, therefore, that is precisely what this analysis proposes: to peel back the layers of meaning within the richly multivalent motif of the world machine in terms of the vibrant anti-tradition of expanded, radically interdisciplinary, interartistic practice in contemporary Brazilian art.

The *perpetuum mobile* of clear enigmas and hidden meanings that is the metaphor of the world machine helps us to understand (or understand ourselves) and to express (or express ourselves) better and more, both ethically and aesthetically. In the context of contemporary Brazilian art, as this brief cross-section shows, it has allowed powerful creators from different spaces on the spectrum to put into practice Beckett's salutary and quintessentially human advice to 'fail, try again, fail again, fail better'.

References

- Alighieri, D. (2003). *Divina Comedia* (edición bilingüe. Trad. Á. Crespo). Galaxia Gutenberg/Círculo de Lectores.
- Andrade, C. Drummond de (2 October 1949). A máquina do mundo. *Correio da Manhã*. <https://blogdoims.com.br/a-maquina-do-mundo-se-entrebriu-no-jornal-por-sergio-alcides/>.
- _____. (1992). Para o sexo a expirar eu me volto, expirante. In C. Drummond de Andrade, *O amor natural* (p. 72). Record.

³⁹ "fundação do objeto", "a obra que já não é o objeto no que possuía de conhecido, mas uma relação que torna o que era conhecido um novo conhecimento".

⁴⁰ "Notas iniciais sobre o positivismo pós-moderno ou: Todos os gatos são pardos. Ainda: o vale tudo da crise do sujeito", "[u]m *duplo quase* que associa experiência literária, atividade crítica e deslocamento antropológico", "[s]eria essa uma alternativa possível para o impasse".

⁴¹ "momento de liberdade", "método ainda a ser inventado".

- _____. (1998). A máquina do mundo. In C. Drummond de Andrade, *Claro enigma* (pp. 121-124). Record.
- Bataille, G. (1930). L'esprit moderne et le jeu des transpositions. *Documents*, (8), 489-492.
- Beckett, S. (1983). *Worstward Ho*. Grove Press.
- Beltrame, P. (2021). La belleza de la física. *La civiltà Cattolica*, 29. <https://www.laciviltacattolica.es/2021/10/29/la-belleza-de-la-fisica/>.
- Borges, J. L. (2005). *Obras Completas I*. RBA / Instituto Cervantes.
- Camões, L. Vaz de (2000). *Os Lusíadas* (Leitura, prefácio e notas de Á. J. da Costa Pimpão, 4ª ed.). Instituto Camões.
- Campos, H. de (2000). *A máquina do mundo repensada*. Ateliê.
- Carneiro, G. (2000). *Por mares nunca dantes*. Objetiva.
- Clark, L. (1984). *Meu doce rio*. Galeria Paulo Klabin.
- Costa, F. Moreira da (2021). Divisão dos cães. In A. Seffrin (Org.), *Revolta e protesto na poesia brasileira* (p. 205). Nova Fronteira.
- Espejo, B. (22 April 2023). La escultura baja del pedestal. *El País. Babelia*.
- Ferraz, L. (October 2016). Calculando Drummond. *Piauí*. <https://piaui.folha.uol.com.br/materia/calculando-drummond/>.
- Garramuño, F. (2014). *Frutos extraños: sobre a inespecificidade na estética contemporânea* (Trad. C. Nougé). Rocco.
- Halpern, G. (2020). *Tous centaures! Éloge dell'hybridation*. Le Pommier.
- Hansen, J. A. (2018). Máquina do Mundo. *Teresa*, 19, 295-314. <https://doi.org/10.11606/issn.2447-8997.teresa.2018.149115>.
- Lucchesi, M. (2006). Poesia e ciência. Quase crônica. *História, Ciências, Saúde*, 13, 257-267. <https://www.scielo.br/j/hcsm/a/pQZCMdFXKNvWLZVcJCr6fHM/?format=pdf&lang=pt>.
- _____. (2019). *Domínios da insônia. Novos poemas reunidos*. Patuá.
- _____. (2020). *Adeus, Pirandello*. Rua do Sabão.
- Marmeleira, J. (7 March 2023). *Nuno Ramos: Opening*. Galeria Francisco Fino. <https://www.franciscofino.com/exhibitions/48-opening-nuno-ramos/>.
- Martínez Pereiro, C. P. (2020), Errer dans les brouillards malsains tisés par mes désirs. Do surrealismo heterodoxo de Maria Martins. In A. del Olmo, A. Bernat Vistarini, F. J. Díaz de Castro y M. L. Pereira (Orgs.), *Como el camino empieza (Palabra e imagen para Perfecto E. Cuadrado)* (pp. 179-176) José J. de Olañeta.
- Martínez Teixeira, A. (2018). Não é estranho — A experiência do instante na escrita de Ferreira Gullar. In P. Petrov (Org.), *Meridianos Lusófonos* (pp. 45-65). CLEPUL.
- Martínez Teixeira, A. (2020). El hagoromo de Zeami en las prácticas interartísticas brasileñas, *Arte, Individuo y Sociedad*, 32.4 (Septiembre): 1105-1119. <https://dx.doi.org/10.5209/aris.67203>.
- Martínez Teixeira, A., y C. P. Martínez Pereiro (2022). Iberê Camargo y el autorretrato: identidad expandida y alteridad. *Arte, Individuo y Sociedad*, 34.1 (Enero), 109-128. <https://dx.doi.org/10.5209/aris.72754>.
- Mitchell, W. J. T. (1995). *Picture Theory: Essays on Verbal and Visual Representation*. University of Chicago Press.
- Morales Elipe, P. (2016). Pintura en voz baja. In *Pintura en voz baja. Ecos de Giorgio Morandi en el arte español* (pp. 10-30). Centro José Guerrero.
- Naves, R. (2004). Monna Lisa nel mezzo di un vórtice. In *Laura Vinci: Máquina do Mundo* (Catálogo) (pp. 8-21). Gli Ori.
- Quincey, C. de (2022). *Naturaleza esencial (El alma de la materia)*. Atalanta.
- Ramos, N. (1995). *À espera de um sol interno (Hélio Oiticica)*. Nuno Ramos. <https://www.nunoramos.com.br/text/a-espera-de-um-sol-interno-helio-oitica/>
- _____. (2011). *Junco*. Iluminuras.
- _____. (2014). Foto, mácula, memória: uma entrevista com Nuno Ramos (Entrevista de Gustavo Romero e Tatiana Santos). *Estudos Linguísticos e Literários*, 49, 149-160. <https://periodicos.ufba.br/index.php/estudos/article/view/14780/10133>
- Rocha, J. C. de Castro (2016). Notas iniciais sobre o positivismo pós-moderno ou: Todos os gatos são pardos. Ainda: o vale tudo da crise do sujeito. In H. K. Olinto, K. E. Schøllhammer and M. Simoni (Eds.), *Literatura e artes na crítica contemporânea* (pp. 133-148). Editora PUC-Rio.

- Soler Gil, J. (2018). Las ideas estéticas de los físicos. *Philosophia*, 78(2), 63-90. <https://revistas.uncu.edu.ar/ojs/index.php/philosophia/article/view/1832>
- Sollers, P. (November 1965). Dante et la traversée de l'écriture, *Tel Quel*, (23), 12-33.
- Studart, J. (14 January 2012). Máquina do mundo cão. *O Globo*. <https://acervo.oglobo.globo.com>.
- Vinci, L. (2013). Conversation with Guilherme Wisnik and Luisa Duarte. In *Laura Vinci* (pp. 191-209). Cosac Naify.
- _____. (2023). *Máquina do mundo*, 2006. Laura Vinci. <https://www.lauravinci.com.br/2006brmqquina-do-mundo>.
- Wisnik, J. M. (2019). *Maquinação do Mundo — Drummond e a mineração*. Companhia das Letras.