

Unraveling Contemporary Artistic Metaphors of the Black Hole

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Abstract. This paper explores the profound symbolism of the black hole in contemporary art, examining its evolution as a cultural icon imbued with rich historical significance. Beyond its 2019 image capture, the black hole has long served as a potent symbol, contrasting the ethereal brilliance of stars with its ominous darkness, often embodying the monstrous Other in the cosmos. Delving into the depths of contemporary artistic expression, this research investigates the black hole as a metaphor for the unknown and humanity's struggle to deal with the incomprehensible. Depicted as a symbol of darkness, chaos, and the unfathomable, it reflects human fears and uncertainties, symbolizing the collapse of traditional systems, including religious ones, and occupying the void left by the absence of the divine and of hope. Overall, the black hole breaks down systems, embodying incomprehensible disorder. Art becomes vital for navigating this unknown, transforming trauma into speech through imagination. This study encourages continued exploration of the metaphors associated with black holes in contemporary representation, acknowledging their crucial role in artistic and interdisciplinary dialogues and the multitude of valuable understanding of the cosmos and, ultimately, of the human that it provides.

Keywords. Contemporary art, black hole, abyss, black sun, abject

For beauty is nothing but the beginning of terror.

- Rainer Maria Rilke, "Duino Elegies"

1. Introduction

In 2019, decades after its first theorization, the first image of the supermassive black hole was revealed. It sits in the center of our galaxy, around 27,000 lightyears from Earth, and logic states that it cannot be seen or captured in images. The black hole in its concept pushes the very limits of what we commonly understand as time, space, and gravity. Its image which is not really a photograph - is made of processes of recovery and transposition of data into visual information (1), and highlights what Umberto Eco calls humanity's "fear of infinity" - the black hole represents something beyond what we can grasp through language, and man seeks to conquer said infinity, placing it in its proper language signifiers and in the realm of what is describable. Then, what this image represents, ultimately, is an attempt to conquer that of which is outside of what we can through language understand and describe.

Therefore, beyond telling us more about the cosmos and the black hole itself, it seems that the black hole reveals a lot about the human, particularly in relation to what we are unable to grasp, be it in the cosmos or within ourselves.

2. Methodology

This research endeavor aimed to unravel the metaphors evoked by the black hole in contemporary art and the diverse meanings it holds as a symbol in this context. Panofsky's method of iconography, as a qualitative method of visual content analysis and interpretation, allowed for the development of this investigation. This method is rooted in art history and sociology and aims to investigate the "intrinsic meaning or content constituting the world of 'symbolical' values" (2).

In this way, the research process relied mainly in a thorough investigation into digital archives of renowned museums and galleries, such as MoMA, Tate, Guggenheim, White Cube, MASP, and other art institutions known for their contemporary art collections. The designation of a specific temporality for contemporary art is an ongoing debate amongst scholars and, for the purpose of this research, works from the 1960s onwards were considered fitting to our goals, as it marks the collapse of traditional aesthetics in postmodernism as well as the historical moment in which the black hole is formally theorized. Furthermore, there were no restrictions as to the format and support in which these visual works presented themselves, which allowed for a rich group of paintings, sculptures, installations, performances, collages, and videos.

Additionally, it was essential to investigate existing literature across various disciplines, including art theory, psychoanalysis, literary theory, cultural and political studies, and philosophy, to capture perspectives across disciplines of how the concept and image of the black hole has been utilized. For this reason, an investigation was carried through searching of databases like JSTOR, Google Scholar, and Scopus, with the use of a variety of keywords and phares, including "black hole," "black sun," "abyss," "void," "vortices," and "chasm." However, literary works in the realm of fiction were not included as they fell outside the scope of our goals.

The investigation of databases and the collection of works were conducted alongside another Brazilian researcher, Leonora de Filippo Sampaio (UFMG), and with the help of professor Mgr. Ondřej Váša (Charles University in Prague). To effectively share the works found amongst the team, as well as to properly analyze them, a systematic collection and organization of the material was developed. A Google Drive folder was used to collect the works of interest as well as relevant bibliography. Moreover, all works of art were listed on a spreadsheet containing further information, including title, artist, date of creation, type of work, collection, and indication of potentially significant bibliography. This course of action proved itself to be necessary not only to better contextualize each work and interact with the material collected, but also to provide a solid foundation for further investigation into each work found. This allowed for easier ongoing communication and discussion of the material, as well as dialogue over bibliography selection and insights on possible theoretical backgrounds amongst the researchers.

Overall, 42 visual artworks and 20 articles and books that made use of the black hole as a metaphor were mapped and systematized, and discussion of the material amongst the researchers was carried out for a total of four meetings over the course of four months.

3. Discussion

Well before its 2019 image, the black hole already situated itself as a significant cultural symbol, imbed with historically constructed meaning and used for a multitude of artistic, literary, and scientific ends.

Overall, its darkness has opposed the magical lightness of stars, and assumed the face of a monstrous Other in the cosmos. It is reminiscent of dark passages that lead to hell, one where you fall through and do not come back from, like the abyss represented by Anish Kapoor in Descent into Limbo (1992) or the empty dark space of Miroslaw Balka's How it is (2008), as well as of bodily orifices - the anus as a dark hole, the mouth as an abyss that leads to the dark passages of the body, and the womb from where we are originated. While the stars are to be reached and are longed for, the black hole is an unknown abyss of which to stay away from. If light provides the conditions for us to see and understand. to describe and to make ourselves conscious, it must be considered that there is its counterpart, darkness. which calls for the unconscious and for what remains distant from the self and away from the light of the conscious mind.



Figure 1. *Descent into Limbo*. Anish Kapoor (1992). Concrete and pigment. 600x600x600 cm. Documenta IX Kasse, 1992. Serralves, Porto, 2018. ©Anish Kapoor.

Available at: https://anishkapoor.com/75/descent-into-limbo

It is understood that the term is first used to refer to the suffocation of a number of a people held captive in a hole in Calcutta, in 1795 (3). Its origin is, then, rooted in claustrophobia, trauma, and death. The very language later developed to describe the astronomic black hole points to death, with mentions of an abyss, a point of no return, and the eating of suns. The black hole is not friendly, and it does not present itself as hopeful, as a possibility of somewhere else. It holds no hope; it sits on the throne of the monstrous of the cosmos. If there is a symbol for the unknown of the universe, it is the black hole in all its mysteriously threatening glory.

The existing literature points to the black hole as a changing signifier, reflecting the anxieties of the unknown of a time (3). Nevertheless, it always stays within the realm of the uncanny, the unknown, and the monstrous. Its otherness and concomitant familiarity approach a negative sublime. An object that while familiar (the origin in the womb), is highly unfamiliar in its state of nothingness (of death and absoluteness). As it is nothing, it can, therefore, be anything.

The absolute nothingness of the black hole of which we talk about presents itself as a significant value of meaning. "Nothing" itself being a symbol that lacks, that describes itself by its denials and exclusions, by absences, is "an image that, in order to be seen, negates itself. An un-universe that can only present its own absence. A boundless abyss that gives itself forth in an infinite austerity" (4). It becomes then, a problem of language. We aim to comprehend that of which seems to situate itself in the very limits of signifiers, but a step closer to its failure than to its success. It appears in gaps and lacunae, driving language and its symbols to a breaking point.

One of the first significant instances of the use of Nothing as an icon is seen in Malevich's Black Square (1915). In The Last Futurist Exhibition of Painting 0.10, the painting was positioned in the very corner of the room, the same place where saints are displayed in Orthodox Catholic tradition. Malevich's new icon inaugurated a new aesthetic tradition, one aligned with a world of revolutions present and to come, and its nothingness and formlessness, while breaking down representation, built in its absence and placed this abyss in a position of sanctity. More than inaugurating a new aesthetic tradition, however, it dialogues with the collapse of traditional systems altogether, particularly religious ones. The iconic position of the Black Square confronts the viewer with questions of meaning and existence in a century was stripping itself of faith, a century that, through nihilism and existentialism, equated nothingness and being, and a century that concludes that creation comes from nothing, that there is no need for God (5).



Figure 2. The Last Futurist Exhibition of Painting 0.10, 1915, Petrograd. A section of Suprematist works by Kazimir Malevich, including *Black Square* (1915). Image in public domain.

This absence of God and of hope provides fertile ground for the black hole – it occupies the gap left by the divine and the hope it used to provide. The acknowledgment of social and political failures in humanity's existence leads to a sense of inadequacy and a conclusion of failure, creating opportunities for metaphors within the concept of the abyss. Anselm Kiefer in his work *To the Supreme Being* (1983)

dialogues with this instance of the black hole metaphor by representing a hall suggestive of nazi architecture, with perspective lines evocative of Leonardo da Vinci's Last Supper (1495-1498). However, there is no transcendence or feelings of spiritual elevation by a Last Supper, only the vague call for atrocities that humanity has lived through. And darkness. In this context, through a signaling of emptiness, it seems that the object announces the end of times, one that humanity set up for itself. A hopelessness is evoked by this abyss, one that suggests that there is no future lying ahead and no chance for redemption. If the future is abolished, what remains is only a longing for a future that will never come and the horror of what seems like an eternal present. Writers like Frantzen (6), and Fisher (7) will draw on Fukuyama's End of History to approach this problem of futurity, the feeling that history is closed off and has come to an end, as a foundation for contemporary depression, one that is highly historically and politically aware.

If the black hole on one side signals to loss of hope in death and annihilation, on the other, Negation can be taken as a positive act in death, a way of defining and creating. This reconsideration of ideas is interestingly developed in posthuman thought. Destruction and annihilation are reinterpreted though a lens of rebirth, and the processes of mourning and trauma reconsidered, as death is read "not in opposition to life, but existing in a flat continuum intertwined with it" (8).

A group of works of art will approach the black hole in this frame of reconsideration of historically constructed systems and categories, considering its destructiveness as a possibility of rebirth. Kim Kulim in Death of Sun I (1964) and Death of Sun II (1964), through the use of not only oil paint but also burnt vinyl on a wooden panel, attempts destruction as an art form, with an apocalyptic title to reinforce this effect. Similarly, Jeram Patel in *Untitled* (1963) experiments with a blowtorch and asserts his action in the canvas trough the properties of his materials, and Lucion Fontana, in Concetto spaziale. Attese (1966) and much of his *oeuvre*, pierces holes and slashes his canvases, allowing for an interaction of the material, the canvas, and the artist that is entirely new in its affirmation of destruction.



Figure 3. *Death of Sun I.* Kim Ku-lim (1964). Oil paint and plastic on plywood. 1070 x 910 mm. ©Ku-lim Kim, Photo: ©Tate. Available at: https://www.tate.org.uk/art/artworks/kim-death-of-sun-i-t14359.

Malevich's breaking down of representation and signaling to the collapse of traditions also calls to a state of chaos where previous definitions and references are no longer useful, and categories and structures come down. The black hole can serve as a metaphor for this state of absolute change and disorder and, beyond representing anything, it is also able to push further from categories and structures, fermenting in a state of chaos and lack, at the very edge of experience, where the limits between Something and Nothing are undefined. Grotstein (9) will link this to the death instinct, stating that what he calls the 'black hole experience' "conveys the experience of meaninglessness and nothingness [...] and represents the ultimate traumatic state of disorganization, terror, chaos, randomness, and entropy". It is, then, the "epitome of the traumatic state", and trauma is, then, this chaotic state of losing language and its symbolic references, and death is the ultimate form of non-meaning. The knowledge here discussed is in a horizon of human thought, but it is entirely unhuman, as it is not known directly but only through negations - in the same way that "blackness" is not treated as a color in itself, not an object as other colors are but the absence of one.

Further investigating this chaos state, Julia Kristeva (10) will look at the breaking point of language as a failure of mourning of a primal archaic Thing, and impossibility of letting go of what comes before symbols. The subject's impossibility of mourning the loss of this primal object drives one to a state of asymbolia, in which a depressed person does not necessary detach themselves from the world of signs, like the psychotic person does, but rather falls into a state of clarity of the absurdity of the nature of signs, rendering them meaningless and abstract, useless. The failure of language is then projected onto the self, who falls into a black hole of melancholia that Kristeva will call *Black Sun*, after the poem *The*

Disinherited, by Gérard de Nerval.

The mourning of a lost primal and archaic "Thing", according to Kristeva, denies the person a primary identification that can secure one's connection to the symbolic order and, in this way, obstructs the fragmentation that is part of the construction of subjectivity. What continues is an attachment to what comes before the symbols. In this way, the more an object is described, the more enigmatic it becomes. That proves to be the case in the very study of the metaphors that the black hole arouses. It seems that the only kind of language that is able to reach what is before the object is existence itself stripping the object of its language so only the skeleton of reality is left. Kriteva approaches this in terms of Hans Holbein's *The Body of the Dead Christ* in the Tomb (c. 1590), which shows a human body stripped of everything that attributes to it humanness. Holbein's Christ, partially responsible for the torment of writers such as Dostoyevsky, is a human body that no longer seems to associate itself to the human, and language fails as it cannot describe that of which comes before or beyond language itself, that is, reality. Similarly to the question of whether mathematics was invented or discovered, we wonder if nature does have an intrinsic language that we can access to reach this state that is beyond it. Holbein's painting deals with giving form and color to what is non-representable, in a way that contemporary art will proceed with the image of the black hole. In this way, both Holbein's Christ and the contemporary black hole work in the "dissipation of means of representation on the threshold of their extinction in death" (10).

The enticement of the black hole is exactly that which makes Holbein's Christ so terrifying. It promises a terrible yet enticing encounter with the very imminence of being. What is proposed is the destruction of the individual in exchange for a state of continuity, of pre-existence. Death is somewhat a rebirth in this context, only that it allows for rebirth as a collapsing back into a vast bluntness of being in inorganic reality.

The subject is constructed through and in language. however, one's taste for the meaninglessness state and the seduction for the state of continuity it promises cannot be overlooked. Kristeva (11) acknowledges this, and states that as well as meaning, we are also spoken to by the abject. The abject gives name to the fragility of boundaries and collapse of meaning mentioned so far, and it presents itself when the body is twisted and turned inside out. It forces us to confront the states of "inside" and "outside", the difference between Self and Other, between the human and the monstrous. The abject threatens the stability of categories with something that is unknown and has been outcast, it is that which does not "respect borders, positions, rules" and "disturbs identity, system, order" (11).

In her theory, Kristeva draws on Freudian theory to

discuss this concept particularly related to the female body, which traces, then, two converging arrows to the black hole: the black hole as a symbol of meaninglessness and inorganic state of reality, and another to the womb as a black hole. Visually, virtually any round-ish dark and empty volume can be paralleled to a black hole. Our very lack of understanding of this abyss, its mystery, allows for projections of ideas onto it and then back onto ourselves, in an interesting although disheveled mirror configuration (it could be argued, even, that this disorder brings this metaphor closer to the chaos of the black hole itself, enhancing its metaphors). The womb, however, assume an Otherness, a monstrous quality, very similar to that of the black hole, one that dialogues not only with death but also with the blunt being that precedes organic existence and the process of becoming.

Through time, the female body has assumed a grotesque quality, particularly through the repulsion to the body and its functions, as well as through the fear of castration evoked by the "mysterious black hole" (12) of female genitalia. Both Creed and Kristeva present the abject as that which is not human, what has been cast off outside of this category. And the womb, particularly, can present a path to it. The womb functions not only as the origin, but also as a tomb, the end destination and the beginning that allows for the loss of the self as subject and for the collapse of boundaries of subject and object. Creed goes on to highlight these two instances of the womb, the first one as a conjurer of "metaphysical comfort of returning to the original oneness of things", the other as a possibility of accomplishing non-differentiation, giving "rise to a terror of self-disintegration, of losing one's self or ego [...] which becomes black, signifying the obliteration of the self". In the end, both instances reveal the womb as one that embrace birth and destruction. A group of mostly female artists will embrace this gendered abject and apply it to their works, resulting in works like Black Sun (2023), by Mira Lee, Orlan's Omnipresence (1993), Louise Bourgeois' The Destruction of the Father (1974), and Lee Bontecou's Untitled (1961).

In this way, the womb assumes something of the uncanny, with a cycle from homely to unhomely, allure of continuity and terror of annihilation. If the loss of hope of nihilism makes our existence alien and the earth assumes foreign and threatening qualities that lead to apocalypse, in the reverse, the abject of the black hole, in all its grotesque alien quality, in the end, evokes something that is familiar, only has been removed from thought through the construction and stabilization of the self. The movement between known and unknown, human and unhuman, life and death, make it possible for the black hole metaphor to blossom, and the traditional configuration of systems are forced to rearrange themselves.

Traditionally, religion has been tasked with handling the abject. However, in a secular century that has lost the sight of God, art presents itself as a particularly fruitful way of controlling our encounters with the abject, the impure. Kristeva will point to art as a way to create language and give voice to the speechless speech. It is through art that we can represent this abject, safely "entering the abyss" and coming out on the other side.

4. Conclusion

Through the systematic mapping of artworks, articles, and books, it became evident that the black hole conveys in contemporary art, fundamentally, a state of trauma, one of meaninglessness and chaos of language and structures. This state, which can be understood as an abject state, dialogues with the subject as much as the construction of the self in language does – we crave to build our own identity and preserve it as much as we desire for annihilation of the self in a state of continuity in the imminence of being.

The black hole lends itself to symbols of destruction. There are instances, however, in which this destruction can be rewired, such as in posthuman thought where death will be reconstructed as life, or in definitions through absences. The paradox of thought brought up by the black hole allows for configurations of projection of the cosmos onto the human and vice-versa, paving way to dealing with the monstrous aspects of not only existence, but inexistence just as well. Art proves itself to be a pertinent media to be used in this process, and Kristeva will highlight its use for a process which she calls "sublimation through imagination", a process in which trauma is turned into speech by art, as it provides the instruments through which one can not only use language, but create language in order to come out on the other side of the black hole.

The black hole is, then, a shifting signifier and attempting to grasp its meanings and metaphors seems, as soon as you step foot onto its territory, as falling into a black hole yourself. One falls through an abyss into a maze of references getting further and further away from its origin point and yet, an unexpected turn brings one right to the center again. For this reason, the black hole fails to embody a single static metaphor, like the cosmic black hole itself it is highly unknown and evocative of a myriad of ontological and metaphysical discussions.

Overall, this paper aimed to unravel, but not exhaust, the metaphors that are evoked by the visual representation of the black hole in contemporary art. The mapping of artworks and exploration of the literature presented a variety of strings of metaphors and signifiers that require further exploration and development. The black hole as a support for metaphors allow for a multitude of ideas to blossom, and the works and bibliography systematized for this research provide significant groundwork for deeper inquiry into the contemporary black hole.

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