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Abstract

About the main psychological and philosophical aspects detached from the film *Solaris* directed by Andrei Tarkovski, as well as the cinema techniques used by the director to convey his messages to the spectator. In my exposition, I rely on the works of Andrei Tarkovsky (*Sculpting in Time: Reflections on the Cinema*), (Andrey Tarkovsky 1996) R. M. P. (*The Science-Fiction Films of Andrei Tarkovsky*), (Salvestroni 1987) Thomas P. Weissert (*Stanislaw Lem and a Topology of Mind*), (Weissert 1992) Vladimir Tumanov (*Philosophy of Mind and Body in Andrei Tarkovsky's Solaris*), (Tumanov 2016) David George Menard (*A Deleuzian Analysis of Tarkovsky's Theory of Time-Pressure*), (Menard 2003) Elyce Rae Helford (*"We are only seeking Man": Gender, Psychoanalysis, and Stanislaw Lem's Solaris*), (Helford 1992) Manfred Geier (*Stanislaw Lem's Fantastic Ocean: Toward a Semantic Interpretation of Solaris*), (Geier 1992) Daniel McFadden (*Memory and Being: The Uncanny in the Films of Andrei Tarkovsky*) (McFadden 2012) and Richard Duffy (*Sculpted in time: Heterotopic space in Andrei Tarkovsky's Solaris*). (Duffy 2003) In the "Introduction" I briefly present the relevant elements of Tarkovski's biography and an overview of Stanislav Lem's *Solaris* novel and the film *Solaris* directed by Andrei Tarkovsky. In "Cinema Technique" I talk about the specific rhythm of the scenes, the radical movement triggered by Tarkovsky in modern cinema, the role of symbolic and iconic elements, and affinities with the fantastic area of Russian literature. In *Psychological Aspects* I analyze the issue of communication in a human society of the future considered by Tarkovsky as rigid, the obsession of the house, and the personal evolution of Kris, Hari, and the relationships between them. In *Philosophical Aspects*, the film is analyzed through the philosophy of the mind (Cartesian dualism, reductionism and functionalism), the problem of personal identity, the theory of heterotopic spaces developed by Michel Foucault, and the semantic interpretations that can be

deduced from the film. It also analyzes the issue of personal identity through Locke's philosophy. "*Conclusions*" show the general ideas of this essay, namely that Man's attempts to classify and maintain forms of interaction with unknown entities will always be condemned to failure and will reflect a major mistake in the panoptic world in which we live. In this framework of analysis of the philosophy of mind, functionalism seems to be the most intuitive. *Solaris* is, however, a movie that begins as a search for answers and comes to provide these answers with a whole range of different questions.

Keywords: *Solaris*, Andrei Tarkovsky, film, cinematographic technique, psychology, philosophy, mind-body dualism, personal identity, heterotopia

Introduction

Andrei Tarkovski (1932 - 1986) was born in Russia. Tarkovsky directed the first five of his seven films (*Ivan's Childhood* (1962), *Andrei Rublev* (1966), *Solaris* (1972), *Mirror* (1975) and *Stalker* (1979)) in the Soviet Union; his latest films, *Nostalghia* (1983) and *The Sacrifice* (1986), were produced in Italy and Sweden. *Andrei Rublev*, *Solaris*, *Mirror* and *Stalker* are regularly listed among the greatest movies of all time. Ingmar Bergman was quoted as saying:

"Tarkovsky for me is the greatest (director), the one who invented a new language, true to the nature of film, as it captures life as a reflection, life as a dream." (Bielawski 2018)

The film history, Steven Dillon, says that much of the film was profoundly influenced by Tarkovsky's films. (Dillon 2006) Tarkovsky developed a theory of cinematography, which he called "sculpting in time." Through this he wanted to highlight the unique feature of cinema as an environment, to address our experience of time and to change it. The irregular film transcribes the time in real time. Using long shots and some cuts in his films, he sought to give viewers a sense of time, lost time, and the relationship between time and time.

The book *Solaris* (Lem 2012) is a 1961 philosophical novel of fiction by Polish writer Stanisław Lem. The book focuses on the themes of the nature of human memory, the experience and the inaction of communication between human and non-human species. The novel was transposed three times: in 1968, directed by Boris Nirenburg, closely following the book and maintaining the emphasis on the planet, rather than human relations; in 1972, directed by Andrei Tarkovsky, respecting the book vaguely and emphasizing human relations; and in 2002, directed by Steven Soderbergh, with George Clooney and produced by James Cameron, also going on human relationships and neglecting the themes suggested by Lem. In fact, Lem himself noted that none of the film's versions focus on the Solaris ocean:

"... ..to my best knowledge, the book was not dedicated to erotic problems of people in outer space... As *Solaris'* author I shall allow myself to repeat that I only wanted to create a vision

of a human encounter with something that certainly exists, in a mighty manner perhaps, but cannot be reduced to human concepts, ideas or images. This is why the book was entitled 'Solaris' and not 'Love in Outer Space'."

- Stanislaw Lem, *Solaris Station* (December 8, 2002) (Lem 2006)

Tarkovsky recognizes these differences, saying that there is a contradiction with Lem's initial idea, because he was interested in the problems of inner life, spiritual problems, so to speak, and Lem was interested in the collision between man and Cosmos. In an ontological sense of the word, in the sense of the problem of knowing and the limits of this knowledge - it is about that. Lem even said that mankind was in danger, that there was a crisis of knowledge when man did not feel ... This crisis is growing, a snowball, takes the form of various human tragedies, including scientists. (Jerzy and Neuger 1985)

The difference is evident from Tarkovsky's explanation of Solaris's transposition process. Tarkovsky commented Lem's novel saying that he was attracted by the book only because he first met a work that could say it is a story of atonement, a remission, in a simple, classic sense of the word, when we remember the sins of the past. (Jerzy and Neuger 1985)

In 1972, Tarkovsky finished the film *Solaris*. He worked on the script along with Fridrikh Gorenshtein.

Solaris has as characters Natalia Bondarchuk (Hari), Donatas Banionis (Kris Kelvin), Juri Järvet (Dr. Snaut), Vladislav Dvorzhetsky (Henri Berton), Nikolai Grinko (Kris Kelvin's father), Olga Barnet (Kris Kelvin's mother) Solonitsyn (Dr. Sartorius) and Sos Sargsyan (Dr. Gibarian).

The film is a psychological drama unfolding aboard a space station that orbits the Solaris planet. The three members of the team have psychological problems, so the psychologist Kris Kelvin is sent there to assess the situation but faces the same mysterious phenomena as the others.

Tarkovsky and Lem collaborated on film adaptation of the novel.

Tarkovsky focuses on Kelvin's feelings for his wife, Hari, and on the impact of space exploration on the human condition.

The soundtrack of the film is the prelude to Johann Sebastian Bach's chorus for organ, *Ier ruf 'zu dir, Herr Jesu Christ, BWV 639*, played by Leonid Roizman (the central theme of the film), and an electronic composition by Eduard Artemiev. Hari has his own musical subtext, a *cantus firmus* by Artemiev inspired by J. S. Bach's music, which is heard at the death of Hari and at the end of the film. (Artemyev 1991)

Solaris premiered at the Cannes Film Festival in 1972 and won the Grand Jury Special Prize and was nominated for the Palme d'Or. A list of the world's best 100 movie releases compiled by Empire magazine in 2010 ranked Tarkovsky's *Solaris* 68th. (Empire.com 2017)

Stanisław Lem claimed that he "never really liked Tarkovsky's version" of his novel. (Lem 2012) Tarkovsky would have gone so far as to produce *Crime and Punishment* rather than *Solaris*, omitting the epistemological and cognitive aspects of his book. (Bereś 1987) For Tarkovsky, the existential conflict exposed by Lem was just the starting point for developing the character's inner life. (Jerzy and Neuger 1987)

1 Cinema technique

Tarkovsky opposed to the movie editing and considered that the basis of the art of cinematography (movie art) is the internal rhythm of images. He considers cinema as a representation of distinctive currents or time waves, transmitted in the film through its internal rhythm. Rhythm is at the heart of the "poetic film". A rhythm like a movement inside the frame ("sculpting in time"), not as a sequence of images in time. (Menard 2003) As Donato Totaro says, editing brings together sequences that are already filled with time. (Totaro 1992, 24) Time within the frame expresses something significant and true that goes beyond the events itself, received

differently by each spectator. The rhythm is not determined by the length of the sequences, but by the pressure of time passing through them. (Menard 2003)

In a statement articulating the similarities between Deleuze, Tarkovski and Foucault's heterotopic¹ model, (Foucault 1971) Deleuze states

"The time image has the power to affect the way we think by cutting off the ordered flow of chronological time, the continuity upon which the unity and wholeness of the subject is founded. The time image fuels thought and pushes it to the limit where new concepts take shape, and new forms of subjectivity and ways of being in the world arise." (Deleuze 1985)

For Ian Christie, who discusses the problems of formalism in cinematography, Tarkovsky's film produces a radical movement in modern cinema because it releases the film from the director's constraints, allowing the film to live in its own time:

"Formalism, they [David Bordwell & Kristin Thompson] believe, unlike some structuralist and psychoanalytical methodologies, crucially implies an active spectator ... Bordwell proposes a 'constructivist' theory which links perception [Tarkovsky] and cognition [Deleuze] ... Bakhtin's most influential concept is probably 'dialogism', which emerged particularly from his study of Dostoevsky's novels ... involves distinguishing between an author's direct speech and that of his characters... Bakhtin showed how these (i.e. 'speech genres') interact with literary genres to define a 'genre memory' [Tarkovsky] which sets limits to each genre... Maya Turovskaya (1989) has used the concept of the chronotope to illuminate Andrei Tarkovsky's idea of cinema as 'imprinted time'." (Christie, Hill, and Gibson 1998)

Deleuze writes about Tarkovsky's text about the "cinematographic figure" as follows:

"Tarkovsky says that what is essential is the way time flows in the shot, its tension [i.e. time-pressure] or rarefaction, 'the pressure of time in the shot'. He appears to subscribe to the classical alternative, shot or montage, and to opt strongly for the shot (the 'cinematographic figure' only exists inside the shot)." (Christie, Hill, and Gibson 1998)

The interior of the space station is decorated with full reproductions of the painting cycle of *The Months* (*The Hunters in the Snow*, *The Gloomy Day*, *The Hay Harvest*, *The Harvesters*, and *The Return of the Herd*) by Pieter Brueghel the Elder, and details of *Landscape with the Fall of*

¹ Heterotopia is an evolutionary change in the spatial arrangement of an animal's embryonic development, complementary to heterochronicity, a change in the rate or timing of a development process.

Icarus and *The Hunters in the Snow* (1565). The film also makes reference to Tarkovsky's previous film in 1966, *Andrei Rublev*, by placing the icon of Andrei Rublev in Kelvin's room. Tarkovsky's references and allegations in the film are attempts by the director to provide a historical perspective in the art of cinematography to evoke the viewer's feeling that cinema is a mature art. (Jerzy and Neuger 1987, 137–60)

Tarkovsky contrasts, in film, Earth as the source of life and the obsolete and inert space station, along with dynamic images of underwater plants, fire, snow, rain. The contrast also appears between the original scenes (visit to his father's house with a lively pond and blooming trees) and the final one in the same place, but where this is cold outside, the pond is frozen, and the trees are naked.

Tarkovsky included levitation scenes for their photogenic value and magical inexplicability. (de Brantes 2008) Water, clouds and reflections were used by him for their surreal beauty, for photogenic value, and for their symbolism. (Bellis 2008)

Solaris has precise and creative affinities with the fantastic area of Russian literature.

The metaphoric interactions, bipolarities, ambiguous miracles we also meet to Bulgakov, Dostoevsky, Gogol and Strugatsky, Tarkovsky transfer them to the image. In the film, the dialogue between mankind and the planet manifests itself exclusively through images, exemplifying, in an original and complex way, how the image communicates and contributes to the development of knowledge. (Salvestroni 1987)

Tarkovsky appeals to a whole gallery of famous paintings hanging on the station walls and repeatedly focused, and three film inserts: Berton's investigation; Gibarian's message before suicide, and a childhood movie shot by his father. These sequences, like the products of the ocean's unconscious, act as a teleportation in time, defying causality and allowing the past and even the

dead to return (Gibarian, Kris's mother, Kris's dog from childhood). Although there is among some scientists and philosophers the idea that one can ever imagine a reality defying causality, an argument that can bring fiction on an equal footing with "reality." (Sfetcu 2018)

The movie critic Maya Turovskaya claims that the past has a special significance for Tarkovsky, he is always on an equal footing with the present; the world of imagination coexists with the real world. What Tarkovsky presents as dreams, imaginations, memories is the "individual flow of time" of the character. In this scheme of things, all moments in time are co-equal, existing alongside the apparent intrigue. (Turovskaia 1989)

2 Psychological Aspects

Tarkovski's film is a drama of pain and partial recovery centered on the psychology of the Solaris station crew. Tarkovski wanted to address this way the deeply emotional and intellectual science-fantastic genre, considered by him to be superficial.

The film approaches a central phenomenon of Klaus Holzkamp's critical-psychological analysis of human perception: the perceptions of the human world are significant to human beings. (Geier 1992) In perception, human beings are oriented towards an objective sense, which objects possess it in connection with the vital activity of the people. By virtue of this quality, the localization of meanings in objects is exclusively a characteristic of the human world. (Holzkamp 1989, 119) The human world is significant in that it is an objectification of the evaluation of utility and hence of human power. Under these circumstances, Solaris can have no meaning, disorienting the human society.

Solaris is a noetic complex species - a species with the property of thought, (Griffin 1998) that evolved under conditions completely different from ours. In our metaphysical system, although two species reach a noetic integrative level, their particular sub-levels may be different

and will never be able to tell whether the gap between them lies outside the contact window of the other. (Weissert 1992)

The film focuses on the issue of communication, in a human society of the future considered by Tarkovsky as rigid. This society refuses to accept diversity, both a dogmatic refusal to check Berton's astronaut's testimonies and an intention to destroy what he fails to understand. (Salvestroni 1987) The spectator deduces the characteristics of this future society, but which is very similar to Tarkovsky's Soviet reality, only indirectly, from the way Berton investigates the metaphor of the mechanical world induced by the impersonal and apparently chaotic character of cars on the motorway, Sartorius's statements, etc.

Tarkovsky is obsessed with the house. The dream images of the house are present in *Solaris*, just like in *Mirror* and *Nostalghia*. A "home" built as a place for both memory and desire. Kelvin's subconscious is made up of memories of the house. The idealization of the house in memory allows it to escape mentally from the conflictual reality. Many memories have unrealistic features (raining inside, levitation, space discontinuity) affecting any idea that the ontology of the past is simple and objective. (McFadden 2012) For the scene of Kris father's house, a symmetry at the beginning and end of the film, in contradiction with technological developments, the director resorts to a series of metaphorical images: lively lake, rain, horse reminding of the final frames of *Andrei Rublev*.

The critic Mark Le Fanu believes that home memories in the film combine "to demonstrate that memory need *not* be extinction; and that on the contrary we live in significance to the extent that we are prepared to embrace the shadows of our loss." (Fanu 1987)

The film critic Sean Martin observes the parallelism between the psychic and the home "as if reflecting dream logic.. .the interiors of these dachas are always ambiguously arranged, with

rooms seemingly moving around in relation to one another." (Martin 2011) The instability of the house structure reflects the disharmony between conscious and subconscious in movies. The structure of the house is mutable and confusing, because the characters themselves are confused and do not have complete self-knowledge. When characters face their weird self, the illusion of self-knowledge is shaken and forced into a state of anxiety. (McFadden 2012)

Kelvin is presented in the beginning as profoundly incapable of correctly understanding the essence of the society in which he lives. The director notes that it is important to recognize that Kelvin

"is an ordinary city dweller, a philistine; he looks just so, ordinarily. For me it was important that he would be just like that. He should be a man of a rather limited spiritual range, average - just in order to be able to experience this spiritual battle, fear, not like an animal which is in pain and does not comprehend what is happening to it. What was important to me was precisely that human being unconsciously forces himself to be human, unconsciously and as far as his spiritual abilities would allow, he opposes the brutality, he opposes all that is inhuman while he remains human. And it turns out that despite him being - so it would seem - a thoroughly average guy, he stands at a high level spiritually. It's as if he convicted himself, he went right inside this problem and he saw himself in a mirror". (Jerzy and Neuger 1985, 22)

Solaris deeply disturbs this society because it invalidates the laws and fixed rules the society is used to. The ocean has a noetic behavior allowing dreams to create, from its own biological material, temporary geometric structures on its surface, as well as some disproportionately independent versions of the human form of people who have approached it, from the footprints of scientists' memories. (Weissert 1992) The ocean is thus endowed with a "symmetrical" logic that helps it overcome formal communication barriers. According to Gödel's theorem², there is a need for a meta-level approach to language. But astronauts are not prepared for this awareness of the unconscious. Their dialogue with the unknown becomes difficult and

² Gödel's incompleteness theorem is a fundamental theorem in mathematical logic, which establishes a correspondence between the semantic truth and the syntactic probability in the first-order logic.

tense, and instinctively and dogmatically rejects this way of communication. Kris is the only person in the movie capable of evolution.

In *Solaris*, "the key to interpretation is the same principle of "symmetry" that governs the Unconscious, including dreams and emotions. With that idea in view, we can observe that Hari, Kris, and Solaris are autonomous beings, distinct from one another, and at the same time elements in which the part is identical to the whole." (Salvestroni 1987) Hari is initially just a message materialized in the communication between Kelvin and Solaris. It brings together the human traits derived from Kris's memory of the woman she loved, but also an alterity she shares with Solaris in the way it was created and evolving. Thus, one of *Solaris's* most important moments, where the potentials and ductility of image language come to a halt, is when Hari, in turn, develops an interactive process using images he perceives visually.

After Hari sees in a record the warm and red flames of a fire around which Kris's family is gathered in a snow-covered winter landscape, she looks at the reproduction of Pieter Bruegel the Elder's *Hunters in the Snow* with intense concentration. Hari, an extraterrestrial person who possesses the natural language and cognitive abilities of an adult but lacking worldly experiences, falls into Ludwig Wittgenstein's comments on visual perceptions: "I contemplate a face and suddenly notice its likeness to another. I see that it has not changed; and yet I see it differently. I call this experience 'noticing an aspect'" (Wittgenstein 1953, 193) Hari notes the element that painting has in common with the sequence he has been watching - snow - and this triggers an associative process that allows her to see painting in a different way. She isolates certain properties, associates them with other images and at the same time synthesizes their common details in order to clarify and illuminate each other.



Hunters in the Snow (1565), by Pieter Bruegel the Elder

At the same time, Bruegel, with his gray and green tones and his white of ice, conveys a sense of cold, loneliness, lack of communication. The lousy and dark hunters, supposedly unnecessarily killing, seem to be linked to Hari's imminent closure of dissolution in Sartorius's annihilator as a victim of a cold ferocity she feels but does not understand. Painting gives Hari a way of approaching an unknown world, and at the same time to connect the message of painting with her situation as a victim and prey. (Salvestroni 1987)

Hari is the message that the planet sends to Kelvin, making him aware of the obtuse and mechanical cruelty dominating the world he comes from: "and consider your guests - it seems that's what you call us - something external, a hindrance. But it's a part of you. It's your conscience." (Andrei Tarkovsky 1972, 02: 02: 13,333-02: 02: 29,808)

This second and again imperfect model that the planet sends - and which Kris can immediately decipher - brings the spectator back to the original scene of the film. As we look at what appears to be the lake water of the opening frames (which present the same concentric motion), the camera slowly pulls away so that we can see that what we see now is an aquatic island, wrapped in turn by the Solaris waters and the island, the old Kelvin's house in and out. The subsequent embrace of two generations is an event that takes place far from Earth on the space station as a materialization of Kris's mental image; and this signals the acceptance of a less fantastic alterity than Hari or the planet, though one that Kris would have misunderstood before his extraordinary double experience. (Salvestroni 1987)

When Kris becomes ill and falls into a dreamlike state of fever, there is a last sequence of memory. The figures of Hari and his mother are almost undetected, the photographs hiding their faces, and both wear the same clothing. The wife and mother combine into a single figure, a recurring theme at Tarkovsky, which suggests an oedipal desire in Kris, updated by Kris's final gesture to his father in the final stage. (McFadden 2012)

3 Philosophical aspects

Jonathon Rosenbaum notes that Tarkovsky's *Solaris*, (Andrei Tarkovsky 1972) unlike Lem's novel, (Lem 2012) is rather anti-science fiction than science fiction. (Rosenbaum 1990, 60)

Rosenbaum suggests that while the film is denying our archetypal space travel, the main concern is the psychological investigation of Kris Kelvin, while trying to rediscover a lost humanity in the face of technology and science. (Duffy 2003) As Tarkovsky noted, "I am interested above all in the character who is capable of sacrificing himself and his way of life - regardless of whether that sacrifice is made in the name of spiritual values, or for the sake of someone else, or of his own salvation, or of all these things together." (Andrey Tarkovsky 1996, 217)

Andrew Tarkovsky's *Solaris* (1972) film can also be approached through the philosophy of mind, of key questions in this area. These questions relate to personality and suffering, covering at least the period from Rene Descartes to modern philosophers such as Derek Parfit and Hilary Putnam. (Tumanov 2016)

Solaris appears as a suitable vehicle to explore philosophical challenges. Derek Parfit imagined such a science fiction scenario as the Teletransporter Thought Experiment, the philosophical personality requirements that perfectly resemble Tarkovsky's film because of the replication of the character, Hari in *Solaris*. (Parfit 1984, 200)

In fact, Tarkovsky's *Solaris* film allows multiple semantic interpretations. Thus, Manfred Geier sees the ocean through three dominant metasemic lexmas: a picture of female sexuality, and a schizophrenic miracle machine (derived from Deleuze-Guattari's *Anti-Oedip*). Given the extraterrestrial ontological origin of the ocean in relation to human beings, its "meaning" can only be determined negatively: it is to hold in front of human beings a mirror of their own anthropomorphic and geocentric limitations. If there is any purpose/meaning for people, it consists of trying to conquer *Solaris*, not in *Solaris* itself. (Geier 1992)

At the same time, *Solaris* presents an excellent example of how heterotopic spaces can exist in cinematic terms. Tarkovsky's film explores how the experiences gained in the heterotopic space offer the individual the ability to reverse the panoramic vision and how these experiences can ultimately show us how we can recover or restore our existence as individual subjects. The experiences of the characters determine us to see many of the forces and speeches that contributed to the creation of this space from an outside point of view. (Duffy 2003)

Our consciousness can perceive things that are not present. Imaginable or designed objects may be distant from the perceived reality. The concepts refer to things that once were able to be

experienced and are now absent; or to a reality that exists elsewhere and whose existence we are sure even if we have never experienced it; or to a fictional world created by the imagination, a world of a film, for example, whose characters and fictitious events can live while we see the film as if they were real; or, ultimately, a fantastic reality. (Geier 1992) In all these cases, the object of consciousness is a conceptualized, imaginary reality, which is represented or expressed in language. All the time our consciousness is intentional; we are aware of something.

For all these approaches the language is important, because it allows consciousness to keep focused on something. The literary or fanciful text, however, can refer to a reality that does not exist. We are dealing here with fictitious utterances that have the same linguistic form as the statements that may be true ("quasi-statements" for Roman Ingarden) (Ingarden 1997) but does not refer to real objects. Statements are not interested in truth, but of semantic precision or consistency. (Geier 1992)

In *Solaris*, within the limits of heterotopic experience, several theoretical and ontological questions are examined through approaches on each character. In *Sculpting in Time*, Tarkovsky commented that "Solaris had been about people lost in the cosmos and obliged, whether they like it or not, to acquire and master one more piece of knowledge." (Andrey Tarkovsky 1996, 198) Berton declares one of the main philosophical themes of the movie when he tells Kelvin: "You want to destroy that which we are presently incapable of understanding? Forgive me, but I am not an advocate of knowledge at any price. Knowledge is only valid when it's based on morality." (Andrei Tarkovsky 1972, 00: 29: 26,099-00: 29: 42,115) Kelvin's father believes his son is a danger to him and to society, and he agrees with Berton's suggestion that his son's utilitarian vision of life has neither morality nor an essential humanistic approach.

The ocean does not mean anything as an object, it simply exists. The ocean is not found in any of the human experimental approaches. No experiment is repeatable, no generalization determinable. It is something singular, which essentially contradicts human language, a "pure object" without an intelligible or experimentally defined purpose, causing a kind of epistemological optimism. The ocean is an extraterrestrial existence for humans and therefore incomprehensible. It is designated as an ocean, a brain, a protoplasmic machine, a gelatin, although everyone knows that it is none of them. (Geier 1992) Thus, the Solaris ocean can be interpreted as plasma, organized physical structure, with its own metabolism and mechanism, capable of goal-oriented activity, generating new eruptive forms, (Brockhaus and Efron Encyclopedic Dictionary 1907, 10: 356) with variants such as the ocean - rhythmically moving waves, smoke and fog rising from its surface with depths and islands - an organic prebiotic formation - a primitive biological structure, gelatinous, a single monstrous, overcrowded, - and brain - protoplasmic, a huge amount of information, a source of electrical impulses, in the form of a gigantic, incomprehensible monoblock, possibly endowed with consciousness) as a symbol of feminine sexuality (the unknown is transposed into a partially similar experience, Berton's child experience is nothing but the occurrence of birth, even if it appears to be a meaningless plasma creation, and the appearance of the mimoids can be interpreted as a birth, or a schizophrenic mechanism (a synthesis of the unconsidered schizophrenic unconscious Hari, the product of the ocean, becomes the object of analysis, experimental examinations and reflections (Deleuze and Guattari 2004, 10–11)

Tarkovsky changes the main subject of the novel by reducing the focus on Solaris and focusing on Hari's evolution. A key question from a philosophical point of view is, can it be considered Hari as human? Hari can be analyzed in the context of Cartesian dualism. Descartes's reductionist view of animal suffering and animal-machine is opposed to Hari's evolutionary

experience in *Solaris*. Can only Hari be considered an alien amorphous structure, or should its behavior be considered? Her emotional development and suffering, her epistemological journey toward self-knowledge, and especially her intense relationship with Kelvin, make the film an autonomous and deeply philosophical work of art: (Tumanov 2016) "The major deviation Tarkovsky undertakes in his film consists of a principal shift in the overall intention of the narrative prompted by the firm belief that love and human emotion have a primary meaning in the universe..." (Deltcheva and Vlasov 1997, 533)

The station is as a heterotopic space from which Tarkovsky can project the life, death and humanity in this distant framework. The station will determine the narrative. As Duffy says, it "forms a type ontological no-man's land in which elements, within the narrative and beyond, enter into the work as a whole and provide the audience the opportunity to view a variety of very different discourses at work." (Duffy 2003, 56)

John Locke imagined what would happen if a prince's mind had been transported into a shoemaker's body by replacing the shoemaker's mind. On the outside it would look like a shoemaker, but the inner feeling would be the prince, "For should the soul of a prince, carrying with it the consciousness of the prince's past life, enter and inform the body of a cobbler, as soon as deserted by his own soul, every one sees he would be the same person with the prince, accountable only for the prince's actions." (Locke and Winkler 1996, 142) For Locke, the shoemaker would be the prince only on condition that all the experiences of the past, that is, his autobiographical memory, be preserved during the transfer of mind. Thus, Locke sees autobiographical memory as the most important aspect of personality, which is very relevant for assessing Hari's status in *Solaris*. At first, Hari does not seem to have an autobiographical memory ("You know, I have the feeling as if I've forgotten something."), So he fails the personality test of

Locke's. Kelvin concludes that she can not be a human person and eliminates her. His action is representative of a culture of personal repression, and according to Berton's warning at the beginning of the film, that Kelvin is shown more than willing to destroy what he does not understand. (Tumanov 2016)

But Kelvin has the chance to re-evaluate Hari at its second iteration. The new Hari begins to accumulate the autobiographical memory imposed by Locke, merging in a way with Kelvin because it is an emanation of his mind. This paradigm of "memory outsourcing" can be developed based on Derek Parfit's attempt to expand the Lockean personification concept:

” There are several ways to extend the experience-memory criterion so as to cover such cases. I shall appeal to the concept of an overlapping chain of experience-memories. Let us say that, between X today and Y twenty years ago, there are direct memory connections if X can now remember having some of the experiences that Y had twenty years ago. On Locke’s view, only this makes X and Y one and the same person. But even if there are no such direct memory connections, there may be continuity of memory between X now and Y twenty years ago. This would be so if between X now and Y at that time there has been an overlapping chain of direct memories. In the case of most adults, there would be such a chain. In each day within the last twenty years, most of these people remembered some of their experiences on the previous day. On the revised version of Locke’s view, some present person X is the same as some past person Y if there is between them continuity of memory.” (Parfit 1984, 205)

Tumanov states that in *Solaris* we have such a chain of memory that overlaps with Hari, because he remembers Kelvin. Hari even managed to recall a conflict with Kelvin's mother, a fragment taken from Kelvin's memory: "I remember how we were having tea, and then she threw me out. I got up and left. And then what happened?" The last question indicates that the borrowed autobiographical memory is still incomplete, but it exists.

In a study by Nina Strohminger and Shaun Nichols, they concluded that modifying a person's moral base - rather memory loss - is the most important feature of losing identity. (Strohminger and Nichols 2014, 161) The authors call this "moral self hypothesis" and propose it

as a model of how people perceive the nucleus of autonomy in others. In Hari's case, Tumanov argue that his "moral self", identical to that of Kelvin's ex-wife, is very clearly defined.

Parfit synthesizes personal identity as a complex phenomenon: "personal identity over time just consists [...] in various kinds of psychological continuity, of memory, character, intention, and the like." (Parfit 1984, 227) Thus, Kelvin discovers that Hari is an empty reply, but a person with moral and emotional qualities like any human being.

Over time, Hari's reply becomes a totally new person: "I am not Hari. That Hari is dead." But the psychological continuity of the new Hari captivates him and convinces Kelvin of her personality when she tries to commit suicide with liquid oxygen and then comes back to life with horrible pain, Kelvin says, "You used to resemble Hari. But now you-and not her-are the real Hari." The episode of oxygen suicide illustrates the prime role of suffering in the process of determining Hari's personality.

For Sartorius, however, Hari's non-biological non-human structure disqualifies her. He expresses the ethical view that he is free to experiment with the "guests" of the station in search of knowledge. the justification of these actions comes from the belief that he does not experience real people or animals, but the appearance of the child's figure trying to escape from the lab evokes Berton's claim to value or morality in search of knowledge. (Duffy 2003) Kelvin's warning, "you'd better leave, you're too impressionable" suggests that such considerations are not being met at this station. Tarkovsky noted that "Man's unending quest for knowledge, given him gratuitously, is a source of great tension, for it brings with it constant anxiety, hardship, grief and disappointment"" (Andrey Tarkovsky 1996, 198) Snaut adds that the neutrino systems of which his body is composed are unstable, an affirmation of symbolic significance, equivalent to denying Hari's personality.

Stability of character is important for personal identity. Without stability, Kelvin's two colleagues suggest that Hari can be destroyed as an object. The correctness of Kelvin's intuition is also demonstrated by the famous inductive reasoning test of the duck³: "If it looks like a duck, swims like a duck, and quacks like a duck, then it probably is a duck." Unlike the dwarf of Sartorius who fails to pass the duck test of humanity. And as in the case of Snaut.

The reductionism is part of a movement in the philosophy of mind that contradicts Cartesian dualism. René Descartes claims that human beings possess a soul (or mind in modern terms) quite separate and qualitatively different from the body: "From the very fact that we conceive vividly and clearly the natures of the body and the soul as different, we know that in reality they are different, and consequently that the soul can think without the body." (Descartes 1984, 99)

Unlike Cartesian dualism, which claims that human beings have a separate and qualitative soul (or mind) different from the body, reductionism is based on the hypothesis that the soul/mind can be reduced to the body, that is, the brain produces the mind, so the soul cannot "think without body". (Tumanov 2016) Functionalists - including Hilary Putnam - are trying to save the elements of Cartesian dualism in the context of modern materialism, (Putnam 1975, 436) attempting to maintain the materialistic basis of reductionism without accepting the latter's claim to a correlation between physical and mental, challenging the pain problem with the idea that mental states can be reduced to the states of the brain

From this point of view, Sartorius is a reductionist, considering only Hari's neutrinos structure. Putnam's position, however, known as multiple realizability - the notion that no matter

³ The test of the duck implies that a person can identify an unknown subject by observing the usual features of the subject. It is sometimes used to counter brutal or even valid arguments that something is not what it seems to be.

how pain is done, regardless of the physical structures or processes in which the person suffers, the experience of pain shows the existence of a mental constitution. (Putnam 1975, 436) Practically, in the confrontation between Kelvin and Sartorius about Hari's pain, we have a dramatic debate between reductionism and functionalism with ethical foundations.

Descartes considered animals lacking souls and, therefore, the ability to truly experience pain or suffering. He saw them as automatic machines and even made vivisections - of the type Sartorius suggests to Kelvin to interpret Hari: "I do not explain the feeling of pain without reference to the soul. For in my view pain exists only in the understanding. What I do explain is all the external movements which accompany this feeling in us; in animals it is these movements which occur, and not pain in the strict sense." (Descartes 1984, 148) Descartes was a dualist only in terms of people. For animals, he was a full reductionist.

In the library scene, after witnessing the tension and hostility of the three men in the library, and heard Sartorius accusing Kelvin of neglecting science for her, Hari offers the central discourse of the film:

” Hari: I think that Kris Kelvin is more consistent than both of you. In inhuman conditions, he has behaved humanely. And you act as if none of this concerns you, and consider your guests - it seems that's what you call us - something external, a hindrance. But it's a part of you. It's your conscience. And Kris loves me. Maybe it's not me he loves, but he's simply protecting himself. He wants me alive. That's not the point. It doesn't matter why man loves. It's different for everyone. It's not Kris. It's you. I hate you all.

” Sartorius: I would ask you...

” Hari: Please don't interrupt me. I'm a woman, after all.

” Sartorius: You're not a woman and you're not a human being. Understand that, if you're capable of understanding anything. There is no Hari. She's dead. You're just a reproduction, a mechanical reproduction. A copy. A matrix.

” Hari: Yes. Maybe. But I... I am becoming a human being. I can feel just as deeply as you. Believe me. I can already get by without him. I... love him. I am a human being. You... you're very cruel.” (Andrei Tarkovsky 1972, 2: 02: 02,489-02: 04: 35,893)

Hari passes the duck test in the library, convincing the spectators. Here, Sartorius seems to be a Cartesian machine. Snoot oscillates between Hari's scientific rejection and emotional acceptance, demonstrating the dilemma inherent in the human condition, between the pure emotion and the theories we build.

Snaut's monologue is the culmination of the final stage of the library:

" We have no interest in conquering any cosmos. We want to extend the Earth to the borders of the cosmos. We don't know what to do with other worlds. We don't need other worlds. We need a mirror. We struggle for contact, but we'll never find it. We're in the foolish human predicament of striving for a goal that he fears, that he has no need for. Man needs man." (Andrei Tarkovsky 1972, 01: 59: 22,329-02: 00: 00,701)

The notion of a mirror is the significant element in the use of Tarkovski's heterotopic model. As part of the station, the library not only allows Tarkovsky to present the audience with a framework that avoids exotics, but also states the use of the heterotopic model in the film. The library is the alternative to the discourse of the reductive scientific reasoning that governs the rest of the discourse. (Duffy 2003) As a site that opens the discourse realm of imagination and alternative models of "reality," the library is at the same time the focal point of the contest between the "truth" representations. As many critics have highlighted, the scene of the film library is largely Tarkovsky's creation. (Vida and Graham 1994)

Lefanu states that "Tarkovsky, of course, is intent on showing us the mirror - like the interdependence of earth and space - in the last resort one and the same location, filtered through the human imagination." (Fanu 1987, 61) As states Duffy, the possibility of being in the heterotopic space gives us the ability to look back from the distance, the true inversion of panoptic vision. Green says the planetary ocean is the one that gives us the device that will allow us to look directly at our own beliefs in humanity. The mandate of the heterotopic device is to provide this "glass" or "mirror", which allows us to see what is often hidden from our eyes by our inability to recognize the obvious. (Duffy 2003)

Conclusions

Speaking directly to Tarkovsky's vision of humanity in *Solaris*, Gilles Deleuze asks

"are we to believe that the soft planet Solaris gives a reply, and that it will reconcile the ocean and thought, the environment and we see at once designating the transparent face of the crystal (the rediscovered woman) and the crystallisable form of the universe (the rediscovered dwelling)?" (Deleuze 1985, 75)

The problem is that, as Duffy says, (Duffy 2003) humanity has lost touch with itself, with its own spirituality and many elements that bind it. His conclusion is that although *Solaris* expands many of these elements, he is ultimately unable to reconcile Kris Kelvin's rediscovery of individual humanity into the film, suggesting that *Solaris* is not responding to this optimism. *Solaris* is a movie that begins as a search for answers and comes to provide these answers along with a whole range of different questions.

The film suggests that fiction is as strong as "reality" and that imagination is the only foundation on which "reality" is based. Life is trying to connect to another life. Man's attempts to classify and preserve this form of interaction will always be condemned to failure and will reflect a major mistake in the panoptic world we live in. Heterotopia is a place where such categories, classifications and restrictions do not apply. In such spaces we can identify that existence is best understood as a field of unsubstantiated imagination, where possibilities are endless, and restrictive boundaries are reduced inefficiently. (Duffy 2003) Through his exploits in the heterotopic space, Kelvin had the chance to return to some of the past mistakes of his life, and thus re-discovers his own humanity and confirms his place as a free individual subject to make his own choices. Certainly, this experience must be viewed with at least one optimism.

The fact that Hari goes through the test of humanity's duck in Kelvin's eyes is reflected by the inevitable reaction of the spectator to actress Natalia Bondarchuk - a true woman capable of convincingly displaying suffering, love, understanding and noble behavior. No amount of

scientific stuttering could convince us that Bondarchuk is just a bunch of "unstable neutrinos" or "specimen." (Tumanov 2016) Our brains will not let us. To reduce Hari's humanity, the theories - the scientific and philosophical foundations of Sartorius' position - are necessary. Only such theories can suppress the natural emotional response to humanity. Such a theory is reductionist.

The temptation to give up any spontaneity in the light of the conceptual power of philosophy and the overwhelming evidence of science weigh heavily on human sociality. Although functionalism and reductionism, strictly speaking, are theories of the philosophy of the mind, functionalism seems to be intuitive - a built or implicit feature of the human mind. We have evolved mental mechanisms for social life - compassion, reciprocity, the ability to feel guilty, to connect emotions, etc. We cannot ignore our emotional behavior. However, these adaptations can be rejected or suppressed by some form of reasoning. The demagogic negation of mankind and genocide that occurred again and again in our history leads us back to Putnam's octopus⁴. And here the counter theories can help. (Tumanov 2016)

The final synthetic and polisemic image, with the island, Kelvin's father's house, and the embrace of the two, is interpreted in very different ways, and often contradictory, as an obedience to authority and traditional social institutions, the archetype of power - father, a tough entity wrapped in conservatism's logic, or a sense, oscillating between the need to entrust to superior

⁴ "Consider what the brain state theorist has to do to make good his claims. He has to specify a physical-chemical state such that any organism (not just a mammal) is in pain if and only if (a) it possesses a brain of a suitable physical-chemical structure; and (b) its brain is in that physical-chemical state. This means that the physical-chemical state in question must be a possible state of a mammalian brain, a reptilian brain, a mollusc's brain . . . etc. At the same time it must not be a possible . . . state of the brain of any physically possible creature that cannot feel pain. Even if such a state can be found, it must be nomologically certain that it will also be a state of the brain of any extraterrestrial life that may be found that will be capable of feeling pain before we can even entertain the supposition that it may be pain." (Putnam 1967, 77)

entities capable of doing miracles and the opening of a new vision of the world, a vision that reveals the richness of a reality full of possibilities by which Kelvin projects to a dynamic future in which there are no static and absolute realities. (Salvestroni 1987) In another interpretation, Kris realizes he can find consolation in understanding the people in his memories rather than repressing them and keeping them away, just like Hari at the beginning. Another interpretation of the conclusion could be that the surface of the planet reaffirms Kris's desires without his physical presence, and that the Kris we see is simply another Solarian manifestation. In both scenarios, the visual fulfillment of Kris's desire is important. Both would consist of the same memories and psyche. (McFadden 2012)

The philosophical storm unleashed by attempts to fight Cartesian dualism must eventually return to the body - no matter how much Descartes has reduced our mortal form. Whatever its basic structure and despite being an emanation of Kelvin's memory, Hari's kinematic embodiment (and the associated duck test), for Kelvin and the spectators, leads us beyond the debate between functionalism and reductionism or Locke's problem. And she sacrifices her body for Kelvin as she deliberately obeys an annihilation from Snaut and Sartorius. (Tumanov 2016) The same paradoxical Christ-like act seals Hari as an unmistakable man and solves the problem of his personality. Tarkovsky's final answer to the central question of the film is uplifting and tragic.

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