OLD SOUL IN A NEW MECHANICAL BODY

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Abstract

The soul–body–mind problem is an age–old question. Ever since Plato and pre–Stoics, many philosophers have tried to answer the questions of dependence and relationship between these “parts”. This paper is an overview of the theory of holons proposed by Arthur Koestler and its later implications in modern cinema, specifically the anime Ghost in the Shell. There are many issues that are current and related to the mind–body problem that arise from modern cinema and TV shows, but are usually neglected. In these shows and movies, we can find modern ideas about cyborgs and transhumanism, which were popularized by the mentioned anime. Most modern shows are closer to transhumanism and postmodernism and will therefore be mentioned only by name. Another issue that arises from modern cinema is individualism and egocentrism that is not focused on the transcendental or even the transcendent. The intention of this paper is to show that using Koestler’s ideas of holons we need to take into consideration a broader approach to transhumanism, and that it should not be focused only on the individual.

KEYWORDS: Koestler, ghost, body, mind, transhumanism, transcendental

Introduction

One could argue that at the beginning of the 21st century, there is a lot of talk about the soul, reason, and the transfer of consciousness into a new entity, a new body or effigy, as well as the possibility of it.1 Maybe it is not always

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clear that the topic at hand is the soul or the consciousness, but it is usually
deducible or implied in some way. The fascination and debates about the
transfer of consciousness into a new entity probably have something to do
with science fiction and modern cinema that people have been exposed to
over the last couple of decades. Some of the first fascinations most certainly
came from the work of Mary Shelly and her *Frankenstein*, or Julius Verne
and H. G. Wells to some extent. Those authors opened up space for fantasies
about altering the human condition, along the lines of modern transhuman-
ism. Mankind is to embark on a new journey that includes new entities in
biomechanical, biomorphic, cybernetic or other man–made structures that
have robotic parts in them and serve humans to transfer their consciousness
into them. One may say, it is a quest to become like God. Motion pictures
and some television shows have had a great impact on the world we live in.
In some of them, there is a reality that presents transfer of consciousness,
implying the idea of extending human existence on this plane of reality.
Modern scholars would define it as transhumanism. Yet, some believe there
is also a spark or a pulse in man that philosophers and religious people call
the soul. The idea of immortality, of finding the divine in a person, of locat-
ing the soul, has been present in society and humanity since the beginning
of time. In ancient times the idea of immortality and divinity was expressed
through mythology, then it passed into religion, and today we try to express
it by finding means to transfer our consciousness or simply upload it to the
cloud and thus prolong our existence. Another issue that emerges from the
body–mind–soul paradigm is the question of consciousness. The discussion
of the soul is more related to religion and philosophy, while consciousness
is related to philosophy, psychology, and transhumanism. The aim of this
paper is to describe the system of *holons* proposed by Arthur Koestler and
to show its impact on the perception of the world and the body–mind–soul
problem, especially on the issues of wholeness and mankind. At the same

2 Hopkins Patrick D., “Why Uploading Will Not Work or the Ghosts Haunting Transhuman-
doi.org/S1793843012400136.
3 Murphy, B. J., “A Transhumanist’s Journey to Becoming Gods, Angels, and Ghosts,” ac-
4 Dinello, Dan, “Cyborg goddess,” in *Anime and Philosophy: Wide Eyed Wonder*, ed. Steiff
Josef and Tristan D. Tamplin (Chicago Ill: Open Court, 2010), 281.
5 See Eliade Mircea and Willard R Trask. *A History of Religious Ideas Volume 1: From the
doi.org/10.7208/9780226147607.
6 For the argument see Idel Moshe, *Mircea Eliade: From Magic to Myth* (New York: Peter
Lang, 2014), 64, 87, 106, 107, etc.
7 Holon is a term coined by Koestler which represents a sort of an atom. It will be explained
further in the following text.
time, philosophical ideas will be presented, but they are just a guide in the presentation of argument since they can be explored much further in their own respective fields. The same applies to Gnosticism and movies, especially in terms of transhumanism, since each is a separate study.

1. Are philosophical ideas important?

One of the prominent ideas in cinematography over the last two or three decades is the dualism between body and soul, or a sort of awakening or transfer, which are ideas that can be found in transhumanism. The idea of dualism itself though, was present in the earliest philosophical schools, starting with Plato, the Stoics, and the Gnostics. In a broader sense, one could say that the idea remained, but changed its medium, while the audience remained the same. At the beginning of modern philosophy, Descartes had the idea of distinguishing between the body and the soul. For him these were two entities, and one was above the other. At the time, his work was criticized as it is still today. In this paper, Gilbert Ryle and his book *The concept of mind* will just be briefly mentioned. In his book, Ryle criticizes Descartes, saying that he was too much in the realm of the machines and too industrially oriented in his thinking. In his Second Meditation, Descartes reflects on the fact that the soul does not have the same accidents as the body. In other words, the soul is a spiritual substance and by substance alone is immortal. Furthermore, Descartes uses God, the unchangeable principle of all reality, as a transcendental variable, and concludes that God in His essence is unchangeable; therefore, He is the principle by which all things are measured. In the conclusion of his *Meditations*, Descartes points out that the human spirit (soul) can exist without a body, because through imagination and intellect it has a clear and distinct idea about itself, regardless of whether the body is perceived as an extended thing or not. This brief reflection on Descartes and his work is a reminder of what lies in the background of most reflections on the human condition, and at the same time is a quintessence of all the previously mentioned science fiction. Once again, the terminology has changed, but the idea remains the same, as does the

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9 Dinello, “Cyborg,” 280.
11 Descartes, “Meditations,” 12.
problem and the “quest” for soul, since our knowledge, conclusions, and understanding of the soul have not evolved. Scholars are still struggling to define what the soul is. Apart from the sensitive part and our inner “feeling and certainty that something exists”, we also struggle with the terms we use to describe our sense of awareness, sense of perception, and our interpretation of reality. In the quest of unravelling the problem of body and mind, or body and soul, Arthur Koestler and his theory on holons come to mind.13

_Holon_ is a linguistic creation that consists of the Greek term holos (ὅλος — whole) with the addition of the suffix “on”, as in the case of protons or neutrons, and it suggests partiality as opposed to the whole. To justify his system, Koestler states that there are many subsystems that should be talked about or discussed, but we often lack the terminology to discuss them.14 Precisely in the spirit of language and with the help of the term holons, Koestler sees the possibility of an abstract system that will be helpful in common understanding and significantly help in the interpretation of the most complex systems.15 Before the system of holons takes central place in Koestler’s work and reaches its final goal in the interpretation of the human condition and the social element, he tries to explain the system to his readers in a somewhat mechanical way, reaching for a story told to him by the Nobel laureate Herbert Simon. It is somewhat paradoxical that he uses the story of two watchmakers and their mechanisms to introduce his transcendental holon system, since he criticizes Descartes and Ryle for using mechanical and machine point of view to explain their theories of separation and segregation.16 The parable talks about two watchmakers, Bios and Mehos, who were excellent watchmakers and were therefore in high demand, and their phones would often ring. However, Bios was more successful than Mehos and became richer and richer, while the latter became impoverished to the point that he eventually had to close the shop and work as an employee for Bios. The difference between them, tells Koestler further in his story, even though they made the same watches that consisted of about 1000 parts, is that Bios had subsystems, i.e., wholes, which he made one by one and finally put them together, while Mehos did everything at once, and as soon as the phone rang, he would drop everything on the floor and the whole mechanism would fall apart, which required him to start again from scratch.

13 Koestler was a Hungarian born author and journalist, who moved to Britain in 1940. His work apart from fiction consisted of exploring Kepler, Copernicus and Galileo’s work. His most prominent book is _The Ghost in the Machine_, written in 1967.
14 Wilber Ken, _Sex, Ecology, Spirituality: The Spirit of Evolution_ (Boston: Shambhala, 2010), 33 — 34.
16 Koestler, “Ghost,” 45–47.
Bios, on the other hand, when the phone rang, lost only the part he was working on at that moment, while the other parts would remain untouched.

With this story, Koestler wants to emphasize the evolution of a certain system. Starting with the mechanical description that is presented in this story, he soon starts talking about the social dimensions of holons and how we can use them to present certain systems in nature, whether in society or even in an individual. He emphasizes that it is precisely through the established hierarchy that faster growth of an individual system is possible because it enables easier maintenance as well as pre-defined functions and actions. Koestler’s idea is to establish the hierarchy of complex systems so that they can be analyzed through intermediate points. Those points serve to define the structure, but at the same time are still called holons to differentiate them further.

To expand the scale of the system, Koestler compares the holon to a city which has its own dynamics and is in motion, and therefore can be viewed as a living being. More precisely, since it is in motion and has its own units, hierarchies, and belongings, we can say with certainty that the city is more alive (being) than a spring or one of the wheels of a mechanism that is an integral part of a system. With this way of thinking, for Koestler holons become parts of the social fabric, and man as such is no longer an island, following the behaviorist model — for Koestler he becomes a holon. Thus, man is partly focused on himself and his inner self, and on the other hand, he is turned towards other people and beings that surround him, whether towards individuals, or the cosmos he lives in. Speaking further about holons and their characteristics, and delving into social spheres, Koestler finds social norms at the top of the hierarchy. It is precisely holons as social tools that grow from single individualism to social norms that require both the wholeness and partiality of both individuals and groups. This entire speech, as well as the above-mentioned middleness as a term, serve as something else to Koestler, namely, to introduce the concept and model of Janus, which becomes the overall center of the cosmos that Koestler creates by explaining reality, its changes, as well as eschatological transcendence. The need for a hierarchy of holons comes from Janus, as for Koestler he is the best representative not only of a holon but also of the human condition, the processes that take place within us, and dualism, which becomes obsolete, since it is already

17 Koestler, “Ghost,” 47.
18 Koestler, “Ghost,” 47.
19 When mentioning Janus, Koestler refers to the Roman god who is represented in iconography with two faces, one of which has its gaze directed towards the sky, while the other face looks down. In his book The Ghost in the Machine, there is an explanation for Janus on page 47. Janus and such interpretation of holons became a central point of his later work, titled Janus: A Summing Up, published in 1978.
united in its complete nature. Nature of Janus, his one face represents God, and therefore an ascent to the sky, an upward look — we could say the soul, while the other face is lowered down and represents the anxious, introspective, perhaps the body. In the figure of Janus itself, these dual polarities are combined into one entity, and thus we could speak of a monistic entropic dualism that is open to a kind of transcendence.

“…the atom, although its name comes from the Greek word for “indivisible” turns out to be a very complex Janus-faced holon. Facing outwards, it mingles with other atoms as if it were a single whole... but how have we learned to look inside (atoms)...”20

It is from this atomic level that Koestler rises to the entire cosmos in his interpretation of holons and the system itself, while also using holons and presenting them as modes of behavior (behavioral holons) that are guided by subconscious rules, i.e., rules that are in our subconscious and by which we often unconsciously react. Therefore, according to his interpretation, each holon does not have the same value or price. Some are much more valuable than others. He calls this hierarchical system holarchy and distinguishes within it three types, or more precisely, three orders of holons; a) autonomous units in supra (superior) position to their parts, b) dependent parts subordinated to higher level and c) those that are in cooperation with others (holons).

2. Koestler’s critique of dualism

Although perhaps from today’s perspective this does not make too much sense, this thought of Koestler’s seems to be grounded in the problem that he presents in a previous text, which talks about the caterpillar and the capacity of the caterpillar for self-renewal, i.e., according to his example, if we cut the caterpillar into six parts, we will get six caterpillars.21 In a similar way, he wants to show that we are to some extent creatures of habits that need evolution and a change of consciousness. Koestler distinguishes three types of brain that we have acquired through millions of years of evolution, and that it is our first brain, which is closest to animals and their behavior, the one responsible for limiting our development, even though it is crucial for our survival.

Koestler sees his theory of holons as a broader view of reality that provides answers to the debates that have been going on for centuries about the state of affairs as well as the problems that have entered the world with

behavioral psychology. At the same time, Koestler, with his theory of holons and Janus tries to put an end to the age–old debate on body and mind. In the works of Descartes and Ryle, Koestler recognizes the problem of perspective. He suggests that awareness is only one of the states and that we cannot see it as black and white, as all or nothing. He points out that our consciousness is a graded state.\(^{22}\) For awareness itself, according to Koestler, it is necessary to be fully present in the moment and to be aware of the activity that we are doing. To be aware is to have an awareness of our surroundings, while there is a difference between “being conscious” and “being conscious of something”.\(^{23}\) The change of consciousness includes a change in the way we learn, and the way we do some things automatically is necessary to rise from the classical dualism to which Descartes and Ryle stuck. Before the hierarchy itself, which is necessary to evade the trap of dualism, Koestler also mentions the trap of behaviorism, which refers to the subjective impression of free will, freedom, and actions that we subjectively perceive as acts of free will, but in fact have their foundation in predefined realities that they impose on us by tradition.\(^{24}\) Classical dualism, further emphasized by Koestler, recognizes only one behavior (activity) between body and mind and proposes a hierarchical approach that is consequential and moves from observing lower states of consciousness and awareness towards higher states.\(^{25}\) Another problem that arises in this classical view is the separation of the activities of mind and body as separate entities, which is why Ryle’s criticism is also related to mechanization. At the same time, with this criticism, Koestler is aware that the hierarchical approach is not sufficient to provide answers to all questions, especially those related to spirit and body, and he himself points out that new problems arise in the hierarchical approach, primarily related to above individual consciousness or psycho–symbiotic consciousness, concluding that we cannot escape from the infinite whatever it is, or may be.\(^{26}\)

Koestler tries to reduce all these theories to one common denominator, which he calls OHS (open hierarchical system), as an alternative to the current orthodox systems. As the easiest explanation of the system, Koestler lists three symbols that will represent the three previous systems of thought; the tree (represents hierarchy), the candle (represents the exchange of materials, but also in this exchange retains a pattern and represents an open system), and the helmsman (represents cybernetic control). To these he adds

\(^{22}\) Koestler, “Ghost,” 205.
\(^{23}\) Koestler, “Ghost,” 206.
\(^{24}\) Koestler, “Ghost,” 207–208.
the two faces of Janus, which represent wholeness and partiality, and the mathematical sign for infinity (the horizontal sign of the number eight), and thus you have a picture book of the OHS theory.²⁷

In his last book, Janus: A Summing Up, Koestler once again criticizes Descartes’ way of thinking and classical dualism. He points out that man cannot be reduced only to a thing, or more precisely, to the processes that take place inside of him (physical–chemical reactions), but that man is an organism with its own subsystems. Precisely these subsystems are holons, and they are subject to systems that supersede them as well as to the complete autonomy of each–one (man for himself).²⁸ From these lines we can already notice a departure from Koestler’s way of thinking about holons, because this time he does not present them through inanimate, mechanical beings, but through man, who is a living and social being. While criticizing classical dualism, he once again points to the narrowness of the dualistic view towards the problem of soul and body that observes only one action instead of multiple interacting actions, and highlights the necessity of a multiple perspective that enables a holistic approach.²⁹

In this perspective, the categorized distinction between body and mind becomes blurred, and is gradually replaced by the distinction between “mental” and “mechanical” as complementary attributes of processes at each level. The dominance of one of these attributes on the other hand — whether the activity of tying the tie is done consciously or mechanically... Thus even the lower, visceral parts of the hierarchy, regulated by the autonomic nervous system, can apparently be under the control of the mind...³⁰

Koestler sees the solution to this and similar problems in his system of holons, which enable convergence of both the mechanical and mental parts of behavior without separating them in the classical sense of division, and help us to observe from a single whole, which has its sub–sections, and for the investigation of which we do not escape from infinity, but we can enter it without fear, so that we have room for new subsystems of names and interpretations, regardless of the depth and complexity of the system and whether we are observing a person, an animal, a plant or the cosmos.

3. Cinematic quest for the soul (transfer)

While Descartes, Ryle, Koestler, and many other scholars tried to propose solutions to the body–mind–soul question trough their systems, these ideas

²⁷ Koestler, “Ghost,” 221.
²⁹ Koestler, “Principio,” 271.
are rekindled in modern cinematography. Regarding the consciousness, the soul, awareness, and the perception of reality one of the most influential movies surely must be Wachowski brothers *The Matrix*. Apart from *The Matrix*, the movie that stood out even more with its ideas was a Japanese anime called *Ghost in the Shell*. In the *Ghost in the Shell* the main protagonist is a cyborg, or a cybernetically enhanced security officer, Major Motoko Kusanagi, whose body is almost fully synthetic apart from her brain. Her mind is the only thing that keeps her human. The anime is set in a dystopian future, where all human beings have had some alterations and modifications done to them, and it is only a question of money and power in terms what can be done to an individual. The main motive for the alterations is the prolongment of life, or in short — eternal life. *The Major*, being the main protagonist, asks herself if she would remain human if her brain was replaced with a synthetic one. At the other end of the spectrum in the movie is the main villain, who is a hacker mainly hacking the shells (body and mind). By hacking into synthetic bodies, he uses them for his own purposes and agendas. By the end of the movie, we come to the great realization that the hacker is a computer program that has evolved to the point where he/she/it developed its own consciousness. What is more terrifying is that this synthetic entity questions its own reality, and even its own existence, its very own soul. The most prominent ideas from the movie are the union of consciousness, the idea of oneness, and convergence while keeping one’s own identity, in any way, shape, or a form. We can see clear sings of transhumanism as well as posthumanism in this anime. The main protagonist, the Major, is presented in a non–binary way, as is the soul hacker. Dinello says that “‘Ghost in the Shell’ uniquely advocates a vision of a posthuman future that exalts technology and renders humanity and its gender prejudices obsolete.”  

After the first meeting between the Major and the hacker, the Major states:

*MOTOKO: We do have the right to resign [from Section Nine] if we choose, provided we give the government back our cyborg shells and the memories they hold. Just as there are many parts needed to make a human a human, there’s a remarkable number of things needed to make an individual what they are. A face to distinguish yourself from others. A voice you aren’t aware of yourself. The hand you see when you awaken. The memories of childhood, the feelings for the future. That’s not all, there’s the expanse of the data net my cyber–brain can access. All of that goes into making me what I am. Giving rise to the consciousness that I call “me.” And simultaneously confining “me” within set limits.*

The identity struggle is more than obvious. It is rooted in the quest of knowledge and self-awareness. There is obviously also the question of emo-

tions, which are usually perceived as strictly human, and up to that point they served as a distinctive feature of a human being. The Major is overwhelmed with emotions in a way, although they may be presented as identity issues and are not shown explicitly in the anime. Even more so, she is overwhelmed with the condition of being a person (or losing this condition) and enlists all the things she perceives as being parts of human life as well as what it would mean for her to lose it all. She in the moment of crisis, while at the same time synthetic entity represents a new opportunity. She wants a guarantee that she will remain herself. In comparison to Koestler’s book, she is conscious and aware of a specific activity, changing her states of consciousness.33 By the end of the anime, one could say she becomes a prototype for the principle of Janus. In a sense of the system presented by Koestler and his system of holons. To distinguish her fullness at the end of her ontological metamorphosis, one must view her parts, that are fundamental to her, as well as part of a ghost that she inherited. They both, old and new, inherited and adjoined represent the fullness that is Janus.

As mentioned earlier, some other movies also imply transfers of consciousness, or enhancements to a human condition that is usually perceived as faulty and in need of correction. For most of them, the solution is to give up or neglect the transcendental component in favor of eternal life on this earth, another planet, or a vessel. This is one of the main differences in the philosophy of the other movies compared to the Ghost in the Shell, yet they all contain pieces of ideas of cyborgs, transhumanism, or posthumanism. There are many contemporary scholars that research transhumanism from various angles, such as the aforementioned Dinello, or Jon Bialecki who writes from the perspective of cinema and sociology. Also, we cannot forget the feminist and gender perspective of “cyborg manifesto” of Haraway34, as well as others who are too many to list them all. The majority of them return to the problems of body and mind, yet the struggle remains, since the focus is on the individual, and not on the society as a whole. In terms of Koestler’s theory of holons, they are just that — only parts and pieces that give certain solutions, but do not provide a full solution. One must give up on something to achieve this set goal.

Conclusion

Koestler’s theory of holons is difficult to follow and fully comprehend, since it relates to many branches of human sciences. It can be linked to philoso-

33 Koestler “Ghost,” 206.
physiology, but also to psychology, naturalism, theories of evolution, and sociology. We can also find traces of economics in it as well as ethics, logic, biology, neurosciences and so forth. In *The Host in the Machine*, Koestler tries to give solutions to a vast number of problems with one common goal — to explain our reality which is based on society. It is his focus on society as well as on the individual that makes him special. His main idea is the rise of consciousness, so that we as a civilization can transform from *homo manicus* to *homo sapiens*. It is this transformation that represents eternal life for Koestler. In that sense, he gave way to transhumanism and posthumanism. Those themselves are topics for another research, but in them we can also find traces of Koestler’s theories. The main difference between transhumanism and postmodernism against the theory of the *holons* is that former ideas are particular and often focused on just one piece of the puzzle, while Koestler aims for unity. One could argue that currently it is impossible to have a full comprehension of all the processes, yet it seems more important than ever to have it, or at least to try to have as wide perspective as possible. A new paradigm is to replace the notion of a soul within a body with the notion of a conscious self within a prison or a shell. In that regard, most contemporary scholars are in the realm of Gnosticism, as well as transhumanism and the discussion of gender itself. The main difference is that the new perspective is not oriented toward transcendence, yet remains on this plane, which also lies between the lines of Koestler’s theory of holons and Janus. It remains on this plane of existence and has prolongment of life on this earth as its objective.

### References


35 Koestler “Ghost,” 339.

**Sažetak**

**STARA DUŠA U NOVOM MEHANIČKOM TIJELO**

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**KLJUČNE RIJEČI:** Koestler, duh, tijelo, um, transhumanizam, transcendentalno

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