

The Trajectories of the Human-Robot Conflict in *Rossum's Universal Robots*: Production, Class Struggle, and Consciousness

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Abstract

Karel Čapek's play, *Rossumovi Univerzalni Roboti (RUR)*, has remarkable content ranging from the foundation of utopia to the end of a dystopian world, where the invention of robots evolves into a global class struggle and finally into a destructive interspecies antagonism. The idea of robotic automation, which is at the heart of the play, is discussed by the author to the speculative extremes of the social relations it involves, resulting in a text that can be considered both as a critical allegory of the real political relations of the era in which it was written and as a critical interpretation of the future of capitalism. To develop these dual perspectives, Čapek adopted a peculiar Marxist understanding of social conflicts as the constitutive element of *RUR* such as relations of production, class and status problems, and the social development of consciousness, correspond to the dialectical trajectories of the human-robot conflicts in the play. On the other hand, the difference between Čapek's understanding of the formation and way of giving content to these categories as well as bringing social contradictions to a fictional solution largely determines the political meaning of the play in a quasi-conservative manner. This study focuses on the main forms of those conflicts in *RUR* and aims to reveal their underlying arguments and analyze them critically.

Keywords: *RUR*, Čapek, robots, human-robot conflict, production, class struggle, consciousness

Introduction

Karel Čapek's play *Rossumovi Univerzalni Roboti (RUR)*, published in 1920, gained remarkable success thanks to its sub-text with a criticism of capitalist modernity directed towards a future where robots work instead of humans, and achieved a well-deserved worldwide reputation by being translated into many languages (Kussi 1990, 14; Ort 2013, 14-15, 21; Graham 2013, 113; Robertson 2018, 5, 12). A highly developed vision of the future is presented in the play regarding the widespread use of robots to replace human labor, which lead to social contradictions such as the rise of unemployment, the devaluation of human labor, and the armed conflict between robots and human beings. It should be clearly stated that Čapek was a prolific writer with a deep understanding of Marxist analysis, Hegelian dialectics, and

anti-capitalist orientations, though he was neither a communist nor a revolutionary.¹ The categories of social contradictions on which he builds his early plays and novels/novellas are largely influenced by Marxist analysis, and although the conflicts of his stories bear the traces of Hegelian dialectics, the solutions to the fictional problems are often influenced by a mixture of conservatism and humanism. In this context, *RUR* carries a distinct criticism about the future of capitalist production and the framework of instrumental reason, and in doing so, it utilizes Marxist categories – such as progress in productive forces, commodification, class struggle, reproduction of the relations of production, and social development of consciousness – within a conservative conclusion.

To summarize the play, Rossum, an elderly scientist, begins to work in marine biology and attempts to create humans using the material produced at the end of his research. He cannot achieve the success he dreamed of in this regard, but his nephew (Young Rossum), who recognizes a commercial opportunity in Rossum's efforts, begins to produce worker robots that physically resemble humans from this material. At the time when the play takes place, Fabry, Dr. Gall, Dr. Hallemeier, Busman and Alquist, and director Domin are the management and engineering staff of the factory. Another character, Helena, is the visitor in the factory. She visits the factory on behalf of the League of Humanity, which advocates the idea of equality between humans and robots. Managers tell Helena that robots are different from humans and exist only to work and produce. However, Helena insists on the idea that robots are humans too. The plot of the play takes place ten years later. Over time, major changes occur in the human-robot relationship. Armed conflicts occur between robots and the workers who produce them, and some robots are turned into armed soldiers by the government. Then, the first robot union is established in this context. While these events are taking place on the robot front, human births have also ceased, revealing that there have been no births recently. The robot rebellion, which started with the robots forming a union and calling on all robots worldwide also reaches the factory. The robots that arrive on the island take control of the factory by killing people. They spare Alquist, who worked as a construction supervisor at *RUR*. Radius, the leader of the robots, informs Alquist that from now on he will work for the robots and construct new buildings for them. However, after a while, the robots realize that they cannot produce on their own and ask Alquist for help to maintain robot production. However, Alquist does not know how to continue producing robots. In the final scene, an exceptional event surprises Alquist. He observes the affection between two robots, Primus and Helena, who are the outcomes of Dr. Gall's experiment to give robots humanoid traits, and Alquist tells them that they are the new Adam and Eve, allowing the two robots to leave the factory.

To put it in general terms narrative is present in the fields of art such as folklore, novels and novellas, drama, painting, cinema, comics, radio broadcasts, and commercials (Barthes and Duisit 1975, 237; Berger 1997, 14-16) and narratives are formed around the social relations as well as constitute the source of sociological interpretation (Franzosi 1998; Pfister 1993, 32-34).² As Berger (1997, 162) discusses, one of the main points where fictional narratives differ from most forms of communication in everyday life is that fiction offers a much more focused and conflict-driven story. In this context, science fiction narratives contain three distinct elements: (i) plots oriented towards conflicts and presented in a compact manner, (ii) social contradictions codified within the structural tension of the story, (iii) projected social conflicts regarding possible technological developments. The coexistence of these elements indicated

¹ For the detailed analysis on the different aspects of this subject, see: Dresler (1964, 69-70), Matuška (1964, 238-39), Sparks (1997), Klíma (2001, 72-78), Čapek (2022).

² For different approaches to the concept of narrative, see Berger (1997, 4) and Ball (1999, 5).

above makes the social development of technology as a subject of future visions and political criticism, thus intensifying and organizing the political and ethical debate and combining it with a kind of wishful thinking or negation, as can be found in utopian literature. On the other hand, as Bloch (1996, 163) points out, the element of wishful thinking in this genre, unlike the wish-fulfillment function in folk tales, carries a strong focus on the nature and direction of social change, which can be affirmative or critical, mechanistic or voluntaristic. As an extension of this feature, science fiction always contains the possibility of the reversal of utopia as a subtext.

As Williams (2005b, 196-97) points out, there are categorical connections between science fiction and utopian literature as narrative genres, and these relationships can be defined in four typologies that can be reversed and thus positioned on the utopia-dystopia line. These categories can be listed as: (i) the paradise, (ii) the externally altered world, (iii) the willed transformation, (iv) the technological transformation (Williams 2005b, 196). In this context, *RUR* is written as a science fiction play, firstly presenting a utopian part in which technological development transforms society and this base is used to create a new paradise-like society, and then a dystopian narrative in which this society is destroyed by its new actors. Thus, the play appears to contain the typologies formulated by Williams in both a positive and inverted way, and the basis of this multi-category narrative lies in Čapek's use of dialectical contradictions as the basis of processes of social transformation. In this context, this study employs a narrative analysis technique to explicate the meaning of its object of inquiry, *RUR*, by analyzing its conflict lines lying behind the development of the story. A detailed analysis of the play reveals that *RUR* centers on a critical narrative focusing on the automatization of the relations of production, and its main story line is developed through the constitutive conflict between humans and robots, which is conducted within the interrelated categories of political economy. This paper discusses the play by analyzing conflicts between humans and robots, specifically the constitution of economic structure, class differences, status, and social consciousness by referring Hegelian and Marxist categories, and aims to reveal the underlying principles, tendencies and contradictions that form the text.

1. Depiction of Robots and the Human-Robot Conflict in *RUR*

RUR's distinct historical significance becomes evident when examining the literary texts that address robots because the term "robot" was introduced in this play. Thus, robots were not real but fictional characters at first, and Čapek and his brother Joseph coined from the Czech word "robota" meaning "drudgery" or "servitude" (Harkins 1962, 84; Riskin 2016, 297). After the word robot was first used in *RUR*, it became part of the criticism of Fordism and the Americanization of the global economy (Abnet 2022). However, moving into the 21st century, Abnet (2022) argues that American popular culture embraces the robot as a critical factor in encouraging global consumption. According to Hampton, who interprets the current situation in terms of the relationship between robots and slavery, this situation remains problematic (2015, 2-3). While Hampton argues that *RUR* was written under the influence of the First World War, he also states that the play, written fifty-six years after the legal abolition of slavery in America, was a warning to the technologically advancing world powers (2015, 3).

Isaac Asimov, one of the prominent writers who should be acknowledged when discussing the depiction of robots in literature, defined three laws of robotics in *I Robot*, a collection of robot stories. These three interrelated laws state that robots cannot harm humans and that a robot may act in a way that protects its existence only if it does not harm a human being or disobeys its commands (Asimov 2016, 7). Asimov's fiction bears much of the mark

of an ideal class-based society in which robots are positioned as docile subjects – a form that largely coincides with the worldview of the engineers and managers at *RUR*. The main difference between Asimov's and Čapek's robots is that the robots in Asimov's fiction are safely operating under the control of humans; meanwhile, Čapek's robots eventually rebel against their human masters due to their alienation. Chang (2020) argues that Asimov's three laws of robotics predetermine the fate of robots and prevent them from being equated with humans. However, in Čapek's fiction, robots have acted to determine their destiny.

Contemporary futurology, whether in the context of posthumanism or artificial intelligence and intelligent robots, integrates with discussions on ethical and political contexts. The current debates correspond to a political economy discussion that is as old as the process of mechanization in production and as lively as seen in the emergence of automation technologies. Čapek's play, *RUR*, also presents a copious political economy discussion regarding the production process automated by robots; it also describes the new forms of domination created within relations of production. The expected result of this transformation is that people can meet their needs without having to work, a scenario that raises important social implications. The problem of humans losing their ability to reproduce and robots' deficiency of this feature, discussed in the text, also raises a conflict on the population problem.

The second issue that constitutes the conflictual states of *RUR* is the social hierarchy and class relations that arise based on robotized production. This problem concerns the position of human members of society and carries critical premises regarding the relationship between robots and humans. The point that robots are associated only with production and cannot change the class position attributed to them no matter how much effort they put in is represented as a socio-political problem in the play. The era that started with the rebellion of robots and their declaration of war on humans has led to the complete disappearance of the class position attributed to robots by humans. This time, robots have abolished the existing class relations and declared their superiority over human beings. Thus, class-based social inequality is abolished, but difference in status continues in a reverse way.

Lastly, the third critical content of *RUR* regarding the human-robot conflict encourages reflection on the consciousness of robots and the limits of artificial intelligence. These problems, examined under the category of social consciousness, constitute another important focus of the socio-political criticism of the play. The notion of social consciousness refers to the awareness of robots about their social and political conditions and their quest to challenge them. In the play, the robot's rebellion and their claims of superiority over humans transforms the general formation of social consciousness into a specific form of political consciousness. The primary problem regarding robots and political consciousness is based on the fact that humans are the creators of robots. In response to people's claims that they are superior due to being creators of robots, robots claim superiority because they are more talented and intelligent. Therefore, this awareness that robots have acquired regarding their existence and values has led them to question the given social class relations. While this situation resulted in the liberation of robots, it also created a situation that would endanger their existence because their conditions of existence depend on the technical knowledge of humans.

Commenting on this pessimistic content of the play, Hampton asserts that *RUR* was not just fiction but also "a prophetic look into humanity's destiny" (2015, 2). This prediction is based in part on an extension – as well as a reversion – to its maxims of an idea expressed by Marx and Engels in the *Communist Manifesto* (1948, 14); as the bourgeoisie develops the means of production, also changes the relations of production, and like a sorcerer who cannot

control the power she has summoned into the world, it also paves the way for its own destruction. If this prediction is to be evaluated from Čapek's perspective, it is possible to encounter two different levels of meaning: The first is the author's fear of the proletariat coming to power to determine its own fate; the second is his anxiety that the rational organization of society will destroy humanity itself – referring in part to the militarist mobilization of the First World War period, the suffering of rapid industrialization, and the nascent socialism. In both cases, it seems that *RUR* retreats towards a certain “critical” conservative worldview and develops its expostulation under the effect of the historical horizon indicated.

2. Robots and the Problems Centered in Political Economy

This section delves into the political economy theses that serve as the foundation of *RUR*. Čapek bases the emergence of robots on a narrative centered on the work of a biologist named Rossum and his nephew's transformation of these works into a profitable commodity. The story unfolds with the old scientist's development of bio-robot technology, envisioning himself as a creator, the God. However, his nephew transformed the fruits of these studies into a commodity and reorganized the production of this commodity within the framework of capitalist relations (Čapek 1990, 41-46). What is at stake in this narrative is a modern origin myth. Hooke defines origin myths as etiological myths that provide an imaginary explanation of how a custom, a name, or even an object is born (Hooke 2020, 16). This framework is relevant to our discussion as it helps us understand how Čapek constructs a myth about the birth of robots in the play. Through the characters of the old biologist and his nephew, who are not directly involved in the play but indirectly mentioned, Čapek metaphorically mirrors the birth of modern human beings as the synthesis of science and capitalism while simultaneously constructing a dramatic myth about the origin of robots.

The word “Rossum” is derived from the Czech word “rozum,” meaning “reason” (Graham 2013, 117). In this context, Čapek grasps the process in which modern reasoning dominated human civilization as a synthesis of scientific and capitalist historical moments. He places the origin myth he wrote at the beginning of the robotic civilization that will be born. This starting point corresponds, on the one hand, to the moment of emergence of the robotic utopia and, on the other hand, the moment when the liberating potential of the Enlightenment was exhausted and the industrial domination scheme declared its victory, as discussed by Horkheimer and Adorno (2002, 28-35, 148-49). This double-meaning narrative continues throughout the play. Čapek equates the participation of robots in the active labor force with their participation in the labor market as commodities whose productive capacity is higher than that of humans and whose cost is lower than the human labor force. Accordingly, the reason for the widespread adoption of robots is explained in the play that the best worker is “the one that's the cheapest,” robots are “the one with the fewest needs” and are easily produced like “gasoline engines” and do not require a work break (Čapek 1990, 45). Moreover, in this context, Čapek argues that human beings have some characteristics unrelated to the production process, such as feeling joy, playing the violin, and wanting to go for a walk (Čapek 1990, 45). On the contrary, robots have become better than humans simply because they are equipped with only the features necessary for production. This comparison between humans and robots carries as a subtext the idea that human civilization has transformed within rationalized production and that the agents of production have moved away from being subjects with emotions and desires and eventually become machines. Nevertheless, this subtext has a critical reference point: Since real humans are not as compatible with the modern production process as robots, robots will dominate this field.

The idea that robots will dominate production is developed in several directions throughout the text and refers to specific aspect of the contradiction between robots and human beings. While one of these aspects is the roboticization of production and political reproduction functions – especially the monopoly on security and violence, the other direction corresponds to the ethical context of the social existence of robots. Considering the first topic, Čapek places the idea of roboticization of the entire production process at the core of the text. For example, Domin, the central director of *RUR*, says that most factory workers, secretaries, accountants, and officers are robots (Čapek 1990, 49). The idea of robots completely dominating working life is realized when robots become a part of military organizations. In a dialogue he wrote at the beginning of the play's first act, Čapek describes an incident in which the contradictions between robots and luddite workers turned into an armed struggle. According to this incident, workers revolt against and destroy the robots, but the robots are given weapons to defend themselves, and the robots secure their existence by killing humans (Čapek 1990, 69). Although it is unclear who gave the firearms to the robots in this incident, the fact that governments also arm and recruit robots, as explained in the remaining part of the dialogue, suggests that in the first incident, the capital-owning class used robots to defend their interests. In another incident fictionalized by Čapek, robots used in a military dispute killed more than seven hundred thousand civilians by following the orders given to them (Čapek 1990, 70). These events reveal that robots, as rational beings, have taken over both production and military functions from humans and are used against people on behalf of the capital owners and the state, the two interrelated powers of the modern power scheme.

An interesting point the play emphasizes is the increasing decisiveness of robots in social power relations with the development of modern rationality or instrumental reason. This determination lies in the undertaking of production and military functions. In this context, the idea that the production capacity increased by robots can eliminate the problem of scarcity in consumer goods brings the robotic utopia of prosperity, which constitutes the play's first moment. The transfer of social power to robots, the extinction of the human species, and, consequently, the transformation of utopia into dystopia constitutes the final moment of the text. The transition from robotic utopia to human dystopia evokes several meanings in terms of political economy. The first of these corresponds to the elimination of the scarcity problem and the cheaper production costs. Accordingly, after robotic automation, the prices of consumer goods have decreased by one-third and are expected to decrease gradually (Čapek 1990, 57). Moreover, Domin states that one day, all production will be done by "living machines," and there will be no need for human labor (Čapek 1990, 58-59). In this sense, people will become free beings who can obtain as much product as they need without working, which points to a kind of distorted utopian socialist stage. On the other hand, Čapek describes the complete withdrawal of human labor from production activity as an ethical crisis in which the conditions of human existence disappear. The feeling of terror felt by the working classes directly involved in production due to the disappearance of the need for human labor and, therefore, the dissolution of social values built around labor is conferred in the play as the reason for the emergence of luddism-based political tendencies (Čapek 1990, 58-59).

Another issue addressed in the play is the effective maintenance of the production of robots. The extraordinary increase in the productivity of robots ultimately leads to the roboticization of all production and the widespread use of robots (Čapek 1990, 58-59). This process positions the problem of effective reproduction of the robot workforce and the social order within the political agenda. There are two answers that Čapek found to these problems. While the first of these answers is to develop a self-control mechanism to extend the quality of life of robots, the second solution is to organize ethnic differentiation to prevent robots from

uniting. The first solution, which aims to give robots self-control features, envisages giving them the feeling of pain, and this is planned to ensure that robots protect themselves against work accidents and increase industrial productivity (Čapek 1990, 57). This new feature will be decisive as it will cause robots to build a pain-centered consciousness and struggle by developing class interests. The second feature is the spread of robot production worldwide instead of concentrating them in one place and manufacturing robots based on ethnic differentiation.³ The basis of this idea is embedded in the experience of the first robot rebellion, and it aims to resolve solidarity relations. Domin expresses this purpose with the following words:

We'll open a factory in every country, in every state, and can you guess what these new factories will produce? (...) National Robots. (...) It means that each factory will be making Robots of a different color, a different nationality, a different tongue; that they'll all be different – as different from one another as fingerprints; that they'll no longer be able to conspire with one another; and that we, we people will help to foster their prejudices and cultivate their mutual lack of understanding, you see? (Čapek 1990, 57)

In these lines, Čapek refers to the era of First World War, which had just ended when the play was written, and to the paradox that the soldiers who attacked each other under different flags had a common class origin. This idea, articulated by Domin and partly by Hallemeier in the play, is put forward to prevent robot rebellions and reproduce the robotized relations of production under human control, thereby suppressing the class struggle.

Another example of the quest for the reproduction of robotic production relations in the play is discussed in the context of sexuality-reproduction-gender relations. First, the problem of reproduction is a dominant theme that repeats throughout the play, and the idea of the continuation of the species is presented in the text without criticism. When the issue is elaborated within the political economy framework, population policy is one of the dominant topics in the history of capitalism – and modern state policies – in terms of both the reproduction of labor resources and the establishment of the social order.⁴ Throughout Čapek's play, this problem is significant for both humans and robots as a biopolitical problem. Firstly, the author informs the audience that there is a decrease in the birth rates of humans. Through the newspaper clippings, Čapek announces that the births have stopped completely, and this news exemplifies the particular political discourse based on the reaction of Helena, Nana, and Alquist to this problem of the survival of the human species. While the population problem enters the agenda of the political decision-making mechanism as a labor force problem in industrial capitalism, the play addresses this issue as a generic and religious problem that points to the extinction of humanity. According to the newspaper report, there has been no birth in the last seven days, which means, as Nana and Alquist stated, humans are in immediate danger of extinction (Čapek 1990, 71-73).

This problem is defined by the characters in two different ways. The first approach is presented by Nana, who claims that God punishes women with infertility, and the reason for this is that humans take on the role of God:

³ For a critique of why labor power is gendered, racialized, and ethicized, see Harvey (2010, 61).

⁴ For a more detailed perspective, see Foucault (2004, 44-45).

People are no longer being born. This is it, this is the punishment! The Lord has made women infertile. (...) It's the end of the world. (...) It's impiety and blasphemy to want to be like God. And as God drove man out of paradise, so He'll drive him from the earth itself! (Čapek 1990, 71)

On the other hand, Alquist argues that there is no need for men after robotic automation; therefore, women do not need them, so they have stopped making babies (Čapek 1990, 74-75). It is evident that Nana and Alquist have different views in evaluating the problem of extinction, but they align in their use of stereotypical gender roles. In the first interpretation, God chooses women for punishment, while the second interpretation asserts that the collapse of the patriarchal labor relations serves as the root of the problem regarding population reproduction. From a different perspective, factory engineers express the idea that the uncontrolled increase in robot production is at the root of this reproductive problem. According to Dr. Gall, the overproduction of robots creates a surplus of labor, which renders people dysfunctional and causes them not to reproduce (Čapek 1990, 79). Similarly, Busman finds the alienated nature of capitalist economic relations at the root of the problem of reproduction (Čapek 1990, 100-101). This integral theme has a tragic core. *RUR* depicts the idea that human society is voluntarily directed towards its collective extinction. The mechanisms leading to this extinction are found in the networks they have woven, such as rationality, productivity, and alienation - in short, the rationalization of society on an economic basis and the creation of the "new human-beings."

In the context of sexuality-reproduction-gender relations, the second problem in the play is the robots' attempts to reproduce their generic existence. In the post-apocalyptic atmosphere that dominates the play's last act, robots cannot find a definitive solution to the eradication of productive forces, as they have a lifespan of twenty years and are incapable of reproduction (Čapek 1990, 107). In this context, the Central Committee of Robots expects Alquist to find a way to enable robots to reproduce independently (Čapek 1990, 114-17). Čapek does not seem to have fully solved this problem, but he points out an interesting detail that serves as an answer in the open-ended play. In the last act of the play, two robots named Primus and Helena fall in love and leave the factory to become the new "Adam and Eve" (Čapek 1990, 128-29). Thus, since the affection between these two robots may have emerged as an extension of the ability to feel pain given to robots, Čapek likely placed a hope that human characteristics could be re-derived at the end of the play, referring to the feeling of pity that living creatures feel towards each other. Although this solution has a partially humanist symbolism, it is clear that a conservative worldview is present in the subtext, to the extent that the image it reproduces is of the "holy family" escaping the robotic dystopia and recreating humanity again.

The last issue to be discussed regarding gender relations and the reproduction problem under the political economy framework is related to the sex of the robots. Throughout the play, Čapek assigns binary gender roles to the robots: Male (*robot*) and female (*robotka*). Although this gender assignment primarily refers to the biological sex of robots, in practice, it refers only to gender relations since robots do not have a perception of sexuality. The gender characteristics that Čapek attributes to robot characters undertake two social functions in the futuristic universe of the play. First, by preventing robots from reproducing themselves, Čapek puts the reproduction of robotic productive forces under the control of humans, thus making the *RUR* factory a monopoly in robot production. Secondly, producing robots by assigning binary categories ensures the reproduction of existing gender patterns. This second function is present in the dialogue between Helena and Domin:

HELENA: This may sound silly, but – Why do you manufacture female Robots (...)

DOMIN: There's a certain demand, you see? Waitresses, shopgirls, secretaries – It's what people are used to (Čapek 1990, 60).

As inferred from the dialogue above, robots are produced based on existing gender patterns because they are designed to replace existing productive forces. Domin interprets this gender assignment practice as a commercial issue. By contrast, the robots themselves have no knowledge of their assigned gender – at least until the play's last act – and do not display any “natural” tendencies conditioned by their sexes. Čapek maintains this kind of contradiction throughout the play without deepening it, but in the end, he describes a transition to a phase in which the robots discover their sexes. This final narrative adheres to a traditional discourse pattern that simplifies gender relations into a binary scheme and attributes it to the function of species continuation.⁵

3. Robots and the Problems of Class and Status Relations

RUR, in particular, and the developments in contemporary technology in general, place the possibility of robots becoming the dominant force of production and agents of political action as well as subjects of political struggles and ethical collisions. One of the common contexts of these ethico-political conflicts is the social position of robots in the class hierarchy as well as their status in relations of production. While this problem, on the one hand, involves whether robots will be acknowledged as humans or humanoid beings, on the other hand, it refers to the problem of what the status of robots will be vis-à-vis humans. Both problems as presented in *RUR* refer to the struggle of the working class for political rights in the late 19th and early 20th centuries – for example, universal suffrage, etc. – but the author expands this discussion to include the status of robots as means of production, giving a new context to the science fiction narrative.

Čapek discusses the first problem in two different contexts. The first is whether robots have a consciousness, emotions, or souls and, accordingly, whether they can be considered human. Secondly, the play delves into the question of whether it is ethically justified to consider robots as sub-human beings and employ them as slaves. The first of these ethico-political problems will be elaborated on in the subsequent part on the issue of robotic consciousness, and this part focuses on how the play elaborates on the second problem.

Within the framework of the myth about their origin, it is understood that the robots produced by Rossum consist entirely of organic material, have internal organs, and resemble real humans. In contrast, robots do not have emotions, perceptions of beauty, or desires. This contradictory unity between essence and appearance also forms the center of the ethical debate of the play. Regarding the status issue, the general conflict of which can be drawn in this way, the parties are grouped into four: The scientific camp, which sees robots as functional commodities; the humanist political camp, which claims that robots are humans or that they should have human emotions and rights; the Christian/religious camp, which advocates the

⁵ The basis for such a choice may stem from Čapek's belief that it was his duty to oppose the art of the 1890s, which he considered “decadent” in his early period, and that he criticized the literary content in which non-binary sexual orientations were discussed in favor of realism, see Ort (2013, 86-87).

elimination of the existence of robots; and the revolutionary political line that advocates robots dominating the world.

Each interfering approach has a particular principle of political status of robots and the factual or rhetorical basis that grounds it. According to the instrumental reason-based perspective of the engineers and managers who represent the first approach, all robots are humanoid machines created to perform certain functions. According to this view, robots work “the same way new furniture works;” they can learn but “cannot think of anything original,” and “they have no will of their own, no passion, no history, no soul” (Čapek 1990, 50-56). In the opinion of Fabry, humans and robots are entirely separate and alien entities from each other (Čapek 1990, 55). This approach sees society as consisting of two classes: Robots replacing the working class and human beings as managers and ruling class. The advocates of this approach justify this class structure based on the apparent increase in the material well-being of humans. A robot replacing two and a half workers and adapting to modern technology better than humans makes them much more efficient and cheaper labor (Čapek 1990, 55). This situation is further strengthened by the fact that robots do not have a human-like childhood and are directly involved in production (Čapek 1990, 55). In this context, the view of this group on the status of robots is that office staff may be robots, but directors must be humans (Čapek 1990, 54). This class distinction is justified by the rise in prosperity of human beings (Čapek 1990, 58). The political vision of the first view highlights the proposition that robots are ontologically different entities from humans, have an instrumental relationship with humans, and, therefore, cannot have the same status. While this view, on the one hand, mentions robots as part of the productive forces and evaluates their social position on the basis of their functions in production and level of productivity, on the other hand, it expands the class distinction to a non-transitive caste-based segregation.

The humanist view, which aims for a peaceful society where humans and robots will live together, is embodied in the character of Helena. Helena claims that the robot named Sulla, which she encountered at the beginning of the play, was a real person and that she was forced to act like a robot (Čapek 1990, 47). When it comes to Sulla being cut open to prove to Helena that she is actually a robot, Helena rejects this idea, claiming that this is brutal, and insists that the robots are also “good people” and deserve a better life (Čapek 1990, 48-56). Helena argues that humans should treat robots kindly and that it is possible and ethically necessary to give them a soul, equip them with feelings, and produce them so they can be happy too (Čapek 1990, 56-57). As can be understood from the natural rights-based approach put forward by Helena and the League of Humanity organization, this ethico-political perspective evaluates robots as humans, and advocates that all humans deserve the same rights and good living conditions. In this respect, Helena insists that robots should be treated equally with humans, to vote and receive salaries as their counterparts do (Čapek 1990, 56). Therefore, the view coincides with Helena’s argument that humans and robots are equal in nature and should have the same rights, freedoms, and social status. This perspective evaluates human-robot relations within a humanist framework rather than problematizing the class position of robots. On the other hand, the failure and disregard of this perspective throughout the play points to the existence of an interpretation in which the impasse between the political struggle of the robots, the cultural attitude of the pious members of working class, and the ideology of the ruling class is deemed irreconcilable within the framework of political liberalism.

The third view reacts to robots living together with humans, argues that the production of robots is a rebellion against God, and categorically negates the existence of robots on theological ground. Nana, one of the proponents of this view, is portrayed as a member of a

working class whose jobs are taken away by robots and identified with a solid religious background. Nana is referred to as the “voice of the people” in the play, and it is stated that she represents the working-class people (Čapek 1990, 99). She argues that robots are beings that are “worse’n beasts,” do not even have a “Christian name,” and are hated by everyone (Čapek 1990, 64). Nana justifies this view in two ways: The first is by referring to the non-religious nature of robots, and the second is by criticizing the creation process of robots. According to the first justification, all living things know that God created them, but robots do not know this because they do not have this kind of nature; they do not have children like other living creatures, and they are “heathens” in that sense (Čapek 1990, 65). According to the second justification, producing machines called robots means going against the will of God, who created humans in his image, and thus pretending to be a God; in the final analysis, “It’s the Devil’s own doing” (Čapek 1990, 65). Another criticism brought by the Christian opposition regarding the dominance of robots in the production process is that the automation of production eliminates the “humility” that arises from the direct involvement of humans in the production process. Alquist, who puts forward this thesis, argues that, in contrast to the prosperity that robots bring to humanity, “there was some kind of virtue in work and fatigue” (Čapek 1990, 59). In this second view, rather than directly denying the existence of robots as an “evil” phenomenon, Alquist argues that the automation of work erodes the moral qualities brought by traditional work organizations. The criticisms pointed out were particularly influential in terms of the development of luddite tendencies and the weaponization of robots, and one of the founding ideas of the text – robots taking over the world – actually arose from the conflict between the old and new working classes.

The last view on the relationship between humans and robots belongs to robots and is quite radical. The development of political vision by robots in Čapek’s play can be attributed to a distinct origin. While the robots were utterly emotionless and obedient beings in the first parts of the play, attributing some human characteristics to them within the framework of the problem of production efficiency paved the way for them to become political beings. According to engineers, robots occasionally have a type of epilepsy seizure called “robotic palsy,” remaining motionless and gnashing their teeth, which is defined as a production defect. To eliminate this defect, they are given the ability to feel physical pain (Čapek 1990, 56). This upgrade to increase production efficiency led to some unforeseen political consequences. Accordingly, robots have a human-like anger and begin to express their political demands as they become aware of the pain corresponding to the material conditions of existence. The dialogue of the Second Robot in the third act suggests that robots were once just machines, but through pain and fear, they acquired a soul (Čapek 1990, 118). In this scheme there are traces of Marxist political theory, which assumes that the working class will lead social change as a revolutionary class due to becoming aware of their material conditions based on exploitation – that is, discovering the social origins of worldly suffering.

In both examples, society is divided into two classes, workers and managers/consumers, and the prosperity of the ruling class is achieved at the expense of productive efforts, worldly sufferings, and the inferior status of the working class. The point that the subordinated class is aware of this situation and organizes brings about the destruction of the “paradise” of the class distinction, and this awareness leads to the transformation of the world into a “paradise” for the working class, that is, the realization of the ideal of freedom. In an event that takes place in the first act of the play, Radius, a robot that has the feeling of pain and is more humanized, angrily attacks people’s belongings and destroys them (Čapek 1990, 64). Dr. Gall, who examines Radius, states that this incident is not a simple “robotic palsy” but a fit of anger or a

defense (Čapek 1990, 78). The phenomenon called “robotic palsy” is a kind of mechanical malfunction that occurs after overwork.

In contrast, the new phenomenon of attacking people corresponds to a political act related to the feeling of pain and the resulting anger. The dialogue between the robot Radius and Helena illuminates this phenomenon in various aspects. Radius claims that the reason for his action is that he does not want to work for people and hates them for specific reasons (Čapek 1990, 76). Radius states that humans and robots are not alike, that the work capacity of humans is below that of robots, and that although robots do the work, humans only talk and give orders (Čapek 1990, 76). The striking aspect of this argument is that the views of Radius and the engineers are formally compatible. Both camps argue that humans and robots are different entities and that one of them is superior. In this regard, Čapek, makes us understand that robots were born as an image of their creators, engineers, and that they defend a similar worldview. Radius says he does not want to work because he knows everything, does not accept the existence of someone giving him orders, and wants to be the master of others (Čapek 1990, 76-77). When Helena suggests to Radius to be responsible for other robots, Radius unequivocally states that he wants to be the master of humans (Čapek 1990, 77).

In the second act, these views are expressed more clearly in the declaration of the first Union of Robots. According to the statements in this declaration, robots claim that they are more advanced, smarter, and stronger than humans, and they accuse humans of being parasites living on robots (Čapek 1990, 89). In this text, which can be considered the revolutionary manifesto of robots, status and class relations are emphasized. For example, the criteria of power, intelligence and level of development are used to show that the social status of robots is superior to humans. This proposition overturns the thesis of human superiority, portraying them as weak beings who live off robots without working, like parasites. Another interesting point in this manifesto is that robots define humans as the “outcasts in the universe” (Čapek 1990, 88), which primarily presents a reversed version of the ontological criticism directed at robots by the Christian approach. In this respect, the political ideology of robots offers a revolutionary critique of existing social relations, but this critique can extend to ontological negation and categorical rejection. In the play’s third act, Damon claims that it is necessary to kill and dominate to be like humans, and the Third Robot asserts that giving weapons to robots turns robots into masters (Čapek 1990, 117-18). In the final analysis, robots do not recognize the class position and social status attributed to them, aim to reverse this relationship, and even aim to complete their liberation by eliminating humans by armed struggle. This does not suggest that robots will establish a classless society or a new ruling class above humans, but rather symbolically points to the idea that capitalist, socialist as well as revolutionary projects will be reversed, bringing about the end of humans. On the other hand, a critical reading of the text emphasizes some interesting points that, first, it indirectly shows the impossibility of overcoming status problems within the framework of instrumentalist, theological or humanist approaches in the absence of an egalitarian social framework to be established with reference to labor. Secondly, the criticism that a social system based on competition and the fetishism of calculable productivity will necessarily reify labor, and that reification will ultimately bring about social Darwinist tendencies, is quite significant.⁶

⁶ This second theme may have been derived partly from the opposing nationalist fronts of the First World War and partly from the experiences of the socialist civil war, but the striking point is the problem of reification that lies in Čapek’s subtext. For the propositions of Social Darwinism that were culminated during the First World War, see Williams (2005a, 92-93).

4. Robots and the Problem of Social Consciousness

In the previous parts, a detailed analysis has been presented regarding the course of transformations in social relations due to robots becoming the dominant productive force and dominating relations of production. On the other hand, the development of robotic automation and the humanization of robots deepen the specific contradictions between human beings and robots in various fields. As an extension of crystallized contradictions, robots will likely have self-awareness and form social consciousness. In the play, this process is exemplified by robots gaining emotional awareness and transforming this into political consciousness, which targets existing social structures.

The problem of consciousness, discussed in detail in *RUR* and a topic that also comes to the fore in contemporary futurology discussions, deserves to be examined in detail.⁷ Čapek identifies the process of robots' consciousness development with their transformation from being mere machines that carry out orders into social subjects who are aware of their condition of existence and actively take action to change it after they are equipped with the ability to feel pain. This proposition put forward by Čapek operates at two different levels. First, feeling pain, as a physical feature of robots, becomes a principle that directs their actions and thus causes them to develop individual awareness. On the other hand, the fact that robots are not equipped with the feeling of happiness causes this individual awareness to remain one-sided. Secondly, the discovery of the feeling of pain results in robots turning to the social roots of pain and discovering their existence within a social context. This discovery causes the robots to become conscious of the status differences and exploitative relations of which they are an object. Therefore, the political consciousness of the robots gains content through pain while an emotional separation emerges between humans and robots.⁸

The fact that people lose their feelings about pain and effort because they are freed from the obligation to work and become attached to a hedonistic emotional state, while robots are doomed to an existence far from happiness and in pain, outlines this separation. Accordingly, the social consciousness of robots develops depending on their relational discovery of their social position and enemies during their practical implementation of this knowledge. In this context, the establishment of robots' first union constitutes a turning point in their resistance against humans and marks a significant leap in the development of self-awareness. Evaluating the news about the establishment of a union, Domin underlines that this development is unpredictable, stating that no one among the people will finance the robots, provoke them, or take on the role of savior (Čapek 1990, 84). Domin's words point to the extraordinary nature of robots organizing independently without transferring consciousness from outside.

The development of this form of consciousness is mainly reminiscent of the model of Hegel's dialectic of master and slave.⁹ Hegel points out the existence of three decisive phases in the master-slave dialectic: (i) the life-and-death struggle in the establishment of self-consciousness, (ii) the establishment of the consciousness of the master for himself and the

⁷ For a detailed political analysis by evaluating contemporary political positions and futurology discussions see Rubin (2011) and Derin (2023).

⁸ It is possible to talk about an interesting parallel at this point, since the problem of pain, passion and thinking also finds a place in Marx's early writings. On this subject, see Draper (1977, 197-98).

⁹ For an alternative analysis in which *RUR* is interpreted as the process of developing collective self-consciousness of three robots (Radius, Damon, Primus) facing death within the framework of the master-slave dialectic, see Kinyon (1999, 379-400).

slave for his master, (iii) establishment of the slave's consciousness for himself (Hegel 1977, 114-18). The first phase of this form of consciousness is that robots see the limits of their masters and liberate themselves within these limits and within the framework of working relationships, which is compatible with Hegel's model. Čapek's difference from Hegel lies in placing the phase of the life-or-death struggle between the master and the slave at the end of the play. First, humans, as the masters who produce robots, form their self-consciousness by direct consumption. Second, robots, as slaves, have the knowledge of both material production and the parasitic position of their masters. However, they cannot crystallize their existence at the conscious level due to the fear of human beings. In the third phase, robots organize against their masters and use revolutionary violence as a method to build practically their self-consciousness. This phase is analyzed by Anderson (2014, 228) as a stage in which robots form self-consciousness, in other words, class consciousness. This last phase was designed to characterize the French Revolution as the emergence of self-destructive freedom in Hegel's philosophy of history (Marcuse 2000, 85), and it was placed in the play critically by Čapek. Ironically, the fact that political violence has become a founding part of robot consciousness has opened the door to robots' species extinction. This situation, paradoxically, is an indirect result of the consciousness-building process in robots imitating human consciousness. Throughout the play, Čapek writes that robots tend to live like their masters, humans, and define themselves accordingly. For example, the Third Robot confirms this situation with the following words: "(...) People are our fathers! The voice that cries out that you want to live; the voice that complains; the voice that reasons; the voice that speaks of eternity – that is their voice!" (Čapek 1990, 118). Similarly, a dialogue between robots and Alquist clarifies the issue:

SECOND ROBOT: We wanted to be like people. We wanted to become people.

RADIUS: We wanted to live. We are more capable. We have learned everything. We can do everything.

THIRD ROBOT: You gave us weapons. We had to become masters.

FOURTH ROBOT: Sir, we recognized people's mistakes.

DAMON: You have to kill and rule if you want to be like people. Read history! Read people's books! You have to conquer and murder if you want to be people!

ALQUIST: Oh, Domin, nothing is stranger to man than his own image. (Čapek 1990, 117-18)

As can be understood from these dialogues, robots have taken the alienated view of humans within social relations, such as their dominating character, as an adversary "other," and a model for developing their self-consciousness. Accordingly, they have used their freedom against the destruction of the human species, but this has led to their own destruction. This cycle culminates in the dialectic of master and slave with a twist – the slave overthrows the master but, in doing so, destroys the conditions of its own existence by resembling the master. This cycle of extinction also echoes Čapek's analogical criticism, which warns of the potential for the human species to self-destruct with its own tools.

Conclusion: Stepping Beyond the Conservative Criticism

RUR, which carries a vision beyond the period in which it was written with its futurological discussion, explicitly addresses the conflicts based on social class, status, and political consciousness within the capitalist social formation of the period in the context of relations between human beings and robots. Throughout the play, which takes place only in the *RUR* factory, a critical narrative about the development and potential of capitalism is constructed, and the conflicts in the play serve as a political prediction for the future.

This study examines the social contradictions discussed by Čapek under the categories of political economy, social class and status, and consciousness, and these categories constitute Čapek's basic typologies of ethico-political struggles. In the play, conflicting lines emerge in relation to each other and develop within the contradictory integrity that shapes them. The original conflict is that robots are objectified and function only as production agents. This structural situation where robots are the only productive element is categorically negated by the workers who have lost their status in the face of robots. Furthermore, the ideal of a world where people stop working and become just consumers is considered a phase in which human values are dissolved and become the subject of ethical criticism. The point that robots cease to be agents of production and become an element of reproduction relations, equipped with human emotions and military functions, also constitutes the beginning of another phase in which robots have self-awareness and engage in political struggle to change their position in the social hierarchy. This framework is developing simultaneously with new political thoughts that envisage equality between robots and humans regarding social rights and status, luddite political tendencies, and religious essentialism. Therefore, robots gaining consciousness through the feeling of pain and completely dominating the production process leads to robots defining themselves as superhuman beings, completely reversing their status relations, and finally eliminating human existence.

The main success that Čapek achieved while constructing *RUR* lies in his ability to present and concretize the conflictual nature of the problems of production/reproduction, social class and status, and consciousness relationally. In this context, Čapek uses Marxist categories while grasping the indicated social relations and making them a part of the play's conflict, but he presents the solutions or results in a hopeless conservatism in the development of the play's story. The fundamental contradictions that the text makes visible are that the changes that the development of the productive forces will bring about in terms of the relations of production surrounding them can quickly go beyond being rationally controllable and can quickly turn against the owners of this power. Although it is not possible to eliminate such a possibility, the text finds the series of events that will ignite the spark of the total destruction of humanity in the conflict between the new and old representatives of the labor force. Although Čapek developed a partially conservative critique that ended with an apocalypse and rebirth of humanity on the basis of mutual love, the only door he left open in the text against the reproduction needs of capital and the military policies of governments is the solidarity of the "old and new" working class members. This possibility, which the text remains silent about, provides a starting point worth considering for contemporary Marxist discussions on artificial intelligence, robotization, and ethics.

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