



<https://doi.org/10.53032/tvcr/2025.v7n3.25>

Android Dreams and Capitalist Nightmares: Race, Technology, and the Posthuman in Philip K. Dick's Worlds

Dr. Ancy Elezabath John

Assistant Professor,
Department of English
Christian College, Chengannur, Kerala, India.

Email: ancyej@gmail.com



<https://orcid.org/0009-0006-8455-0035>

Abstract

Technology has become a progressively fundamental element in humans' lives, and it shapes us in ways formerly only imaginable in science fiction. The union of humans and technology mount the way for cyborgs to step into the realm of posthumanism. Posthumanism challenges the fixed boundaries between human and machine, imagining a future where biology and technology integrate. Rather than portraying posthumanism as an escape from inequality, Philip K. Dick's fiction uncovers its role in reinforcing hierarchy. His narratives show how techno-capitalism co-opts posthuman potentials to reduplicate and escalate systemic oppression based on race, gender, and class. This paper offers a critical analysis of Philip K. Dick's inquisitive worlds, where androids, cyborgs, and augmented humans navigate a dystopian landscape shaped by racial exploitation, corporate hegemony, and the commodification of identity. "While posthumanist discourse often anticipates an emancipated, post-racial future, Dick's narratives contend that technology does not transcend social stratification but rather reconstitutes it as a new site of control" (12). In *Do Androids Dream of Electric Sheep?* (1968), Dick complicates posthumanist ideals by exposing their inherent entanglement with capitalism. The novel demonstrates how capitalist power structures dictate technological proliferation, commodify artificial life, and destabilize the ethical boundaries of personhood. Ultimately, Dick propels his characters and readers into an uncertain future where the very definition of the human is unstable, forcing a navigation of a profoundly unknown world.

The Voice of Creative Research

Vol. 7 & Issue 3 (July 2025)

Keywords: Posthumanism, Cyborgs, Techno-capitalism, Techno-orientalism, Race, Gender, Commodification, Androids, Artificial Life

Introduction

The term posthumanism was coined by Hassan in 1977. Hassan introduces this in his article *Prometheus as Performed towards a Post Humanistic Culture?* Subsequently, this term began to evolve and expand into a wide range of disciplines and fields. The cyborg, born from the fusion of human and machine, heralded the advent of posthumanist thought. This intellectual trajectory is defined by its deconstruction of the human/non-human binary, thereby inviting a critical reconceptualization of identity, race, and gender. Though he presented his science fiction as technologically advanced on the surface, his work is fundamentally racist and capitalist. During this time, the line between the human body and technology started to blur. This forces us to reconsider and redefine humanism.

Late twentieth-century machines have made thoroughly ambiguous the distinctions between natural and artificial, mind and body, self-developing and externally designed, and many other categories that used to apply to organisms and machines. Our machines are disturbingly lively, and we ourselves frighteningly inert (Haraway, *A Cyborg Manifesto*, 3)

In his literary works, he characterises Asian people as machine-like and showcases cyborgs with racist stereotypes. Dick engages with the ideas of race, gender, and the capitalism and commodification of cyborgs. The following questions will be addressed in the thesis. In a posthumanistic world, how feasible is the coexistence of cyborgs and techno-orientalist stereotypes? What kind of future are humankind/cyborgs headed to? How is humankind prepared for the changes of posthuman futurism? If human culture creates artificial life, does such life deserve to be embedded in the same ethical discourse which we apply to naturally evolved life, and especially human life?

Philip K. Dick's works explore the intricacies of posthuman culture. He gives us an idea about the prevailing notions of race, class, and gender stereotypes in the world of cyborgs. The traditional notion of the body is broken into a hybrid cyborg that is allowed to be exploited by the dominant species. Some scholars of posthumanism have suggested that this new world will supersede the hierarchy of race and gender, but in Dick's science fiction novels, race and gender are used in a very material sense, which alters our ability to imagine and understand what it means to be and not to be posthuman. Race and gender create and sustain hierarchies even in a posthuman world. Technology offers opportunities and the power to empower the marginalised, but who has access to it is a question. The unequal control over its development solidifies capitalist hierarchies in the posthuman era. If human culture creates artificial life, does such life deserve to be embedded in the same ethical discourse that we apply to naturally evolved life, and especially human life? This paper is to critically examine a vision of the posthuman future in which humans and technology are inextricably intertwined.

The Voice of Creative Research

Vol. 7 & Issue 3 (July 2025)

In Dick's works, which are set in a posthumanistic world, the advancement of technology will be shown to reinforce rather than dismantle the existing patriarchal and racist structures. He also gives us an insight into the Western humanist tendency to commodify and subjugate both the nonhuman and the marginal human. Dick challenged the fragile nature of reality; his narratives became surreal fantasies. Dick's characters grapple, plunge into an unsettling revelation, and slowly discover that their world is actually an illusion. His science fiction portrays a post-apocalyptic world with posthuman features. His novels, like *Eye in the Sky* (1957) and *Time Out of Joint* (1950), exemplify the recurring themes of questioning the nature of reality, fear of omnipotent authority, and criticism of political oligarchies. "Dick's worlds are worlds in motion where destinations are never reached and utopia is never achieved, but somehow a space is created for new possibilities" (Cock 13).

Donna Haraway's *A Cyborg Manifesto*, published in 1985, can be considered as one of the seminal works of posthumanism. Haraway emphasised the idea of the Cyborg as a symbol of posthumanism; she embraced technological advancement as a new possibility for liberation, empowerment, and social justice. Philip K. Dick's fiction masterfully interrogates technology's Janus-faced nature: its power to elevate human potential is inextricably linked to its capacity for catastrophic unintended effects. He goes against the traditional notion of defining humans as fixed terms; he tries to point out the meaning of posthumanism and predict a new future. Through his science fiction, he questions the centrality, superiority, and universality of human subjects and values, and explores the possibilities of emerging technologies.

Research Method and Methodology

This paper uses a qualitative literary methodology rooted in critical textual analysis and informed by posthumanist, feminist, postcolonial, and Marxist theoretical frameworks. The research method is interpretive and analytical, relying on close reading of Philip K. Dick's works and their engagement with theoretical discourses of race, gender, and techno-capitalism.

Objectives of Research

Through visions of posthuman worlds, Philip K. Dick's novels critically examine technology not as a force for transcending social hierarchies, but for recalibrating them. This paper contends that his work fundamentally questions the notion of progress, asking if technology liberates or instead reinforces systemic racial, gender, and class inequalities.

Literature Review

The concept of posthumanism, first introduced by *Ihab Hassan* (1977), has been shaped by theorists such as Donna Haraway, N. Katherine Hayles, and Rosi Braidotti. Haraway's *Cyborg Manifesto* (1985) presents the cyborg as a metaphor for hybridity and resistance, while Hayles' *How We Became Posthuman* (1999) warns that technological integration often reinforces liberal humanist and capitalist ideologies.

Posthumanist discourse often replicates systemic hierarchies, a point scholars of race and gender make by examining tropes like techno-orientalism. *Roh, Huang, and Niu* (2015), for instance, show how science fiction constructs Asians as a technologically advanced but dehumanized Other. Feminist critiques also note that androids and cyborgs are frequently

The Voice of Creative Research

Vol. 7 & Issue 3 (July 2025)

represented through sexist stereotypes, reflecting broader patriarchal control. Philip K. Dick's works are central to these debates. It explores the blurred boundaries between human and machine while exposing the persistence of racism, sexism, and capitalist domination. In sum, existing literature shows that while posthumanism imagines liberation and hybridity, it often reproduces the hierarchies it seeks to overcome. This study situates Dick's speculative fiction within these debates to reveal how his worlds complicate utopian posthumanist ideals.

Intricacies of posthuman culture

The emergence of technology and the internet in posthuman society is one of the major themes in science. Techno-orientalism occurs across different genres and disciplines. This theory emerged during the mid-1990s. Science fiction exploration of the future makes techno-orientalism a most pervasive expression. Dick's novels reveal racial politics rooted in posthuman science fiction. Dick's works challenge the idea of a posthuman being with a more holistic understanding of self, race, class, gender, etc. His works shed light on the undiscovered or undefined challenges of racist and sexist stereotyping in the posthumanistic sociocultural world.

Humanism is a broad philosophy that believes in the importance of human beings and their potential. It gives high importance to human beings as rational, logical, and autonomous. The title 'human' grants a kind of cultural luxury and a privilege.

But the posthuman does not really mean the end of humanity. It signals instead the end of a certain conception of the human, a conception that may have applied, at best, to that fraction of humanity who had the wealth, power, and leisure to conceptualise themselves as autonomous beings exercising their will through individual agency and choice. (Hayles 5).

Posthumans are those who are aware of the limitations of the human body and are open to the enlargement of human potential through the use of technology beyond its natural limits.

Posthuman Collective in Philip K. Dick's Novels

Dick's works delve into the diverse relationships between humans, androids, and animals. Dick uses technology as a long arm of government. This chapter looks at posthumanism as a philosophy that acknowledges human limitations and seeks to expand human potential through technology. Dick's fiction world attempts to interrupt the changing perspective on his mechanical environment. Post-humanism challenges the notion that human beings are the centre of the world. Turing argues that "machines can think" (8). This makes humans enter the realm of the posthuman, where there is no difference between body and technology. Humanoid robots are a hybrid of machines and humans, a creature of reality and fiction. Posthumanism advocates for the enhancement of human conditions with the help of technology. The enhancement will lead human beings to transcend their biological limitations and become posthuman.

Dick's replicants in his science fiction works aren't just human; he also creates artificial animals, granting them the same level of importance as their real-life counterparts. The posthumanistic socio-cultural world of Dick explores the ideas of religion, emotions,

The Voice of Creative Research

Vol. 7 & Issue 3 (July 2025)

relationships, and the post-apocalyptic future. He explores the mutually exclusive nature of religion and empathy. Dick portrays the relationships between humans, animals, cyborgs, and androids. In his world, humans were able to show affection or empathy towards their androids. This shattered the so-called humanistic ideology. Dick portrays his humans as someone who is aware of their own hindrance to development and seeks the help of technology for their expansion. Dick's post-apocalyptic future shows the growth of technology where humans and electric animals coexist. In the essay, 'The Androids and the Human', Dick awakened the idea of technology acting as a long arm of government. He goes on to ask: What are the boundaries of the individual? "Rather than learning about ourselves by studying our constructs, perhaps we should attempt to comprehend what our constructs are up to by looking into what we ourselves are up to" (184).

The narrative renounces the confined human community and envisions a posthuman community in which humans and machines empathise and sympathise, vitally shaping one another's existence. This essay makes us witness the animation of the technological environment. He mentions Penfield's scientific contribution, 'brain mapping', and this concept was later developed by Dick through his imaginative realm. Penfield was able to recognise the exact centres in the brain and show the different areas of the brain from which this sensation is formed. By stimulating any area of the brain using an electrode, he observes a change in its emotional state. He does this experiment using a rat. The idea of a 'mood organ' is a fictionalised version of this scientific contribution.

Posthumanism is purported to enquire into the favourable position of certain human beings while being aware of the demarcation of the human body. This opens a new pathway to posthumanism to step up in human potentiality through the usage of rising technologies. Posthumanism evinces a reconsideration and re-specification of the nuances and edges of humanism. Posthumanism compels us to re-evaluate what it means to be human in a world increasingly shaped by artificial intelligence, urging us to embrace the possibilities and navigate the complexities of our technological future. Technology has extremely insulated the human body, and this modified human attempts to illustrate the connection between the techno-orientalist disposition and the contemporary understanding of race, class, and sexuality. Posthumanism is seen as a groundbreaking theory.

Posthumanism involves a rejection of what is sometimes called 'human exceptionalism', which is the conviction that our own species is special, and uniquely gifted and privileged, as the pinnacle of evolution. It recognises that evolution itself is a force which has 'non-human agency', and will surely proceed beyond us into a posthuman, post-anthropocentric future that we may be part of, but could only be part of. (Barry 338).

Exploring Racism and Sexism in Philip K. Dick's Works

Orientalism traditionally depicts Asians as passive, enigmatic, and fundamentally different, thereby reinforcing the cultural and intellectual dominance of the West over the East. In *Techno-Orientalism: Imagining Asia in Speculative Fiction, History, and Media*,

The Voice of Creative Research

Vol. 7 & Issue 3 (July 2025)

Orientalism is described as a strategy of representational containment, one that freezes Asia within traditional, often pre-modern, imagery. By contrast, techno-Orientalism articulates a broader, more dynamic, and at times contradictory range of representations—constructed by both East and West—of an “Orient” marked by rapid economic growth and cultural transformation. Like Orientalism, techno-Orientalism remains deeply invested in the project of modernity, reflecting not only the privileging of modernity within cultures but also their anxiety about losing a perceived advantage over others. Extending beyond Orientalism’s framework of a hegemonic West exercising representational authority over the East, techno-Orientalism encompasses a more expansive, bidirectional discourse shaped by the circulation of trade, technology, and capital across global hemispheres (3).

Dick’s novel *Do Androids Dream of an Electric Sheep?* is centrally concerned with humanness in the context of modern technology and how the cyborg is an object for acculturation in the late 20th century. This novel achieved mythical representation among film critics and science fiction aficionados. The story follows the protagonist, Rick Deckard, who is a bounty hunter tasked with retiring the androids known as Nexus 6. These androids are capable of replicating human emotions. The novel follows the sexual relationship between the android and human; this reveals the façade of authenticity here. Dick presents electronic animals throughout the novel to project financial status, and these electronic animals symbolise emotional well-being. The novel places emphasis on the inherent racist and capitalist notions through these electric animals, and the androids project capitalists and a techno-oriented society through their characters and androids.

The novels by Dick laid the foundation of the critical posthumanism proposed by Rosi Braidotti, that matter, including the specific slice of matter that is human embodiment, is intelligent and self-organising. This means that matter is not dialectically opposed to culture, nor to technological mediation, but continuous with them.” (The Posthuman 35). His multiverse that is present in the novel is crucially non-anthropocentric; through his novel, we can also witness that nonhuman objects are particularly involved in cultural and political regimes.

Dick questions human control over the world. He presents the shifting images of reality and the presence of a posthuman world in an anthropocentric society. Dick creates a posthuman world by challenging the authenticity of any unifying discourse; he creates awareness about our own future. Dick stated in his essay, *The Android and the Human*, that “As the external world becomes more animate, we may see that we, the so-called humans, are becoming, and may to a great extent always have been, inanimate in the sense that we are led, directed by built-in tropisms, rather than leading. So we and our elaborately evolving computers may meet each other halfway” (4). This may sound unreal, but he presents how human beings are going to lose their humanity without even realising it.

Commodification of the Human through Posthumanism

The Man in the High Castle, published in 1962, gives us a vision of a mechanised world where all beings are reduced to mere resources. This novel predicts an upcoming future and

The Voice of Creative Research

Vol. 7 & Issue 3 (July 2025)

contains the revelation of a mysterious future ahead. *The Man in the High Castle* revolves around characters like Robert Childan, Juliana, and Tagomi. The setting of the novel is in the post-Second World War era. Robert Childan is a great citizen and the owner of American Artistic Handcraft. The Japanese customers embrace American culture. Juliana is a judo instructor and the former wife of Frankie. She comes into contact with Joe. African American and gender politics play a great role throughout the novel.

Dick's works problematize the status of humans at the centre. The anthropocentric claim is that humans can think logically, remember, understand, and have high reasoning power. Since the 20th century, there has been a rapid shift in this situation. The rapid growth of technology, robotics, and artificial intelligence has made a significant change in society. Technology has started becoming a part of our everyday lives. The character Jason Travener, from the novel *Flow My Tears*, the Policeman Said, is a genetically enhanced television singer. His quest for identity and existence is the crux of the novel.

The protagonist of the work had great celebrity status. The irrational behaviour towards him creates a helpless situation. Jason Travener craves a racial identity. The unethical behaviour of the government towards certain creatures is mentioned in this novel. This cultural integration has created a space for posthumanism. It can be argued that posthumanism still questions all existing dichotomies based on class, gender, and race, but posthumanism reinforces the traditional dichotomies. Globalisation, capitalism, and technological innovations play an essential role in defining the posthuman. Western tendency to commodify the non-human and marginal evolves from the foundations laid by a capitalist society, which will be a product of the capitalist ideologies, where the posthuman body will become an ideal market and product for capitalist expansion. This chapter explains how a posthuman psyche is constructed and deconstructed in a capitalist society. Posthumanism as a theory gives us both hopeful promises and reminds us of the fearful scenarios that could follow.

Dick's vision of future reality cannot be easily differentiated from fact and delusion. In the process of androdization, he brings forth a posthuman relationship without annihilating the humanistic subject. He questions the notion of pervasive memories as a basic part of human identity and whether these memories can be artificially created in the human mind using technology. Therefore, the traits of subjects, such as race, class, gender heteronormativity, and representation of sexuality in science fiction, should be scrutinised. Dick discovered many possibilities for a posthuman world to see reengineered or redesigned human bodies with more intelligence. For him, the body becomes a site of experimentation in the posthuman world.

Dick helps to break the conventional notion of the body that focuses on the authoritarian nature of embodiment. Posthuman body should not be seen as a replacement for the biological human form, but rather as a prosthetic extension that augments and expands the capabilities of the traditional human being. This period must be considered a new phase of history in which people coexist with artefacts, cyberpunk simulation, technological enhancement, and robotics. This will have a crucial impact on the future. His androids, Racheal

The Voice of Creative Research

Vol. 7 & Issue 3 (July 2025)

and Jason Taverner, participate in the social and emotional realms of human relations. Rick Deckard was not able to recognise himself as a posthuman until he had his encounter with the android Racheal, and this encounter acknowledged him as a posthuman. He started to feel empathy towards the androids. This reevaluates the idea of human. His novel primarily explores the isolated human life and them strive to never feel complete loneliness. “So, I left the TV sound off and I sat down at my mood organ and I experimented” (Dick, *Android 4*). This shows how humans rely on artificial objects to cure their loneliness. The characters in his novel never feel the warmth of the human community.

The humans in his novel satisfy their souls with the help of these cyborgs. The sociocultural environment that Dick created is an expansion of the present reality by merging it with technology. Dick was able to make us experience his fictional world through his writing. He creates a hybrid society where he is able to question the centrality of humans. Dick designed an apocalyptic future where humans and androids coexist without the dominance of one over the other. He shows us a cultural world fascinating with possibilities. Dick makes us rethink and redefines the idea of an authentic human.

Conclusion

Posthumanism has given strong emphasis to science and technology, and it believes that humans can use technology to improve their physical, cognitive, and emotional abilities. Science fiction acts as a vehicle for the future world. He depicts a future that is both darker and more positive. Other than Dick's works, William Gibson's *Neuromancer* and Wachowski's *Matrix Trilogy* are the other novels that explore the concept of posthumanism. The posthuman body cannot be analysed in isolation. His work presents a posthuman body that carries traditional marks of normalcy and hierarchy and that has an influence on society and technology. Posthumanism carries this stereotype and hierarchy that is prevalent in the contemporary world. Dick's works create a posthuman world that is still under the Western capitalist structure that controls Asians, non-humans and women.

Dick's science fiction works create a post-apocalyptic future in which humans coexist with a combination of technologically modified humans and animals. Yet, he presents a humanistic perspective and collides it with the posthuman social and biological environment. Technology has drastically insulated the human community, making humans more dependent on machines. He attempts to bring gender politics to light and illustrate the connection between technology and contemporary understandings of race, gender, and sexuality.

Haraway extends this interpretation further, fusing cybernetic devices and biological organisms. On the subject, Haraway calls it “Far from signally a walling off of people from other living beings, cyborgs signalling disturbingly and pleurably tight coupling” (152). We can witness the same in *Do Androids Dream of Electric Sheep?* The capacity of an android to demonstrate empathy, warmth, affection and humane judgment creates extraordinary depth and complexity. The androids in Dick's fiction are hybrid figures of a part of a human and a part of a machine. These artificial lives unravel themselves into the posthuman world. They were

The Voice of Creative Research

Vol. 7 & Issue 3 (July 2025)

not only witnessing human life but also experiencing it. Dick's fiction world attempts to interrupt the changing perspective on his mechanical environment.

Science fiction brings in an imaginative world with realistic incidents. The discrimination against Asians, replicants and women is all the result of this techno-orientalism. In Dick's works, the posthuman world of androids and humans is looked at as having machine-like qualities. He questioned the posthuman idea about the non-centrality of humans. He makes us redefine, rethink, and critically analyse what it means to be in a posthuman world. The cyborgs in Dick's novels are experiencing real, unfiltered life experiences. He tries to interpret what the future is going to look like. Rachael, the cyborg in the novel, is having sex with Rick. "If it's love toward a woman or an android imitation, it's sex. Wake up and face yourself, Deckard. You wanted to go to bed with a female type of android, nothing more, nothing less" (Dick, *Android 24*). Rick here is objectifying the android's body for her physical appearance. This forecasts the situation of women in a posthuman world. "Some female androids seemed to him pretty [...] For example, Rachael Rosen. No, he decided; she's too thin. No real development, especially in the bust" (Dick, *Android 43*). Dick's novels investigate the paradox of creating artificial beings in a posthuman world, questioning whether these characters embody the very themes of what it means to be human in such a context.

Though Dick's works can transcend social boundaries, his depiction of cyberspace frequently reinforces sexist and racist prejudices, casting doubt on the viability of creating a truly progressive cyberspace. Androids with modest characters are depicted as inferior in the human community. Posthuman conceptions rising from capitalist societies are implicitly shaped by capitalist ideology, possibly replicating and magnifying existing inequalities. This creates a power structure between humans and posthumans. Through contrasting narratives, Dick's three novels, like *Do Androids Dream of an Electric Sheep?*, *The Man in the High Castle*, *Flow of My Tears*, and *The Policeman Said* explore the three different ethical and practical implications of manipulating the human body. According to Hayles, in *How We Became Posthuman* (1990), "capitalism encourages the inflation of desire, marketing its products by seducing the consumer with power fantasies" (170). Modification of one's body is given prominence in posthumanism to become a flawless creature. Technology has the power to empower the marginalised, but the question is, who gets access to this technology and who controls the distribution of the technology? This creates a posthuman hierarchy and results in the commodification and marketing of the body.

According to N. Katherine Hayles, the posthuman does not signify the extinction of humanity but rather the dissolution of a particular conception of the human—one historically tied to a privileged minority endowed with wealth, power, and leisure, who could imagine themselves as autonomous subjects exercising agency and free will. What proves problematic, Hayles argues, is not the posthuman condition itself but its entanglement with a liberal humanist conception of the self, which reinforces individualism and hierarchical subjectivity (*How We Become Posthuman* 287). Within this framework, Philip K. Dick's novel emerges as a crucial touchstone for interrogating the West's assertions of superiority in science and

The Voice of Creative Research

Vol. 7 & Issue 3 (July 2025)

technology. The text reflects how racial difference is encoded to mirror dominant Western paradigms. Furthermore, even in a purportedly posthuman condition, women characters are depicted not as agents of change but as exoticized and objectified figures. These persistent race and gender stereotypes underscore the need for rigorous critical scrutiny, revealing how the novel reproduces cultural hierarchies under the guise of speculative imagination.

Findings

In Philip K. Dick's posthuman futures, technology does not transcend systemic hierarchies but reconfigures them, serving as an instrument of capitalist domination. Through techno-orientalist tropes that perpetuate racialized imaginaries, Dick destabilizes the concept of the "authentic human," revealing its mechanized fragility. Using androids and cyborgs to interrogate empathy and ethics, he critiques posthumanism's utopian potential, foregrounding its exploitative entanglement with capitalist power.

Works Cited

- Barry, Peter. *Beginning Theory: An Introduction to Literary and Cultural Theory*. 1995. Manchester Univ. Press, 2002.
- Braidotti, Rosi. *The Posthuman*. John Wiley and Sons, 2013.
- De Cock, Christian. "Jumpstarting the Future with Fredric Jameson." *Journal of Organisational Change Management/Journal of Organisational Change Management*, vol. 22, no. 4, July 2009, pp. 437–49.
- Dick, Philip K. *Do Androids Dream of Electric Sheep?* 2011.
- . *Flow My Tears, the Policeman Said*. Houghton Mifflin Harcourt, 2012.
- . Philip. *The Android and the Human*, Bruce Gillespie, 1972.
- . Philip K. *The Man in the High Castle*. Penguin UK, 2012.
- Haraway, Donna J. *Manifestly Haraway*. U of Minnesota Press, 1 Apr. 2016, pp. 3–90.3–90. <https://doi.org/10.5749/minnesota/9780816650477.003.0001>.
- Hayles, N. Katherine. *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature and Informatics*. University of Chicago Press, 2008.
- Roh, David S., et al. *Techno-Orientalism: Imagining Asia in Speculative Fiction, History, and Media*. *Asian American Studies Today*, 2015.
- Turing, Alan M., et al. *Computing Machinery and Intelligence / Great Papers Philosophie*. Ditzingen, Reclam Verlag, 2021.