

https://doi.org/10.48417/technolang.2025.04.08 Research article

The Tragedy of the Instrumental Mind: From the "Tyranny of It" to the Project of "Humanizing" Technology

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Abstract

The article is devoted to the analysis of one of the key problems of our time - the tragedy of instrumental reason, expressed in the fact that rationality, originally designed to liberate humankind, has turned into the power of its enslavement. The dominance of the logic of efficiency and calculation leads to a reduction in the qualitative diversity of the world and the displacement of questions about meanings and values. The research uses the method of critical and theoretical analysis of the concepts of the Frankfurt School (Max Horkheimer, Theodor Adorno, Herbert Marcuse, Jürgen Habermas), the phenomenological approach of Martin Buber's approach to the dialogical relations "I am You" and "I am It", as well as a comparative analysis comparing Buber's ideas with the project "common cause" by Nikolai Fedorov. As a result, the essence of instrumental reason is revealed as logic, which turns the mind into an instrument of programmed control. From the standpoint of the philosophy of dialogue, it is shown that the tragedy of technorationality lies in the total displacement of the "I-You" attitude by the "I-It" attitude, leading to metaphysical alienation. Comparative analysis revealed two alternative ways to overcome the crisis: Buber's existentialphenomenological project of "humanizing technology" and Fedorov 's cosmological-historical project of "Common Cause", which refocuses technology from an instrument of domination into an instrument of salvation and restoration of kinship. It is concluded that overcoming the tragedy of instrumental reason does not lie in rejecting reason and technology, but in their ethical reinterpretation through subordination to the logic of communication, responsibility and service – whether conceived as dialogical encounter, communicative action, or a "common cause" of universal resurrection.

Keywords: Instrumental reason; Technorationality; Technological civilization; Tragedy of reason; Frankfurt School; Philosophy of dialogue; Martin Buber; "I am You"; "I am I"; Alienation; Humanization of technology; Nikolai Fedorov; "Common Cause"

Citation: Berezovskaya, I. (2025). The Tragedy of Instrumental Reason: From the "Tyranny of It" to the Project of "Humanizing" Technology. *Technology and Language*, 6(4), 124-138. https://doi.org/10.48417/technolang.2025.04.08



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УДК 165.173 https://doi.org/10.48417/technolang.2025.04.08 Научная статья

Трагедия инструментального разума: От "тирании Оно" к проекту "очеловечивания" технологии

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Аннотация

Статья посвящена анализу одной из ключевых проблем современности - трагедии инструментального разума, выражающейся в том, что рациональность, изначально призванная освободить человека, превратилась в силу его порабощения. Доминирование логики эффективности и расчета приводит к редукции качественного многообразия мира и вытеснению вопросов о смыслах и ценностях. В исследовании применяются метод критико-теоретического анализа концепций Франкфуртской школы (М. Хоркхаймер, Т. Адорно, Г. Маркузе, Ю. Хабермас), феноменологический подход М. Бубера к диалогическим отношениям "Я-Ты" и "Я-Оно", а также компаративный анализ, сопоставляющий идеи Бубера с проектом "общего дела" Н.Ф. Фёдорова. В результате раскрыта сущность инструментального разума как логики, превращающей разум в инструмент запрограммированного контроля. С позиций философии диалога показано, что трагедия инструментальной рациональности заключается в тотальном вытеснении отношения "Я-Ты" и победе установки "Я-Оно", ведущей к метафизическому отчуждению. Компаративный анализ выявил два альтернативных пути преодоления кризиса: экзистенциально-феноменологический проект "очеловечивания технологии" М. Бубера и космически-исторический проект "Общего дела" Н.Ф. Фёдорова, переориентирующий технологию из инструмента господства в инструмент спасения и восстановления родства. Сделан вывод, что преодоление трагедии инструментального разума лежит не в отказе от разума и техники, а в их этическом переосмыслении через подчинение логике связи, ответственности и служения - будь то диалогическая встреча, коммуникативное действие или "общее дело" всеобщего воскрешения.

Ключевые слова: Инструментальный разум; Технорациональность; Технологическая цивилизация; Трагедия разума; Франкфуртская школа; Философия диалога; Мартин Бубер; "Я–Ты"; "Я–Оно"; Отчуждение; Очеловечивание технологии; Николай Фёдоров; "Общее дело"

Для цитирования: Berezovskaya, I. The Tragedy of Instrumental Reason: From the "Tyranny of It" to the Project of "Humanizing" Technology // Technology and Language. 2025. № 6(4). P. 124-138. https://doi.org/10.48417/technolang.2025.04.08



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INTRODUCTION

In modern civilisation, technology has ceased to be an external attribute and has become a constitutive element that determines how humans exist in the world. Technology determines the possibilities of cognition through cognitive tools (e.g., telescopes, microscopes, Big Data), communication, and even the structure of human desires (Groys, 2018; Delio, 2020). Technological progress, which promised to free humans from the shackles of nature and routine labour, has turned into a new form of dependence. The mind, which has staked everything on total efficiency, calculation and control, has itself fallen victim to its own instrumental logic. This situation represents the tragedy of the instrumental mind: its victory turns out to be its defeat. A paradox arises when the means replace the end, and the logic of the system's functioning begins to dominate the meaning of its existence, leading to existential emptiness and the replacement of ends with means.

The following reflections are dedicated to the problem of the paradoxical situation in which rationality – originally aimed at optimising human existence – turns into a force that enslaves it. The dominance of instrumental reason (Ilyin, 2020; Marcuse, 1994) leads to a systemic crisis, expressed in the reduction of the qualitative diversity of the world to quantitative indicators, the displacement of questions about meanings and values by technical optimisation of means. The anthropological core of this problem is the dominance of the monological "I-It" attitude over the dialogical "I-You" relation, which leads to the alienation of humans from the world, other people, and themselves.

The aim of these reflections is to analyze instrumental reason as characterized by its internal tragedy and yet to identify prospects for overcoming this crisis within the framework of projects aimed at "humanising" technology.

To this end, we firstly seek to reveal the genesis and essence of instrumental reason on the basis of a critical-theoretical analysis of the concepts of the Frankfurt School (Max Horkheimer, Theodor Adorno, Herbert Marcuse, Jürgen Habermas), showing its transformation from an instrument of liberation into an instrument of domination and systemic control.

Secondly, we need to analyse the existential dimension of the tragedy of technorationality — the total social practice of instrumental reason — through the categorical apparatus of Martin Buber's philosophy of dialogue ("I-Thou" and "I-It").

Finally, we will consider alternative projects for overcoming the crisis through a comparative analysis of Buber's ideas about the "humanisation of technology" and Nikolai.Fedorov's cosmic-historical project of the "Common Cause", which reorients technology from an instrument of domination to an instrument of salvation and restoration of universal kinship.

Methodologically, these three steps require firstly a critical-theoretical analysis applied to the study of the concept of instrumental reason by Horkheimer, Adorno, Marcuse, and Habermas. A phenomenological approach is required for an interpretation of Buber for the analysis of the dialogical "I-You" and "I-It" relations – and finally a comparative analysis, allowing us to appreciate the ideas of Buber and Fedorov as contrasting ways of overcoming alienation and 'humanising' technology.



CRITIQUES OF INSTRUMENTAL REASON - THE FRANKFURT SCHOOL

The concept of instrumental reason, developed by Max Horkheimer and Theodor Adorno in their work *Dialectics of Enlightenment*, is key to understanding how rational thinking, once intended to expose myths, has become a new myth itself by focusing on the principles of efficiency and expediency that dominate modern technogenic society (Adorno & Horkheimer, 1997).

The instrumental mind, striving for total calculation, programmatically controls both individuals and society. The rejection of questions about goals, meanings, and values reduces the qualitative diversity of the world to quantitative indicators (Ilyin, 2020). The mind ceases to be an organ of truth-seeking and becomes a technique for calculating optimal paths. And the key mechanism of this tragic metamorphosis is the transformation of the mind from an instrument of criticism and liberation into an instrument of domination and calculation.

This transformation, according to Horkheimer and Adorno, is not accidental, but represents an immanent dialectic of the Enlightenment project itself. The initial impulse of the Enlightenment – demythologisation – required the elimination of all blind faith in forces inaccessible to reason through the knowledge of the laws of nature.

But already in the very act of cognition through the formation of concepts, primary violence occurs. A unique, living, multifaceted object (for example, a specific tree) is subsumed under an abstract universal category ("tree"). Its individual features are erased for the sake of its functional definition (for example, "wood" or "resource"). Thus, thinking, in its quest to free itself from the myth of the spirit of the tree, becomes an instrument of its reification, and the mind becomes mythological, for it begins to worship its own created abstraction (Adorno & Horkheimer, 1997).

The mythological worldview operated with fate – a blind force that equalised everyone in the face of destiny. Enlightenment, with its formal logic and mathematics, replaces fate with the principle of equivalence. In myth, sacrifice is equated with the wrath of the gods; in science, various qualitative phenomena are reduced to a single quantitative law (e.g., the law of conservation of energy); in a capitalist economy, heterogeneous goods and human labour are equated with abstract exchange value. This new principle, as the authors write, equates everything in the world, everything that is incommensurable, "to a single denominator" (Adorno & Horkheimer, 1997, p.20). Thus, the logic of calculation itself becomes a new form of fate, as total and inexorable as is mythological destiny. The assertion that instrumental reason "programmatically controls as above individuals and society" requires the mechanisms of such control to be specified. One of the key mechanisms is the internalisation of external control, its transformation into internal selfdiscipline. In striving to dominate external nature, humans are forced to suppress their own internal nature – their desires, emotions, and everything that cannot be totally rationalised. Instincts, fears, and desires become objects of control and sublimation. The mind, directed outward as an instrument of power, turns inward as an instrument of self-repression. According to Horkheimer and Adorno, this leads to the formation of an "authoritarian personality" (Adorno, 2001), which, being suppressed from within, willingly submits



to external authorities – the state, the market, ideology. A society built on the principle of instrumental efficiency begins to function as a giant self-regulating system. An economy based on the principle of profit maximisation, along with politics reduced to management technologies, and bureaucracy operating with impersonal instructions are all forms of systemic rationality in which living people are merely human resources. The critical potential of the individual, their ability to say 'no' to the system, atrophies, since the very idea of something different seems "inefficient" and "irrational". This is how control is exercised – not necessarily through overt violence, but through the creation of structures where alternative ways of thinking or acting are simply not visible or technically impossible (Adorno & Horkheimer, 1997; Marcuse, 1994).

The thesis of reducing the "qualitative diversity of the world to quantitative indicators" is central to understanding the ontological implications of instrumental reason. However, this process contained a fatal substitution: in order to master nature, reason had to assimilate it to itself, make it calculable. In the famous chapter on the "Culture Industry", Horkheimer and Adorno show how this logic works in the field of art (Adorno & Horkheimer, 1997). In the pre-capitalist era, a work of art possessed an "aura" – uniqueness, connectedness with ritual, a trace of the author, i.e. a whole set of qualitative characteristics. The cultural industry replaces the aura with the standard. Movies, songs, and books are produced according to templates, just like any other product. Their success is measured not by the depth of aesthetic experience, but by box office receipts, ratings, and sales figures – purely quantitative indicators (Muller, 2018). The world of heterogeneous experience is being replaced by a homogeneous field of calculable data. And the deepest philosophical aspect of the problem is the reduction of the "Why? question to the "How?" question. Classical philosophy, starting with Aristotle, wondered about different causes, among which was the "final cause." or goal. Based on the positivist attitude, instrumental reason declares the question of ultimate causes and goals metaphysical and epistemologically untenable. The only legitimate question is about functioning – about how phenomena are related to each other, not why they exist and for what. Thus, the mind, refusing to search for meaning (purpose), deprives the world of its qualitative dimension, reducing it to the level of a complex mechanism subject to disassembly and assembly (Ilyin, 2020; Zhao, 2020).

The development of the critique of instrumental reason within the Frankfurt School was not limited to the concepts of Horkheimer and Adorno. Herbert Marcuse in his work *One-dimensional Man* concretized the social consequences of this logic, introducing and analyzing in detail the concept of "technological rationality" In his interpretation, it appears as the embodiment of instrumental reason in a social system that suppresses critical reflection and creates a totalitarian consumer society (Marcuse, 1994). This society, governed by technological rationality, is characterized by the fact that it does not prohibit, but systematically gives rise to and encourages needs. But at the same time, it systematically forms "false needs" – needs imposed by social control in order to strengthen the system, such as the need for constant updating of goods, a certain lifestyle, and entertainment as passive recreation. Meeting these needs creates a sense of freedom and wellbeing, but in reality it is a form of social control. Persons whose "false needs" are satisfied lose motivation to protest. Their lack of freedom becomes comfortable and even pleasant



- it is a "liberating repression". Marcuse points out that classical critical thought existed in two dimensions: 1) the measurement of the present being and 2) the measurement of the possible, negating, utopian. This second dimension, embodied, for example, in the images of utopias or in the tragic conflict of art, contained the potential of a "Great Rejection" – a total rejection of the existing order. Technological rationality eliminates this second dimension. For example, the concept of "freedom" gets a positive, operational meaning: "freedom of choice" between hundreds of models of the same product, between political parties that actually pursue the same policy. Thought and language become onedimensional – they describe and serve only the existing reality, losing the ability to think otherwise (Marcuse, 1994). The space of inner freedom, beyond the control of the system, is consumed by the mass media and the culture industry, which fill all their free time with standardized images. Personal misfortunes and social injustice are translated into the plane of individual psychological complexes that need to be "worked out". Control is introjected – people begin to supervise themselves, striving to meet the standards of 'success and efficiency dictated by the system. This rationality neutralizes the opposition.: How can you be against efficiency, progress, rationality? Criticism of the system begins to look irrational or destructive (Feenberg, 2011). The result is a society that is totalitarian in a new, mild form. These are not concentration camps, but a "concentration camp of comfor".

Society functions as a closed system where all alternatives – political, economic, cultural, and intellectual – are either technically eliminated or presented as identical in their essence. Political pluralism boils down to a competition between management teams that do not question the foundations of the system (Marcuse, 1994; Muller, 2018).

The analysis presented by Erich Fromm in the work *Escape from Freedom* (Fromm, 2004) shows the socio-psychological ground on which the grain of instrumental rationality falls. Instrumental reason, according to Horkheimer and Adorno, rejects the questions "why?" and "for what?". This is the ideal rational form for giving up freedom. You don't have to painfully decide for yourself what is good and evil, what is the meaning of life. It is enough to follow the algorithm, instructions, and effective protocol. "Escape from freedom" finds its ideological sanction in instrumental reason: "I'm not avoiding responsibility, I'm just following a rational, scientific, effective procedure" Later, in the *Study of the Authoritarian Personality* (Adorno, 2001) and other works, representatives of the Frankfurt school showed how a suppressed, conformal, anti-democratic personality is an ideal functional element for a society governed by instrumental reason. She does not ask unnecessary questions, appreciates order and strength, is ready to obey hierarchy and perform her functions without reflection. Thus, "escape from freedom" prepares a person to become a passive object as well as an active promoter of the "programmed control" of the instrumental mind.

Jürgen Habermas, a representative of the second generation of the Frankfurt School, criticized his predecessors in *Theory of Communicative Action* (Habermas, 2000) for not finding an inherent counterbalance to instrumental reason. Habermas makes a fundamental distinction between two types of social action. The first is a strategic (or instrumental) action aimed at effectively achieving a predetermined goal, whether it is the conquest of



nature or the manipulation of other people. Its criterion of success is correctness and effectiveness, and the sphere of legitimate application is science, technology, economics and administration. Habermas emphasizes that this is not "evil", but a necessary functional component of a complex society. However, it is fundamentally different from the second type — a communicative action, the purpose of which is not success, but to achieve mutual understanding and agreement between the participants regarding their joint situation. The specificity of communicative rationality is revealed in its mechanism: entering into genuine communication, a person implicitly puts forward four claims to understanding, truth, normative legitimacy and sincerity, which, in case of doubt, can be justified in discourse. The criterion of success is agreement reached not under pressure from power or manipulation, but by the power of the best argument. This rationality is embedded in the very fabric of human language and sociality, manifesting itself in everyday communication, moral disputes, democratic discussion, and socialization processes. Thus, communicative rationality is the immanent alternative to instrumental reason that Habermas' predecessors failed to discover. It provides a solid normative basis for criticism, as it allows us to distinguish forms of coordination based on free consent from those imposed by systemic coercion or distorted by manipulation (Habermas, 2000; Feenberg, 2011).

The critical analysis of instrumental reason initiated by Horkheimer and Adorno naturally leads to the concept of technorationality (Muller, 2018; Zhao, 2020). Instrumental reason reveals the epistemological roots of the distortion of reason, which reduced itself to the function of calculation and domination, but technorationality describes the concrete embodiment of this logic in the social fabric of modern technological society as a systemic imperative of efficiency. Going beyond technical tasks it subordinates politics, culture and human subjectivity itself, replacing the discussion of values and goals with technical optimization. Technorationality, therefore, is instrumental reason, which has become a total social practice and a new ideology masquerading as objective necessity (Ilyin, 2020; Muller, 2018).

THE TRAGIC DIMENSIONS OF TECHNORATIONALITY – MARTIN BUBER

The Frankfurt School's analysis focuses on society as a diseased system, but the original, existential dimension of human existence, which technological rationality not only suppresses, but radically and catastrophically deforms, remains on the periphery (Buber, 1967). If the Frankfurt School sees technology as a social problem – the machinery of domination that displaces communication and solidarity – then the German and Israeli existentialist philosopher and personalist Martin Buber sees it as a metaphysical catastrophe that reformats the very architecture of human presence in the world. The tragedy lies not so much in what technorationality does to society, but in how it changes the fundamental way a person treats the world, the other, and themselves. Buber offers not so much an analysis of the social system as a diagnosis of the existential state that arises at its epicenter: a state of total loneliness and alienation in the world deprived of encounters or meeting (Buber, 1999; Friedman, 2013).



The key to understanding this tragedy is Buber's "I-Thou" and "I-It" dichotomy. These are not just two types of relationship, but two fundamentally different ways of being "I" "I", who pronounces "You" and "I", who perceives the world as "It" are different, almost incommensurable existential positions (Buber, 1999).

The I–It relationship is a world of experience, usage, categorization, and objectification. This dimension is necessary for life: a person works in it, analyzes, plans, uses things and tools. This is the realm of cause and effect, where everything can be measured, explained, and subordinated. It is in this area that instrumental, technological intelligence reigns supreme, transforming the world into an impersonal collection of objects for manipulation, resources for benefit, and problems for solution. The problem of modernity, according to Buber, is the total and indisputable victory of this mode. Technorationality appears as the ideal, absolute embodiment of the "I am It". It transforms the entire universe – nature, society, culture, another person, and even the inner world of a personality – into a gigantic, functionally organized "It", into a warehouse of variables to be calculated, optimized, and managed (Buber, 1999; Friedman, 2013).

However, the real tragedy, according to Buber, does not begin with the statement "I am It" but with the oblivion and displacement of "I am You". The "I—You" relationship is one of genuine encounter, dialogue, reciprocity, and living presence. In it, the Other (be it a person, a tree, a work of art, or God) exists not as an object with a set of qualities, but as a unique, integral, and irreducible reality that comes into direct, non-mediated contact with the Other. This encounter or meeting takes place "here and now", it requires full dedication and the presence of both participants, dissolving into the "space between". This attitude, devoid of preconceptions and strategies, is fraught with risk, because in it the Self opens up to the influence of the Other and allows for the possibility of its own transformation. As Buber wrote: "The one who says You does not possess Anything as an object, ... he does not possess anything. But it consists of an attitude" (Buber, 1999, p. 47). It is in this responsible response to the call of Another, that the true Self is born and created. A person finds himself not in introspection, but in dialogue. Dialogue is, "first of all, an ontic relationship, i.e. an attitude that affects not only the subjectivity and empirical life of a person, but also his objective being" (Buber, 1999, p. 252).

The tragedy of technorationality, therefore, lies in the systematic and total destruction of the very possibility of "I am You" in a world entirely structured by the logic of "I am It". This tragedy unfolds on several levels. The first level can be described as the level of alienation from being. The world of "It" is the world of the past, fixed in categories and functions. There is no authentic present in it, no miracle of presence. Life in its kingdom is an existence among things, not participation in meetings or genuine encounters. Paradoxically, a person who aspires to master the world as "It" inevitably becomes part of this system himself – a lonely, objectified functional element, a "human resource" alienated from the flow of living being. The second level is the tragedy of interpersonal relationships. Under the conditions of total domination of technorationality, Another person is inevitably reduced to a social role, a psychological type, a consumer profile, a unit of data. Any "You" is potentially and constantly transformed into an "It". Buber describes this condition both in the essay "The Human Problem" (Buber, 1999) and in the collection *Images of Good and Evil* (Buber, 1999). In this state, people become alienated from the



world, from other people, and from themselves, interacting with indirect, functional models of the world, people, and even themselves. The deep tragedy of technorationality lies not in environmental threats, but in existential devastation, in the substitution of a living, granted dialogue with a world of impersonal, controlled and, ultimately, indifferent functions. Technorationality is the realm of "It", where there is almost no room for meeting with "You". Genuine dialogue, which requires courage, openness, a willingness to be unpredictable, and recognition of the Other's absolute otherness, becomes almost impossible. Its place is taken by communication as an exchange of information, negotiation as a bargaining of interests, or manipulation as covert management. Finally, the third level of the tragedy of technorationality is the tragedy of the religious dimension: even God runs the risk of becoming an "It" – an object of theological doctrines, a "higher mind" or a psychological projection, but not an eternal "You" to whom one can turn with one's whole being. Technorationality builds a universe – rational, manageable, transparent – in which there is simply no existential space, suitable language, or organic gesture left for such conversion, prayer, and dialogue (Buber, 1999).

Consequently, the answer to the challenge formulated by Buber lies on a different plane than the answers of the representatives of the Frankfurt school. Where they saw a subject for social criticism and the transformation of institutions, Buber sees an existential chasm, the overcoming of which requires not a change of social paradigm or type of rationality, but a radical existential turn, a daily and relentless act of choice. It's the courage to say "You" in a world that persistently responds to you in the language of "It". This is a willingness to take risks in a space where calculation prevails. It is a stubborn belief that, even in spite of tyranny, It remains an opportunity for a breakthrough into dialogue, for that moment of presence in which the true human self is born and the eternal "You" is revealed. This is both the tragedy and the hope of Buber's thought. Technology, being essentially a means, cannot answer questions about the meaning of life, suffering, love and death, it involves no summons to a meeting. But Buber did not call for abandoning technology. In conversations with kibbutz members in 1961, recognizing the problem, he insisted on the need not to demonize, but to "humanize technology", arguing that genuine interpersonal relationships can also occur within a technological environment (Buber, 1967; Friedman, 2013). The task is to bring human values into the very logic of technical systems through an act of service and caring for a world that has lost its sacredness. The thinker called not to destroy technology, but to "humanize" the attitude towards it, realizing that any technology is an objectified human attitude, values and intentions of its creators. It carries a "message", and this message should be addressed by asking, "What are you doing with my life? What values do you bring to it?" (Buber, 1967; Friedman, 2013).

THE COMMON CAUSE TO OVERCOME TRAGIC TECHNORATIONALITY – NIKOLAI FEDOROV

In the spirit of Buber's call for dialogue, a comparison of his ideas with those of the Russian thinker Nikolai Fedorov may be fruitful for reflections on the tragedy of the instrumental mind. A dialogue between seemingly distant traditions, despite the difference



in language, context and time, is possible, since both philosophers see the root of the problem in an inauthentic, alienated attitude to being. For Buber, this is the loss of the "I–You" relationship, for Fedorov, it is a violation of filial duty, oblivion of "kinship". And both thinkers call not for passive contemplation of the tragedy, but for radical, almost impossible activity – for responsible action to restore the disintegrated integrity (Fedorov, 1995a; Young, 2012).

In the first part of Nikolai Fedorov's fundamental work, often conventionally referred to as *The Question of Brotherhood or Kinship* (Fedorov, 1995b), the thinker makes a harsh diagnosis of modern civilization. He sees the root disease not in a lack of knowledge or technology, but in a fatal, unnatural gap between "though" and "deed", between theory and practice, between cognition and action. According to Fedorov, this split is the root cause of the weakness, disunity, and immorality of the human race. Instead of a holistic, lively attitude to the world, humanity has created two isolated worlds: the world of "scientists" (pure thought, theoretical reason) and the world of "non-scientists" (blind business, unenlightened practice) (Fedorov, 1995b; Groys, 2018).

A positivist scientist, in Fedorov's understanding, is like a passive spectator in the theater of the world. The purpose of this science is to describe, classify, and explain patterns, but not to change reality itself for the better. Such knowledge is ineffective and therefore immoral. It studies nature as a given, with all its deadly forces (famine, disease, natural disasters), but does not aim at their radical transformation. It is the knowledge of "the world as it is", not "the world as it should be". It serves curiosity, not duty. And in the world of the "unlearned", narrowly utilitarian activity prevails, devoid of a higher, unifying goal. This is work for the sake of survival, enrichment, comfort or power, but not for the sake of saving and transforming the universe. Such an action is blind and destructive. It exploits nature and other people, exacerbating disunity. Without the guidance of a higher, morally meaningful idea, practice degenerates into an egoistic struggle of all against all. This split is projected externally: it generates social inequality, justifies the exploitation of nature, and is the philosophical basis for reconciliation with death as a "natural" law that can only be studied but not abolished (Fedorov, 1995b; Zasukhina, 2016).

Humanity exists as a collection of selfish individuals who have forgotten about their universal kinship. Social structures are based not on love and cooperation, but on competition and exploitation. Modern civilization has come to terms with death as an immutable biological law, passively accepting it and cultivating a "funerary" culture of oblivion. For Fedorov, death is not just a fact, but the main metaphysical evil, the result of the blindness of natural forces and the human fall. The living generations have forgotten their ancestors, not paying back the debt to those who gave them life. In Fedorov's words one can here an echo, of Buber: "To live for oneself is to be the executioner of one's fathers; to live for others, for resurrection, is to be the son of man" (Fedorov, 1995b, p. 81).

Indeed, there is here a point of convergence with Buber. Buber's "I am It" attitude is the philosophical expression of Fedorov's "non-fraternity" and "non-sonship". The world transformed into an impersonal "It" is a world where fathers have become objects rather than a living "You"; where the bond of generations has been severed, replaced by the functional bonds of the present moment (Buber, 1999; Fedorov, 1995b).



Fedorov's response to this tragedy is a grandiose project of active transformation of the universe, a "Common cause" thanks to which a revolution in the understanding of science and technology can be accomplished. This project does not raise the issue of exploiting nature but of spiritually mastering it. "The task of humankind is to turn the blind, deadly force of nature into a vital, life-giving force, into an instrument of revival" (Fedorov, 1995a, p. 395). We are talking about the transformation of deadly natural forces (hunger, disease, cosmic cold) into consciously controlled, life-giving energies. Fedorov talked about climate control, teluric (terrestrial) and cosmic regulation. Technology is conceived not as a tool of domination for the comfort of the living ("I am It" in its utilitarian aspect), but as a tool of salvation and duty (Fedorov, 1995a; Groys, 2018).

The main idea of the Common Cause is resurrection, which is understood by Fedorov not as a supernatural miracle, but as the highest scientific and ethical task. By collecting and synthesizing scattered dust particles, using all the resources of future science, humanity must restore the bodily organization of bygone generations. It is an act of supreme justice and filial love, reversing death itself. The Fedorov project makes technology a servant of resurrecting love, not calculation. The united humanity, which resurrected its ancestors, becomes God's co-worker in the final spiritualization of matter, the transformation of the entire universe from the realm of blind necessity and death into the realm of Life, Reason and Love (Fedorov, 1995a; Young, 2012).

Instrumental reason in the discourse of Fedorov's philosophical ideas is a blind mind that serves selfish purposes. It is a mind that, even when creating complex systems, remains in thrall to death, because it accepts it as a given. The mind of the "Common Cause" is a mind that becomes an instrument for restoring kinship and justice. Its goal is not domination, but salvation, not exploitation, but resurrection. not the calculation of efficiency, but the fulfillment of duty. Such intelligence transforms technology itself: from an instrument of escape from problems, it becomes an instrument of redemption and active confrontation with the main tragedy of the universe – death and non-fraternity (Fedorov, 1995a; Zasukhina, 2016).

Thus, the dialogue between Buber and Fedorov reveals two poles in understanding the tragedy of the instrumental mind and two possible ways to overcome it. Buber points to an existential-phenomenological path: a return to the immediacy of the dialogical encounter "I—You" here and now, to the courage to say "You" in the world of "It". This is a path of personal, interpersonal breakthrough (Buber, 1967; Friedman, 2013). Fedorov proposes a cosmic-historical project: a universal "Common Cause" with the help of transformed science and technology to resurrect universal kinship and victory over death. This is the path of collective, historical salvation (Fedorov, 1995a; Young, 2012).

They are united by the understanding that true intelligence and true technology are possible only as a service of communication - communication between "I" and "You", between the living and the dead, between humanity and the cosmos. Where reason breaks away from this ethical and religious foundation and becomes a self-sufficient tool, it condemns itself to the role of an executioner – the executioner of nature, another person, their fathers and, ultimately, themselves. Overcoming tragedy does not lie in abandoning reason and technology, but in their radical reorientation – from the handmaidens of "It" and death to the allies of "You" and life (Buber, 1999; Fedorov, 1995a; Habermas, 2000).



DISCUSSION

The Frankfurt School places the structure of society at the center of its research. It considers technological rationality not as a neutral tool, but as a socially conditioned mechanism for exercising power, ideology and control, which leads to a weakening of public relations and a limitation of individual autonomy. According to this tradition, the crisis of modernity stems from an inherent contradiction of the Enlightenment project which gave rise to a "repressive" social order in which instrumental thinking colonizes the world of life. Overcoming the crisis is associated with the transformation of sociopolitical institutions, which can be carried out either through radical criticism of repressive systems, or, as in Habermas, through the affirmation of communicative rationality.

The thought of Martin Buber, whose approach can be defined as existential-phenomenological criticism, is moving in a completely different direction. The central object of his analysis is not the social system, but the existential situation of the individual, for whom the dominance of technorationality appears not as a historical, but as a metaphysical problem. Buber sees the key problem as the total dominance of the "I–It" relationship based on objectification and use, and its displacement of the "I–You" relationship as a genuine encounter and dialogue, which leads to existential devastation. Salvation, according to Buber, lies not in social transformations, but in a personal existential effort - the courage to affirm the dialogical "I–You" relationship every day in a world structured by the logic of "It". This path presupposes renewed religiosity, where God is the absolute "You", and prayer is a dialogical encounter that requires an inner spiritual awakening.

Buber's focus has shifted from society to the existential state of an individual, for whom technorationality appears not as a social problem, but as a metaphysical catastrophe that reformats the very way of human presence in the world. His diagnosis implies that the tragedy lies in the total victory of the "I—It" relationship – the world of objectification, experience and use – and the systematic destruction of the possibility of the "I—You" relationship as a world of genuine encounter, dialogue and mutual presence, which leads to existential devastation and total loneliness. The way to overcome lies not in changing the system, but in a personal existential turn and religious-personalistic mysticism.: Salvation is a daily, relentless and risky act of choice, the courage to say "You" in a world that responds "It". This is the path of radically renewed religiosity, where God is the eternal "You", and prayer is a dialogue that requires not social reform, but spiritual awakening to a dialogical existence.

The third direction, presented by Nikolai Fedorov, develops cosmic-historical criticism and offers project-transformative salvation through a "Common Cause". The subject of the Russian thinker's reflections is the universe and the history of humankind in their entirety. Fedorov considers "non-fraternity" to be the primary cause of world evil – the rupture of family ties between generations, leading to the passive acceptance of death. Fedorov sees the answer to this fundamental problem as a collective scientific and technological project on a planetary scale, requiring a radical reorientation of science and technology: from the goals of domination and comfort to the management of natural forces, to the resurrection of ancestors and thus to the victory over death. In this paradigm,



technology is transformed from a tool of calculation into a means of filial love and universal salvation, and the idea itself appears as a utopian religious project calling on humanity to cooperate with God in the spiritualization of the cosmos.

Thus, the Frankfurters seek salvation in correcting society through criticism and communication, Buber in transforming interpersonal existence through the mystery of dialogue, Fedorov strives for salvation through the transformation of the universe and history in the megaproject of resurrection.

These are three different perspectives, but their dialogue enriches the understanding of the tragedy of the instrumental mind, clearly showing that it is simultaneously social, existential and cosmological. This understanding opens up several perspectives for further research. One of them is the problem of the practical implementation of Buber's project of "humanizing technology" in the context of total digitalization, algorithmic management, and the development of artificial intelligence (Bylieva, 2025; Delio, 2020; Nikitenko, 2024). Modern research in the field of ethics of artificial intelligence (Friedman, 2013; Nikitenko et al., 2024) and human-centered design (Auernhammer, 2020; Usmani et al., 2023) can be considered as attempts to implement this principle.

A promising direction is the search for points of convergence of existential-phenomenological analysis with large-scale socio-historical transformation projects. How can the personal act of a dialogical meeting become the basis for collective action, and the project of a "Common Cause" avoid the danger of a new technocratic totalitarianism? Focusing on these perspectives makes it possible to transfer critical theory from the plane of historical and philosophical analysis to the field of actual practical thought necessary for understanding and overcoming the key challenges of the technological civilization of the 21st century (Digilina et al., 2023; Garibay et al., 2023; Grover & Arora, 2023; Riedl, 2019).

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Received: 29 August 2025

Revised: 14 November 2025

Accepted: 18 December 2025

Статья поступила 29 августа 2025 одобрена после рецензирования 14 ноября 2025 принята к публикации 18 декабря 2025