RADOVAN RICHTA – THE PREDECESSOR OF THE CLUB OF ROME AND THE 4.0 VISION

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Abstract

Radovan Richta was a Czech academic, philosopher, sociologist, prognostic, and head of an interdisciplinary research team. He specialised in the issues of the scientific and technological revolution and its social and human contexts. Both in the East and the West, he was famous for the work of Civilization on the Crossroad, which in many ways surpassed its time. Richta (and his team of scientists) may perhaps be considered the predecessors of the Roman Club. His link is highly inspirational for the current reflection on the so-called fourth industrial revolution and civilizational milestones as well as system changes.

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Radovan Richta belongs among those half-forgotten authors whose reputation exceeded Czechoslovak horizons. Similar to F. Valenta, Richta's inspirational work often remains more appreciated abroad than in the Czech Republic. Richta's legacy and message have something to say to people today, including contemporary economics and economists. Richta (and his team) can be labelled as the predecessor of the Club of Rome and of the current discussions around the so-called Fourth Industrial Revolution (4IR).

Radovan Richta (1924-1983)

Radovan Richta an academician, philosopher, sociologist, prognostic, and the head of an interdisciplinary research team belongs among the leading twentieth-century Czech scientists. The core of his efforts was focused on studying the issues of the Scientific and Technical Revolution (STR) and its social and human relationships. In both the East and the West, he was famous for his book *Civilization on the Crossroad*, which in many ways, is still ahead of its time.

The Life of Radovan Richta

Radovan Richta was born on June 6, 1924, in Smíchov, Prague where he grew up in a railway official's family. He attended Vančura High School (since 1961 Na Zatlance High School), where he graduated in 1943. Subsequently, he was deployed in the Avia factory as an auxiliary office worker. He actively participated in the activities of the Předvoj resistance group, founded by classmates and friends from the high school.

¹ For more details, see AOP, 2016, No. 4. F. Valenta is a co-author of Civilization on the Crossroad.

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In the autumn of 1944, Richta was arrested and imprisoned. The internment resulted in permanent and severe health problems due to a series of diseases that resulted in chronic pulmonary tuberculosis and later a dysfunctional immune system. He was rescued on 1 May 1945 by the Swiss Red Cross when along with several other seriously ill prisoners he was permitted by the Germans to be evacuated. Many of the Předvoj resistance group who were arrested were executed on 2 May 1945 in Terezin. This fatal coincidence scarred and traumatised Richta for the rest of his life.

After the war, he studied at the Faculty of Natural Science and later at the Philosophical Faculty of Charles University in Prague (1945-1950). He was involved in the Union of University Students and also worked for the party press, in *Rudé Právo* and *Tvorba* (1949–1953). He obtained the title Doctor of Philosophy, i.e. a Master's degree (PhDr.) with the work *The Czech Question and Masaryk's Cosmopolitan Philosophy* (1953). In 1965, Richta obtained the scientific rank of Doctor of Philosophical Sciences (DrSc.) based on his *Man and Technology in the Revolution of Our Day – Communism and Changes of Human Life (To the Nature of Humanism of our Time)* treatise.

Shortly after (1953–1954), he became the head of a department at the Ministry of Higher Education and during this time participated in the work of the State Commission for the establishment of the Czechoslovak Academy of Sciences (ČSAV). In 1954, he was accepted as a researcher at the ČSAV. In 1966, he became the head of an interdisciplinary team for the STR research. This work was published in the *Civilization on the Crossroad* work (1966a). In 1968, Richta was elected as a correspondent member and, in 1977, a full member of the CAS. He later became a member of the Presidium of the Czechoslovak Academy of Sciences and participated in the overall management of this institution. He acquired a considerable reputation in the international forum where he successfully represented Czechoslovak science. From 1970–1983, he served as director of the Institute of Philosophy and Sociology of the Czechoslovak Academy of Sciences.

Richta spent the years from 1960–1964 recovering from tuberculosis. From 1958, he had often been treated in Dobříš sanatorium, where he had been studying and writing hard. During his illness, he continued his scientific work³ and was especially interested in the STR in socialism. Even in this difficult period, he impacted scientific and public life through his studies. He was also a member of the Editorial Board of *Filosofický časopis*. Richta's entire life was filled with intensive work for science, for ideas of leftwing humanism and society.⁴ Richta died on July 21, 1983, in Prague. He was a member of several international scientific institutions and received many high state honours and

² In the 1960s, the socio-scientific environment and state and political power significantly influenced the results of the examination of four interdisciplinary scientific teams: for the theoretical problems of the planned management of the national economy (leader O. Šik); for social and human STR connections (R. Richta); for the research of the vertical social differentiation of the Czechoslovak society (P. Machonin) and the team for the development of the democracy and political system of our society (Z. Mlynář). Their origin was primarily the attempt to ensure a faster increase of the level of life and civilisation by creating and developing original Czechoslovak growth concepts (Hoppe et al., 2015).

³ The work kept Richta in a mental balance. As evidenced by personal testimony in (Vaško, 2001).

^{4 &}quot;All his life he studied, as if he should live forever, and worked as if he had to die tomorrow" (Ondryáš, 1999, pp. 10-11).

awards from the CAS, especially for his set of works and the leading share in the collective research of the STR.

The focus of Radovan Richta's research

Richta belonged to the young intellectuals who helped build the new institutions after February 1948 and who met in 1954 at the Cabinet of Philosophy of the CAS (since 1957, the Institute of Philosophy of the Czechoslovak Academy of Sciences). From the beginning of his studies, he was interested in the methodology of science and the changes in this area. This led to Richta's reflection on the historical nature of forms of social life, history and methods of science, and hence to the consideration of STR and human development. He gradually began to develop Marxist teachings on the building of socialism, with a lifelong emphasis on man's relationship with science and technology (1963a; 1968a; 1968b; 1973). The culmination of his interest in the role of science and technology in the development of society is *Civilization on the Crossroad* (1966a).

In his scientific work, Richta focused first on the critique of Masaryk philosophical and sociological systems (1958), which he soberly analyses in the context of the development of philosophical thinking of the late nineteenth century and also focuses on questions of Communist humanism (1963b). Later, he devoted himself entirely to the current problems of linking the STR and socialist society, emphasising the advantages of socialism over capitalism (1967c; 1974b; 1976; 1982). In cooperation with the interdisciplinary team, the Marxist concept that the STR created was in its time complex and unique (1963a; 1966; 1966b; 1967b; 1967c; 1971a; 1971b; 1974a; 1974b). He also addressed civilisation transformations (1966a; 1967), science methodologies (1982) and prognostic considerations (1979).

Richta attempted to gain a deeper insight into questions that had not been answered before. Sometimes, these questions had not even been raised yet. He was filled with creative and brave new ideas. His first works have already significantly influenced social scientists and broader intellectual society, especially the essays *Man and Technology in the Revolution of Our Day* (1963a) which contribute to the fact that the term technology became one of the central concepts of philosophical thoughts of the 1960s. In the Marxist spirit, he analysed the revolutionary processes of the STR. Quantitative indicators complemented the qualitative analysis. Richta reflects on the "technical challenges" and thinks of the productive forces of the new society, the "technical conditions"

⁵ The dying Richta leaves handwritten thoughts for an unfinished work the *Contours of a New Civilization* (Vaško, 2001).

^{6 &}quot;These two brochures have impressed as an intellectual bomb. The generation, which was shocked by the discovery of the XX. KSSS Congress and tired of the perilous Cold War and the temporary climatic fluctuations of the political climate was suddenly and radically confronted with a new revolutionary hope and effective moral challenge" (Smíšek, 1997, p. 28). The "blue booklet" is the text here (Richta, 1963a), the "red booklet" is work (Richta, 1963b).

⁷ Richta operates with the term *technique*. Today in a broad sense, for example, in economics this especially means *technology*.

⁸ See (Nový, Hroch and Gabriel, 1994).

⁹ Richta asks the central question "Whether the impressive power of modern technology encumbrances people or gives them wings?" (1963a, p. 3). He frames it with many other questions, for example, whether we understand the revolution which we cause.

of the creative self-realisation of man. He contemplates the controversy of technology vs "humanity", respectively of the modern questioning over the "human factor". This is closely connected with the natural-historical conception of the social development of K. H. Marx¹⁰ (and F. Engels). In particular, the enlargement of this study results in the core work *Civilization on the Crossroad* (1966a).

In 1963, he also published his essays on *Communism and Changes of Human Life (To the Nature of Humanism of our Time)*, ¹¹ which also feature part of his doctoral work. Richta reflects on traditional forms of life, upheavals in human relationships, "the shaking in the depths of wealth", and the transformations of work. ¹² Socialism, which is conceived as a "community of work", emphasises the revolutionary changes of the material base under the influence of the STR, and once again puts a human in the central place. The work concludes with the words: "The mystery of our epoch depends on the social development of man" (1963b, p. 51).

Humanistic ideals pervade all of Richta's work. *Civilisation on the Crossroad* suggests how to achieve universal transformation and progress in society in the sense of the self-realisation of man as self-purpose. The all-round development of man is to be both the basis and the goal, the development of the productive forces. Richta's humanist ideals partly contributed to the creation of slogans such as "Socialism with a human face", which was overly fashionable in the late 1960s. 13 *Civilisation on the Crossroad* is, therefore, also appreciated because it helped open up the public discourse of the reform social science rhetoric, on which it built part of the sociology, philosophy and economics of the 1960s. However, there are many critical voices on both the right and left of the political spectrum, which point to the naive (or directly unfair) intentions of the 1960's reformers. And they are more wary of the false and dangerous concepts of the so-called third ways.

The work of Richta, headed by *Civilization on the Crossroad*, still enjoys the intense interest of western scholars of various disciplines. However, in the domestic environment, Richta is usually overlooked or deliberately neglected, which dramatically enhances development after 1989. Richta is criticised for high academic and non-academic functions

¹⁰ Including traditionally underestimated Marx's Manuscripts "Grundrisse", with reflections on, for example, leisure, self-realisation of man or the economy of time. Richta deserved the Czech edition of this work and wrote the introduction for the translation of Volume I (Svoboda, 1971, volume II, 1974 and volume III, 1977).

¹¹ This "red booklet" was supposed to be the first, before the "blue booklet" (1963a). It was initially a study of communism that Richta had promised to the Rudé právo Journal before going to the sanatorium. Finally, the paper was twisted by the newspaper. The publication (1963b) contains an outline of Marxist social theory. Its elaboration was to become the second pillar – in addition to the consideration of the STR based on the text (1963a) – Richta's work, which was to lead to unified science about the man. In the period 1968–1970, an anthropological team began to work (Smíšek, 1997).

¹² Already in the 1960s, Richta considered it necessary "to complete mechanisation and to proceed with automation" (1963b, p. 28). Advanced automation today belongs to the 4IR spells, respectively to many buzzwords 4.0 (Sirůček, 2018).

^{13 &}quot;R. Richta ... was an ideologue of the far-flung future of communism and the scientific and technological revolution and, in fact, of the slogan of socialism with a human face. He put these words into Dubcek's mouth as well as into the Action Program of the Communist Party of Czechoslovakia" (Mlynář, 1990, p. 151).

and his works and is calibrated as a "leading normaliser" of the ČSAV. Richta's work in domestic social sciences is thus often relativized and interpreted as ambiguous. Although with some questions, Richta was necessarily subordinate to his time, his work proves both the power of spirit and the scientifically objective vision of not only the present but, above all, the future.

After 1970, Richta collaborated on joint projects with Soviet and other scientists from socialist countries (1974a; 1974b; 1982). The outputs usually operated with the fact that the competition between world capitalism and world socialism under STR conditions is definitely decided. Moreover, in favour of socialism. It also underlines the criticism of Western sociological, political and economic theories including concepts of post-industrial society, etc., falling into the conglomerate of theories of the transformation of capitalism (1980; 1983).¹⁴

The prognosis of the development of *Czechoslovakia 2000* (1979) is considered to be the last significant task personally led by Richta. This was a joint study commissioned by Government Resolution No. 128/1979 and prepared for the Government of the Czechoslovak Socialist Republic at the Richta Institute for Philosophy and Sociology of the Czechoslovak Academy of Sciences, in cooperation with the Economic Institute of the Czechoslovak Academy of Sciences. However, the text has never been published.¹⁵

Civilisation on the Crossroad

In 1966, Richta became the head of the interdisciplinary team for research on the social and human context of the STR. This is his most astonishing record in the history of sociology and many other disciplines. The team was established by the Central Committee of the CPC and prepared its report for the XIII Congress of the Communist Party of Czechoslovakia in 1966. The report was published as *Civilization on the Crossroad: Social and Human Implications of the Scientific and Technical Revolution* (1966a). It seeks comprehensive and synthetic clarification of the STR, its contexts and implications, including human and social dimensions against the background of the confrontation of two social systems – socialism and capitalism. The text uses the contrast of the STR and the industrial revolution, and it explains the differences.

¹⁴ According to these socio-economic concepts, modern capitalism after the WWII, resp. today's post-capitalism (P. Mason, P. F. Drucker) was to "revive" and become a state society: post-industrial (D. Bell), technotronic, cyber-electronic (Z. K. Brzezinski) super-industrial (H. Toffler), "natural capitalism" (newer Reports for the Club of Rome), "capitalism 4.0" (A. Kaletsky), knowledge-based knowledge society (P. F. Drucker), networking (M. Castells, J. Rifkin) digital (P. Tapsott) and the capitalism of digital platforms (N. Srnicek). It describes a system that is fundamentally transformed: by the Revolution of Management (J. Burnham), leadership revolution, convergence processes (J. Tinbergen, J. K. Galbraith), the "Third Way" market economy (A. Giddens) and digitisation (P. Mason). This vast and overlapping spectrum also includes the contemporary concepts of 4IR, Industry and Society 4.0 (Sirůček, 2017; 2018).

¹⁵ At the end of his life, Richta attempted to create a prognostic team, which – in Richta's words – would "deprive us of a political curse and allow us to explore society officially" (Kutta, 1997, p. 22). In the last period, Richta's entire team was protected from the threat of dissolution only by the authority of international co-operation.

Civilization on the Crossroad is a collective work yet¹⁶ with the decisive and irreplaceable role and authority of Richta. It represents the economic, sociological and technological prognosis of development, which addresses the transformations of the former industrial society into a modern society called, e.g. informational.¹⁷ The text has been gradually translated into at least twelve languages and is still among the most important outputs of Czechoslovak social sciences. It is the world's most prized original domestic work in philosophy, economics and sociology.

The book, in addition to the preface, the introduction (*To Understand the Meaning of Changes*), the spreadsheet attachments and an extensive bibliography consists of four sections. The first "Nature of the Scientific and Technical Revolution" maps out the changes in the structure of productive forces, technical and social breakthroughs (STR and changes in production relations) and access to the STR in the CSSR. The second, "Revolutionary Changes in Work, Skills, and Education" focuses in more detail on the STR impacts on the structure of work and education. The STR also changes the way of life where one must deal with an artificial environment — as indicated in the third section "Modern Civilization and the Development of Man". The final part is called "New Features of Social Development in the Era of the Scientific and Technical Revolution" and highlights the new position of science and focuses on further issues of governance and the social and ideological problems of the "science and technology era". Part of it forms the appendix, which provides a summarising theme to reflect on for practice.

Today, the significance of *Civilization on the Crossroad* remains versatile. It became a bestseller that attracted extraordinary attention both at home and abroad. ²⁰ In its time, it was even referred to as the "Capital of century XX". ²¹ A critical approach (to capitalism but also to so-called real socialism), holistic focus, originality, and the broad use of new knowledge of world science aroused interest. The study also led to the creation of a new

¹⁶ The study was born out of discussions from which only a fraction was published. A. Hodek, A. A. Hoch and F. Kutt, who met on "philosophical walks" initially contributed to the Richta team theory (Kutta, 1997). In the second edition, the explicitly listed authors' group includes 28 names. The philosopher J. Filipec (Historical Institute of the Czechoslovak Academy of Sciences), "Richta's right hand" was a member, as well as figures such as A. Hodek (Institute of Philosophy of the Czechoslovak Academy of Sciences), F. Kutta (Institute of Economics of the Czechoslovak Academy of Sciences) and F. Valenta (University of Economics in Prague). At the same time, in the *Introduction*, thanks are also expressed for the help of several dozen experts, including the economists M. Hájek, K. Kouba, O. Šik, V. Šilhán and M. Toms. The 3rd extended edition includes 61 co-authors although Richta himself usually wrote the resulting text.

¹⁷ R. Richta does not use those terms of Western science.

¹⁸ Here according to the second Czech edition (Svoboda, 1967). The 3rd extended edition (Svoboda, 1969) is also known. It contains new studies of changes in economic growth models, as well as complements and refinements from underlying studies.

¹⁹ For Richta, socialism remained fatally inseparable from its humanistic nature and the creative forces of man. Man emerges from his original natural world and lives in the environment he has created.

²⁰ To the teamwork was dedicated, for example, the monothematic number of *Sociologický časopis* (1966, No. 2), with the introductory text by R. Richta (1966b).

²¹ With the parallel between *Civilization on the Crossroad* and the breakthrough that Marx's *Capital* meant for society, the "father of futurology" arrived – the German lawyer, political scientist and humanist O. K. Flechtheim (1909–1998).

scientific field of STR. At that time, it was a truly exceptional interdisciplinary concept²² and the work has been studied by experts from philosophy, sociology, economics, urban development, medicine and others. It is also important to systematically compare progress in capitalist and socialist countries and to identify valid statistical indicators for such a purpose.

Richta pushed for the STR term²³ and the theory of substitution of physical work by mental work. His original STR concept highlights the transformation of productive forces (1966a). He later attempted to analyse the possibilities for change from the nature and type of science (1982 and further). Instead, Richta illuminates not only the nature of the changes in the technical and human components of the Marxist category of productive forces but also the overall changes in man's historical position and the growth forms of civilisation.

The authors of *Civilization on the Crossroad* point to the transition between the two stages of society's development. Production is increasingly relying on science and technology (automation of production, plastics, nuclear power, etc.). Human work is liberated from monotony and can be used to make production more efficient. The economy is detached from mechanical mass production that has prevailed since the Industrial Revolution. These processes are described as the STR²⁴ that overturns the elementary technical, economic, social and anthropological conditions of civilisation development. Unlike industrialisation, science, ²⁵ and its technological applications are a decisive factor in the growth of productive forces. Ultimately, it influences the development of man and his creative forces. These changes reflect the need for an intensive transformation of the economy into a dynamic organism that will continually renew its growth. Fundamental social investment is to invest in human capital, specifically in science, education and human skills. The more human forces the STR releases from mechanical work, the more it is possible to direct these resources into the further development of the

²² In the 1960s, the interdisciplinary designation was used. Today, even in the context of 4IR, it is juggled with the current terms interdisciplinary, multidisciplinary or transdisciplinary, etc. with a meaning that is often unclear or overlapping. Many times, these are mandatory phrases, sometimes even words that are perceived even pejoratively.

²³ Richta did not invent the term STR; it was invented by J. D. Bernal (1901–1971). The Irish-British physicist, a sociologist of science, was also a leftist activist. He formulated the concept of five epochs: river agricultural culture, old Greece, the 16th and 17th centuries in Europe, the industrial revolution in England and the scientific and technological revolution after WWII.

²⁴ This is a category that has been used up to this day and used not just by Marxist authors. It marks new processes of developing the interrelationships between science, technology, production and society. These appear in the mid- 20th century with the reflection of scientific and technical knowledge. The universality is the key feature of the STR. When the whole of society is changing (Purš, 1973) distinguishes: 1) the industrial revolution (from the 1880s to the end of the 19th century, with its centre in England); 2) the Revolution in the technical sciences (from the 19th century to the WWII, with the centre in Germany and the USA); 3) the STR (starting after the Second World War, but also in connection with scientific discoveries from the turn of the 19th century). For more detail of the sequence of technological and other revolutions, see (Sirůček, 2017; 2018).

²⁵ In the STR, science becomes an immediate production force. Richta formulates this earlier in connection with Marx's "Grundrisse" Manuscripts (1963a). However, this thesis was later criticised, for example by Ransdorf (1997) who pointed out that the immediacy of science can only arise based on universal mediation.

socialist economy. Moreover, for the reason it is to be a creative work, the overall self-fulfilment of human beings in the spirit of humanistic values will also increase.

A part of the text assesses the impact of STR on human life in fields such as the environment, work organisation, lifestyle, relationship with nature etc. The authors perceive the realisation of STR as the central line of open competition between capitalism and socialism. Therefore, it also contains recommendations on how to improve the performance of the Czechoslovak economy to fulfil the historical task in this competition. In the STR conditions, growth schemes from the industrialisation period cannot be applied inertially. Effective growth is still less associated with an increase in the number of workers and industrial buildings. As a new fundamental growth relationship (for fast growth), science advances over technique and technology before industry. Above all, it is, therefore, recommended to abandon an extensive growth model and invest in education, science and technology.

Moreover, the increasing income differentiation frees up space for socialist intelligence initiatives and replaces a "bureaucratic-directive" system of corporate governance with a more flexible and rational system. However, professional councils and qualified proposals on changes in corporate governance and the economy did not take much of it into account at that time. On the contrary, Richta's vocabulary and his scientific authority covered up the existing directive-administrative methods of management.

Inspiration and Challenges by Richta

Civilisation on the Crossroad brings many thoughts that were a breakthrough at the time. What is meant by the "crossroads"? The crossroads concerned the possibility of further ensuring the development of productive forces in a harmonious way, including the development of its most important component – man, his abilities and mental life.²⁷ In the 1960s, Richta et al. warned that all economic difficulties, disproportion and the impossibility of further industrialisation, signal the current presence of the "node line" of modern civilisation.²⁸ Beyond this limit, the further development of the productive forces is not manageable by existing methods, but only by the transition to STR.

Some voices argue that just by this, Richta expresses the deep nature of the problems of so-called real socialism (resp. Protosocialism)²⁹ and fundamental problems that later lead to its collapse, disintegration and dismantling. According to Richta, capitalism can

²⁶ In this, to a certain extent, the study with the parallel work of the interdisciplinary teams for economic reform (O. Šik) and the study of the social structure (P. Machonin) continued. However, the proposed measures did not completely overlap. Richta's team suggested, for example, less radical changes in the social structure (Hoppe, 2015).

²⁷ Based on the idea of K. H. Marx (1857) that the saving of time is equal to the growth of leisure time, i.e. the time for full development of the individual. This, in turn, influences the productive power of labour as a key component. Vaško (2001) calls this thesis a "Marx equation" and at the same time treats it as a condition for choosing one branch of the "crossroads". He asks whether current civilisation allows this formula to be fulfilled. The second branch of the "crossroads" means the abandonment of the development goals of capital, driven by maximising profits, regardless of the social consequences.

²⁸ Turning Point of Growth is the name of the subchapter in the third chapter of the first section (Richta, 1966a).

²⁹ Compare (Heller, Neužil et al., 2007; Ransdorf, 1997).

only be overcome on the "the field of progress" and "will prove it is incompetent to carry out this progressive human task" (1966a, p. 41). So-called real socialism has not proved this, for reasons both subjective and objective. Richta's warning about the danger of ignoring development trends remains significant. The fact that finding the right direction on a civilisation "crossroads" requires system changes. It follows from Richta's work that it is necessary to change people and the relationships between them for a systemic change. Man will change if he uses leisure time to develop. But do people want this?³⁰

There are also other interpretations of Richta's civilisation "crossroads". Richta's work is supposed to be a socialist reflection of a deep and multidimensional crisis, including the existential crisis, in which industrial civilisation has sunk into. This crisis is manifested by the civilisation fermentation of the 1960s, in the East and the West. Many intellectuals and experts in various disciplines in the 1960s were looking for ways to solve the crisis and present the ideas of an ideal post-industrial society etc.³¹

The work of Richta and his team can also be described as the forerunner of the Roman Club and his warning forecasts. *Civilization on the Crossroad* is sometimes criticised for not explicitly considering the growth limits, e.g. in the form of the depletion of natural resources. ³² Richta, however, states that increasingly satisfying human needs does not automatically connect with the growing consumption of natural resources. Different interpretations may be because of the perception of the "growth imperative" – in the context of the fact that traditional industrial growth should come across the ceiling. Some of the first reports of the Club of Rome call for growth stoppage; sometimes limited, sometimes negative. It is not the same as Richta's ideas about "optimising growth" in the spirit of the economy of time, which was supposed to provide the first truly scientific picture of efficiency in a far broader concept with a critical emphasis on subjectivity. For man and a new space for his all-round development, Richta sought to overcome human degradation in the sense of alienated manufacturing power.³³

Despite certain time constraints,³⁴ Richta's STR theory includes most of the social and civilisation growth factors, respectively the development factors, depending on

³⁰ An issue also crucial regarding current considerations of 4R. Richta should be read carefully by those who are naively dreaming of the wonderful inactivity of millions of people without work. For example, they receive unconditional basic income without work. Atomised digital demented, who all share and fundamentally believe that they are automatically entitled to everything, effortlessly and immediately. This included the right to "have fun" up to death. (Sirůček, 2017; 2018). These anticivilization utopias with *Civilization on the Crossroad* or with Richta, have nothing in common. They are the exact opposite.

³¹ With references to dozens of theories of the transformation of capitalism, to the Frankfurt School (including E. Fromm) etc.

³² Such as the first Limits to Growth (Meadows, D. H., Meadows, D. L., Randers, J., Behrens, W. W.: The Limits of Growth: A Report for the Club of Rome's Project on Predication of Mankind, Universe Books, 1972). Today, this cult bestseller has been criticised for its wrong methodology and deliberate catastrophic reasoning. Even its followers point out that it is more of a warning than a practical guide to negotiation.

³³ With the so-called human factor – as one of the fashionable expressions – about two decades later, the Gorbachev inspired perestroika began although Richta (or his team) cannot be associated with it or be blamed for its impact.

³⁴ Not only terminological, for example, in the sphere of informatics. *Civilization on the Crossroad*, of course, reflected the then bipolar situation.

human needs and developmental transformations of man and society. Of vital inspiration is Richta's emphasis on the spheres of science and research. Moreover, the standard economics of today considers them as a critical source of growth. This includes the fundamental question of whether science and research can only be left to markets? This is closely connected with the emphasis on education and the role of the human factor, and hence, the importance of investment in this direction. On the other hand, in Richta's vision, it is possible to critically look at unilateral optimism and the almost non-self-contradictory influence of the STR on education.³⁵

Richta's work brings many critical stimuli to the current discussions about society 4.0 or 5.0. *Civilization on the Crossroad* is truly a scientific treatise, unlike many texts about so-called 4IR, which are rather propagandistic. Pre-fabricated phrases, empty passwords, tragicomic slogans, including appeals for "new thinking" (How many in sequence?).³⁶ Richta and his team wanted to communicate something to the world and to help change the world in the direction of humanistic ideals. And they also had something to tell the world. They were not primarily about being published in scientific "Coffee Grinders" or about the spending of grant funds or the misuse of them for private companies.

Recognition that our civilisation is at a fateful "crossroads" could at least contribute to the partial fulfilment of Richta's reference. The dictatorship of political (hyper) correctness, however, strictly rejects any crossroads. It forces everyone to swear that the "end of history" is the only real progressive truth in the spirit of so-called liberal democracy, despite the world and the people.

Selection from R. Richta's Book Publications

O podstatě sociologické a filosofické soustavy "masarykismu" (in Popelová-Otáhalová, J., Kosík, K. (eds.): Filosofie v dějinách českého národa, NČSAV, 1958); Člověk a technika v revoluci našich dnů (Československá společnost pro šíření politických a vědeckých znalostí, 1963a); Komunismus a proměny lidského života (K povaze humanismu naší doby) (Československá společnost pro šíření politických a vědeckých znalostí, 1963b); Civilizace na rozcestí: společenské a lidské souvislosti vědecko-technické revoluce (ed., Svoboda, 1966a); Ekonomika jako civilizační dimenze (in Kouba, K. et al.: Sborník Ekonomického ústavu ČSAV, ČSAV, 1967a); Vědecko-technická revoluce a socialismus (co-author J. Filipec, Svoboda, 1971a); Člověk – věda – technika. K marxisticko-leninské analýze vědecko-technické revoluce (co-editors B. M. Kedrov, S. P. Odujev, Svoboda, 1974a); Sozialismus – Imperialismus – wissenschaftlich-technische Revolution: Die Wissenschaftlich-technische Revolution in der Klassenauseinandersetzung zwischen Socialismus und Imperialismus (co-authors B. Löwe a J. Filipec, Berlín, Akademie 1974b); Československo 2000: prognóza vývoje československé společnosti (ed., after 1979, unpublished); Marxisticko-leninské koncepce řízení společenských procesů a krize

³⁵ Not only by R. Richta (and his team) but also most theorists on the transformation of capitalism including, for example, American futurologist, sociologist and publicist D. Bell (1919–2011), who was directly inspired by *Civilization on the Crossroad*.

³⁶ The heretical idea is the comparison of Civilization on the Crossroad with the book Industry 4.0 (Mařík, V. et al.: Industry 4.0: Call for the Czech Republic, Management Press, 2016). Both are the output of a large interdisciplinary team, both of which were formed based on a government mandate, both to respond to the revolutionary "civilization crossroads".

buržoazních sociálně-politických teorií (in Kolektiv: *Ke kritice buržoazní politologie,* Academia, 1980); *Socialismus a věda* (co-editor S. R. Mikulinskii, Academia, 1982).

A Selection of Journal Publications of R. Richta

Česká otázka a Masarykova kosmopolitní filosofie (Univerzita Karlova, 1953); Úvahy o budoucnosti dělby práce (Sociologický časopis, 1965, no. 2); Povaha a souvislosti vědeckotechnické revoluce (Sociologický časopis, 1966b, no. 2); The Scientific & Technological Revolution (Australian Left Review, 1967b, no. 7); Vědecko-technická revoluce a marxismus (Otázky míru a socialismu, 1967c, no. 1); Technika a situace člověka (Filosofický časopis, 1968a, no. 5); Vědecko-technická revoluce a alternativy moderní civilizace (Sociologický časopis, 1968b, no. 5); Vědecko-technická revoluce a její společenské aspekty (Filosofický časopis, 1971b, no. 1); Člověk a technika (K dialektice přetváření světa a rozvoje člověka) (Filosofický časopis, 1973, no. 4); Krize perspektiv buržoazní společnosti (Nová mysl, 1975, no. 1); Přednosti socialismu a vědeckotechnická revoluce (Teorie a metoda, 1976, no. 2); Is There a New Type of Science Emerging? (Teorie rozvoje vědy, 1977, no. 4); Ke kritice buržoazních filozofických přístupů k soudobému vědeckotechnickému pokroku (Filozofický časopis, 1983, no. 1).

Additional Information

Průmyslová revoluce: Vývoj pojmu a koncepce (Purš, J., ČSAV, 1973); Mráz přichází z Kremlu (Mlynář, Z., Mladá fronta, 1990); Czech Philosophy in the XXth Century (Nový, L., Hroch, J., Gabriel, J. (eds.), Council for Research in Values and Philosophy, 1994); Nové čtení Marxe 1. (Ransdorf, M., Futura, 1997); "Chováme se jako revolucionáři?" – R. Richta a příběh mezioborového týmu (Smíšek, J., Marathon, 1997, no. 4); Vzpomínka na interdisciplinární tým R. Richty (Kutta, F., Marathon, 1997, no. 4); Akademik Radovan Richta (Ondryáš, K., Marathon, 1999, no. 4); Civilizace za rozcestím (Vaško, T., Marathon, 2001, no. 1); Bojíte se socialismu? (Heller, J., Neužil, F. et al., Periskop, 2007); Radovan Richta a mezioborový tým pro výzkum společenských a lidských souvislostí vědeckotechnické revoluce: proč a jak vznikla Civilizace na rozcestí (Hoppe, J., in Hoppe, J., Škodová, M., Suk, J., Caccamo, F., "O nový československý model socialismu": čtyři interdisciplinární vědecké týmy při ČSAV a UK v 60. letech, Ústav pro soudobé dějiny AV ČR, 2015); Bublifuk 4.0 (Sirůček, P., Marathon, 2017, special issue); Minislovníček a literatura 4.0 (Sirůček, P., Medias res, 2018, no. 2).