

Editorial

Resurrecting Bogdanov on the 150th Anniversary of his Birth

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Welcome to this special issue of *Systems Research and Behavioral Science* on the work of Alexander Bogdanov, and its contemporary value to systems thinking and systems science. In this editorial, we first say a little about who Bogdanov was, and why his legacy is relevant to our research community. Then we explain how we came to be editing this special issue. Finally, we introduce each of the papers that have been accepted for publication.

1. Who was Bogdanov?

The personal story of Alexander Alexandrovich Malinovski (1873-1928), who is better known by the pseudonym Bogdanov, is quite remarkable. He was a polymath and a prolific writer, besides being a prominent leader of the Bolshevik faction of the Russian Social Democratic Labour Party, which came to power in Russia following the October Revolution in 1917. Some have claimed that his name was almost as well-known as Lenin's during the early years of this movement (Lecourt, 1976; Yassour, 1981). His impact on Russian intellectual life lasted until the late 1920s. Unlike Lenin, Bogdanov made original contributions in a variety of fields besides politics: economics, political and cultural theory, social psychology, literature (he was a novelist), and medicine (specifically research on blood transfusion). Perhaps most relevant for the reader of this journal is that he is widely recognised for having produced a systems perspective with striking similarities to von Bertalanffy's (1968) general

system theory, and he did so more than a decade before von Bertalanffy's first major work on the subject (von Bertalanffy, 1926). Bogdanov's writings are therefore considered an important predecessor to contemporary systems science and systems thinking (Midgley, 2003), although there are arguments in the literature that they should be seen as more than this: according to Capra (1996), Bogdanov's magnum opus, *Tektology*, represents the first systematic explication of the systems paradigm, so it can be considered a founding contribution rather than a predecessor (also see Şenalp & Midgley, 2023, in this issue, for an exploration of this claim). Indeed, quite recently, Jackson (2021) recognised that Bogdanov's work already touched upon many of the themes that would later become central to critical systems thinking. The present special issue of *Systems Research and Behavioral Science* is dedicated to the systemic work of Bogdanov.

Bogdanov's legacy was forgotten for several decades, and there were at least three reasons for this: opposition from Lenin, who turned against his erstwhile colleague; Bogdanov's early death following a failed blood-transfusion experiment; and then Stalin's erasure of his name from the Soviet historiography (Biggart, 1998; Biggart et al., 1998a; White, 2019). His work was rediscovered in Russia in the 1960s. However, both inside and outside Russia, the recovery of Bogdanov's ideas has been slow and painful. In the West, the process started in earnest in the 1970s and 1980s. There are several key publications on Bogdanov's life and work that are landmarks in this regard. For instance, the Bogdanov biography by Grille (1966), in German, is notable. Also, the Bogdanov bibliography prepared by Biggart et al. (1998b) can be seen as a milestone. However, Bogdanov's original writings were not available until the 1980s in languages other than Russian. The only exception to this was the translation of the first two parts of *Tektology* into German, prepared by Bogdanov himself, and these were published in 1926 and 1928 in Berlin. We should note that the first book-length biography of Bogdanov to be published in English was written just four years ago by White (2019), and this is yet another milestone. The most important initiative is arguably the Alexander Bogdanov Library Project, which plans to translate all the major works of Bogdanov into English. Three volumes have been completed since 2013, under the editorial leadership of David Rowley and Evgeni Pavlov (Bogdanov, 1901-1906, 1903-1906, 1913a), and several more volumes are currently in the process of preparation. We believe that these translations will be game-changers for the recovery of Bogdanov's legacy. The impact of the first three translations can already be seen in books by popular authors like Mason (2015), Wark (2015), and Rovelli (2021).

There are other ground-breaking publications to be mentioned as well, as they are especially relevant to the systems research community. The series of English-language articles by Gorelik (1975a, 1975b, 1980, 1983, 1987) are a case in point. Gorelik also edited and published the first English translation of Bogdanov's *Essays on Tektology* in 1980. This came out a whole nine years before *Tektology* was republished in Russia, in 1989.¹ Then the translation of the first part of *Tektology* (Bogdanov, 1913b, and later updated in 2nd and 3rd editions) was edited by Peter Dudley and published in 1996 by the Centre for Systems Studies at the University of Hull. On the Russian side, Vadim Sadovsky did the hard work of technical editing, and together with Vladimir Kelle, he also wrote the foreword to this edition.

¹ This was the first time since 1929 that *Tektology* had been republished in Russia – 1929 being the year that the third part of *Tektology* was released, shortly after Bogdanov's death.

It has only been in the last decade, with readers accessing the new English translations and the first book-length English language biography of Bogdanov, that the real value of his legacy has been acknowledged beyond a small community of enthusiasts. Now it is being recognised by an ever-increasing number of people in diverse fields across the world. The present special issue of *Systems Research and Behavioral Science*, which marks the 150th anniversary of Bogdanov's birth, aims to contribute to this global recovery process by highlighting the continuing relevance of Bogdanov's ideas for contemporary systems research.

2. How this special issue came into being

In 2021, the Centre for Systems Studies at the University of Hull collaborated with the Department of Systems Analysis in Economics at the Financial University under the Government of the Russian Federation on the organisation of two events that aimed to build on the recovery of Bogdanov's legacy. The first event was a mini-symposium entitled *Alexander Bogdanov's Legacy: From Rediscovery to Full Recovery*, which was combined with the Annual Mike Jackson Lecture (held at the University of Hull each year to showcase the work of a leading systems scholar). This two-in-one event aimed to bring together Bogdanov experts, contemporary systems thinkers, and systems scientists. Due to the Covid-19 crisis, the event took place online instead of face-to-face, on 2-3 June 2021. The Annual Mike Jackson Lecture was delivered by the renowned theoretical physicist, Carlo Rovelli, who, in his recent book *Helgoland* (2021), dedicated a chapter to Bogdanov and the philosophical aspect of his encounter with Lenin. The text of this lecture, and the conversation between Jackson and Rovelli after it, are included in our special issue.

The above mini-symposium was initiated by Örsan Şenalp, and was realized with the support of Fabian Tompsett and John Biggart (key Bogdanov researchers from the UK), as well as Amanda Gregory and Gerald Midgley (Co-Directors of the Centre for Systems Studies at the University of Hull). The event attracted the participation of key English-speaking Bogdanov experts, and was co-sponsored by the UK-based Cybernetics Society. Thanks to Viacheslav Maracha and Svetlana Shchepetova (from the Financial University in Moscow), the event created linkages between networks of Bogdanov scholars from various fields beyond the systems community, and it brought together scholars from the English-speaking world and Russia. This contributed to a deeper and more comprehensive discussion than usual of Bogdanov's ideas. Out of the authors who presented at the mini-symposium, those writing papers directly related to Bogdanov's systems ideas were invited to contribute to this special issue. One of Jackson's papers, and the paper by Şenalp and Midgley, stem from this mini-symposium.

The second event was a larger, hybrid (online and face to face) conference held on 9-10 December 2021 at the Financial University in Moscow. This was the second biannual conference on the *Systems World of Alexander Bogdanov*, and this series of conferences was launched in 2019 under the leadership of George Kleiner, Svetlana Shchepetova and their team. Several presenters were invited to contribute to this special issue. The papers by Vladimir Lepskiy and Elena Malakhova, George Kleiner, and the second paper by Jackson (on pragmatism), stem from this conference.

Although several other speakers from both the Hull mini-symposium and the Moscow conference were also invited to contribute, their papers were not completed in time. We hope that some of these papers will be further re-worked and then submitted to a regular issue of *Systems Research and Behavioral Science* in due course.

Despite the Russian-Ukrainian war, which is prominent in the news as we are writing this editorial, the powerful figure of Bogdanov continues to connect these two peoples. Bogdanov completed his higher education at Kharkov Imperial University (now Karazin National University) in Ukraine. It is symbolic that the international conference dedicated to the 140th anniversary of Bogdanov's birth was held there. Also, in December 2023, the 3rd Biannual Conference will be held at the Financial University in Moscow, timed (as this special issue is) to coincide with the 150th anniversary of Bogdanov's birth. The organizers are confident that Ukrainian researchers will also take part in it, as they did in previous conferences.

3. The papers in this special issue

The two opening papers in this special issue are from Alexander Bogdanov's own pen, and they present his ideas on Einstein's theory of relativity. This is the first time an English-speaking audience will have encountered these papers, which are translated by David Rowley (who is, as mentioned above, one of the editors of the Bogdanov Library Project). What makes these relativity papers special is that they were written by Bogdanov in a climate in which science was being subjected to political interference: Einstein's general relativity theory was heavily criticized by Lenin and other leaders of the Soviet Socialist Republic. One of the papers we are publishing originally appeared as a prominently-placed article in a book published in Moscow in 1923 by Bogdanov and his colleagues (Bogdanov et al., 1923).² In these two papers, Bogdanov not only defends Einstein and his theory of relativity, but he also argues that this theory confirms the scientific worldview he developed in *Tektology*. Bogdanov wrote in a footnote in *Tektology* that 'Application of the organizational point of view leads to a far more simple conception of the relativity principle than the usual one, to a conception which eliminates its enigmas' (Bogdanov, 1913b; p. 108). We believe that these articles closely resonate with the main points that Carlo Rovelli (2021) makes with regard to Bogdanov's scientific worldview (also see below).

The third text in this special issue is the transcript of the above-mentioned Annual Mike Jackson Lecture by Carlo Rovelli, entitled 'Relational Interpretation of Quantum Mechanics and Alexander Bogdanov's Worldview'. Rovelli highlights the continuing relevance of the philosophical debate between Bogdanov and Lenin, especially to the contemporary philosophy of science debate between scientific structural-realism and anti-realism. Rovelli also discusses Bogdanov's scientific worldview, and he draws on Bogdanov's thinking to underpin his own work on quantum gravity, which aims to reconcile Einstein's general relativity theory with quantum mechanics. Also, there is a transcript of the intriguing and insightful conversation that took place between Jackson and Rovelli after the lecture.

² Another prominent article in that book was from Moritz Schlick, who distinguished himself internationally by publishing on Einstein's relativity theory, and later came to be known as the founder of the famous Vienna Circle.

The next paper, by Örsan Şenalp and Gerald Midgley, proposes a new research agenda that connects the recovery of Bogdanov's legacy with the possible resolution of long-lasting debates on the unity of science and the unity of the systems paradigm. Since the early 2000s, the dominance of those advocating for "disunity" in the philosophy of science has been waning, and there has been a new debate arising that is marked by a renewal of the ideas of unity and integration (Rahman and Symons, 2009; Schurz, 2014; Ruphy, 2016; Tahko, 2021). The research agenda proposed by Şenalp and Midgley highlights the relevance of Bogdanov's work in the context of both the philosophy of science and the systems paradigm, and they suggest that returning to Bogdanov could provide important inputs for these contemporary debates on unity.

Mike Jackson, who has recently displayed a revived interest in Bogdanov's work, has delivered two articles for this special issue. In the first one, Jackson compares Bogdanov's ideas to those of the American and British Pragmatists, especially Charles Sanders Pierce, William James, and John Dewey. Jackson argues in this paper that, if the systems approach is to realize its full theoretical and practical potential, it needs to be rebooted on the basis of the work of Bogdanov and the Pragmatists.

The following paper, by Vladimir Lepskiy and Elena Malakhova, argues that Bogdanov's ideas anticipated later trends in research on the control and organization of social systems. According to the authors, this later research not only includes the development of systems methodologies and first- and second-order cybernetics, but also the third-order cybernetics that Lepskiy and his colleagues (like Stuart Umpleby and Tatiana Medvedeva) have been proposing. Third-order cybernetics emerged with the development of artificial intelligence and related socio-technical innovations associated with self-developing, poly-subject environments.

Then, in his other paper, Mike Jackson explores the commonalities between the work of Bogdanov, on the one hand, and the prominent British cyberneticist, Stafford Beer, on the other. Here, Jackson focuses on both authors' visions of post-capitalist society. In so doing, he highlights the contributions of other writers who have drawn on Bogdanov and Beer to formulate contemporary visions of post-capitalism.

George Kleiner's paper comes next, summarising his "tetrad theory", and presenting it as a balanced alternative to Kornai's (1971, 1980) economic systems theory and Ludvig von Bertalanffy's (1968) general system theory. Kleiner focuses on one of Bogdanov's key concepts in *Tektology*, 'world ingression', which means the 'continuous relationship between all existing things' (Bogdanov, 1913b, p.135), and he compares the main tenets of his tetrad theory to other systems-based approaches.

The final paper in this issue is by Juan Rendon-Sanchez, who argues that Bogdanov's concepts, like the "scientific organization of experience" and "ingression", provide us with helpful tools for dealing with contemporary global crises. These tools can also aid in discussions of human excess (e.g., engaging with the works of contemporary thinkers like Slavoj Žižek).

We hope you enjoy this special issue, but more importantly, we hope you are inspired to visit (or revisit) the writings of Bogdanov and bring his insights into your own systems research.

References

- Bello, R. E. (1985). The systems approach: A. Bogdanov and L. von Bertalanffy. *Studies in Soviet Thought*, 30, 131–147. <https://doi.org/10.1007/BF01043756>
- Biggart, J. (1998). The rehabilitation of Bogdanov. In J. Biggart, G. Gloveli, & A. Yassour (Eds.). *Bogdanov and his work: A guide to the published and unpublished works of Alexander A. Bogdanov* (pp. 3–39). Ashgate.
- Biggart, J., Dudley, P., King, F. (Eds.) (1998a). *Alexander Bogdanov and the origins of systems thinking in Russia*. Ashgate.
- Biggart, J., Gloveli, G., Yassour, A. (Eds.) (1998b). *Bogdanov and his work: A guide to the published and unpublished works of Alexander A. Bogdanov*. Ashgate.
- Bogdanov, A. A. (1901-1906). *Towards a new world: Articles and essays*. Translated by D.G. Rowley. Alexander Bogdanov library project, historical materialism book series, 2022. Brill.
- Bogdanov, A. A. (1904–1906). *Empiriomonism: Essays in philosophy*. Translated by D.G. Rowley. Alexander Bogdanov library project, historical materialism book series, 2020. Brill.
- Bogdanov, A. A. (1913a). *The philosophy of living experience: Popular outlines*. Translated by D.G. Rowley. Alexander Bogdanov library project, historical materialism book series, 2016. Brill.
- Bogdanov, A. A. (1913b). *Bogdanov's tektology: Universal science of organisation – Book 1*. Edited by P. Dudley. Translated by V. N. Sadovsky, A. Kartashov, V.V. Kelle, and P. Bystrov. 1996. Centre for Systems Studies Press.
- Bogdanov, A. A. (1980). *Essays in Tektology*. Translated and edited by G. Gorelik. Intersystem Publications.
- Bogdanov, A. A., Bazarov, V. A., & Yushkevich, P. S. (Eds.). (1923). *Printsip otnositel'nosti i eefilosofskoe istolkovanie (The principle of relativity and its philosophical interpretation)*. Mir Publishing House.
- Capra, F. (1996). *The web of life: A new scientific understanding of living systems*. Anchor Books.
- Grille, D. (1966). *Lenins rivale: Bogdanov und seine philosophie (Lenin's rival: Bogdanov and his philosophy)*. Verlag Wissenschaft und Politik.
- Gorelik, G. (1975a). Principal ideas of Bogdanov's tektology: The universal science of organization. *General Systems*, 20(2), 3–13.

- Gorelik, G. (1975b). Re-emergence of Bogdanov's tektology in Soviet studies of organization. *Academy of Management Journal*, 18(2), 345–357.
<https://doi.org/10.2307/255536>
- Gorelik, G. (1980). Bogdanov's tektology: Its basic concepts and relevance to modern generalizing sciences. *Human Systems Management*, 1(4), 327–337.
<https://doi.org/10.3233/HSM-1980-1406>
- Gorelik, G. (1983). Bogdanov's tektology: It's nature, development, and influence. *Studies in Soviet Thought*, 26(1), 39–57. <https://doi.org/10.1007/BF00832210>
- Gorelik, G. (1987). Bogdanov's tektologia, general systems theory, and cybernetics. *Cybernetics and Systems*, 18, 157–175. <https://doi.org/10.1080/01969728708902134>
- Jackson, M.C. (2021). *Bogdanov, critical systems thinking, post-capitalism, and quantum physics*. Research Gate (October 10, 2021).
- Kornai, J. (1971). *Anti-equilibrium: On economic systems theory and the tasks of research*. North-Holland.
- Kornai, J. (1980). *Economics of shortage*. North-Holland.
- Lecourt, D. (1976). Bogdanov: Mirror of the Soviet Intelligentsia, Appendix in *Proletarian Science? The Case of Lysenko*. NLB; 137-162.
- Midgley, G. (2003). Systems thinking: An introduction and overview. In G. Midgley (Ed.). *Systems thinking, volume I: General systems theory, cybernetics and complexity*. Sage.
- Rahman, S. and Symons, J. (2009). Logic, epistemology and the unity of science: An encyclopedic project in the spirit of Neurath and Diderot. In Rahman, S., Symons, J., Gabbay, D.M., Bendegem, J.P.v. (Eds.). *Logic, epistemology, and the unity of science*, volume 1. Springer.
- Rovelli, C. (2021). *Helgoland*. Penguin.
- Ruphy, S. (2016). *Scientific pluralism reconsidered*. University of Pittsburgh Press.
- Schurz, G. (2014). *Philosophy of science: A unified approach*. Routledge.
- Şenalp, Ö., & Midgley, G. (2023). Alexander Bogdanov and the question of unity: An emerging research agenda. *Systems Research and Behavioral Science*, 40, 1–21.
<https://doi.org/10.1002/sres.2923>
- Tahko, T. (2021). *Unity of science*. Cambridge University Press.
- von Bertalanffy, L. (1926). *Fechner und das problem der integration höherer ordnung (Fechner and the problem of higher order integration)*. PhD thesis, Universität Wien.

von Bertalanffy, L. (1968). *General system theory: Foundations, development, applications*. Braziller.

White, J.D. (2019). *Red Hamlet: The Life and Ideas of Alexander Bogdanov*. Historical Materialism Book Series. Brill.

Yassour, A. (1981). Lenin and Bogdanov: Protagonists in the 'Bolshevik Centre'. *Studies in Soviet Thought*, 22, 1–32. <https://doi.org/10.1007/BF00837970>

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