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# **Editorial**

# **Festschrift for Mike Jackson**

Ashish Dwivedi\*

School of Health and Social Care, University of Essex, Colchester, UK \*Corresponding author

#### **Gerald Midgley**

Centre for Systems Studies, Faculty of Business, Law and Politics, University of Hull, UK Birmingham Leadership Institute, University of Birmingham, Birmingham, UK School of Cybernetics, Australian National University, Canberra, Australia Department of Informatics, Faculty of Technology, Linnaeus University, Växjö, Sweden Schumacher Institute, Bristol, UK Andean Institute of Systems, Lima, Peru

#### **Abstract**

This is the editorial for a festschrift for Mike Jackson. We begin by outlining six phases of Jackson's research, from 1982 to the present day: an initial critique of soft systems thinking and soft operational research (OR); a proposal for methodological pluralism to overcome the hard/soft divide; a description of an 'enhanced systems/OR' that acknowledges the complexities, uncertainties and conflicts regularly encountered in practice; the further development and popularization of his enhanced OR under the banners of 'critical systems thinking' and 'total systems intervention'; the consolidation of his work in three books with mature presentations of his perspective; and a rethinking of the history of both systems thinking and systems science, accompanied by a renewed focus on the implications of his methodological ideas for systems practice. Following this outline, we move on to an overview of the papers in the festschrift, each of which either expands on Mike Jackson's ideas, applies them in new application domains or critiques those ideas and provides alternatives.

Keywords: critical systems practice, critical systems thinking, methodological pluralism, Mike Jackson, total systems intervention.

#### Introduction

This festschrift is a special issue of *Systems Research and Behavioral Science* to honor Mike Jackson's lifetime contribution to systems thinking. Mike, who is currently an Emeritus Professor in the Centre for Systems Studies at the University of Hull (UK), edited this journal

for twenty-five years, from 1997 to 2021. Mike is one of the leading developers and exponents of systems thinking in the world today, and he has an international reputation in both the systems and operational research (OR) communities. With over forty years of systems thinking and practice under his belt, it is now a fitting time for *Systems Research and Behavioral Science* to recognize his contribution.

Unlike some festschrifts, which are full of anecdotes and reminiscences about the person being honored, we decided not to focus on Mike as an individual. Rather, we wanted the papers in this festschrift to be significant contributions to the literature in their own right. This is because one of the strong themes in Mike's work over the years has been critical thinking, and indeed he was part of a small group of researchers who coined the term 'critical systems thinking' back in the late 1980s (Flood and Jackson, 1991a). We believe that Mike would appreciate papers that use, build on or critique his work, and he would much prefer this kind of festschrift to a collection of glowing accolades.

#### Mike Jackson's Research

We believe that Mike Jackson's sustained contribution to systems thinking and operational research (henceforth shortened to 'systems/OR') can be usefully structured into the following six phases of activity:

- 1. An initial critique of soft OR and soft systems thinking (1982-1985).
- 2. A proposal for methodological pluralism to overcome the hard/soft divide (1984-1987).
- 3. The formulation of an 'enhanced systems/OR' that acknowledges the complexities, uncertainties and conflicts regularly encountered in practice (1987-1988).
- 4. The further development and popularization of his enhanced OR approach under the banners of 'critical systems thinking' and 'total systems intervention' (1990-1999).
- 5. The consolidation of his work in three books with mature presentations of his perspective (2000-2019).
- A rethinking of the history of both systems thinking and systems science, accompanied by a renewed focus on the implications of his methodological ideas for systems practice (2020-2025).

The key innovation within this body of work, which has advanced the theory and practice of systems/OR, is his proposal for methodological pluralism (sometimes called 'multimethodology' in the OR literature). All his subsequent proposals for systems/OR methodology and practice have, in one way or another, been built around this. Even Mike's early critique of soft OR (Jackson, 1982) came to inform how he later depicted the strengths and weaknesses of the 'soft tradition' within a framework for methodological pluralism. This work was highly significant, for the following reason:

The late 1970s and early 1980s saw a paradigm war between 'hard' and 'soft' systems/OR. This threatened to divide the systems/OR community into two camps that saw methodology

and practice so differently that they could barely find any common ground. Mike Jackson then wrote a seminal paper with Paul Keys in 1984 that argued for complementarity between hard and soft: at the risk of over-simplifying their argument, 'hard' (focused on objective modelling and optimization) is more useful when there is agreement between stakeholders on the nature of the problematic situation and the purposes of an intervention, and 'soft' (focused on exploring multiple perspectives and increasing mutual understanding) is more useful when stakeholders disagree over these things. Indeed, Jackson and Keys (1984) proposed a four-box framework explaining the major assumptions of different systems methodologies. Many people understood this framework as matching different systems/OR approaches to their most appropriate contexts of application. This was later expanded to six boxes by Jackson (1987a) and to nine by Jackson (2019). It is the six-box framework, backed up by a broader argument for methodological pluralism in Jackson (1987b), that is often cited as the most influential contribution. While there have been many papers and books subjecting this framework to critique (e.g., Tsoukas, 1993; Gregory, 1996a, 1996b; Midgley, 2000), and the number of these critiques is evidence of its influence, Jackson's 1984 and 1987a,b papers are widely regarded as seminal because they offer an early, theoretically-informed and practical means to transcend the soft/hard divide, while still respecting the full set of methodological insights coming out of both hard and soft systems/OR.

Jackson (1988) then built on this early work. First, he recognised that, if systems/OR is to be a broad practice welcoming the use of a variety of soft (problem structuring) and hard (problem solving) methodologies, it couldn't reasonably reduce the complexities of practice to taking a remit from a client and simply developing a mathematical model. He therefore proposed a form of 'enhanced OR' that requires the practitioner to take a critical approach to exploring the remit of an intervention with stakeholders, taking account of power relationships, before choosing the methodology that will work best in the circumstances. In the late 1980s and early 1990s, this proposal was particularly well received in the Community Operational Research Network (a community of practice with around three-hundred members dedicated to applying systems/OR to community development), and his 1988 paper was later identified as a distinctive, seminal contribution to Community OR (Midgley and Ochoa-Arias, 2004), which is still influential more than thirty years later (Midgley, Johnson and Chichirau, 2018).

Then this work was massively expanded and popularized. There were three important books launched in this expansion phase, all released in 1991 using the label 'critical systems thinking' (CST) (Jackson, 1991; Flood and Jackson, 1991a, 1991b). Up to 1991, the CST research community consisted of approximately 20 researchers contributing ideas on methodological pluralism, critical inquiry and power relations. The 1991 books facilitated significant growth, and within five years, Midgley (1996) commented that the number of authors writing under the banner of CST had grown to over one hundred, and of course there were many more readers and practitioners. Flood and Jackson's (1991b) book sold well

over 20,000 copies. The work of Jackson and others contributed to a climate where people started to leave the soft/hard debate behind, and methodological pluralism became broadly acceptable within systems/OR (e.g., Mingers and Gill, 1997).

Jackson's work finally came to a fully mature form in three more recent books. In 2000, he offered a theoretical overview of paradigms in systems/OR and discussed the pluralistic use of methodologies drawn from these paradigms. In 2003, he presented a similar argument in a more practitioner-friendly form. Finally, in 2019, he wrote his 'magnum opus', which expanded on the practice of methodological pluralism, incorporated complexity science, and offered a wealth of detailed reflections on a range of systems methodologies that clearly came from decades of dialogues with their leading advocates. These books remain key references for people with an interest in systems/OR, broadly defined.

Recently, Mike has been writing more prolifically than ever, with two key foci: rethinking the history of our field and renewing his focus on systems practice.

In terms of the history, he has gone back to the origins of systems thinking and systems science in the works of Alexander Bogdanov (Jackson, 2023a). He has contributed to a growing movement of people (e.g., Gorelik, 1980; Zelený, 1980, 1988; Bello, 1985; Dudley and Poustilnik, 1995; Dudley, 1996, 1998; Gare, 2000; Senalp and Midgley, 2023) who have recognised that contemporary forms of systems thinking did not originate from mid-20<sup>th</sup> century, American systems science (e.g., Bertalanffy, 1950; Boulding, 1956), as many people once thought. Instead, they can be traced back to the thinking of Bogdanov (2010-2013) in Russia.<sup>1</sup>

Then there is his renewed focus on practice, which has taken three forms. The first has connected his thinking with philosophical pragmatism. The lay meanings of pragmatism are 'atheoretical' or 'expedient', but these are degraded uses of the term that bear little similarity to the original pragmatist philosophy, which is all about how inquiry can support action for improvement. This was recognised by Walker (2007), who asked why critical systems thinkers had avoided discussing pragmatism for so long, and he pointed to the benefits of making connections between the two bodies of thought. Mike clearly saw the benefits too, so made the argument for founding critical systems thinking on pragmatist ideas (Jackson, 2023a, 2023c).

The second renewed focus on practice involved a collaboration between Mike Jackson and Luis Sambo, who led the World Health Organization's response to the Ebola outbreak in 2014. Together, they have made a significant contribution to understanding what systems thinking can contribute to public health, using critical systems thinking to make the case for

<sup>&</sup>lt;sup>1</sup> It is also possible to find related ideas to those that are currently discussed under the banners of systems science and systems thinking in many forms of philosophy and science prior to Bogdanov, going back to the ancient Greeks (M'Pherson, 1974; Crowe, 1996), but it is clearly the case that Bogdanov's formulation is more like contemporary thinking than those earlier works (e.g., see Jackson's, 2023b, comparison of the theories of organization from Alexander Bogdanov and Stafford Beer).

going beyond health systems approaches that fail to embrace methodological pluralism (Jackson and Sambo, 2020; Sambo and Jackson, 2021).

The third and most recent contribution in Mike's renewed focus on practice is a practitioner's guide (Jackson, 2024) that consolidates all his recent thinking about pragmatism (Jackson, 2023a, 2023c) and how to make critical systems thinking work for the benefit of organizations wishing to pursue systemic improvements (Jackson, 2020, 2021, 2022, 2023d).

Mike Jackson has made a sustained, forty-year intellectual contribution to our research community, and it is particularly noteworthy that his proposals for methodological pluralism and critical systems thinking have been highly influential in moving systems/OR beyond the hard/soft divide. This has been of significant benefit to our practice. Of course, no innovation of this nature can be accomplished by one individual working alone, and many more authors were involved in its development and dissemination, but Jackson's contribution has been widely acknowledged as central and seminal.

#### The contents of the Festschrift

Below, we discuss the papers accepted for this Festschrift, all of which engage with Mike Jackson's work on critical systems thinking (CST).

After this editorial, the Festschrift begins with an interview with Mike Jackson, in which he discusses a life spent in the field of systems thinking (Jackson, Lloyd and Chowdhury, 2025). The interview is full of interesting observations and viewpoints grounded in more than forty years of systemic reflections. These are the articulate thoughts of a systems thinker who has fully matured his ideas.

Then a collection of papers follows the interview. Some expand on Mike Jackson's ideas, some apply them in new application domains, and some critique those ideas and provide alternatives. We provide two different typologies for appreciating this collection of papers.

In the first typology (Table 1), the papers are structured into the following five thematic clusters:

- 1. Exploring next-stage theoretical developments in CST,
- 2. Methodological innovations in CST for tackling wicked problems,
- 3. A blueprint for the future of CST,
- 4. Leveraging CST to foster resilience in real-world contexts, and
- 5. CST for global challenges.

Themes	
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	Exploring Next- Stage Theoretical Developments in Critical Systems Thinking	Methodological Innovations in Critical Systems Thinking for tackling Wicked Problems	A Blueprint for the Future Critical Systems Thinking	Leveraging Critical Systems Thinking to Foster Resilience in Real-World Contexts	Critical Systems Thinking for Global Challenges
oer .	Smith and Midgley (2025): paper 2.	Scales, Ang and Sankaran (2025): paper 4.	Xu and Fan (2025): paper 6.	McKenna (2025): paper 7.	Herron, Mendiwelso- Bendek, Salinas- Navarro, Vilalta- Perdomo and Weaver (2025): paper 3.
Authors & Paper Number	Albakri and Wood-Harper (2025): paper 10.	Zhu (2025): paper 5.	Klein (2025): paper 15.	Clark, Brocklesby and Elias (2025): paper 9.	Norris, Foote and Greatbanks (2025): paper 12.
Autho	Hesselgreaves, Hobbs, French, Wilson and Lowe (2025): paper 8.	Espinosa (2025): paper 11.	Sun (2025): paper 16.	Wilden, Hopkins and Sadler (2025): paper 13.	Gregory, Atkins and Dwivedi (2025): paper 17.
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Table 1: First thematic clustering of papers presented in the Festschrift

In the second typology (Table 2), the papers are structured into five clusters that are different from those in table 1:

- 1. Empowering decision-makers via CST,
- 2. Improving organizational and sectoral resilience using CST,
- 3. Innovating in social policy and community contexts with CST,
- 4. Case studies of CST: lessons from practice, and
- 5. Lessons from theory to shape the future of CST.

Themes							
Empowering Decision-	Improving Organizational	Innovating in Social Policy	Case Studies of Critical	Lessons from Theory to Shape			

	Makers via Critical Systems Thinking	and Sectoral Resilience using Critical Systems Thinking	and Community Contexts with Critical Systems Thinking	Systems Thinking: Lessons from Practice	the Future of Critical Systems Thinking
nber	Smith and Midgley (2025): paper 2.	Norris, Foote and Greatbanks (2025): paper 12.	Herron, Mendiwelso- Bendek, Salinas- Navarro, Vilalta- Perdomo and Weaver (2025): paper 3.	Scales, Ang and Sankaran (2025): paper 4.	Zhu (2025): paper 5.
Author & Paper Number	Albakri and Wood-Harper (2025): paper 10.	Wilden, Hopkins and Sadler (2025): paper 13.	Clark, Brocklesby and Elias (2025): paper 9.	McKenna (2025): paper 7.	Xu and Fan (2025): paper 6.
Au		Gregory, Atkins and Dwivedi (2025): paper 17.		Hesselgreaves, Hobbs, French, Wilson and Lowe (2025): paper 8,	Espinosa (2025): paper 11.
					Klein (2025): paper 15.
					Sun (2025): paper 16.

Table 2: Second thematic clustering of papers presented in the Festschrift

While both typologies bring different insights to the relationships between the contributions in the Festschrift, we will use the first typology (Table 1) as a structure for reviewing the papers. We will start with three that explore various features of next-stage theoretical developments in CST.

Exploring next-stage theoretical developments in CST

Smith and Midgley (2025), in "Accommodation and Critique: A Necessary Tension", note that a key dilemma in CST is that both critique (rethinking social systems) and accommodation (stakeholders reaching agreements on next steps for change) are necessary to realise transformations, yet they are often experienced as contradictory forces in systemic interventions. If accommodation is prioritised over critique, then little more than incremental

change is usually possible. However, if critique is undertaken by researchers alone and is prioritised over accommodation, then the lack of stakeholder buy-in can often lead to a failure of implementation. The authors point to the ideas of Gillian Rose as a way forward for CST practitioners to understand and address this dilemma.

Albakri and Wood-Harper (2025), in "Revisiting Critical Systems Thinking: Enhancing the Gaps through Sustainability and Action Methodologies", make a related point about the need to reconcile critical engagement with practical constraints, saying that this is essential in the context of sustainability.

Then the third and last paper about next-stage theoretical developments is by Hesselgreaves et al (2025), who argue in "Applying Critical Systems Thinking Through Phronetic Pluralism: Learning from Human Learning Systems and the Adaptive Learning Pathway" that addressing contemporary challenges in governance requires the incorporation of systemic leadership and adaptive learning, but these are rarely discussed in this context. Their paper emphasizes the importance of pragmatism and pluralism in applied CST, and they conclude by arguing that a mindset of 'phronetic pluralism' could be useful for integrating systems theory into practice.

#### Methodological innovations in CST for tackling wicked problems

In the theme on methodological innovations in CST for tackling wicked problems (Table 1), we have three papers. The first one, "Empowering Managers to Adopt Multimethodological Intervention Strategies to Address Complex Problematic Situations", is by Scales et al (2025). It explores Mike Jackson's foundational work on the Systems of Systems Methodologies and his ideas about methodological pluralism. These informed the creation of a postgraduate systems thinking course for managers at an Australian university. The authors discuss how Jackson's ideas enabled a diverse group of students to collectively explore a complex issue within the Australian construction industry. The experience of running the course led to a natural evolution in its format and content.

The next paper in this thematic cluster, by Zhu (2025), is entitled, "Pragmatic Ontology – Enhancing the Philosophical Foundation of Critical Systems Thinking/Practice". This argues the case for revisiting the ontology of CST by incorporating Quine's notion of 'ontological commitment', Habermas's concept of 'ontological presupposition', Xu Changfu's 'theory of heterogeneity', Husserl's 'layers of ontology' and Gadamer's hermeneutic ideas of 'prejudice' and 'tradition'. Revisiting ontology can underpin the recent move towards pragmatism in CST.

The third and final paper in this cluster is "Revisiting the Viable System Model as an Emancipatory Systems Approach", by Espinosa (2025), who focusses on Mike Jackson's critiques of Stafford Beer's Viable System Model and Team Syntegrity. Espinosa argues that the establishment of a 'critical empathetic approach' has the potential to further Jackson's influence in systems research and multimethodology.

A blueprint for the future of CST

The third theme in the special issue, a blueprint for the future of CST, also has three papers. The first is "Creative-Becoming Holism: Reflections on and Development of Creative Holism in the case of Science Education", by Xu and Fan (2025). Mike Jackson was a core participant in an international collaboration between the Institute of Systems Science in the Chinese Academy of Sciences, the Japan Advanced Institute of Science and Technology (JAIST) and the Centre for Systems Studies at the University of Hull (UK). In a series of annual conferences starting in 1995, Chinese, Japanese and UK researchers all set out to learn from one another (e.g., Midgley and Wilby, 1995). Xu and Fan's (2025) paper is situated in this tradition of crosscultural learning, and it discusses the importance of evolution and emergence to creative holism. Indeed, the authors argue that dynamic process is the foundation of systems thinking.

The second paper in this theme, by Klein (2025), is entitled, "Transcending Systems Thinking: Critical Systems Integration and What's Love Got to Do with It". This delves into the important idea that systems thinking could be a pathway to addressing the complexities of the Anthropocene. However, to achieve this potential, systems thinking must perpetually renew itself, which involves moments of transcendence. Klein argues that systems thinking needs to embrace a wider array of lived experiences, including those that have been historically marginalized. It also needs to cultivate a collective understanding that arises from shared reflective experiences. The author uses the case of 'the Tamkeen experience of metamorphic transformation' to show how systems thinkers can better engage in renewal.

The third and final paper in this section is by Sun (2025), who looks "Towards a More Holistic and Pluralistic Critical Systems Thinking: The Dimension of 'Hé' (和)". Like the earlier paper by Xu and Fan (2025), this one exemplifies the spirit of cross-cultural learning that has long been close to Mike Jackson's heart. It examines the concept of 'He' (和), which is derived from Eastern, particularly Chinese, philosophical traditions. Sun argues that 'He' (和) can enhance CST's capacity to cultivate a holistic and pluralistic perspective.

## Leveraging CST to foster resilience in real-world contexts

The first of the three papers in this fourth theme on leveraging CST for resilience is by McKenna (2025), and it is entitled, "The Complementarity of Program Logic and Critical Systems Heuristics: Critical Systems Practice for the Evaluation of Emergency Relief in Australia". McKenna presents his work on improving the outcomes of Australia's Emergency Relief Program through the integration of multi-perspective and multimethodological critical systems thinking and practice. McKenna's paper enriches the systemic evaluation literature by demonstrating the synergistic relationship between program logic and critical systems heuristics, and by underscoring the advantages of a multi-perspective, multimethodological CST approach.

The next paper in this theme is by Clark et al (2025), and is entitled, "Enhancing Collaborative Advantage through Critical Systems Thinking: An Augmented Viable System Model Intervention in a Cross-Sector Partnership Social Policy Context". The authors note that cross-

sector partnerships frequently encounter difficulties due to complex human and organizational interactions. To enhance these collaborations, systemic methodologies are essential. Clark et al report on a study that combines the viable system model with team syntegrity, and they note that this combination can encourages collaborative thinking about improvements to viability.

The last paper in this theme is entitled, "The Utility of Critical Systems Practice: A Supply Chain Practitioner Perspective". It is by Wilden et al (2025), and they explore the application of critical systems practice (CSP) within supply chain management to address disruptions stemming from the COVID-19 pandemic. The authors discuss the implications of CSP using a food supply chain case study, emphasizing how systems thinking can enhance resilience by tackling systemic challenges.

#### CST for global challenges

The fifth and final theme in the special issue is on CST for global challenges. The first paper on this, by Herron et al (2025), is entitled "The Resonance of Mike Jackson's work with the Use of Systems Ideas in Community Operational Research". The authors are a team of five active researchers from the UK who have written a reflective note based on their participation in a community-based learning initiative. They note how their experiences and insights extend Mike Jackson's legacy.

The second paper in this theme, by Norris et al (2025), is entitled, "Mode 2 Critical Systems Practice for Complex Safety Decisions: Reflections from New Zealand's Dairy Industry". This presents the use of critical systems practice (CSP) to address a multifaceted safety concern at a dairy manufacturing facility in New Zealand. The incorporation of reflective practice in both the research and the composition of this article demonstrates the efficacy of CSP in navigating complex safety issues. Their main finding is the importance of focussing on cognitive complexity among participants at the outset of an intervention, through critical facilitation and reflective practice.

The final paper in this theme, and in the whole Festschift, is entitled, "Towards Transformative Supply Chain Research and Practice: A Critical Systems Perspective". The authors are Gregory et al (2025), who address the imperative for the supply chain discipline to transition from a functionalist viewpoint to a systems-oriented one. Gregory et al delineate the components of a systems approach, which encompasses various paradigms and methodologies, and its implications for supply chain theory and practice. It emphasizes the necessity of incorporating a range of paradigmatic perspectives, fostering interactions among them, and creating avenues for enhanced comprehension and transformative initiatives. Gregory et al (2025) examine the supply chain for personal protective equipment (PPE) in the UK during the initial year of the Covid pandemic, utilizing three distinct perspectives: objective-positivist, subjective-interpretivist, and radical-critical. These offer significantly different insights. The

authors conclude that there is an urgent need for a systems approach in supply chain theory and practice.

#### In Conclusion

We would like to end by noting that it has been an honour to edit this Festschrift, and to have worked with Mike Jackson in the Centre for Systems Studies at the University of Hull. We are certain that his ideas will continue to inform systems thinking and practice long into the future.

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