## 67th Annual Meeting of the International Society for the Systems Sciences (ISSS 2023)

Skukuza, South Africa 16-23 June 2023

**Editor:** 

J. M. Wilby

ISBN: 978-1-7138-9345-5

## Printed from e-media with permission by:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2023) by International Society for the Systems Sciences (ISSS) All rights reserved.

Printed by Curran Associates, Inc. (2024)

For permission requests, please contact International Society for the Systems Sciences (ISSS) at the address below.

International Society for the Systems Sciences (ISSS) 47 Southfield Road Pocklington, York YO42 2XE, United Kingdom

Phone/Fax: +44 (0)1759 302718

enquiryisss@gmail.com

## Additional copies of this publication are available from:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571 USA Phone: 845-758-0400

Fax: 845-758-2633

Email: curran@proceedings.com Web: www.proceedings.com

Presenter	Title	Track	Session	Page Number
	Keynote addresses			
Ison, R	Professionalising the Systems Thinking Practitioner	Plen	Mon	N/A
Joseph-Malherbe, S	The leadership imperative and cultivating it	Plen	Tues	N/A
Klein, L & Kadaoui, K	In the Mirror of Tamkeen: Growing a Shared Understanding of Societal Metamorphosis or The Gardener AND the Garden, Learning to Speak the Language of "AND"	Plen	Wed	N/A
Lebese, RT	Ubuntu in Health Promotion	Plen	Thur	N/A
Lilley, R & Midgley, G	Rethinking Systems Thinking	Plen	Tues	N/A
Netshandama, VO	Social entrepreneurship learning ecosystems, let us also include the forgotten spaces: An invitation	Plen	Thur	N/A
Njenga, S	An African perspective on leadership and future leaders	Plen	Mon	N/A
Smith, GR	Towards a unifying framework for system science	Plen	Tues	N/A

Presenter	Title	Track	Session	Page Number
	Ranulph Glanville Memorial Lecture			
Leonard, Al	EcoAffiliates: a Viable System Model Interactive Cast Study	OTSC	SP 3B	N/A
	ISSS 2023 Conference Research Project	'	1	1
Peterson, S	Seeing the nose on your face: Reflective practice for professionals	CSTP	1A	N/A
	Workshops	<b>"</b>	'	I
Argall, N	Organization Engineering in practice: Designing a paradigm for Systems Science	SMSE	SP 2B	N/A
Clifford-Holmes, J	Typology of Systems Diagramming Techniques	SMSE	SP 4B	N/A
Gardiner, L	Radical inclusion! The key to unlocking generative potential and systemic transformation	SIEL	SP 2C	N/A
Laouris, Y	Towards improving the visibility, impact, and societal contributions of ISSS	OTSC	SP 2A	N/A
Scholte, T	Perceptual Conflict Management: A Cyber-Systemic Approach to Conflict Egagement Across the Professions	CYB	SP 4A	N/A
Smith, W	The Shift to the Fifth	SIEL	SP 2D	N/A
Wagner, A	Trauma and Democracy - Exploring the narrative landscape and sensemaking of 350 people in Germany in relation to current crisis and polarization	SACD	SP 2E	N/A
	SIG Sessions papers			
Argall, N	Organization Engineering: A language in progress	SMSE	3B	N/A
Barnes, L	Approaching the Blood Transfusion Continuum as a System: Action Research to foster the emergence of voluntary blood donation	HST	3A	N/A

Presenter	Title	Track	Session	Page Number
Buckle, P	Reflection on Systems Guilt from the Perspective of Analytical Psychology	SACD	4C	N/A
Bunnel, P	Language as an Enabling Constraint in Systems Sciences	CYB	5A	N/A
Campher, S	Framing semantic data warehousing from a systems perspective	DPSS	2E	1
Clifford-Holmes, J	Multi-dimensional analysis of the conflicts over the Grand Ethiopian Renaissance Dam	SESD	5C	N/A
Clifford-Holmes, J	A systemic analysis of participatory land and water governance in the Tsitsa river catchment, South Africa	SESD	1C	14
Cloete, D	Co-creating anticipatory heuristics and becoming praxis: A Provisional framework for systems practitioners	CSTP	1A	N/A
Coetzee, M	A critical systems approach to conference organisation	CSTP	3D	30
Cook, P	Physics and Beyond	HS	1B	N/A
Cotet, C	From Chaos to Control: A Scoping Review of Cybernetics and System Thinking as Enablers for Rail Infrastructure Resilience	СҮВ	2C	N/A
Cottam, R (1)	Multilevel Information Structures	OTSC	1D	N/A
Cottam, R (2)	Multilevel Physical Structures and Stable Disequilibrium Systems	GSML	3C	N/A
Dostal, E (1)	W/Holistic Participatory Democracy	OTSC	3E	40
Dostal, E (2)	There are systems and systems	RGTS	1B	55
Drevin, G; Snyman, D	Reflections on the information technology honours program using a systems approach	DES	5B	75
Drevin, L	Being human in an IT environment	CSTP	3D	85
Fischer, T	Feedback, Closure, Eigenbehavior and Analog Computing	CYB	4D	N/A

Presenter	Title	Track	Session	Page Number
Friend, A (1)	Prologue: Introduction to SAGE-P GDP as a Measure of Entropy Production of the Nation-State	GSML	SP 4C	N/A
Friend, A (2)	GDP as a Measure of Entropy Production of the Nation-State	SESD	SP 4C	N/A
Gabriele, S	Systemocracy: Transcending Bureaucracy via the 30/30 RoundTable	DES	1C	N/A
Gardiner, L	Attending Responding Becoming: the fruits of a living learning inquiry	SIEL	3B	N/A
Goede, H	Towards an integration of different perspectives in strategic planning: a critical systems heuristics approach	OTSC	5B	N/A
Hay, A	A PAR approach to environmental justice competencies and systems thinking in pre-service teacher education	DEI	2B	N/A
Idris, M	What is the impact of Feminist Narrative Research (FNR) on Participatory Systems Mapping (PSM) practitioner reflexivity within a health policy context for more meaningful engagement?	DEI	2E	N/A
Ison, R	Governing river catchment governing: the case of the Olifants, South Africa	SCA	SP 3A	N/A
Katual, D	Game-based learning to improve critical thinking and knowledge sharing: Literature Review	CSTP	2C	96
Keykaan, D	Digital phrenology: Algorithms and ethics from a systems perspective	RHT	4E	124
Laouris, Y (1)	The role of systems science and cybernetics in transforming contemporary governance	CYB	2C	N/A
Laouris, Y (2)	A critical discussion regarding the feasibility of rendering Structured Democratic Dialogue virtual	OTSC	3C	N/A
Love, T (1)	The 2 Feedback Loop Axiom: Why participatory systems methods fail and are inappropriate for complex system problems	SMSE	1E	135
Love, T (2)	Variety Dynamics: A new body of systems methods and a new mathematical field for management and control of dynamically complex multi-actor systems	SACD	4C	143

Presenter	Title	Track	Session	Page Number
Ludikhuijze, H	Literature and Social Change – Pedagogies of (Re)Orientation in Voluntourism Reading Groups through uMunthu in Rural Malawi	SCA	2E	N/A
MacGill, V	Spolier Alert: The Wizard of Oz is a Fraud Systemic Musings on the Nature of Self	BIC	5D	N/A
Malele, V	System Thinking meets Data Science/Engineering	DES	1C	157
Manduna, WM (1)	Social justice to learning computer programming: A critical systems thinking approach in computing education at a university	CSTP	1A	N/A
Manduna, WM (2)	The do's of learning programming: a critical review of the suitable assessment strategies for the programming students	DES	5C	N/A
McCulloch, L	How might a systems approach invite the change or hope "it" wishes to see? A story of an action research journey so far to advance the "system" with mothers in addiction recovery in Ireland	DEI	2B	N/A
McIntyre, J (1)	Story telling to foster emotional intelligence, distributive leadership and multispecies relationships	BIC	5D	168
McIntyre, J (2)	A gender sensitive approach to uniting indigenous views on natural law with relational governance for protecting the commons	BIC	5D	188
Metcalf, G (1)	Reframing systems thinking for systems changes: Sciencing and philosophizing from pragmatism towards processes as rhythms	RHT	4E	218
Metcalf, G (2)	Industry / Society 5.0: Moving from transhumanist to posthumanist technologies	RHT	3C	N/A
Montero, A	An Autoethnography of my Nomadic Journey with Western and Indigenous Knowledges: From Social Constructionism to Systems Thinking in Leadership	DEI	2B	N/A
Muller, J	The Application of FMA to Automation Research	AR	4D	264
Nagraj, S	Solving 'wicked' problems in global health using systems science	HST	5A	N/A
Nshimba, C	Listening to the Affected: Security in a Home Area Network	CSTP	5C	276

Presenter	Title	Track	Session	Page Number
O'Donnell, J (1)	Implementation and Systems sciences: What happens when two sciences collide	OTSC	1D	N/A
O'Donnell, J (2)	Designing safe virtual spaces as part of mainstream disability services using the Viable Systems Model	HST	3A	N/A
Pinsker, E	Systems Thinking, Systemic Change and Equity in Public Health Practice: A Dialogue	HST	SP 1B	N/A
Pinzon-Salcedo, LA	Amazonian Perspectivism: Enriching systems thinking by leveraging contributions from indigenous Amerindians	CSTP	2A	N/A
Potts, M	Promoting systemic change in our educational institutions through metacompetencies that develop transformative qualities of Being and agency	DES	3B	292
Preiser, R	Interacting across difference: exploring capacities for making sense of diversity and change	DEI	5B	N/A
Rajagopalan, R	Systemic consciousness: new horizon for systems practice	CYB	SP 1A	N/A
Reynolds, M	Professionalising systems thinking in practice: what's not to celebrate?	EP	2A	309
Roberts, R	Using Systems dynamics to understand the impacts of community renewable energy projects in New Zealand	SMSE	1E	N/A
Scribante, J	The Development of a Framework for Improvement of Intensive Care Delivery in South Africa: A Systemic Intervention	HST	3A	N/A
Smit, I	Using Dooyeweerd's Fifteen Modal Aspects to Diagnose Challenges in Action Research	AR	4C	323
Smith, W	Quiet Revolution: A Lifelong Perspective on Systems Capped by the Discovery of Stem-Systems	SIEL	3E	N/A
Swartz, J	A Philosophy of Systems Futures: Transdisciplinary Cooperations	SPhil	2D	N/A
Sweeting, RB	Architecture, Ecology, and Hubris	SESD	2D	337

Presenter	Title	Track	Session	Page Number
Tuddenham, P	Interconnected Earth: Advancing Systems Literacy through Systems Process Theory, and Conversation Theory, and Al-Enhanced Collaboration	HIS	3D	N/A
Van der Westhuizen, L	Exploring the Transformative Power of Visual Art: A Practitioner-Researcher's Journey towards Self-Reflection	EP	5A	345
Wagner, A	Trauma and Democracy - Exploring the narrative landscape and sensemaking of 350 people in Germany in relation to current crisis and polarization	SACD	SP 2E	N/A
Williams, B	Applying the 'Extended Dynamic Sustainability' framing to understand sustainability of education intervention outcomes	OTSC	1D	N/A
Winn, K	Documenting Emergent Knowledge to Explore Common Perceptions of Well-Being	SSSS	3E	356
	Poster Sessions			
Kineman, J	Sacred topology of wholeness	RS	P1	N/A
Leonard, Ar	A Viable Systems Application for Improving Climate Adaptability in Kruger National Park	SCA	P1	N/A
A Final Word			367	