



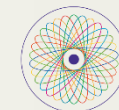
L'APPORT DE BOULDING À UNE TRANSITION SYSTÉMIQUE VERS UNE ÉCONOMIE CIRCULAIRE

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Chercheure – Projet ASECT - Défi Circulades



UNIVERSITE DE
MONTPELLIER



Ecocirculab



PLAN DE LA PRÉSENTATION

Introduction

I – L'économie circulaire systémique de Boulding

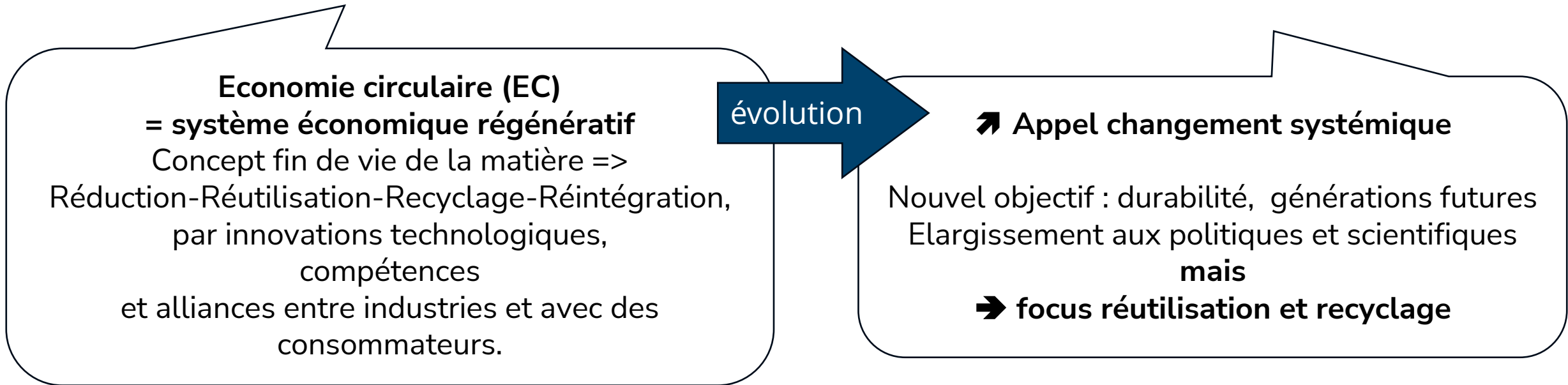
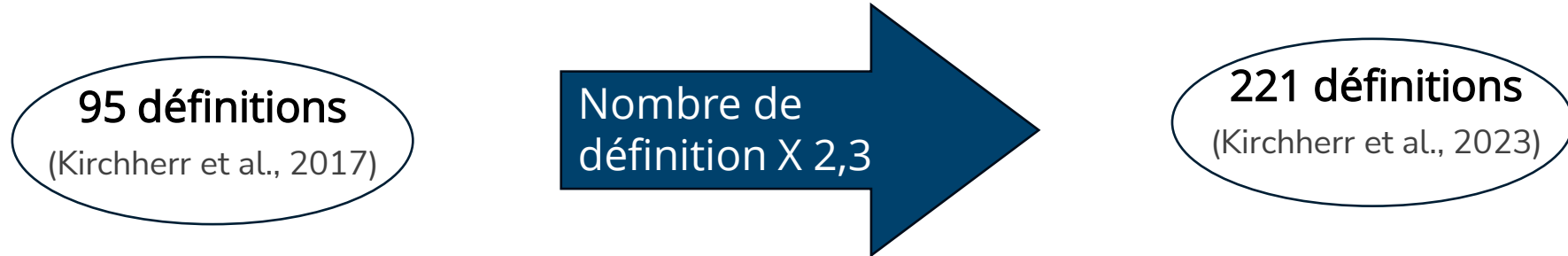
II – La perspective systémique actuelle

III – Mise en discussion

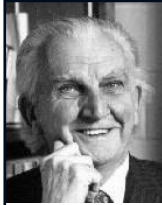
Conclusion



INTRODUCTION



INTRODUCTION



Boulding,
Fondateur des théories des systèmes
et de l'économie circulaire

1956: *General systems theory*

1966: *The economics of spaceship earth*

1968a: *Education for spaceship earth*

1968b: *What can we know and teach
about social systems ?*

1972: *The future of personal responsibility ...*

= 4

221 définitions
(Kirchherr et al., 2023)

« le type actuel **d'économie linéaire**, qui va des **mines aux décharges**,
ne peut continuer éternellement [...]

l'humanité fera face à une transition fondamentale

vers ce que moi et d'autres avons appelé une terre navette spatiale (Boulding, 1966).

Ce sera une **société planétaire**, petite, fermée, limitée,

presque certainement dépendante de l'énergie solaire [...], et elle devra recycler
virtuellement tous ses matériaux,

dans une **économie circulaire**, dans laquelle **les décharges deviennent des mines** »

(Boulding, 1972, p.22-23)

Problématique

Que peut on apprendre de la perspective systémique d'EC de Boulding ?

- Quelle est la perspective systémique de l'EC de Boulding ?
- Quelle est la perspective systémique organisationnelle actuelle de l'EC ?
- Que peut-on apprendre de leur rencontre ?

Méthodologie

- Revue de littérature de 16 papiers de et sur théories EC et systèmes
- Revue systématique de littérature, outil StArt Tool → 429 → 159 → 53 (2^{nde} sélection en cours)
- Analyse thématique et discussion des résultats

I – L'ÉCONOMIE CIRCULAIRE SYSTÉMIQUE DE BOULDING

Systeme

= « tout ce qui n'est pas chaos », « tout système vivant est dynamique » (Boulding, 1968b, p.1-3)

L'étudier : identifier les « modèles continus » « dans le continuum espace-temps »
« pour projeter le futur » (Boulding, 1968b, p.1-3)

Théorie général des systèmes

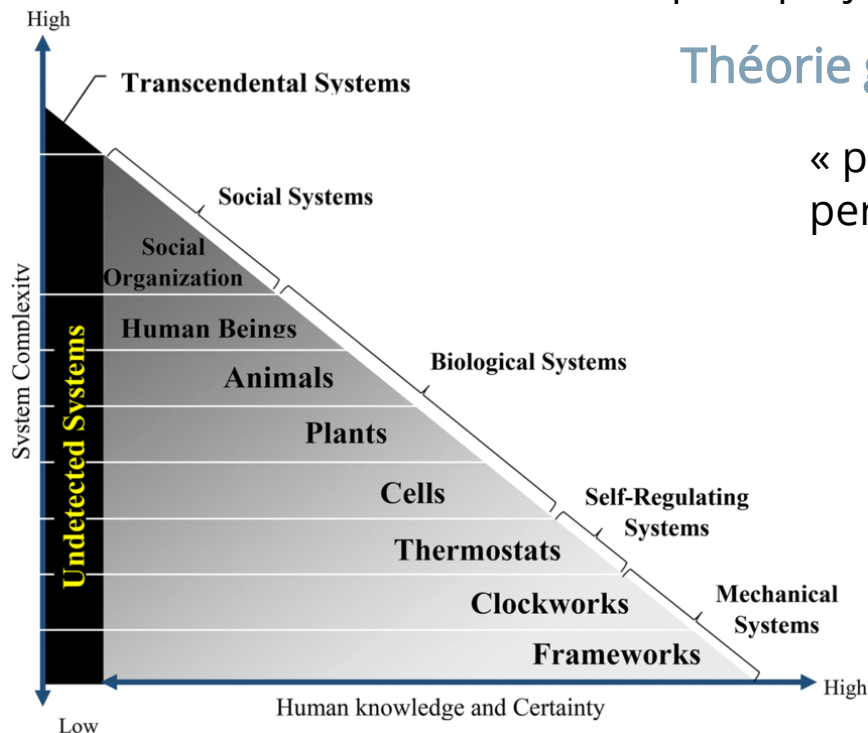
« permettant à chaque spécialiste de comprendre les communications pertinentes d'autres disciplines » (Boulding, 1956, p.199)

« la sociosphère [...] devient dominante sur les autres sphères [...] et commence à affecter la biosphère très rapidement » (Boulding, 1968b, p. 1)

Modèle de l'équilibre écologique

« tout interagit pour former un équilibre stable [...] »

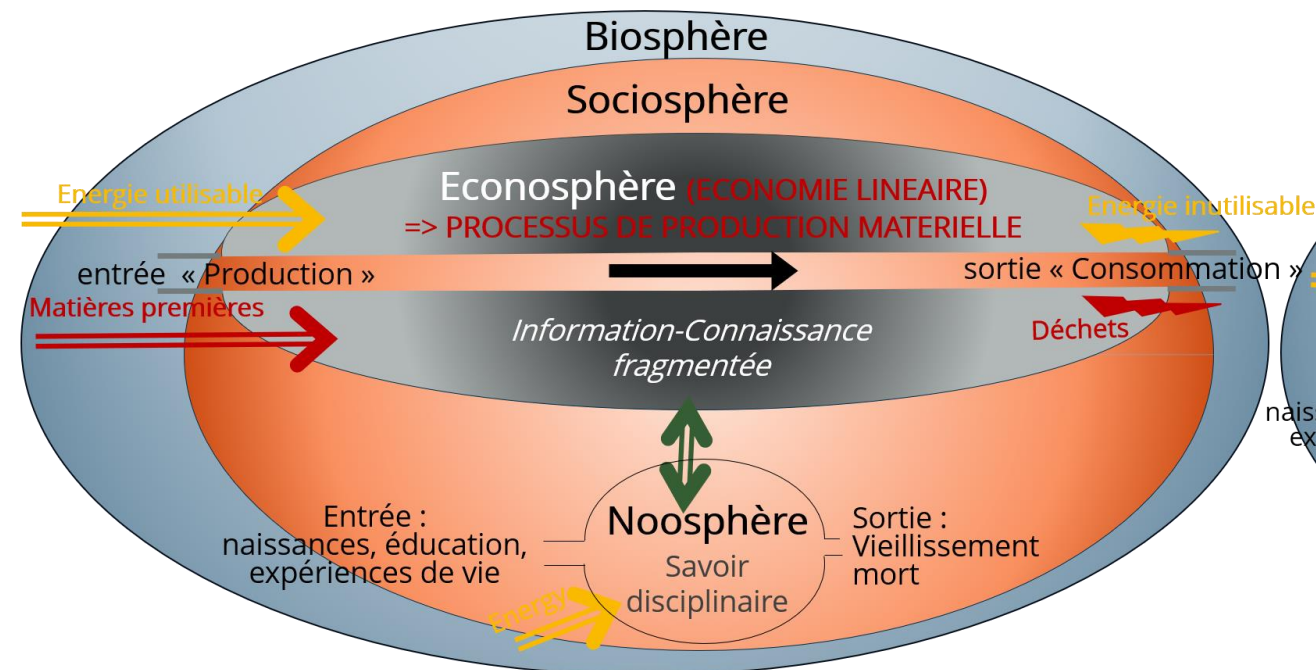
le bien-être de l'individu dépend de l'étendue de la communauté à laquelle il peut s'identifier [...] dans l'espace mais aussi [...] dans le temps » (Boulding, 1966, p. 10)



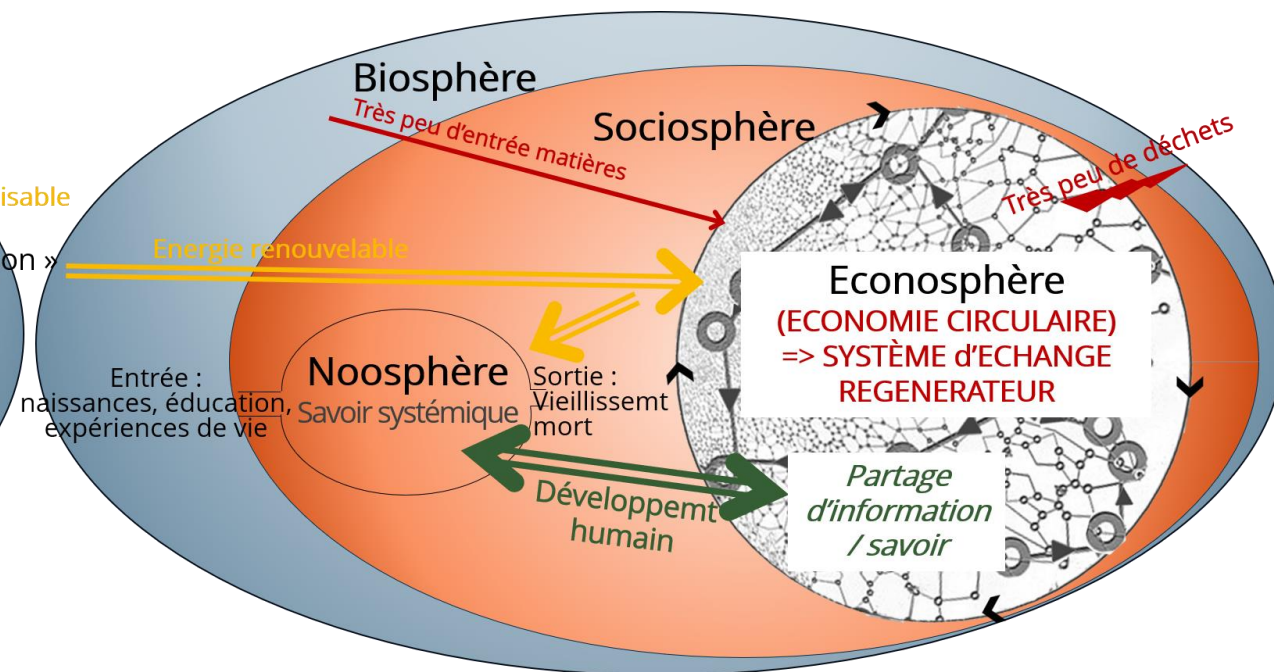
Boulding's skeleton of a general systemic sciences (in Javanmardi et Liu, 2019)

I – L'ÉCONOMIE CIRCULAIRE SYSTÉMIQUE DE BOULDING

Economie linéaire



Economie circulaire

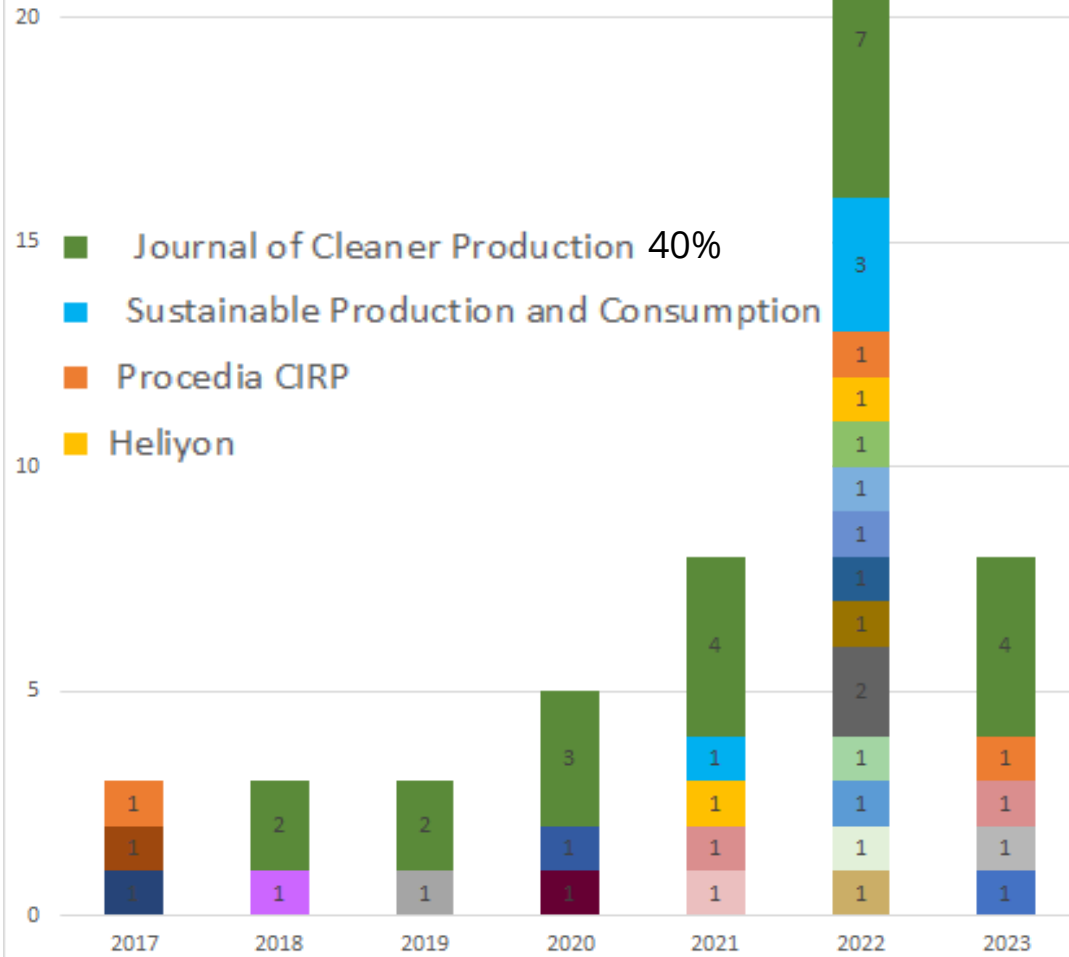


Objectif : développement humain par croissance de production / consommation
(Boulding, 1966)
Indicateur de succès : "débit de production"
(Boulding, 1966)

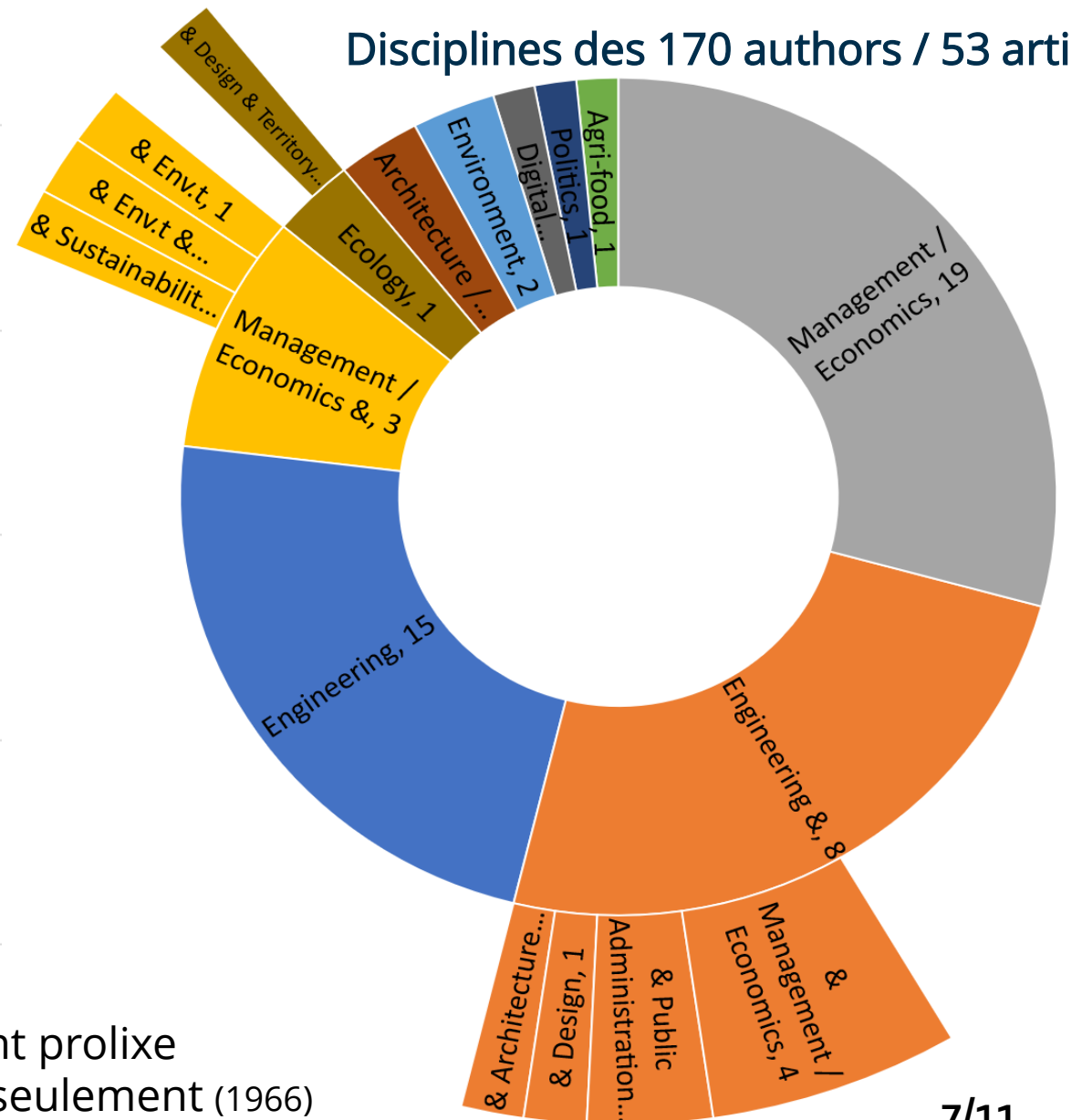
Objectif :
Equilibre écologique (Boulding, 1966, p.8)
Indicateur de succès :
« nature, étendue, qualité, et complexité du stock total, incluant le bien-être des humains »
(Boulding, 1966, p.8)

II – LA PERSPECTIVE SYSTÉMIQUE ACTUELLE

23 revues pour 53 articles

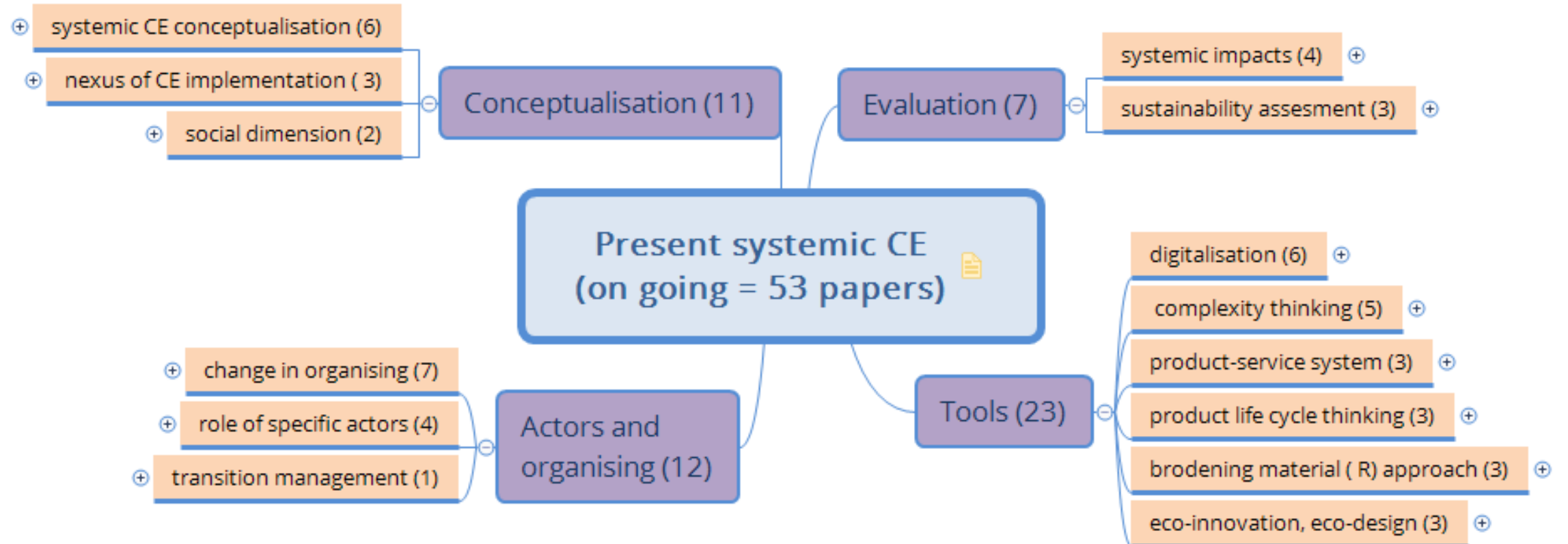


Disciplines des 170 authors / 53 articles



- Pas d'auteur particulièrement prolifique
- 5 articles citant Boulding et seulement (1966)

4 axes d'approche systémique de l'EC



II - LA PERSPECTIVE SYSTÉMIQUE ACTUELLE

Contributions

framework
framework
framework
framework
framework
framework
framework
framework
framework
framework
framework

theories
theories
theories
theories

Boulding
Boulding

multi level
multi level
multi level
multi level
multi level
multi level
multi level
multi level

systemic change
interdependance
interdependance
interdisciplinary
interdisciplinary

sustainable
sustainable
sustainable
sustainable
sustainable
sustainable
sustainable
sustainable

Sustainable

digital
digital
Industry 4.0
Industry 4.0
Industry 4.0

life-cycle
life-cycle
life-cycle
Rs strategies
Rs strategies
Rs strategies

Rs strategies
Rs strategies
Rs strategies

supply chain
product-service
product-service
product-service
product-service

Industrial ecology

lack of social
lack of social
lack of social
lack of social
lack of social

impacts
rebound effects
rebound effects
rebound effects

indicators
indicators
indicators

performance

cooperation
cooperation
cooperation
cooperation
cooperation
cooperation
cooperation

information sharing
information sharing
information sharing
information sharing
information sharing
information sharing
information sharing

governance
non hierarchical governance
non hierarchical governance
non hierarchical governance

involvement
involvement
involvement

Economie circulaire systémique de Boulding

- Changement sociétal : production / consommation
=> système équilibre écologique, non productiviste
- Changement mesure du succès : débit production
=> complexité, riche biodiversité, bien-être humain
- Appel à l'interdisciplinarité => Recherche
systémique prospective, avec sa théorie générale
- Changement du rôle de l'information essentiel au
système d'échange, à partager et croissante,
nouveau facteur de développement humain

Perspective systémique actuelle d'économie circulaire

- Changement de système production/consommation =>
système complexe plus durable, à plusieurs niveaux.
- Changement vers indicateurs plus systémiques :effets
rebonds, circulaire, durabilité mais pas social
- Appel naissant à une recherche interdisciplinaire, porté
par les ingénieurs, avec cadres systémiques émergents
- Appel à coopération et partage d'information, misant sur
le numérique, dans une société compétitive, face au
manque de confiance, et de mobilisation des acteurs

Contributions

Reconnaissance de l'économie circulaire, systémique, écologique, et non productiviste de Boulding

Identification de l'état actuel de la littérature sur la perspective systémique de l'économie circulaire

Eclairage de l'écart entre la perspective changement sociétal de Boulding et d'amélioration du système complexe de production/consommation de la littérature actuelle.

Limites

Recherche en cours, 97 à lire (dont seulement 22 d'intérêt particulier)

Critères de sélection stricts : ("circular economy" AND "literature review" AND system*)

Pistes de recherche

EC comme transformation sociétale / Transition management (Friant, 2022; Loorbach, 2017, Savy et al., 2019, 2022)

Science interdisciplinaire, EC / Systémique, Objet frontière (Star et Griesemer, 1989 ; Boulding, 1956, 1968a, 1968b)

Individu, coopération, gouvernance et sciences de gestion (Follett, 1924 ; Boulding, 1972 ; Savy et al., 2019, 2022)

Merci pour votre attention

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Annexe Bibliographie de et sur Boulding

- Boulding, K. E. (1945). The consumption concept in economic theory. *The American Economic Review*, 35(2), 1-14.
- Boulding, K. E. (1949). Income or welfare. *The Review of Economic Studies*, 17(2), 77-86. <https://academic.oup.com/restud/article-abstract/11/2/77/1567378>
- Boulding, K. E. (1956). General systems theory—The skeleton of science. *Management science*, 2(3), 197-208.
- Boulding, K. E. (1957). *Institutional Economics—A new look on Institutionalism*. 47(2, Papers and Proceedings of the Sixty-eighth Annual Meeting of the American Economic Association (May, 1957)), 1-12.
- Boulding, K. E. (1966). The Economics of the Coming Spaceship Earth. In *In H. Jarrett (ed.) Environmental Quality in a Growing Economy* (Johns Hopkins University Press, p. 3-14).
- Boulding, K. E. (1968a). Education for spaceship Earth. *Social Education*, 32(7), 316-323.
- Boulding, K. E. (1968b). What Can We Know and Teach About Social Systems? In *Social Science Education Consortium Newsletter*. Social Science Education Consortium, Inc. <https://eric.ed.gov/?id=ED041792>
- Boulding, K. E. (1972). The Future of Personal Responsibility. *American Behavioral Scientist*, 15(3), 329-359. <https://doi.org/10.1177/000276427201500303>
- Boulding, K. E. (1993). Spaceship Earth Revisited. In *Valuing the Earth—Economics, Ecology, Ethics.*, par Herman E. Daly and Kenneth N. Townsend (p. 311-313).
- Daly, H. E. (1981). Reflections on Boulding's 'income or welfare'. *Journal of Social and Biological Structures*, 4(2), 158-162. [https://doi.org/10.1016/0140-1750\(81\)80025-5](https://doi.org/10.1016/0140-1750(81)80025-5)
- Friant, M. C., Vermeulen, W. J. V., & Salomone, R. (2020). A typology of circular economy discourses : Navigating the diverse visions of a contested paradigm. *Resources, Conservation and Recycling*, 161, 104917. <https://doi.org/10.1016/j.resconrec.2020.104917>
- James, P. (2022). Re-embedding the circular economy in Circles of Social Life : Beyond the self-repairing (and still-rapacious) economy. *Local Environment*, 27(10-11), 1208-1224. <https://doi.org/10.1080/13549839.2022.2040469>
- Javanmardi, E., & Liu, S. (2020). Exploring the Human Cognitive Capacity in Understanding Systems : A Grey Systems Theory Perspective. *Foundations of Science*, 25(3), 803-825. <https://doi.org/10.1007/s10699-019-09618-3>
- Kenneth Boulding, *General Systems Theory* (1956). (s. d.). Consulté 22 septembre 2023, à l'adresse <https://www.panarchy.org/boulding/systems.1956.html>
- Paché, G. (2022). S'affranchir du «vaisseau Terre»? Retour sur l'héritage de Kenneth Boulding. *Revue de Management et de Stratégie*.
- Spash, C. L. (2013). *The Ecological Economics of Boulding's Spaceship Earth*. Institute for the Environment and Regional Development - Vienna; SRE discussions.

- Acerbi, F., & Taisch, M. (2020). A literature review on circular economy adoption in the manufacturing sector. *Journal of Cleaner Production*, 273, 123086. <https://doi.org/10.1016/j.jclepro.2020.123086>
- Agrawal, R., Wankhede, V. A., Kumar, A., Upadhyay, A., Garza-Reyes, J. A., externe, L. vers un site, & fenêtre, celui-ci s'ouvrira dans une nouvelle. (2022). *Nexus of circular economy and sustainable business performance in the era of digitalization*. 71(3), 748-774. <https://doi.org/10.1108/IJPPM-12-2020-0676>
- Agrawal, R., Wankhede, V. A., Kumar, A., Luthra, S., & Huisingh, D. (2022). Progress and trends in integrating Industry 4.0 within Circular Economy : A comprehensive literature review and future research propositions. *Business Strategy & the Environment (John Wiley & Sons, Inc)*, 31(1), 559-579. <https://doi.org/10.1002/bse.2910>
- Ahmad, F., Bask, A., Laari, S., & Robinson, C. V. (2023). Business management perspectives on the circular economy : Present state and future directions. *Technological Forecasting and Social Change*, 187, 122182. <https://doi.org/10.1016/j.techfore.2022.122182>
- Alcayaga, A., Wiener, M., & Hansen, E. G. (2019). Towards a framework of smart-circular systems : An integrative literature review. *Journal of Cleaner Production*, 221, 622-634. <https://doi.org/10.1016/j.jclepro.2019.02.085>
- Amoozad Mahdiraji, H., Govindan, K., Yaftiyan, F., Garza-Reyes, J. A., & Razavi Hajiagha, S. H. (2023). Unveiling coordination contracts' roles considering circular economy and eco-innovation toward pharmaceutical supply chain resiliency : Evidence of an emerging economy. *Journal of Cleaner Production*, 382, 135135. <https://doi.org/10.1016/j.jclepro.2022.135135>
- Aschemann-Witzel, J., & Stangherlin, I. D. C. (2021). Upcycled by-product use in agri-food systems from a consumer perspective : A review of what we know, and what is missing. *Technological Forecasting and Social Change*, 168, 120749. <https://doi.org/10.1016/j.techfore.2021.120749>
- Atanasovska, I., Choudhary, S., Koh, L., Ketikidis, P. H., & Solomon, A. (2022). Research gaps and future directions on social value stemming from circular economy practices in agri-food industrial parks : Insights from a systematic literature review. *Journal of Cleaner Production*, 354, 131753. <https://doi.org/10.1016/j.jclepro.2022.131753>
- Atif, S. (2023). Analysing the alignment between circular economy and industry 4.0 nexus with industry 5.0 era : An integrative systematic literature review. *Sustainable Development*, 1. <https://doi.org/10.1002/sd.2542>
- Baldassarre, B., Keskin, D., Diehl, J. C., Bocken, N., & Calabretta, G. (2020). Implementing sustainable design theory in business practice : A call to action. *Journal of Cleaner Production*, 273, 123113. <https://doi.org/10.1016/j.jclepro.2020.123113>
- Barrie, J., Zawdie, G., & João, E. (2017). *Leveraging triple helix and system intermediaries to enhance effectiveness of protected spaces and strategic niche management for transitioning to circular economy*. 16(1), 25-47. https://doi.org/10.1386/tmsd.16.1.25_1
- Cappelletti, F., Rossi, M., & Germani, M. (2022). How de-manufacturing supports circular economy linking design and EoL - a literature review. *Journal of Manufacturing Systems*, 63, 118-133. <https://doi.org/10.1016/j.jmsy.2022.03.007>
- Castro, C. G., Trevisan, A. H., Pigosso, D. C. A., & Mascarenhas, J. (2022). The rebound effect of circular economy : Definitions, mechanisms and a research agenda. *Journal of Cleaner Production*, 345, N.PAG-N.PAG. <https://doi.org/10.1016/j.jclepro.2022.131136>

- Compagnoni, M. (2022). Is Extended Producer Responsibility living up to expectations? A systematic literature review focusing on electronic waste. *Journal of Cleaner Production*, 367, 133101. <https://doi.org/10.1016/j.jclepro.2022.133101>
- Ddiba, D., Ekener, E., Lindkvist, M., & Finnveden, G. (2022). Sustainability assessment of increased circularity of urban organic waste streams. *Sustainable Production and Consumption*, 34, 114-129. <https://doi.org/10.1016/j.spc.2022.08.030>
- de Jesus, A., Antunes, P., Santos, R., & Mendonça, S. (2018). Eco-innovation in the transition to a circular economy : An analytical literature review. *Journal of Cleaner Production*, 172, 2999-3018. <https://doi.org/10.1016/j.jclepro.2017.11.111>
- de Oliveira, C. T., Dantas, T. E. T., & Soares, S. R. (2021). Nano and micro level circular economy indicators : Assisting decision-makers in circularity assessments. *Sustainable Production and Consumption*, 26, 455-468. <https://doi.org/10.1016/j.spc.2020.11.024>
- Fernandes, S. da C., Pigosso, D. C. A., McAloone, T. C., & Rozenfeld, H. (2020). Towards product-service system oriented to circular economy : A systematic review of value proposition design approaches. *Journal of Cleaner Production*, 257, 120507. <https://doi.org/10.1016/j.jclepro.2020.120507>
- Gebhardt, M., Kopyto, M., Birkel, H., & Hartmann, E. (2022). Industry 4.0 technologies as enablers of collaboration in circular supply chains : A systematic literature review. *International Journal of Production Research*, 60(23), 6967-6995.
- Ghafoor, S., Hosseini, M. R., Kocaturk, T., Weiss, M., & Barnett, M. (2023). The product-service system approach for housing in a circular economy : An integrative literature review. *Journal of Cleaner Production*, 403, 136845. <https://doi.org/10.1016/j.jclepro.2023.136845>
- Gomes, G. M., Moreira, N., & Ometto, A. R. (2022). Role of consumer mindsets, behaviour, and influencing factors in circular consumption systems : A systematic review. *Sustainable Production and Consumption*, 32, 1-14. <https://doi.org/10.1016/j.spc.2022.04.005>
- Hernandez Marquina, M. V., Le Dain, M.-A., Zwolinski, P., & Joly, I. (2022). Sustainable performance of circular supply chains : A literature review. *Procedia CIRP*, 105, 607-612. <https://doi.org/10.1016/j.procir.2022.02.101>
- Hernandez Marquina, M. V., Zwolinski, P., & Mangione, F. (2021). Application of Value Stream Mapping tool to improve circular systems. *Cleaner Engineering and Technology*, 5, 100270. <https://doi.org/10.1016/j.clet.2021.100270>
- Homrich, A. S., Galvão, G., Abadia, L. G., & Carvalho, M. M. (2018). The circular economy umbrella : Trends and gaps on integrating pathways. *Journal of Cleaner Production*, 175, 525-543. <https://doi.org/10.1016/j.jclepro.2017.11.064>
- Jäger-Roschko, M., & Petersen, M. (2022). Advancing the circular economy through information sharing : A systematic literature review. *Journal of Cleaner Production*, 369, N.PAG-N.PAG. <https://doi.org/10.1016/j.jclepro.2022.133210>
- Kara, S., Hauschild, M., Sutherland, J., & McAloone, T. (2022). Closed-loop systems to circular economy : A pathway to environmental sustainability? *CIRP Annals*, 71(2), 505-528. <https://doi.org/10.1016/j.cirp.2022.05.008>
- Kuzma, E. L., Sehnem, S., Jabbour, A. B. L. de S., Campos, L. M., externe, L. vers un site, & fenêtre, celui-ci s'ouvrira dans une nouvelle. (2022). *Circular economy indicators and levels of innovation : An innovative systematic literature review*. 71(3), 952-980. <https://doi.org/10.1108/IJPPM-10-2020-0549>
- Lehmann, S. (2018). Implementing the Urban Nexus approach for improved resource-efficiency of developing cities in Southeast-Asia. *City, Culture and Society*, 13, 46-56. <https://doi.org/10.1016/j.ccs.2017.10.003>

- Lopes de Sousa Jabbour, A. B., Rojas Luiz, J. V., Rojas Luiz, O., Jabbour, C. J. C., Ndubisi, N. O., Caldeira de Oliveira, J. H., & Junior, F. H. (2019). Circular economy business models and operations management. *Journal of Cleaner Production*, 235, 1525-1539. <https://doi.org/10.1016/j.jclepro.2019.06.349>
- Mendoza, J. M. F., Sharmina, M., Gallego-Schmid, A., Heyes, G., & Azapagic, A. (2017). *Integrating Backcasting and Eco-Design for the Circular Economy: The BECE Framework*. 21(3), 526-544. <https://doi.org/10.1111/jiec.12590>
- Metic, J., & Pigosso, D. C. A. (2022). Research avenues for uncovering the rebound effects of the circular economy : A systematic literature review. *Journal of Cleaner Production*, 368, 133133. <https://doi.org/10.1016/j.jclepro.2022.133133>
- Mukoro, V., Sharmina, M., & Gallego-Schmid, A. (2022). A review of business models for access to affordable and clean energy in Africa : Do they deliver social, economic, and environmental value? *Energy Research & Social Science*, 88, 102530. <https://doi.org/10.1016/j.erss.2022.102530>
- Münch, C., Benz, L. A., & Hartmann, E. (2022). Exploring the circular economy paradigm : A natural resource-based view on supplier selection criteria. *Journal of Purchasing & Supply Management*, 28(4), N.PAG-N.PAG. <https://doi.org/10.1016/j.pursup.2022.100793>
- Pan, X., Wong, C. W. Y., & Li, C. (2022). Circular economy practices in the waste electrical and electronic equipment (WEEE) industry : A systematic review and future research agendas. *Journal of Cleaner Production*, 365, 132671. <https://doi.org/10.1016/j.jclepro.2022.132671>
- Ralph, N. (2021). A conceptual merging of circular economy, degrowth and conviviality design approaches applied to renewable energy technology. *Journal of Cleaner Production*, 319, 128549. <https://doi.org/10.1016/j.jclepro.2021.128549>
- Rios, F. C., Panic, S., Grau, D., Khanna, V., Zapitelli, J., & Bilec, M. (2022). Exploring circular economies in the built environment from a complex systems perspective : A systematic review and conceptual model at the city scale. *Sustainable Cities and Society*, 80, 103411. <https://doi.org/10.1016/j.scs.2021.103411>
- Rodríguez, R. W., Pomponi, F., Webster, K., & D'Amico, B. (2020). *The future of the circular economy and the circular economy of the future*. 10(4), 529-546. <https://doi.org/10.1108/BEPAM-07-2019-0063>
- Roman, P., Thiry, G., Muylaert, C., Ruwet, C., & Maréchal, K. (2023). Defining and identifying strongly sustainable product-service systems (SSPSS). *Journal of Cleaner Production*, 391, 136295. <https://doi.org/10.1016/j.jclepro.2023.136295>
- Santeramo, F. G. (2022). Circular and green economy : The state-of-the-art. *Heliyon*, 8(4), e09297. <https://doi.org/10.1016/j.heliyon.2022.e09297>
- Sarancic, D., Metic, J., Pigosso, D. C. A., & McAloone, T. C. (2023). Impacts, synergies, and rebound effects arising in combinations of Product-Service Systems (PSS) and circularity strategies. *Procedia CIRP*, 116, 546-551. <https://doi.org/10.1016/j.procir.2023.02.092>
- Sassanelli, C., Urbinati, A., Rosa, P., Chiaroni, D., & Terzi, S. (2020). Addressing circular economy through design for X approaches : A systematic literature review. *Computers in Industry*, 120, 103245. <https://doi.org/10.1016/j.compind.2020.103245>
- Singh, J., Sung, K., Cooper, T., West, K., & Mont, O. (2019). Challenges and opportunities for scaling up upcycling businesses – The case of textile and wood upcycling businesses in the UK. *Resources, Conservation and Recycling*, 150, 104439. <https://doi.org/10.1016/j.resconrec.2019.104439>
- Sitadewi, D., Yudoko, G., & Okdinawati, L. (2021). Bibliographic mapping of post-consumer plastic waste based on hierarchical circular principles across the system perspective. *Heliyon*, 7(6), e07154. <https://doi.org/10.1016/j.heliyon.2021.e07154>

- Stocco, L. C., Cezarino, L. O., Liboni, L. B., & Venkatesh, V. G. (2022). Wholesaler echelon and Industry 4.0 in circular supply chains – a systematic review. *Modern Supply Chain Research and Applications*, 4(2), 141-158. <https://doi.org/10.1108/MS CRA-10-2021-0019>
- Suárez-Eiroa, B., Fernández, E., & Méndez, G. (2021). Integration of the circular economy paradigm under the just and safe operating space narrative : Twelve operational principles based on circularity, sustainability and resilience. *Journal of Cleaner Production*, 322, N.PAG-N.PAG. <https://doi.org/10.1016/j.jclepro.2021.129071>
- Sudusinghe, J. I., & Seuring, S. (2022). Supply chain collaboration and sustainability performance in circular economy : A systematic literature review. *International Journal of Production Economics*, 245, N.PAG-N.PAG. <https://doi.org/10.1016/j.ijpe.2021.108402>
- Taddei, E., Sassanelli, C., Rosa, P., & Terzi, S. (2022). Circular supply chains in the era of industry 4.0 : A systematic literature review. *Computers & Industrial Engineering*, 170, N.PAG-N.PAG. <https://doi.org/10.1016/j.cie.2022.108268>
- Trevisan, A. H., Castro, C. G., Gomes, L. A. V., & Mascarenhas, J. (2022). Unlocking the circular ecosystem concept : Evolution, current research, and future directions. *Sustainable Production and Consumption*, 29, 286-298. <https://doi.org/10.1016/j.spc.2021.10.020>
- Valencia, M., Bocken, N., Loaiza, C., & De Jaeger, S. (2023). The social contribution of the circular economy. *Journal of Cleaner Production*, 408, 137082. <https://doi.org/10.1016/j.jclepro.2023.137082>
- Velte, C. J., Wilfahrt, A., Müller, R., & Steinhilper, R. (2017). Complexity in a life cycle perspective. *Procedia CIRP*, 61, 104-109.
- Walker, A. M., Vermeulen, W. J. V., Simboli, A., & Raggi, A. (2021). Sustainability assessment in circular inter-firm networks : An integrated framework of industrial ecology and circular supply chain management approaches. *Journal of Cleaner Production*, 286, N.PAG-N.PAG. <https://doi.org/10.1016/j.jclepro.2020.125457>
- Wijewickrama, M. K. C. S., Rameezdeen, R., & Chileshe, N. (2021). Information brokerage for circular economy in the construction industry : A systematic literature review. *Journal of Cleaner Production*, 313, 127938. <https://doi.org/10.1016/j.jclepro.2021.127938>
- Yu, Y., Yazan, D. M., Junjan, V., & Iacob, M.-E. (2022). Circular economy in the construction industry : A review of decision support tools based on Information & Communication Technologies. *Journal of Cleaner Production*, 349, 131335. <https://doi.org/10.1016/j.jclepro.2022.131335>

- Literature review methodology

Research question : What is the present organisational systemic perspective of CE in academic literature ?

Thematic analysis : 1) through which disciplines, 2) perspectives, and 3), bringing which contributions ?

❑ Collection: 429 papers

- le 02/05/2023, in **Business source premier** (Proquest/ EBSCO), **Proquest One Business**, and **Science Direct**
- **Criteria**: "circular economy" AND "literature review" AND **system***, in academic papers of peer-reviewed journals, in abstracts (+titles +keywords for Science Direct), in english language,

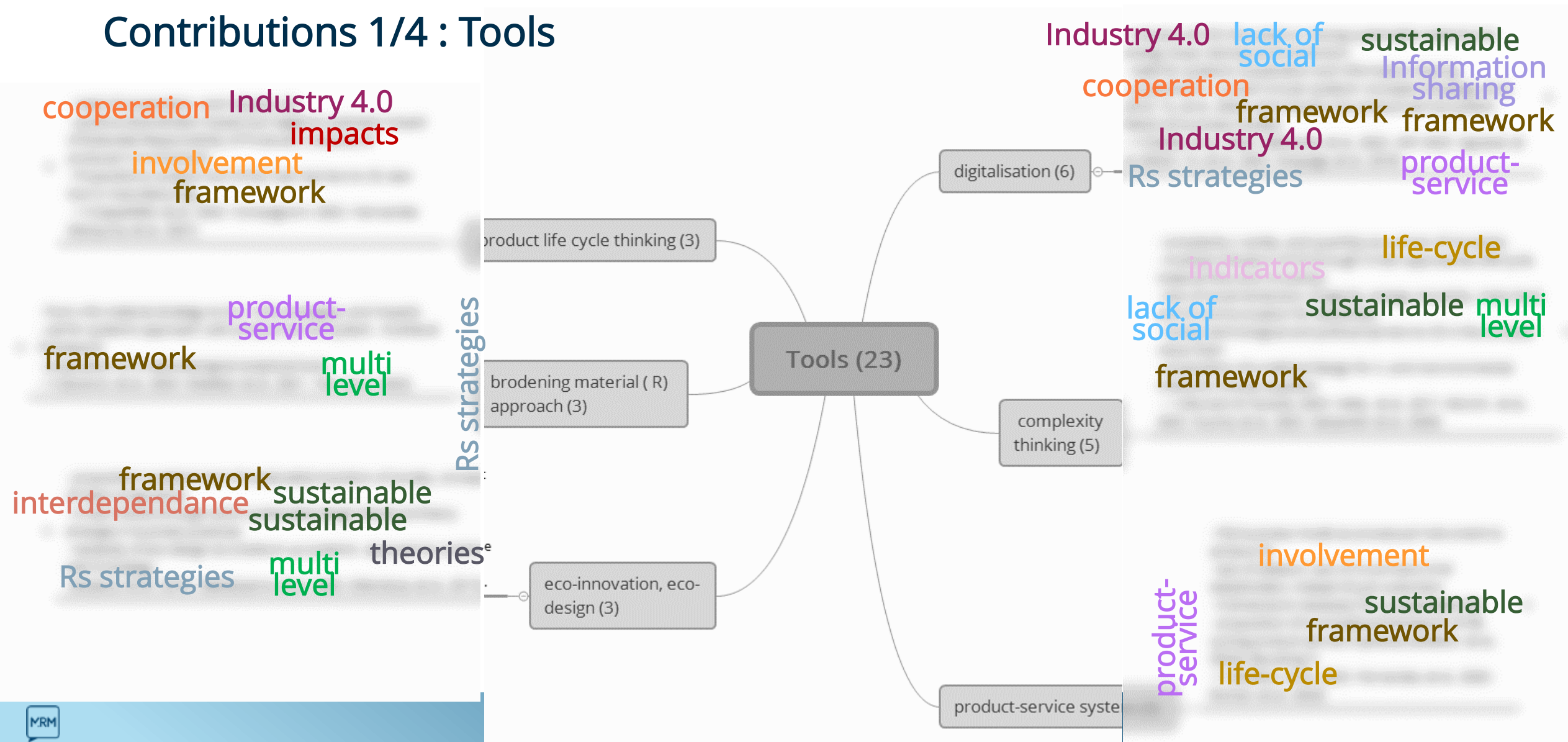
❑ 1st selection: 159 papers [94 duplicated + 170 rejected]

- **looking for (not) relevant keywords** in abstracts (complex, lifecycle, etc , or systematic but not systemic)
- **Criteria of exclusion** : not a scientific paper, no focus on a systemic / CE / organising approach
- **and identification of new inclusion criterias** (linked to the relevant keywords) and a first identification of low, high or very high interest

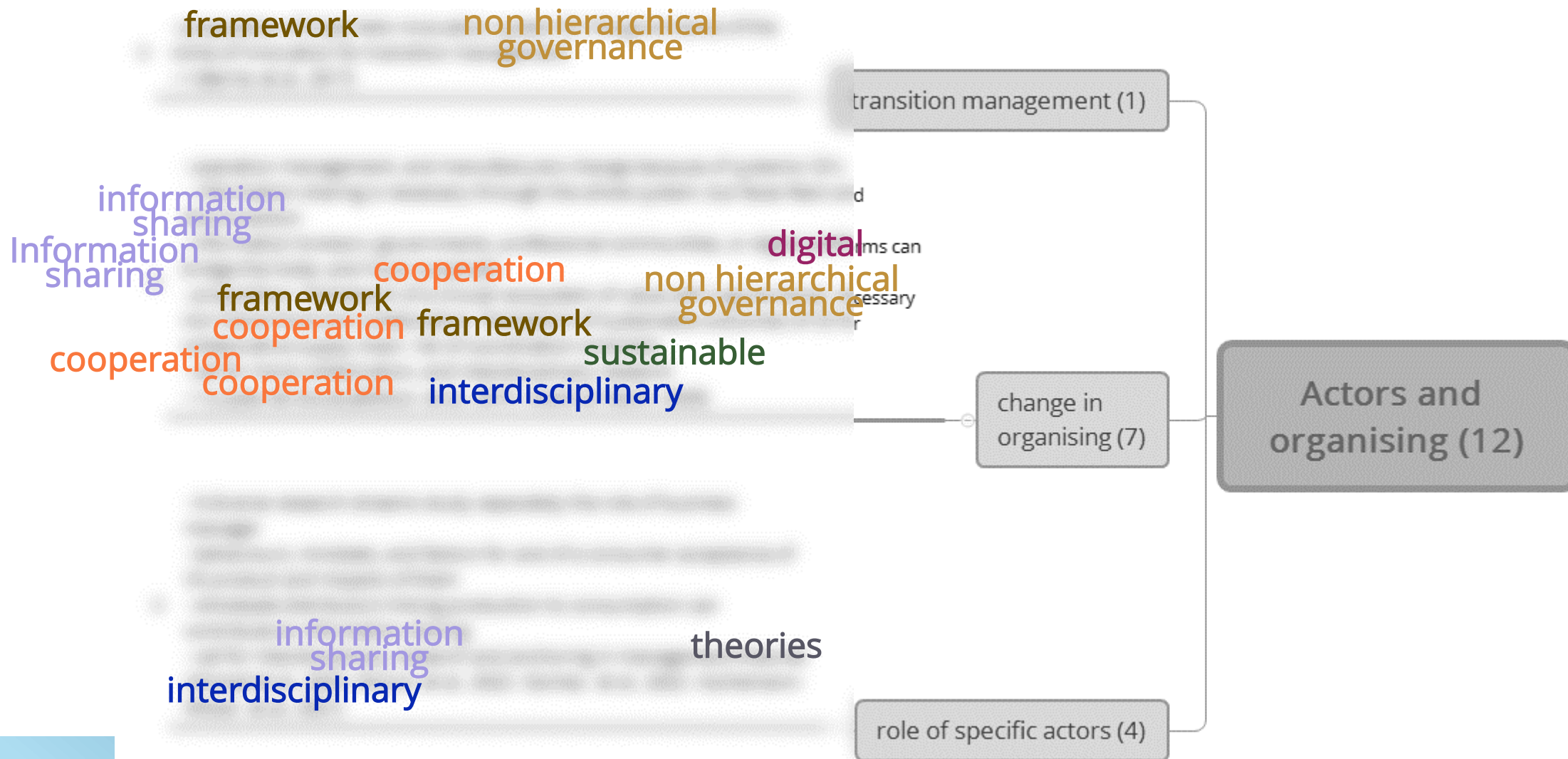
❑ 2nd selection [on going]: up to now, **53 selected** (11 very high interest, 23 high interest) [9 rejected, 97 still unclassified (22 of potentiel high interest)]

- **reading abstract** (if low interest), or **complete text** (otherwise and if interest emerges from the abstract).

Contributions 1/4 : Tools



Contributions 2/4 : Actors and Organising



Contributions 3/4: Conceptualisation



Contributions 4/4 : Evaluation

