

# RS D7 2018

RELATING  
SYSTEMS  
THINKING  
AND  
DESIGN  
7th  
SYMPOSIUM

CHALLENGING  
COMPLEXITY BY  
SYSTEMIC DESIGN  
TOWARDS  
SUSTAINABILITY

TURIN  
23-28.10.2018



BOOK OF ABSTRACTS



**Organised by:**



**POLITECNICO  
DI TORINO**

Department of  
Architecture and Design



**Scientific partnership:**



**SID** Società Italiana di Design



**Sponsor by:**



**CONSIGLIO  
REGIONALE  
DEL PIEMONTE**



CAMERA DI COMMERCIO  
INDUSTRIA ARTIGIANATO E AGRICOLTURA  
DI TORINO

**Book of Abstracts of Relating Systems Thinking and Design (RSD7) 2018 Symposium**

**Editor:** Silvia Barbero

**Publisher:** Politecnico di Torino

**Published in:** March 2019

**ISBN:** 978-88-85745-24-7

The book of abstracts is published and available online as an open access document. Please, cite as:  
Author. (2018). Article title. In S. Barbero (Ed.) Book of Abstracts of Relating Systems Thinking and Design  
(RSD7) 2018 Symposium. Turin, Italy, October 24-26, 2018.

# CONTENTS

## KEYNOTE SPEAKERS

- 10 | **Bistagnino Luigi** - Systemic Approach generates a new cultural paradigm
- 11 | **Bunnell Pille** - With a Grain of Salt
- 12 | **Govera Chido** - The Future of Hope: Social care for sustainable living
- 13 | **Iñiguez Flores Roberto** - Advanced Design cultures, a learning system perspective
- 14 | **Mauldin Chelsea** - Policy Design & Decision Making
- 15 | **Pauli Gunter** - Re-designing the framework: think natural, think local

## PLENARY SPEAKERS

- 17 | **Jones P., Monastiridis S., Ryan A., Toye V., Van Ael K., Vandebroeck P.** - State of the Art Practice: Are we Ready for Systemic Design Toolkits?
- 20 | **Sevaldson Birger** - Systemic Design Association
- 22 | **Simon Widmer** - Circular Economy Toolkit

## 1 | POLICY DESIGN AND DECISION-MAKING

- 24 | **Bellefontaine T., Soliman M.** - Integrating Systems Design and Behavioral Science to Address a Public Sector Challenges from Within
- 27 | **Faiz K., Faiz P., Adha Binti Nordin N., McDonagh D., Woodcock A., Binti Shamsul Harumain Y. A.** - Permeating the barriers between the individual and policy designers in Pakistan: a cross-cultural study of women's mobility
- 32 | **Fassio F., Tecco N.** - Turin Food Atlas. Sharing knowledge towards urban food policies to develop circular cities
- 35 | **Feast L.** - Constitutional Realism and Sustainability: Lessons Learned From a Systemic Design Investigation of New Zealand's Democratic System
- 37 | **Mastroeni M.** - Smart specialization in non-metro canadian regions
- 40 | **Mehta N., Richard C., Raut S., Nahar P.** - A Systems Approach to Sustainability in Space
- 43 | **Metzner-Szigeth A.** - Eco-Social Transformations: Leading Principles and Generative Forces
- 45 | **Muirhead L., Mosse R., Hachey A., Scott N.** - Integration of multiple approaches into the Social Lab practice. A case study from a Social and Public Innovation Lab in New Brunswick, Canada.
- 47 | **Paulsen A., Wildhagen B., Sevaldson B.** - Gearing up the level of systems oriented design in public sector. Case, experiences and learning from Stimulab innovation program
- 50 | **Peter K., Kerr H.** - Alternative Narratives on Economic Growth: Prototyping Change at the System Level
- 53 | **Stamatopoulou A.** - Mapping-and-Designing (in) relationally composed fields

- 62 | **Taverna A., Mortati M.** - A reflection on connecting complexity theory and design for policy
- 66 | **Wildhagen B.**- Understanding variations of entanglement and complexity: A way to influence expectations of Service and Systems Oriented Design in public sector

## 2 | INDUSTRIAL PROCESSES AND AGRI-FOOD SYSTEMS

- 70 | **Dal Palù D., Coraglia V., Lerma B.** - The dark side of high tech precious materials recovery. Overview on the critical issues, opportunities and best practices from a material library point of view
- 73 | **Darzentas J., Darzentas J., de Bruin A., Power M., Prado P., Carmien S., Hobbs E.** - Systemic Design in Food Security and Resilience: Building A Holon
- 77 | **Giordano R., Montacchini E., Tedesco S.** - Building the fashion's future. How to turn textiles' wastes into ecological building products
- 80 | **Konietzko J., Bocken N., Hultink E. J.** - Business Experiments for Circular Urban Food System
- 82 | **Savio L., Thiebat F., Bosia D., Pennacchio R., Manni V.** - Natural fibers insulation panels: an adaptive production
- 85 | **Van der Velden M., Geirbo H. C.** - Repair = Care : Systems stories from Norway and Ghana

## 3 | SOCIO-TECHNICAL SYSTEMS IN THE DIGITAL AGE

- 88 | **Das B., Nahar P.** - Circular Economic Service System Design for Community Based Flood Resilience. Designing a Collaborative Grain Storage and Service System for the Annually Flood Prone Communities of Assam, India
- 92 | **Fiore E.** - New strategies for the refrigerator in the transition towards a circular economy
- 95 | **Germak C., Giuliano L., Abbate L.** - Co-design processes for cleaning and facilities services system
- 98 | **Lomas J., Patel N., Forlizzi J.** - Continuous Improvement: How systems design can benefit the data-driven design community
- 100 | **Tamborrini P., Remondino C., Marino C.** - Data, Fashion System and Systemic Design approach: an information flow strategy to enhance sustainability
- 103 | **Valpreda F., Cataffo M.** - Participatory Design for Service Robotics

## 4 | TERRITORIAL METABOLISM AND FLOURISHING ECONOMIES

- 107 | **Ambrogio F., Comino E., Dominici L., Rosso M.** - The use of water for technical development or technical development for the use of water?
- 110 | **Battistoni C., Barbero S.** - Systemic design for territorial development: ecosystem to support autopoietic local economies
- 114 | **Bofylatos S., Kampasi I., Spyrou T.** - Designing resilient creative communities through biomimetic service design
- 116 | **Bozzola M., De Giorgi C.** - Packaging reconditioned household appliances
- 119 | **Bucci D., Franconi A., Piovesan F., Tagliazucchi S.** - Analyzing OvestLab's collaborative regene-

ration process through a systemic design lens

- 122 | **Cattozzo L., Marotta L.** - Landscapes and systemic design: Po river Delta (Italy) case
- 125 | **Giraldo Nohra C., Barbero S.** - Post-industrial areas on the lens of systemic design towards flourishing urban resilience
- 129 | **Lambiase N.** - Mapping the Circle. Systemic analysis of the experiences of circular economy in Italy through an app
- 132 | **Lemos Oliveira Mendonca R. M., Ribeiro de Mello E. M., de Oliveira Nery S., Horacio M. P., Ro-meiro Filho E.** - Systemic network around education and community gardens
- 135 | **Schaus M.** - Narrative and Value: Authorship in the Story of Money
- 138 | **Toso D., Luthe T., Kiss T.** - The Systemic Design approach applied to water treatment in the alpine region
- 143 | **Varanasi U.** - Life conservation; A study into systemic design for wildlife

## 5 | SOCIAL CARE AND HEALTH SYSTEMS FOR SUSTAINABLE LIVING

- 145 | **Campagnaro C., Ceraolo S., Di Prima N.** - Systemic and participatory design processes in care systems
- 149 | **Eriksson D., Turnstedt L.** - The Nordics as World Leaders in Sustainable Healthcare and why it Matters to you
- 155 | **Gharavi N., Hozhabri M.** - @Home in Transition. Encouraging asylum seekers towards more self-driven approaches to navigate the unknown they are surrounded with.
- 157 | **Kumar A., Wagle P., Bandarkar V., Nahar P.** - Design for the taste-makers: System oriented social innovation for improving the living condition of salt pan labourers
- 160 | **Kumar G. N., Gupta I., Ruchatz J., Nahar P.** - Ethos Design for a Good Quality Life : Building an innovation framework for individuals and organizations towards resilience and cognitive flexibility
- 163 | **Landa-Avila I. C., Escobar-Tello C., Jun G. T.** - Holistic outcome-based approach towards sustain-able design healthcare: aligning the system purpose through system visualisation
- 165 | **Nie Z., Zurlo F.** - Human-centered Approach for Flourishing: Discovering the Value of Service Ecosystem Design in Psychosocial Career Counselling Service
- 167 | **Rygh K., Støren Berg M., Romm J., Morrison A.** - Pre-fuzzy front end alignment of multiple stakeholders in healthcare service innovation - unpacking complexity through service and systems oriented design in Strategy Sandboxes
- 171 | **Savina A., Vrenna M., Menzardi P., Peruccio P. P.** - The Impact of Food Production on Public Health: Systemic Strategies for a Diffused and Transversal Prevention Plan

## 6 | MODELS AND PROCESSES OF SYSTEMIC DESIGN

- 176 | **Barba E., Osborn J.R.** - Measuring Sophistication in Systemic Design and Computing
- 179 | **Besplemennova Y., Tassi R.** - Systems Thinking for Service Design
- 182 | **Boehnert J.** - The Visual Representation of Complexity: Sixteen Key Characteristics of Com-plex Systems
- 185 | **Chaplin H., Christopherson K.** - Re-Defining Journalism Education: Using Systems Thinking and Design to Revolutionize the Future of Storytelling

- 187 | **Chung Y., Renaux J., Chikermane V., Rajani J. J.** - Co-Designing a Social Innovation Model for Changemakers
- 190 | **Darzentas J., Darzentas J.** - Perspectives on Systemic Design: examining heterogeneous relevant literature to provide a historical and 'systemically inspired' review
- 194 | **Davidová M.** - Trans-Co-Design in Systemic Approach to Architectural Performance: The Multi-Layered Media and Agency in Creative Design and Its Processes
- 198 | **Jamsin E.** - Computational Models in Systemic Design
- 203 | **Jones P.** - Evolutionary Stakeholder Discovery: Requisite System Sampling for Co-Creation
- 205 | **Lockton D.** - Old Rope: Laing's Knots and Bateson's Double Binds in Systemic Design
- 208 | **Luthe T.** - Systemic Design Labs (SDL): Incubating systemic design skills through experiential didactics and nature-based creativity
- 210 | **Maessen C., van Houten S., van der Lugt R.** - Future Probing for Proadaptive Organizations
- 215 | **Marines Hernández L. E.** - Mapping disciplinary mobility for tackling complex problems
- 217 | **Matic G., Matic A.** - Design for Emergence – Enabling Stakeholder Liminal Transitions and Innovation Value Pivoting through Complex Systemic Transformations
- 220 | **Murphy R.** - Finding the emic in systemic design: Towards systemic ethnography
- 223 | **Murphy R., Jones P.** - Give me the place to stand: Leverage analysis in systemic design
- 226 | **Passia Y., Roupas P.** - The Contingent City: decoding the possibilities of the city's sociospatial metabolism
- 234 | **Perera D.** - Wicked Problems, Wicked Humor: Fun machines as a Method to Frame Wicked Problems in Architecture
- 236 | **Real M., Lizarralde I.** - A constructivist and soft view of systemic design. A tribute to Jean Michel Larrasquet's work
- 239 | **Sevaldson B.** - Beyond User Centric Design
- 242 | **Silverman H., Rome C.** - Distinctions and Analogies: Mapping Social System Identity
- 245 | **Snow T.** - Regenerative Value Systems – Model(s) illustrating flows and transformations of value within production systems
- 252 | **Sweeting B.** - Radically Constructing Place
- 254 | **Tekogul I.** - Design as adaptation
- 257 | **Thompson W. T., Mesquita Da Silva F., Steier F.** - Binocular vision of designing process for whole systems design crossing boundaries
- 260 | **Van Alstyne G., Skelton C., Nan Cheng S.** - Systemic Design and Its Discontents Designing for Emergence and Accountability
- 263 | **Van Gessel C., Van der Lugt R., De Vries R.** - Socionas: Bringing the systemic view into the design for health and sustainability
- 269 | **Vargas Espitia A., Guataquira Sarmiento N. A., Álvarez Quintero C. D., Rugeles Joya W. R.** - Integration of methodologies through an academic toolkit for the design of products services systems for sustainability - SPSS - in Colombian contexts
- 274 | **Vezzoli C., Basbolat C.** - System Design for Sustainability for All. S.PSS Design applied to Distributed Economies
- 278 | **Zivkovic S.** - The Early Stage Analysis of a Systemic Innovation Lab

# EDITORIAL

The seventh *Relating Systems Thinking and Design (RSD7)* symposium was held at the Politecnico di Torino, the 23-28 October 2018, for the first time in Italy, defining an important collaboration among the institutions that founded the informal group of Systemic Design Research Network (SDRN) in 2012. Not by chance, this symposium has seen the official establishment of the Systemic Design Association (SDA), with a public announcement during the first day. A new phase of the association and of the RSD symposiums started by proposing an inclusive approach to expand the membership and engage different systems- and design-oriented professionals and researchers, while looking after a strong identity of systemic design as a discipline.

The proceedings show the huge amount of contributions we received from all over the world that have inspired more than 200 people in Turin. The aim was to promote international debate on the multiple applications and purposes on which the systems thinking in design is developed towards sustainability. The symposium generated nurturing interdisciplinary collaborations and discussions, involving academics, designers and professionals. “*Challenging complexity by Systemic Design towards sustainability*” was the leitmotif of all RSD7 starting from the workshops, through the keynotes, the plenaries and the parallel speeches, and closing with the de-conference at Monviso Institute.

Four workshops were organized by international experts, coming from *Smart Circular Economy Network*, *University of Brighton*, *Ellen Mac Arthur Foundation*, *Namahn center* and *ShiftN*. Around 100 attendees had a full day workshop in which they investigated the theme of complexity, declined through different areas: IoT, material/immaterial places, Circular Economy and Systemic Design. At the end of the day, the workshops' results were shown in a plenary session and discussed all together with a breaking ice kick-off.

From 24th to 26th October, we had the proper symposium with 6 inspiring keynote speakers, 3 plenary sessions, and 76 presentations in the parallel sessions. We evidenced all the contents through abstracts, presentations and working papers, as well as videos and sketch-notes.

The RSD7 keynotes offered an inspiring range of perspectives on systemic design, emerging from different disciplines and experiences from all over the world. They brightly explained how Systemic Design can effectively integrate systems thinking with design to address complexity, by creating new resilient and sustainable systems in very diverse contexts. We decided to interview them and provide to the whole community a short video to have a glance of their contribution.

The plenary speakers were invited to explore special themes of interest for the community: the newborn Systemic Design Association, the pioneering activities run by Ellen Mac Arthur Foundation and the stimulating Systemic Design Toolkit.

The presentations in parallel sessions were dense and reflected the tracks we proposed. Here we have condensed the wide variety of contributions:

- **Policy design and decision-making** (Innovation in territorial governance, Strategies for sustainable innovation, Design thinking for decision-making, Democracy and responsibility);
- **Industrial Processes and Agrifood Systems** (Industrial ecology in a Circular Economy, Sustainable innovation in industrial development, Sustainabili-

ty of agro-industrial systems);

- **Socio-technical Systems in the Digital Age** (User interaction and enhancement in the age of AI and autonomy, Internet of Things for sustainability, Information technologies in the design domain, Systemic Design for learning from data);
- **Territorial Metabolism and flourishing economies** (Local resources innovation transitioning to a Circular Economy, Sustainable development of regions and bioregions, City metabolism and urban ecologies, Interdisciplinary models for economy-design, New ways of communicating economic systems)
- **Social Care and Health Systems for Sustainable Living** (Sustainable innovation for health systems, Patient empowerment and caregiving, Systemic innovation in social care, Social Flourishing & Cultural Sustainability);
- **Models and Processes of Systemic Design** (Systemic Design theories, Innovation processes in complex systems, Systems and design thinking in education, Historical perspectives on Systemic Design).

The process to select the best presentations was crucial and it required double (and in some case triple or more) reviews, trying to provide a wider spectrum of experiences. In the end, the success rate was 48%. About two third of the presenters have submitted working papers.

The conference was also enriched by the exhibition “Visualizing Complex Systems”. The ability to collect, cross-check, visualize and study quantitative and qualitative information about phenomena and their patterns is itself at the core of the project, becoming strategic for enabling new systems thinking and their design application. Identifying the relationship between components, thus guaranteeing personal expression, horizontal communication and visual thinking, is the first step to enhance a more conscious and transparent decision-making process with a perspective of sustainability.

During the 7th edition of RSD we also experienced some moments of relaxed “learning-and-doing time”, during the “Books and Beers” events and the De Conference Event. In fact, at the end of each day, 3 decompressing “Books and Beers” were hosted in the close venue of Eataly. On that occasion, 5 recently published books were introduced to the audience and discussed in a more informal environment.

After the conventional RSD symposium, for the first time in its history, we proposed a 2-days De-Conference event, to favour networking, deepen conference topics and have a relaxed “learning-and-doing” time in a beautiful natural environment. It took place at MonViso Institute, in the community of Ostana, and it was organised in collaboration with ETH Zürich.

Lastly, I would like to take the chance of this publication to thank the international scientific committee because in the preparation phase they always pushed me towards higher and higher goals. A special thank goes to all the keynote speakers to have been central actors of this conference, sharing their inspiring experiences and knowledge. Finally, I would like to thank the local organizing committee because they supported me in every request and with great confidence in our capacity.

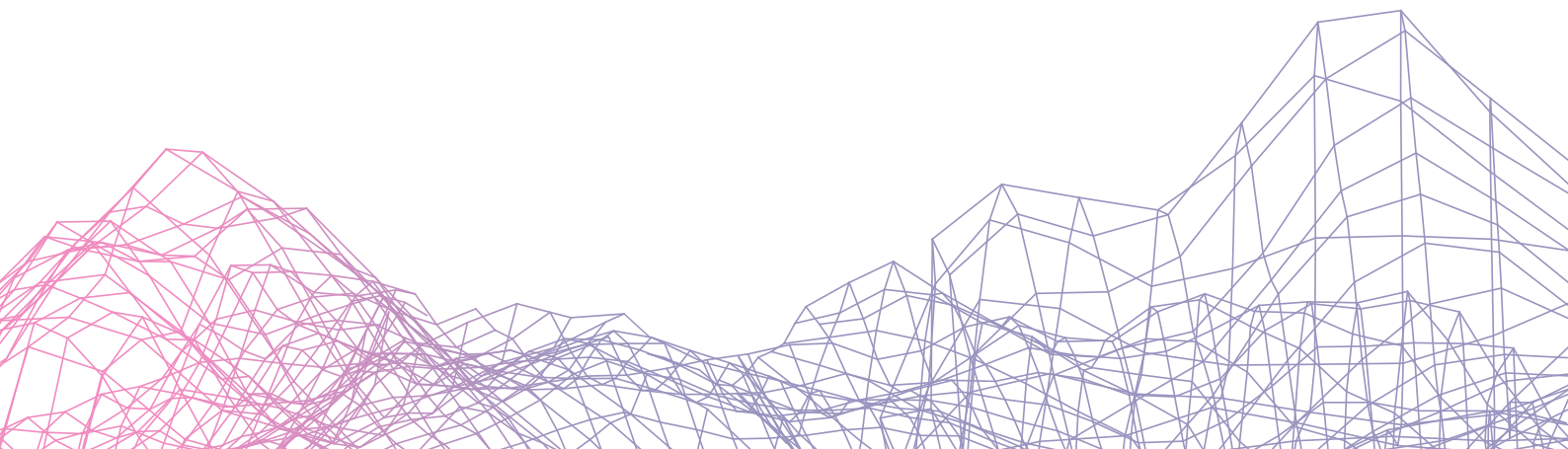


*RSD7 and SDA chair*

Turin, 29.03.19



# 4 | TERRITORIAL METABOLISM AND FLOURISHING ECONOMIES



# Systemic design for territorial development: ecosystem to support autopoietic local economies

**Battistoni Chiara,**  
**Barbero Silvia.**

Politecnico di Torino  
chiara.battistoni@polito.it

## KEYWORDS

Systemic design;  
Design;  
Ecosystem;  
Multidisciplinarity;  
Manufacturing sector;  
Eco-innovation;  
Sustainable development;  
Business incubators.

This research wants to demonstrate the need and the importance of the creation of an ecosystem to support the implementation of projects born from Systemic Design (SD) approach. The leading cause behind it is mainly related to difficult and complex implementation and the success of this type of projects in practical terms. However, they have specific characteristics that can tackle critical current challenges identified by many scholars as climate change, waste production, limitation of natural resources and pollution. For this reason, it is vital to sustain and foster their implementation.

To demonstrate this thesis, we firstly analysed previous SD projects applied to the manufacturing sectors developed in Politecnico di Torino to understand the principal barriers in their implementation. These projects are related to specific economic and productive realities (e.g. Barbero, 2016) or many realities in specific territories - intended as geographical areas - (e.g. Battistoni, 2016). This process was facilitated thanks to the direct involvement of authors in these projects. The result is that SD demonstrates to be able to connect the territory, design and environmental issue. The design discipline with its methodology and approaches has just confirmed to be a solution for the valorisation of the material culture and natural resources of a specific territory (De Giorgi, 2008; Catania, 2011). SD enlarges the borders of the traditional design discipline producing a step forward the eco-design. Indeed, SD approach applied to the single activities permits to change their core business, improving and increasing their incomes, considering waste as resources as in the Blue Economy (Pauli, 2010). Moreover, this approach permits the creation of new products that in some cases let the born of new economic realities, generating the autopoiesis typical of the natural systems as defined by Maturana and Varela (Capra, 1996) (see fig.1). All these opportunities can boost sustainable territorial development, creating a local circular economy.

Moreover, this analysis highlighted important characteristics of SD projects that are more than the five principal guidelines previously defined as Output-Input, Relationships, Act locally, Autopoiesis, Man at the centre of the project (Bistagnino, 2011). At the same time, they can represent the barriers to their success and implementation. The main reason is that they required, at the basis, a cultural paradigm shift (Barbero, 2016), from the linear to the systemic thinking, from competition to collaboration, identified just by Capra as a "the turning point" (Capra, 1982). In this framework, complexity results one of the SD projects fundamental characteristic as they focus on the relationships between components instead of the single entities and on the resources which go in

and out of a production process. Talking about input/output and not resources/waste, the focus is more on qualitative aspects than on quantitative ones. Another consideration that is possible to make from this analysis is that SD projects are community-oriented, territorial-oriented and environment-oriented more than profit-oriented. Producing environmental sustainability, with implications on the economic and social one, they require the competences of different disciplines, multiple actors and stakeholders, both in the design phase than in their implementation, being multidisciplinary and interdisciplinary projects. Last but not least, they require financial support, human resources and project management as all the projects. The current emphasis on the Circular Economy from the European Union is luckily helping to bridge this gap since 2015 (EU, 2015).

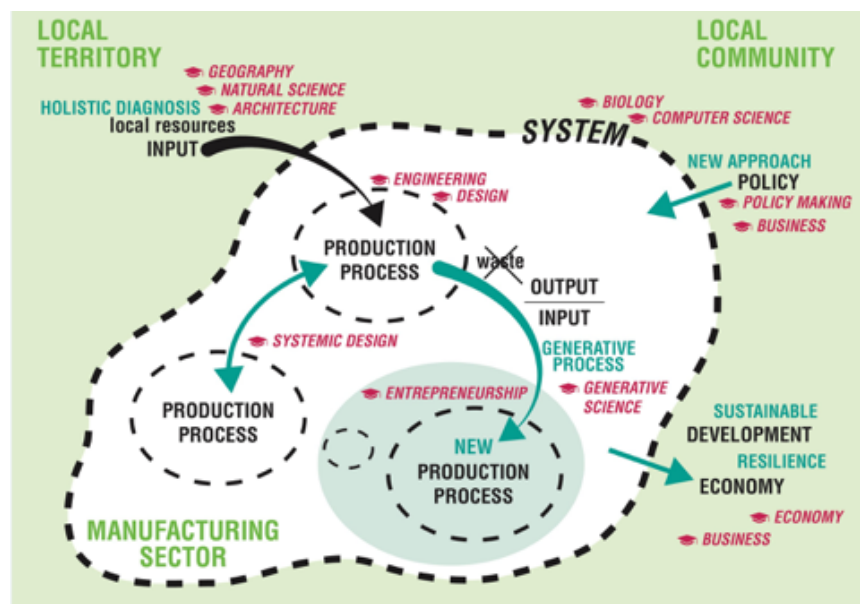
Once settled these characteristics, in a post-Anthropocene era becomes necessary the design of an ecosystem (ECO-SD) (see fig.2) able to stimulate and

foster the born and the implementation of innovative systemic projects. Indeed, the concept of the complex adaptive system that comes from biology is starting to be used by the business environment (Reeves, 2016). Looking at the territory and its productive sectors with a systemic approach, shifting the attention from the single actors to the relationships that are possible to create among them, is possible to obtain different results. As the theory of system suggests “the whole is GREATER than the sum of its parts” (Aristotle), or better “the whole is OTHER than the sum of its parts” from Gestalt theory (Koffka). This shift can let emerge several new opportunities and potentialities linked to a development which is far away from the current economic evidence, centred exclusively to the increase of the GDP. Acting in this way is possible to answer to the real needs of a specific area, with the final goal to act on the cultural paradigm, obtaining a real sustainable development.

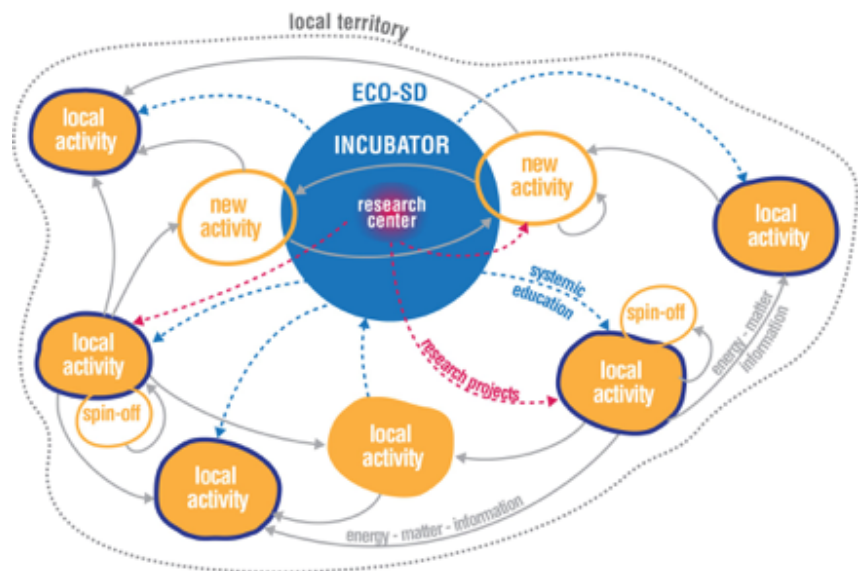
The core of this ecosystem cannot be identified in the current incubators of start-ups which are concentrated mainly on the economic sustainability of the projects and the training of the future entrepreneurs within linear economy benchmarks. Instead, it is a systemic incubator with the goal to foster the born and the reproduction of productive processes and act as an open system. In here, also the economists should think in another way as Raworth suggested (Raworth, 2017). In the ECO-SD, the attention is on the flow of information, matter and energy which create relationship both inside every single process and within them, and within the context of reference where it is placed.

The heart of ECO-SD is the research centre which acts as a guide: starting from the execution of the Holistic Diagnosis (Battistoni 2017, 2018), it can identify the current significant problems and the sectors where projects are needed. Opening the way to the innovation of process, products and services, that are therefore designed and implemented by multidisciplinary groups. In this case, the designers collaborate with other scholars and experts coming from the natural, social and economic science, acting as “mediator” (Celaschi, 2008), fostering the dialogue and the contamination. Working together for the implementation of the new projects, they should maintain the link with the local actors, not exclusively coming from the productive sector but also from the decision-making, to assure a local development in line with the policy design.

**Figure 1** - Graphic representation on the SD applied to the manufacturing sector and the competences involved in this approach



**Figure 2** - graphic representation of the ECO-SD ecosystem



## REFERENCES

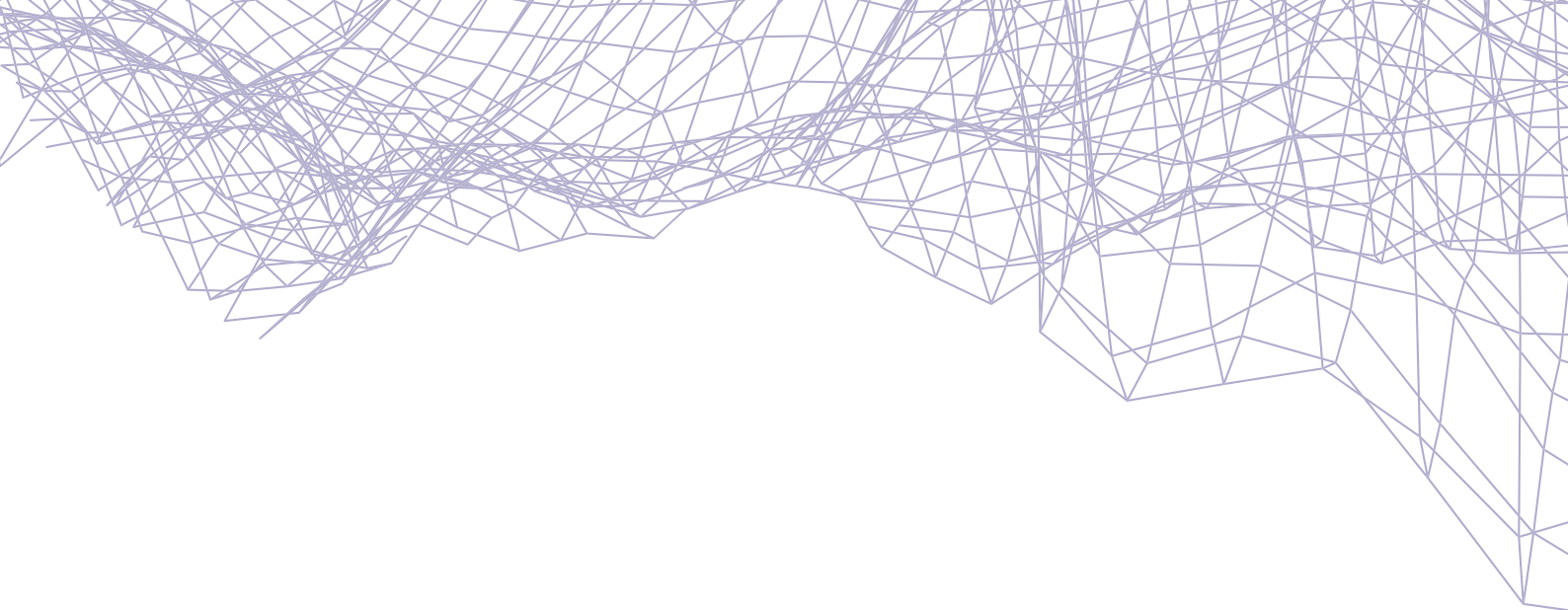
- Barbero, S. (2017). *Systemic Design Method Guide for Policymaking: a Circular Europe on the way*. Torino; Allemandi.
- Barbero, S., Bistagnino L., Peruccio P.P. (2016). Awareness. In Bistagnino, L. (2016). *microMACRO*, 168-175. Milano; ed. Ambiente.
- Barbero S., Battistoni C., (2016). From the sustainable biscuit production to territorial development through systemic incubator. In: 8th International Scientific Conference Management of Technology - Step to Sustainable Production (MOTSP 2016), Porec (HR), 01-03 June, 2016
- Battistoni, C., Barbero, S. (2018). The Holistic Diagnosis as a method to support urban mining actions: the case study of the European project Retrace for Piedmont region (Italy). In: 4th symposium on urban mining and circular economy (SUM 2018), Bergamo (IT), 21-23 May, 2018.
- Battistoni, C., Giraldo, N. C. (2017). The Retrace Holistic Diagnosis. In: Barbero S. (2017). *Systemic Design Method Guide for Policymaking: a Circular Europe on the way*. Torino; Allemandi.
- Battistoni, C., Daghero, A. (2016). High Sangone Valley (Turin), The territorial potentialities. In Bistagnino, L. (2016). *microMACRO*, 371-398. Milano; ed. Ambiente.
- Battistoni, C., Bicocca, M., & Pallaro, A. (2016). Social values, economic, ethical and well-being. In Bistagnino, L. (2016). *microMACRO*, 176-207. Milano; ed. Ambiente.
- Battistoni, C., Ferru, A., & Pallaro, A. (2016). Valle Anzasca e Val Chisone. In Bistagnino, L. (2016). *microMACRO*, 399-423. Milano; ed. Ambiente.
- Bistagnino, L., Celaschi, F., & Germak, C. (2008). *Man at the center of the project*. Torino; Allemandi. Bistagnino, L. (2016). *microMACRO*. Milano; ed. Ambiente. 2° edition
- Bistagnino, L. (2011). *Systemic Design, designing the productive and environmental sustainability*. Bra, Italy; Slow Food. 2° edition.
- Catania, A. (2011). *Design, territorio e sostenibilità: ricerca e innovazione per la valorizzazione delle risorse locali*. Milano; Angeli.
- Capra, F. (1982). *The turning point*. New York; Bantam Books
- Capra F. (1996). *The web of life: A New Scientific Understanding of Living Systems*. Doubleday, New York; Anchor Books.
- Capra, F., Luisi P. (2014). *The Systems View of Life: A Unifying Vision*. Cambridge, UK; Cambridge University Press.
- Celaschi, F. (2008). Design as a mediation between areas of knowledge. In Bistagnino, L., Celaschi, F., Germak, C., (2008). *Man at the center of the project*. Torino; Allemandi.

De Giorgi, C., Germak, C. (2008). *Manufatto: artigianato, comunità, design*. Milano; ed. Silvana.

European Commission. *Closing the Loop—An EU Action Plan for the Circular Economy*; COM (2015) 614 final; European Commission: Brussels, Belgium, 2015.

Pauli, G. (2010). *The Blue economy, report to the club of Rome*. Taos, New Mexico; Paradigm Publications. Raworth K. (2017). *Donought economics: Seven Ways to Think Like a 21st-Century Economist*. London; Penguin random house.

Reeves, M., Levin, S., & Ueda, D. (2016). The biology of corporate survival. *Harvard Business Review*, 94(1), 2.



## **RSD7 CONFERENCE**

### **Book of Abstracts | credits**

#### **RSD7 Conference Chairs:**

Silvia Barbero (POLITO), Conference chair

Claudio Germak (POLITO), Chair on Human-centred Design

Pier Paolo Peruccio (POLITO), Chair on Systemic Design History

Paolo Tamborrini (POLITO), Chair on Systemic Innovation

#### **International Organizing Committee:**

Silvia Barbero (POLITO)

Jenny Darzentas (University of the Aegean)

John Darzentas (University of the Aegean)

Jody Forlizzi (Carnegie Mellon University)

Tore Gulden (HIOA)

Peter Jones (OCAD University)

Harold Nelson

Amina Pereno (POLITO)

Alex Ryan (MaRS Solutions Lab)

Birger Sevaldson (AHO)

#### **Local Organising Committee:**

Eliana Ferrulli

Amina Pereno

Chiara Battistoni

Agnese Pallaro

Carolina Giraldo Nohra

Flavio Montagner

Eleonora Fiore

Chiara Remondino

Barbara Stabellini

#### **Graphic Design and Layout:**

Eliana Ferrulli

Amina Pereno

#### **Supervisor:**

Silvia Barbero