



Faculty of Design

2022

The Role of Designers and Systemic Design in Planetary Health

Barbero, Silvia

Suggested citation:

Barbero, Silvia (2022) The Role of Designers and Systemic Design in Planetary Health. In: Proceedings of Relating Systems Thinking and Design, RSD11, 3-16 Oct 2022, Brighton, United Kingdom. Available at <https://openresearch.ocadu.ca/id/eprint/4207/>

Open Research is a publicly accessible, curated repository for the preservation and dissemination of scholarly and creative output of the OCAD University community. Material in Open Research is open access and made available via the consent of the author and/or rights holder on a non-exclusive basis.

The OCAD University Library is committed to accessibility as outlined in the [Ontario Human Rights Code](#) and the [Accessibility for Ontarians with Disabilities Act \(AODA\)](#) and is working to improve accessibility of the Open Research Repository collection. If you require an accessible version of a repository item contact us at repository@ocadu.ca.

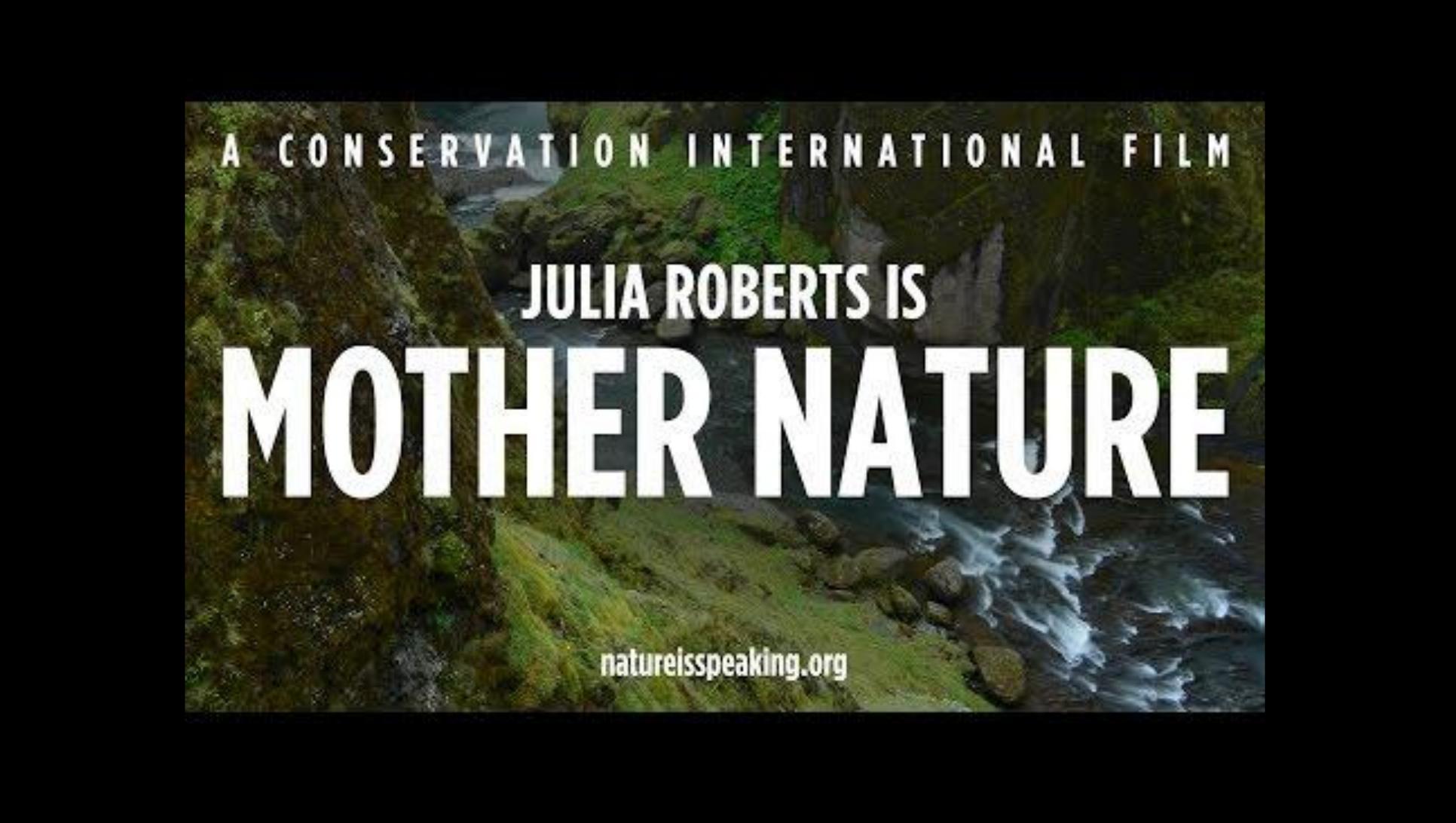
The Role of Designers and Systemic Design in Planetary Health

RSD Symposium

Silvia Barbero, SDA Board Chair

**What kind of
world are we
leaving to our
children?**



A lush, mossy forest stream with a waterfall. The water is clear and flows over rocks, creating white foam. The surrounding vegetation is dense and green, with moss covering the rocks and banks. The overall scene is serene and natural.

A CONSERVATION INTERNATIONAL FILM

JULIA ROBERTS IS
MOTHER NATURE

natureisspeaking.org

Is it time for us to take responsibility in shaping the world

\\ as citizens

\\ as parents

\\ as partner

\\ as scholars

\\ as teachers

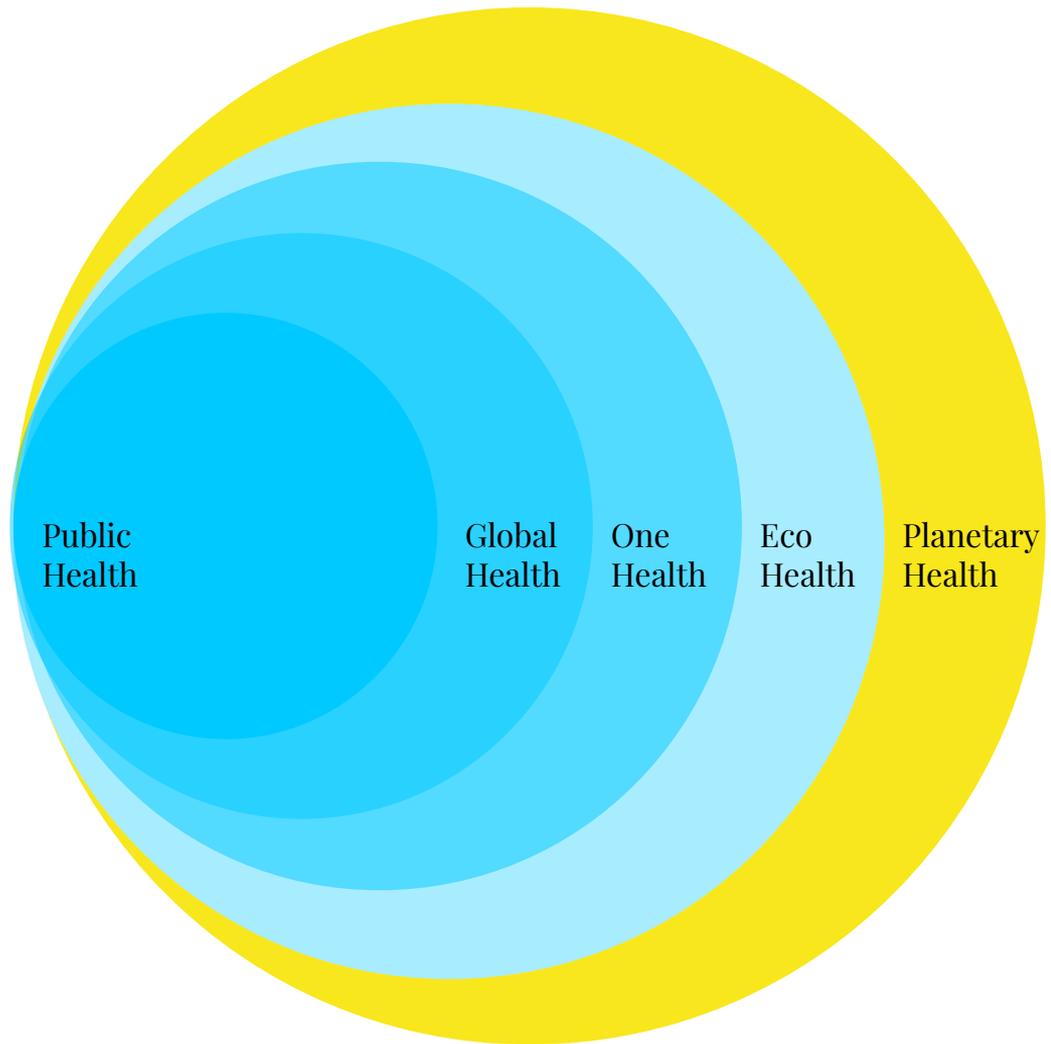
\\ as leaders

...



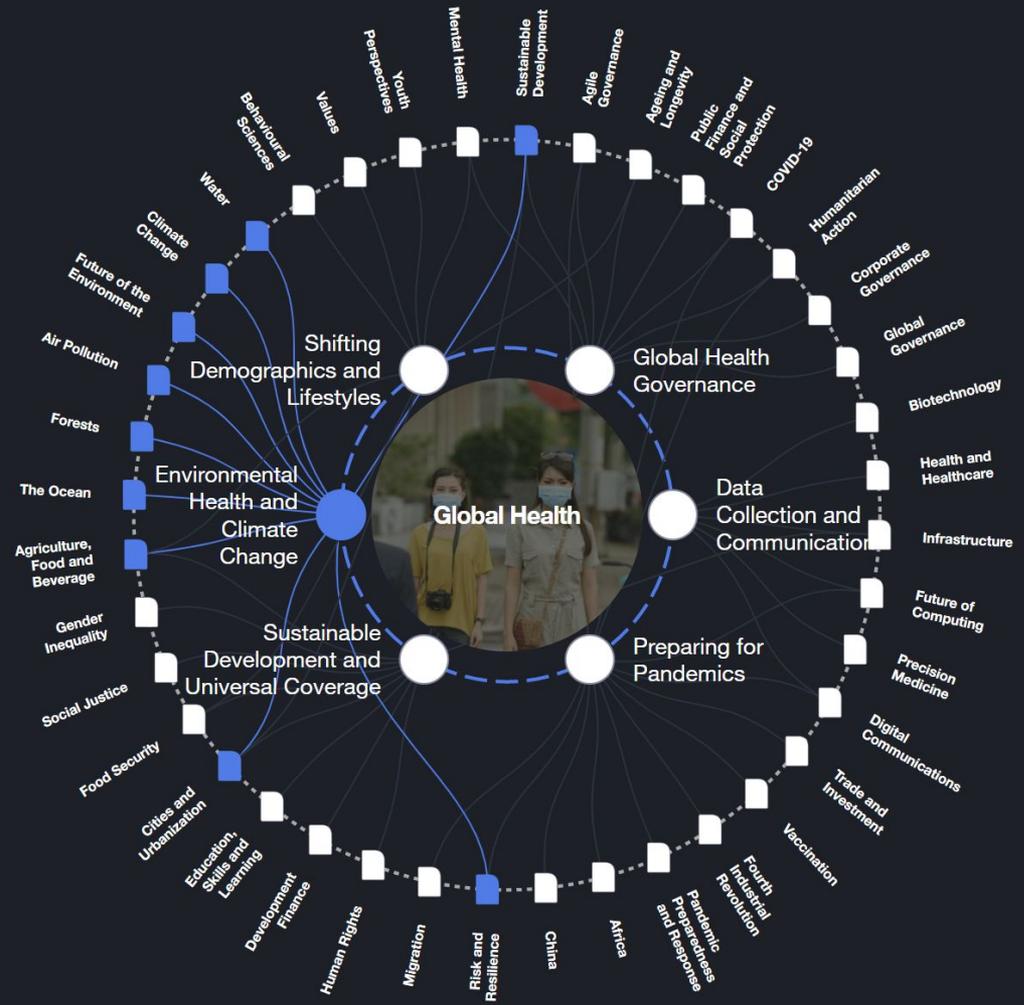
My intention is to give hope for the urgently needed radical shifts in and for planetary health by considering the potential for designers and systemic design to alter paradigms.

What is it Planetary Health?



Global Health

Strategic insight
and contextual
intelligence from
the **World
Economic Forum.**



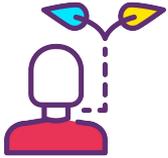
Three Holistic Approach to Health

One Health



is the collaborative effort of **multiple health science professions**, together with their related disciplines, and institutions—working locally, nationally, and globally—**to attain optimal health** for people, domestic animals, wildlife, plants, and our environment.
(Roger F., et al., 2016)

Eco-Health



Planetary Health



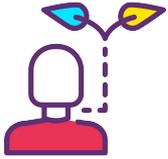
Three Holistic Approach to Health

One Health



is the collaborative effort of multiple health science professions, together with their related disciplines, and institutions—working locally, nationally, and globally—to attain optimal health for people, domestic animals, wildlife, plants, and our environment.
(Roger F., et al., 2016)

Eco-Health



is committed to fostering the health of humans, animals, and ecosystems and to conducting research which **recognizes the inextricable linkages between the health of all species and their environments.**
(Lerner H., et al. 2015)

Planetary Health



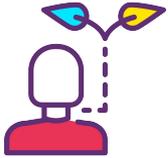
Three Holistic Approach to Health

One Health



is the collaborative effort of multiple health science professions, together with their related disciplines, and institutions—working locally, nationally, and globally—to attain optimal health for people, domestic animals, wildlife, plants, and our environment.
(Roger F., et al., 2016)

Eco-Health



is committed to fostering the health of humans, animals, and ecosystems and to conducting research which recognizes the inextricable linkages between the health of all species and their environments.
(Lerner H., et al. 2015)

Planetary Health



is the achievement of the **highest attainable standard of health, well-being, and equity worldwide** through attention to the human systems—political, economic, and social—and the Earth’s natural systems that define the safe environmental limits.
(Withmee S., et al., 2015)

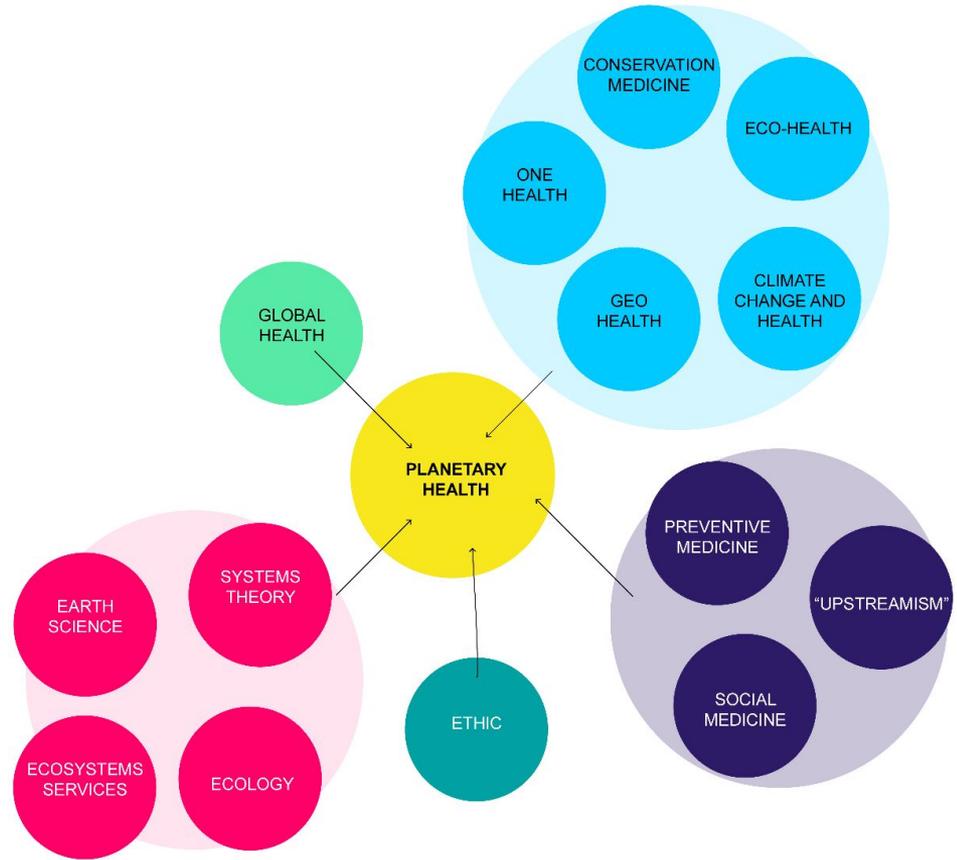
From public to planetary health: a manifesto

“This manifesto calls for a social movement to support collective public health action at all levels of society—personal, community, national, regional, global, and planetary. **Our aim is to respond to the threats we face.**

Our vision is for a planet that nourishes and sustains the diversity of life with which we coexist and on which we depend.”

“We need a new vision of cooperative and democratic action at all levels of society and a new principle of planetism and wellbeing for every person on this Earth.”

Planetary Health Complexity



Planetary Health is...

A field

A scientific paradigm

A policy framework

A communication strategy

A moral imperative

\\ that functions **through other fields** (agriculture, urban planning, design, etc.);

\\ that has a **high level of conviviality**;

\\ that is young and **fragmented**.

Planetary Health is...

A field

A scientific paradigm

A policy framework

A communication strategy

A moral imperative

“Nothing in human health, well-being, thriving, or survival makes sense except in the light of Planetary Health.”

Features: systems thinking, complexity, multiple temporal and spatial scales, deep transdisciplinarity, etc.

Planetary Health is...

A field

A scientific paradigm

A policy framework

A communication strategy

A moral imperative

Scientific inputs into policy must be:

\\ anchored in the **needs of decision-makers**;

\\ anchored in the perspective of **people and communities**.

Have the highest impact when applied to **specific challenges**: hunger, transportation, energy generation, air pollution, etc.

Planetary Health is...

A field

A scientific paradigm

A policy framework

A communication strategy

A moral imperative

Planetary Health is a way to frame and communicate **reality in the Anthropocene.**

Planetary Health is...

A field

A scientific paradigm

A policy framework

A communication strategy

A moral imperative

An ethics for Anthropocene?

“Human prosperity in a flourishing web of life”
(Raworth K., 2017)

The Planetary Health Research Agenda

Approaches needed for the pathways toward Planetary Health proposed for the application of the **Health Knowledge Action Network** research agenda.

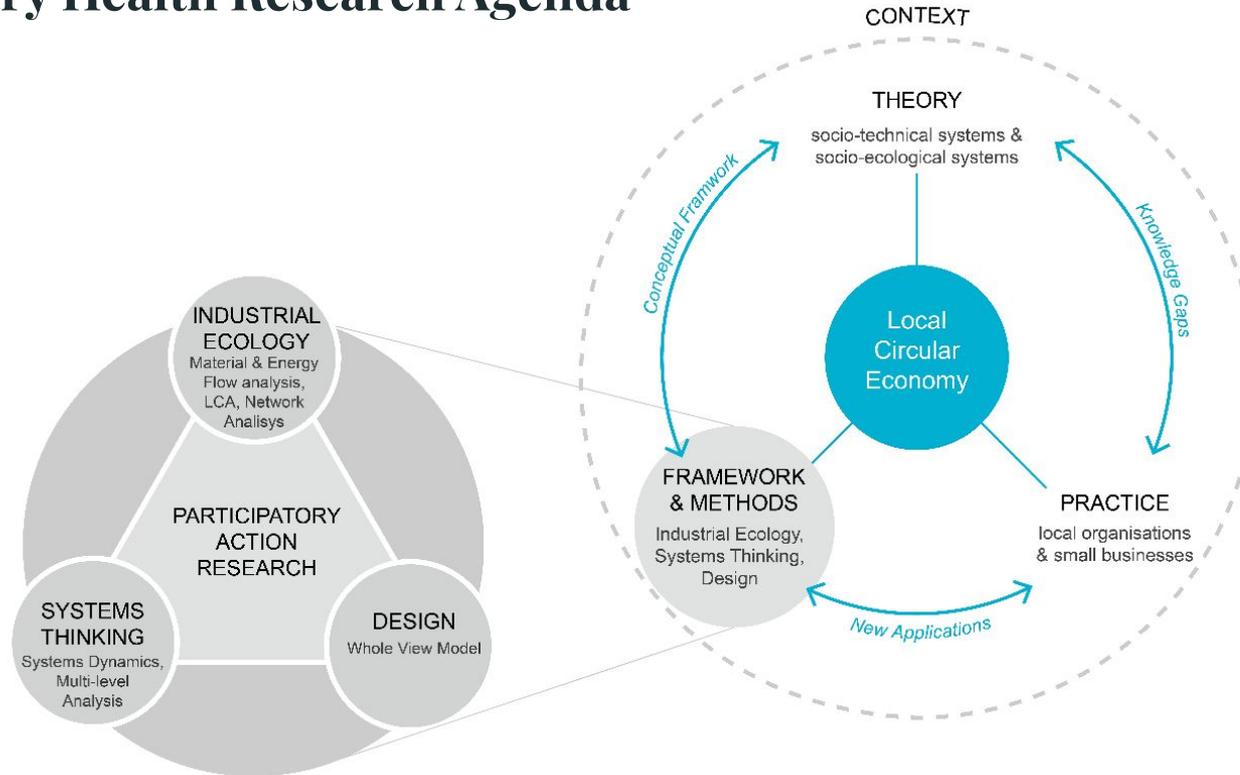
Transdisciplinarity

Broad
communication
and outreach

Multi-scalar
approaches

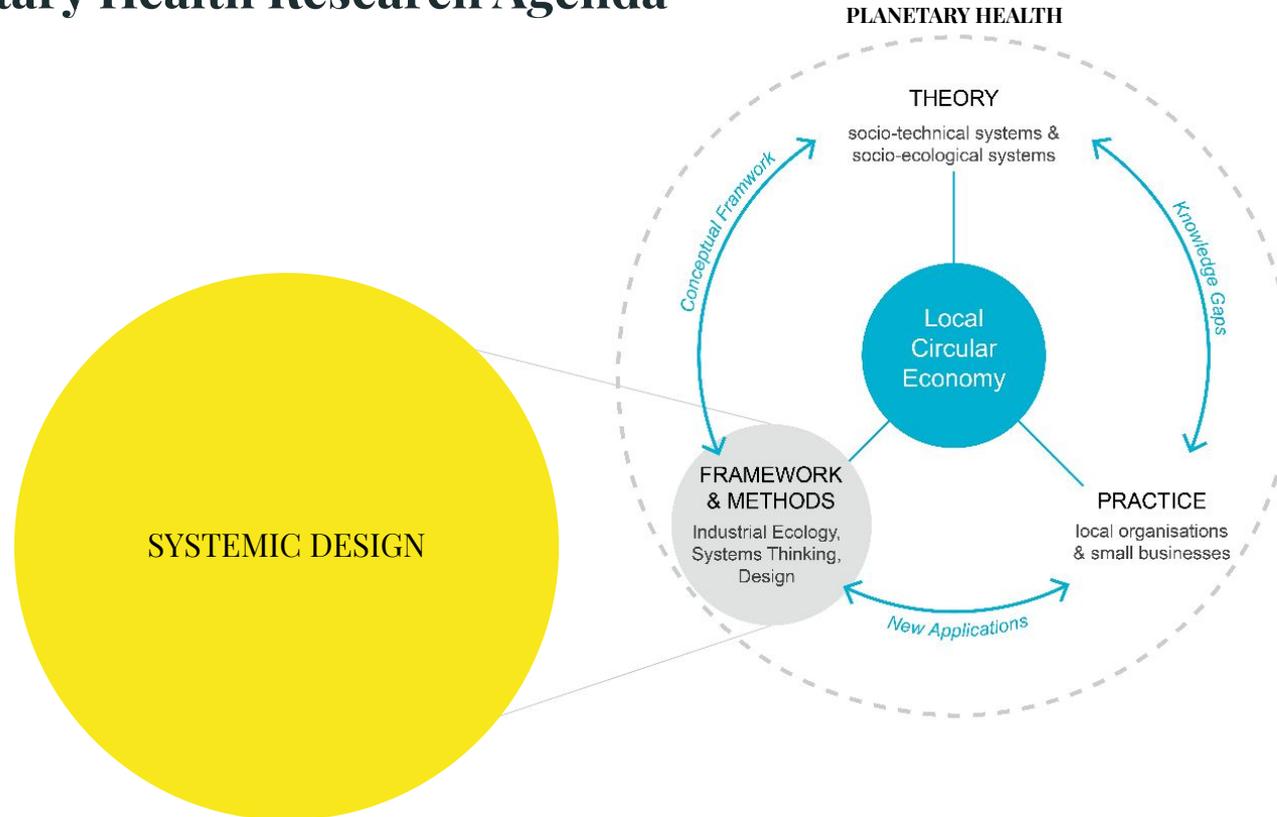
Inclusivity
and equality

The Planetary Health Research Agenda



Nogueira A., et al. (2020). Infrastructuring the Circular Economy. In "Achieving the Circular Economy: Exploring the Role of Local Governments, Business and Civic Society in an Urban Context" special issue. <https://doi.org/10.3390/en13071805>

The Planetary Health Research Agenda

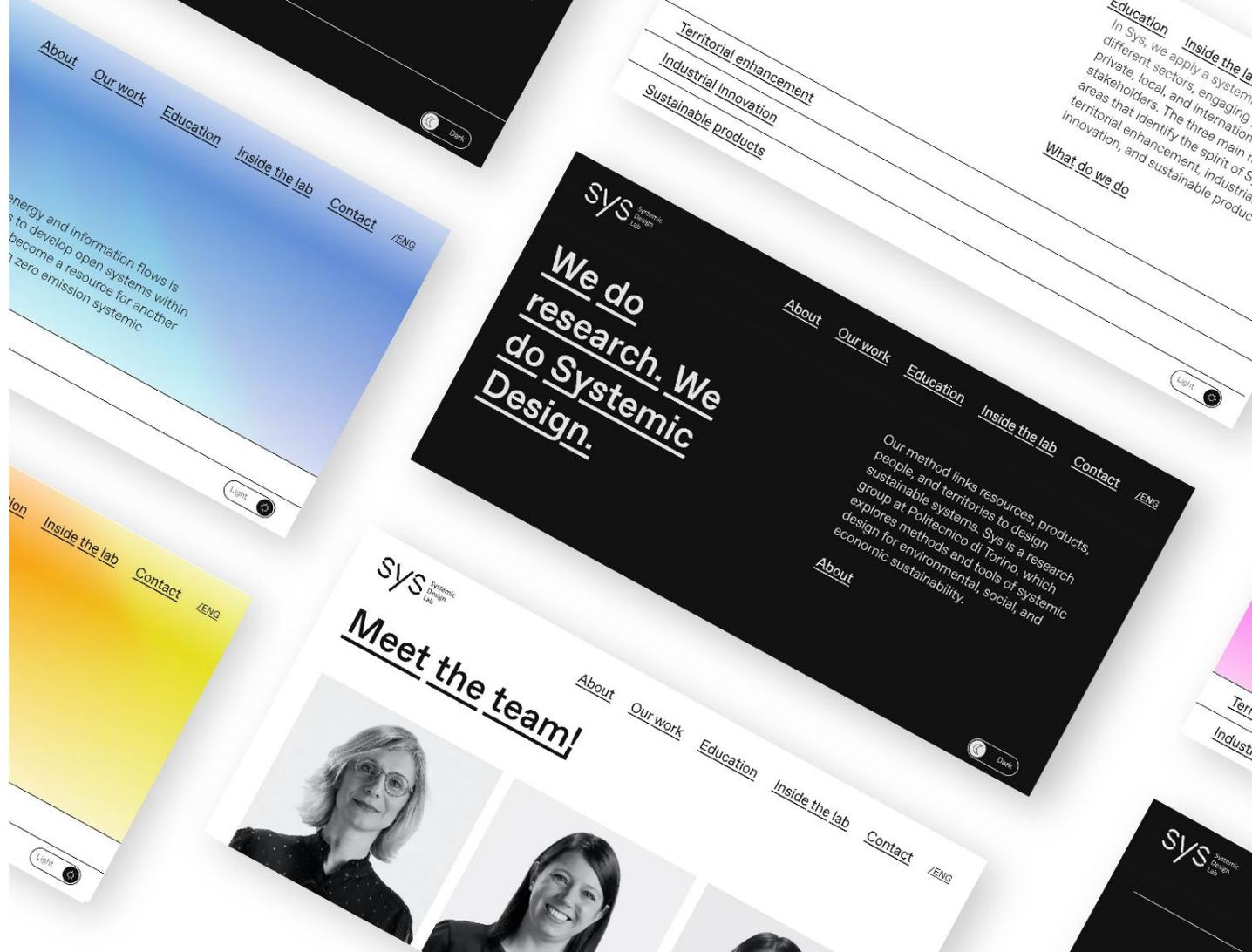


Nogueira A., et al. (2020). Infrastructuring the Circular Economy. In "Achieving the Circular Economy: Exploring the Role of Local Governments, Business and Civic Society in an Urban Context" special issue. <https://doi.org/10.3390/en13071805>

sys Systemic
Design
Lab

sys Systemic Design Lab

www.systemicdesignlab.it



Sys is a research group at Politecnico di Torino, which explores methods and tools of systemic design for environmental, social, and economic sustainability.

[Scroll to explore](#)

Light



The role of Systemic Design

Territorial Enhancement

Industrial
Innovation

Sustainable
Products

The connection with the territory has always been an element that characterises the Systemic Design approach. The **sustainable development of territorial contexts** is a crucial challenge of our century. This needs Systemic Design strategies to initiate and support **structural changes**.

The role of Systemic Design

Territorial
Enhancement

**Industrial
Innovation**

Sustainable
Products

The **research and management of material, energy and information flows** is one of the areas of expertise at Sys. The aim is **to develop open systems** within which the outputs of a production process can become a resource for another business, avoiding waste with a view to achieving zero emission systemic processes.

The role of Systemic Design

Territorial
Enhancement

Industrial
Innovation

**Sustainable
Products**

At Sys we also develop **products and services**. Our aim is to design sustainable projects with a broad view of sustainability, which is understood across the board: **environmental, social and economic**.

Territorial Enhancement

RETRACE



Funding Programme:
Interreg Europe (Call 1&5)

Total budget:
1.514.353,43€

Contribution granted:
1.241.995,63€

Budget Polito:
305.937,00€
(100% funded)



A Systemic Approach for Regions Transitioning towards a Circular Economy

April 2016 - October 2022



Territorial Enhancement

ProGReg



Funding Programme:
H2020-SCC-2016-2017 (SMART
AND SUSTAINABLE CITIES) IA
(Innovation Action)

Total budget:
11.304.072,50€

Contribution granted:
10.589.732,51€

Budget Polito:
496.375,00€
(100% funded)



Productive green infrastructure for post-industrial urban regeneration

July 2018 - May 2023



Industrial Innovation

ECOLOR



Funding Programme: ERDF ROP
2014-20 Piedmont Region
(Italy)

Total budget:
199.009,25€

Contribution granted:
99.504,65€

Budget Polito:
20.000,00€
(100% funded)

**Study of natural dyes
from local crops with
dyeing properties in a
circular economy
perspective**

December 2020 - December 2021



Sustainable Products

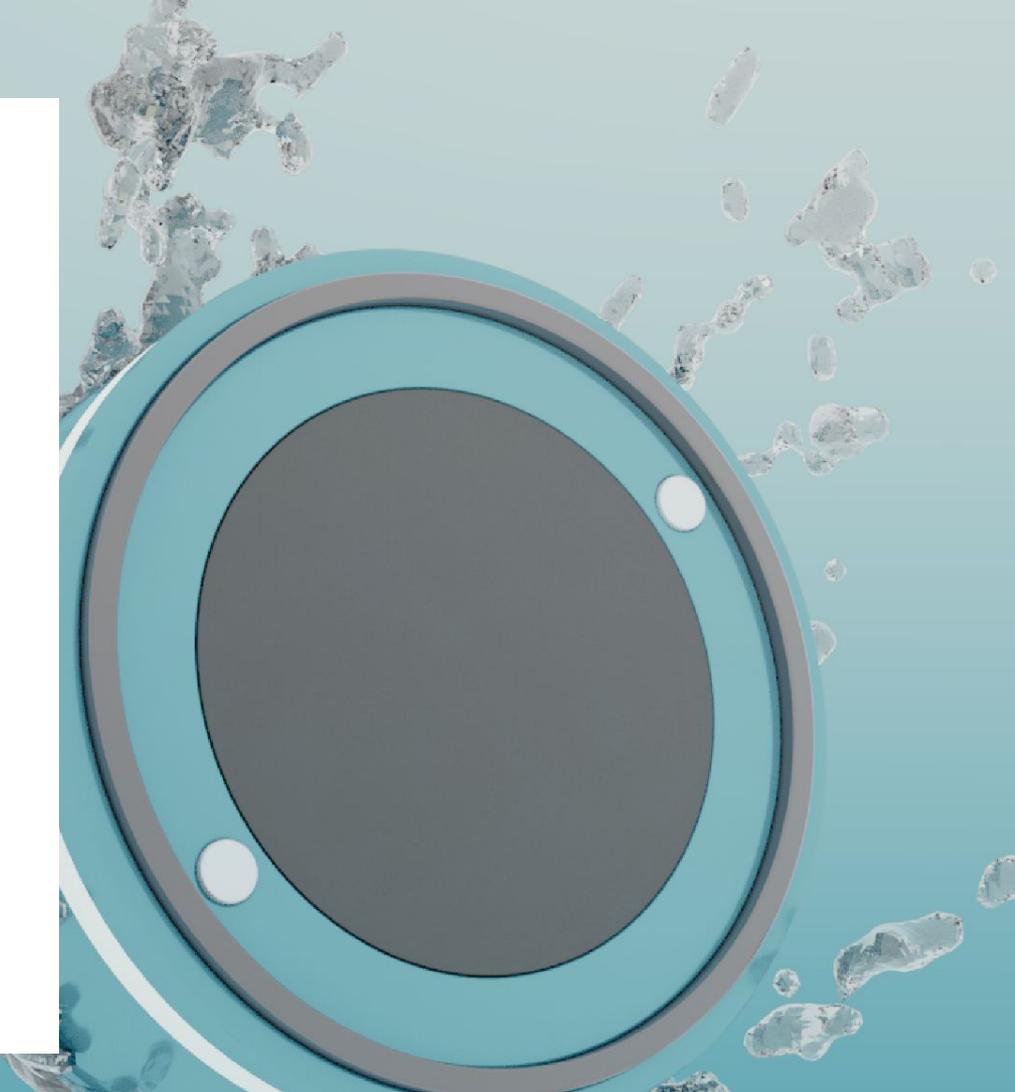
OHH



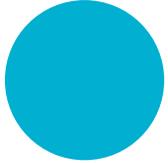
Patent

**Interchangeable device
for monitoring the refill
and discharge of liquids
in a water bottle**

October 2020 - ongoing



Lessons Learned

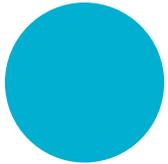


“What we need is not only to modify the system of production but to get out of it altogether. We should remember that this idea of framing everything in terms of the economy is a new thing in human history.”

Bruno Latour



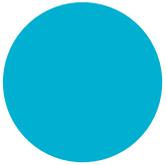
Lessons Learned



“The times are urgent; let us slow down. Slowing down is losing our way—not a human capacity or human capability. It is the invitations that are now in the world-at-large, inviting us to listen deeply, to be keen, to be fresh, to be quick with our heels, to follow the sights and sounds and smells of the world.”

Bayo Akomolafe

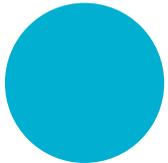
Lessons Learned



“Never doubt that a small group of caring and committed citizens can change the world. In fact, it is the only thing that ever has.”

Margaret Mead

Lessons Learned



“You may not be responsible for the situation you are in, but you will become responsible if you do nothing to change it.”

Martin Luther King

Thank you

for our inspiring journey!