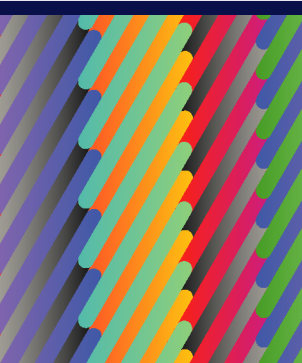
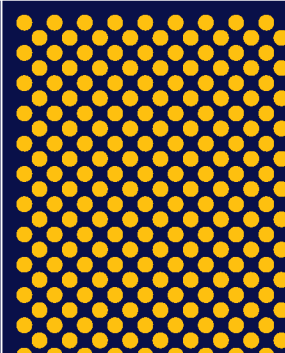
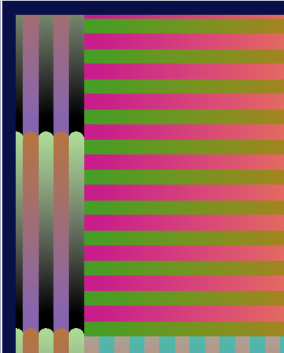
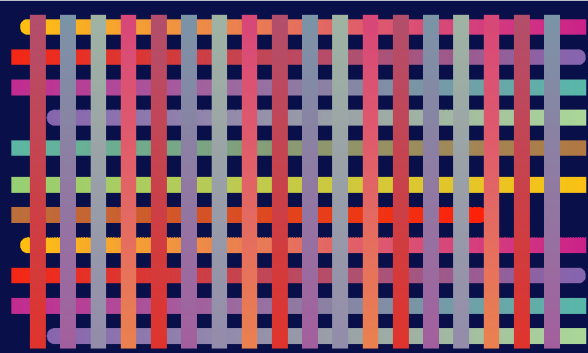


Creative Spectrum

Systemic Innovation Design Methodology applied to creativity to enhance and inspire multidisciplinary teams



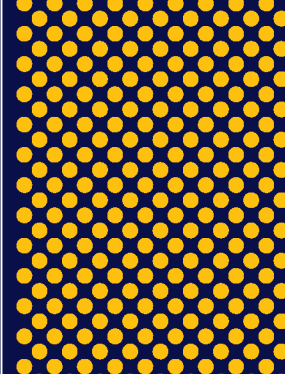
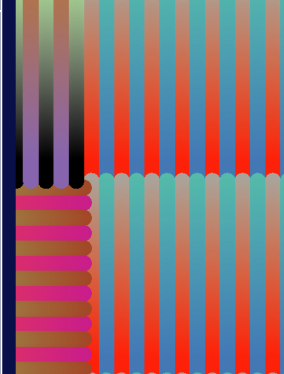
Doctoral Thesis in Management, Production and Design XXXVIII Cycle

Sergio Degiacomi Garbero



Politecnico di Torino

INNOVATION
DESIGN
LAB





**Politecnico
di Torino**

Department
of Management and
Production Engineering

ScuDo

Scuola di Dottorato – Doctoral School
WHAT YOU ARE, TAKES YOU FAR

Doctoral Dissertation

Doctoral Program in Management, Production, and Design

XXXVIII Cycle

Creative Spectrum

Systemic Innovation Design
Methodology applied to
creativity to enhance and inspire
multidisciplinary teams

Candidate

Sergio Degiacomi Garbero

Supervisors

Prof. Paolo Tamborrini

Prof. Chiara Lorenza Remondino

Examination Committee

Prof. Salvatore Di Dio, Referee, Università di Palermo

Prof. Rossana Gaddi, Referee, Università degli Studi

“G. d’Annunzio” di Chieti-Pescara

Prof. Beatrice Lerma, Politecnico di Torino

Politecnico di Torino

2026

Abstract

When discussed in informal contexts, the concept of creativity is often associated with the domains of art and culture. On the other hand, in more formal or productive settings, creativity tends to be instrumentalised and standardised, becoming linked to practices rooted in industrial and industrialised environments. However, there could be a more unanimous definition of creativity, perhaps through the design field? And more in particular, what does it mean to design innovatively through creativity? Are there guidelines that can help designers working with a multidisciplinary team achieve an innovative, sustainable, and creative project? And finally, is it possible to recognise and evaluate design that considers creativity as a vehicle for innovation?

For these reasons, this research has found the Systemic Innovation Design Methodology to be a valid application field through which to identify and apply spatial characteristics, specific actions, and disciplinary diversity, to develop a system capable of guiding a team towards innovative projects through creativity. Furthermore, the objective is also to guide the team towards identifying credible opportunities for applying this project, through participation in funding, economic support, awards, or calls for proposals.

Having defined the spatial, economic, and social context of application, this research sought to determine three key questions through which the research and development of this dissertation could be framed. The next step was to define the state of the art through the white and grey literature, analysed according to disciplinary, temporal, and thematic criteria. The state of the art was then further investigated through field data collected

through participatory activities. Consequently, the investigation shifted from the theoretical to the practical, investigating whether there were any creative best practices, application cases, and projects with significant impact. This allowed the recognition of recurring patterns of processes and actions, as well as the definition of clear contexts for creative applications.

These characteristics and definitions have enabled the research to apply the hypotheses derived from a design study conducted over four months within the Creative Europe unit of the Directorate-General for Education, Youth, Sport, and Culture of the European Commission. This latest integration has therefore guided towards a clear design concept, guidelines and consequently the design of the system itself. The system was designed with the people involved in mind first, paying particular attention to a multidisciplinary and socio-cultural approach. Secondly, spatial characteristics, spaces, and actions were defined to guide the team through seven cyclical processes that allow them to reason about the established objectives. This design also took into account the creation of physical artefacts, specifically an atlas to guide the team through the system, a set of information cards on the system's characteristics, and a glossary providing various definitions of the concept of creativity from the perspective of the design discipline. Finally, this system was evaluated from a heuristic point of view through some experimental sessions, to identify research and design limitations, but also future implementation developments.

