

Colección  
Pacífico



# Design & Territory: Emergencies and Conflicts

Nélida Yaneth Ramírez Triana  
John Jairo Cardozo Vásquez  
Academic Editors



Dirección de Investigación y Extensión  
Vicerrectoría  
Sede Palmira



UNIVERSIDAD  
**NACIONAL**  
DE COLOMBIA

Serie ARTE Y ARQUITECTURA





Colección  
Pacífico



# Design & Territory: Emergencies and Conflicts



# Design & Territory: Emergencies and Conflicts

Nélida Yaneth Ramírez Triana  
John Jairo Cardozo Vásquez  
Academic Editors



UNIVERSIDAD  
**NACIONAL**  
DE COLOMBIA

Bogotá D. C., 2023

© Universidad Nacional de Colombia - Sede Palmira  
Dirección de Investigación y Extensión  
Facultad de Ingeniería y Administración  
© Nélide Yaneth Ramírez Triana, John Jairo Cardozo Vásquez, Academic Editors  
© Various authors

First edition diciembre de 2023

ISBN 978-958-505-469-1 (digital)

Colección Pacífico  
Serie Arte y Arquitectura  
Sede Palmira

Editorial coordination - Sede Palmira  
Thalía Stephanie Yumbra Ruiz

Editorial Preparation  
Editorial Universidad Nacional de Colombia  
direditorial@unal.edu.co  
www.editorial.unal.edu.co

Editorial coordination - Sede Bogotá  
Valentina Martín Roa

Collection logo  
Alexander Pereira Mosquera  
Collection design  
Ángela Pilone Herrera  
Diagramming  
Juan Carlos Villamil N.  
Cover image generated with Firefly

Made in Bogotá, D. C., Colombia, 2023



Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International  
(CC BY-NC-ND 4.0) <https://creativecommons.org/licenses/by-nc-nd/4.0/>

---

Catalogación en la publicación Universidad Nacional de Colombia

Ramírez Triana, Nélide Yaneth, 1973-  
Design & territory : emergencies and conflicts / Nélide Yaneth Ramírez Triana,  
John Jairo Cardozo Vásquez. — Primera edición. — Bogotá : Universidad Nacional  
de Colombia. Editorial Universidad Nacional de Colombia ; Palmira : Universidad  
Nacional de Colombia. Dirección de Investigación y Extensión Facultad de  
Ingeniería y Administración, 2023  
1 CD-ROM (284 páginas) : ilustraciones (principalmente a color), diagramas,  
fotografías, mapas. — (Colección Pacífico. Serie Arte y arquitectura)  
Incluye referencias bibliográficas al final de cada capítulo  
ISBN 978-958-505-469-1 (e-book)

1. Espacio en arquitectura — Diseño — Investigaciones 2. Desarrollo urbano sustentable —  
Estudios interculturales — Colombia 3. Diseño — Investigaciones — Colombia 4. Diseño —  
Enseñanza 5. Comunicación en diseño 6. Percepción espacial 7. Identidad cultural — Diseño  
— Enseñanza I. Cardozo Vásquez, John Jairo, 1973- II. Título III. Serie

CDD-23 711.13 / 2023

# Content

Autors	11
Presentation	23
Introduction	25
Acknowledgments	29
Part I. Space	
Chapter 1. Reinventing Railway Embankments. A New Form of Urban Inhabiting Marco Borsotti	33
Chapter 2. Vitality or Fortification. Designing Open Space in Palmira, Colombia Sabina Cárdenas O'Byrne	49
Chapter 3. Manufactured Housing. Design for Social and Human Welfare and Development Marcelo Antonioni Aguilar Montero Marleny Cardona Acevedo	61
Chapter 4. The Water Potential in the Design of the Territory. Three Cases Compared Michele Ugolini Stefania Varvaro	79
Chapter 5. Design in Chaotic Territory. Collective Design of Public Space in Latin América German Eduardo Ferradas Daniel Eduardo Ferradas	99





## Part II. Identity and Culture

Chapter 6. Design of Food as a Space of Creativity and Cultural Interchange 111

Andrés Sicard

Fabio Fajardo

Chapter 7. Adaptation as a Stage in the Production and the Product Design in Colombia. A Reflection Based on the Experiences of Bogota's First Factory of Pottery, The Salman Industry, and the Metal Industries of Palmira 127

Maria Astrid Rios

Chapter 8. Design and Territory: Culture and Environment. Observations about Interdisciplinarity and Interculturality in the Industrial Design 137

Diego Echeverry R.

Chapter 9. Links between Food, Armed Conflict and Rural Development. Learnings from the Colombian Case 149

Nathalia Valderrama Bohórquez

## Part III. Collaboration

Chapter 10. Discovering the Frugal Attitude of Social Innovation. Bricolage as Activism 165

Manuela Celi

Chapter 11. Mapping Emotional Connections to Foster Engagement in Sustainability Projects. A Case in the Plastic Packaging Industry in Medellín (Colombia) 179

Lucas Rafael Ivorra Peñafort

Chapter 12. Design Solutions to Confront Excessive Tourism Development. The case of Colombia's Caribbean Sea Flower Reserve and the Benefits of a Collaborative Team-Based Approach 195

Diana Castelblanco

Chapter 13. Business Strengthening Model Acunar. A Proposal from Design	207
José Eduardo Naranjo Castillo	
Sonia Marcela Rojas Forero	
Part IV. Learning	
Chapter 14. Appreciation of Regional Identity and Culture in The Teaching of Amazonian Wood Products Design	225
Karla Mazarelo	
Almir Pacheco	
Mirella Vieira	
Claudete Nascimento	
Chapter 15. Impact of Teaching Materials in Learning Geometry	239
Keidy Yasmín Perea Mosquera	
Miguel Fernando González Arana	
Boris Alejandro Villamil Ramírez	
Chapter 16. Creative Industries as a Vehicle for the Projection of the Territory. The Case of Abacko	259
Ximena Alejandra Flechas Chaparro	
Daniel Alberto Reyes Leguizamón	
Chapter 17. Proposal of a Methodological Tool Inspired by the <i>Heliconeacea</i> Family	275
Johanna Andrea Merchán Avenia	
Nélida Yaneth Ramírez Triana	
Departamento de Diseño	
Índice onomástico	297





## Autors

**Almir de Souza Pacheco** Degree in Industrial Design from the Federal University of Amazonas (Ufam), Postgraduate in Design, Advertising, and Marketing from Ufam, and PhD in Design, Manufacturing, and Industrial Project Management from the Polytechnic University of Valencia (UPV), Spain. Professor and vice-coordinator of the design course at UFAM Visiting Professor of the postgraduate programs in: Design, Communication, and Multimedia of the Center for Analysis, Research, and Technological Innovation Foundation (Fucapi); Design and Market of the Martha Falco Faculty; MBA in Marketing, Advertising, and Propaganda of the Uninorte/Laureat Faculty (all in Brazil); and Master in Innovation and Design Management of ISAD, Mexico. He has more than 20 years of experience in design projects, with an emphasis on corporate visual identity systems, graphic production, typography, and design management. He is part of the research groups of INPA (the National Institute of Amazonian Research), Fucapi, and Ufam. Email address: [almirpacheco@ufam.edu.br](mailto:almirpacheco@ufam.edu.br)

**Andrés Sicard Currea** Industrial designer from Jorge Tadeo Lozano University in Bogota. With a PhD in Information Sciences from the University of La Laguna in Spain, he has merged this view with the practice of design to lead projects focused on traditional knowledge associated with agro-biodiversity and social innovation in Colombia. Creator and director of the research group *Saberes Implícitos* established to vindicate the popular wisdom of oral transmission as valid knowledge in search of dialogue and mediation of scientific and academic knowledge with other wisdoms seeking to value the aesthetic dimension from the design within the universe of food cultures, the popular and ancestral foods, everyday life, and its expressions. He conducts research on hostile emotions and living ancestral technologies. Co-founder and general coordinator of the Latin American Food Design Network. He works on social innovation projects where he puts design at the service of the existing human capacities in the territories where he participates, actions all projected by the design that takes care of the existence of life in the future. Email address: [asicardc@unal.edu.co](mailto:asicardc@unal.edu.co)

**Boris Alejandro Villamil-Ramirez** PhD in Production Engineering from the Universidade de São Paulo. Industrial Designer from National University of Colombia, Specialist in Technological Innovation Management from Universidad del Valle, master's in engineering from Universidad del Valle He has



worked as a professor since 2001 at the National University of Colombia, Palmira. In his professional practice, he advises companies in the productive sector on product and process innovations (in agreement with the Chamber of Commerce of Palmira) and has participated in the design of equipment and tools for production chains. In his academic career, he has developed interactive software and conducted studies on innovation processes in organizations and their productive chains. He currently advises the National University of Colombia-Palmira on the technological transfer of its scientific developments to the productive sectors. Email address: bavillamilr@unal.edu.co

**Claudete Catanhede do Nascimento** Graduated in Wood Technology from the Higher School of Technology (EST/UEA)/Brazil, Master in Forest Sciences from the University of São Paulo (USP)/BRAZIL and Doctorate in Biological Sciences (Botany) from the National Institute of Pesquisas da Amazônia (Inpa)/Brazil. She is currently a teacher in the Courses of Postgraduate in Forest Sciences and Design from the Federal University of Amazonas (Ufam)/Brazil and Senior Researcher at Inpa. Has experience in the area of Forest Resources and Forest Engineering, with emphasis on Technology and Forest Products Madera, develops social inclusion projects, with the objective of socializing the knowledge in municipalities of the State of Amazonas/Brazil. The projects developed countries seek the sustainability of the Amazon rainforest. Email address: catanhed@inpa.gov.br

**Daniel Alberto Reyes Leguizamón** Digital communication master's student at the Pontifical Bolivarian University in Medellín, Colombia. He graduated from the National University of Colombia in Bogotá with a degree in graphic design, and he has since worked as a lecturer in the industrial design program at the National University of Colombia in Palmira, where he has also created digital learning tools and co-founded Ce-Lab, the Laboratory of Educational Innovation. His primary areas of interest in research are gamification, digital narratives, and social appropriation of technologies. Email address: dareyesle@unal.edu.co

**Daniel Eduardo Ferradas** Engineer (National Technological University of Argentina) Specialist in Managerial Engineering (National Technological University of Argentina), master's in design, Management, and Development of New Products (Polytechnic University of Valencia, Spain), PhD. in Methods and Techniques of Industrial and Graphic Design (Polytechnic University of Valencia, Spain), Faculty member and researcher at the San Francisco Regional Faculty of the National Technological University (Argentina), Lecturer in the subjects of Fluid Mechanics (Electromechanical Engineering)

and Transport Phenomena (Chemical Engineering), Researcher in Design Management with participation in National and International Congresses through research works related to design. Email: deferradas@gmail.com

**Diana Zoraida Castelblanco Caicedo** Ph.D. student in Society and Culture: History, Art, and Heritage at the University of Barcelona; Master in Habitat at the National University of Colombia; Specialist in Design Management and Industrial Designer at the Jorge Tadeo Lozano University. Researcher and professor at the Faculty of Arts and Design, Jorge Tadeo Lozano University; member of the Research Group Design, Thought, and Creation (B); and leader of the Research Group Territories and Social Aesthetics. Her research fields are oriented toward the design-society-territory relationship. Author of the book *Los Relatos del Objeto Urbano*, as well as several articles and book chapters. She was director of the Industrial Design Programs at Jorge Tadeo Lozano University from 2016 to 2020. Academic peer of the Ministry of National Education and peer evaluator of different projects, research, and national and international calls. Email address: diana.castelblanco@utadeo.edu.co

**Diego Rodrigo Echeverry Rengifo** Professional in cultural and communicative management and a master's in habitat from the National University of Colombia-Manizales. His master's thesis, "Correlates of Habitat: Transits through Intimacy and Resistance, received a Laureate Mention. For the last six years, he has been an occasional professor in the Industrial Design Program at the National University of Colombia, Palmira. Her main academic interests have revolved around environmental thinking, aesthetics, and the visual arts; the city, habitat, and the world of everyday life; cinema, heritage, and recently design. Email address: decheverryr@unal.edu.co

**Fabio Enrique Fajardo Tolosa** Professor of the Physics Department of the National University of Colombia (Unal). Physicist from the National University of Colombia and PhD in Physics from Unicamp - Brazil. For 15 years, he has been working on low-cost technologies applied to communities. He has directed courses at Unal, promoted and directed design workshops in Colombia. He has led the International Development Design Summit (IDDS) in Colombia on three occasions and is currently leading the IV Workshop on Community Design and Innovation (TaDIC). He is also interested in the design of experiments in science education with materials that are readily available. Email address: fefajardot@unal.edu.co

**Germán Ferradas** German Ferradas is a young architect from Argentina who graduated from the Faculty of Architecture, Urbanism and Design (Faud) in Cordoba, Argentina. He has been part of the school's official assis-



tant program since 2018 and is a university researcher for the Public Housing Politics investigation group between 2021 and 2022. He was awarded with mentions in design competitions such as Alacero.org, Dezeen Mini Living, and local professional contests. After finishing his bachelor's degree, he was awarded a scholarship from the Norman Foster Foundation to participate in the "Re-materializing Houses Workshop" in Madrid. "The environment and people's adaptation to the changing space should boost local economies through real solutions". Germán perceives territory as a physical collaborative platform for virtual social discussions. The COVID pandemic and its lockdown showed the necessity of new ways to create common knowledge. In order to do that, he started to write articles for a local newsletter called "Nadie es Cool" about academic discussions in a millennial language. In 2022, Frame Magazine from the Netherlands invited him to rethink retail spaces for the future in an article called "Street Collider," published in October that year. German worked in several offices around the world, such as Ben-Avid, Foster+Partners, and Adamo-Faiden. Discovering new territories and sharing experiences with diverse people is a powerful tool to expand knowledge and innovation. Email address: germaneduardoferradas@gmail.com

**Johanna Andrea Merchán Avenia** Industrial designer with a focus on biomimicry, whose undergraduate work was based on morphological characterization as a tool for the inspiration of designers. Master in Biological Sciences with a research line in neotropical phylogenetic resources, his thesis was focused on the morphological characterization of Heliconias with a focus on education and social problems of a rural community producer of these flowers. She works as a researcher and is a part of the GUIA industrial design research group at the Palmira campus of the National University of Colombia. Her research focuses on biomimicry, taking cues from nature, sustainability, and environmental and social issues, particularly those that affect rural areas. Email address: jamerchana@unal.edu.co

**John Jairo Cardozo Vásquez** Industrial Designer, PhD in Design, Manufacturing, and Industrial Project Management from the Polytechnic University of Valencia, Associate Professor at the National University of Colombia. His research has focused mainly on the systemic application of project development concerning the form and method of design in manufacturing SMEs and the implications of variability and customization imposed on such organizations. Another field of study is related to product configuration systems and problem solving, in which criteria involving dynamic processes and operational systems are handled. Email address: jjcardozov@unal.edu.co

**José Eduardo Naranjo Castillo** MDI. Former director of the School of Industrial Design and the Acunar program (design transfer program to productive communities) of the National University of Colombia - Bogotá (Unal), and of the Department of Design of the Palmira campus. He has developed projects within the institutional framework of the university for national and international organizations in the areas of research, development and productive networks and business development. Leader of the production and export consolidation project for the SDDE of Bogota and ProColombia in productive networks. Director of the project of design-based solutions within the fashion system, commune 15 Cali; Creator of the Co Creation and social innovation laboratory 2020 and the pilot “To reduce the gap”, focused on education in the framework of the open library model; He is currently consolidating the innovation and entrepreneurship ecosystem for territorial competitiveness, as a support structure of the Innovation Center for Water, Territory and Peace Management CI-ATP and participates in the research project on artisanal fishing in the municipality of Guapi Cauca -Econavipesca, with the Swedish cooperation agency, the University of Cauca and the National University. Email address: [jenaranjoc@unal.edu.co](mailto:jenaranjoc@unal.edu.co)

**Karla Mazarelo Maciel Pacheco** Degree in Industrial Design from the Federal University of Amazonas (Ufam); Postgraduate in Business Marketing from Ufam; Master in Forestry and Environmental Sciences from Ufam; PhD in Design, Manufacturing, and Management of Industrial Projects from the Polytechnic University of Valencia, Spain. Associate Professor, Level 1, by the Department of Design and Graphic Expression (Ufam). She has professional experience in industrial design, with an emphasis on management and development of industrial projects; research in natural and environmental resources for textile production; research in forest products technology; systemic modeling for product manufacturing; and business organization, among other areas. He is a member of the Research Network in Product Design and Development, with emphasis on applied systemics (rDis) (UPV/Spain), and of research groups in Design and Technological Development at INPA (National Institute of Amazonian Research), Fucapi, and Ufam. Email address: [karlamazarelo@ufam.edu.br](mailto:karlamazarelo@ufam.edu.br)

**Keidy Yasmin Perea Mosquera** Teacher of the Escuela Juan Ladrilleros de Buenaventura, with an emphasis in social sciences. She has a degree in education in special education from the National Pedagogical University, a Master's degree in teaching of exact and natural sciences from the National University of Colombia, Palmira, and personal and pedagogical interests in inclusive education processes, an area in which she has developed a diploma





in special educational needs and knowledge management in inclusion from the Universidad del Valle and a diploma in management of inclusive education from the Universidad Icesi. Email address: pkeidyyasmin@yahoo.com, kypeream@unal.edu.co

**Lucas Rafael Ivorra Peafort** Project Management Professional (PMP), Industrial Designer, Master in Environmental Management from Pontificia Universidad Javeriana, and Doctor of Philosophy and Graduate Certificate of Research and Innovation Management from Swinburne University of Technology (Melbourne, Australia) Assistant Professor of the Department of Design at the Faculty of Architecture and Design of the Pontificia Universidad Javeriana Coordinator of the Design Factory Javeriana Bogotá and Coordinator of the University Planning Project: Food, Life, and Habitat in Guaviare, Colombia Member of Icontec Committee 014 on Environmental Management and Tools for Sustainable Development. Member of ISO Technical Committee 323 on Circular Economy. Research interests focus on the circular economy, sustainable design and eco-design, sustainable behaviors, and trust building. Email address: ivorral@javeriana.edu.co

**Manuela Celi** Manuela Celi initiated her research trajectory during her Ph.D., focusing on diverse knowledge facets related to design, their utilization, and translation into skills within learning systems, with a specific emphasis on Metadesign. As an associate professor at the Politecnico di Milano, her research deepened into design and advanced design processes. Recent investigations center on Design, Future Studies & Anticipation, and she was principal investigator in the FUEL Erasmus plus project for Polimi ([www.fuel4design.org](http://www.fuel4design.org)). With a theoretical orientation, her transdisciplinary research explores the nexus between design and the humanities and social sciences through the Humanities and Design Lab. Over the past decade, she has particularly examined the production of culturally rich intermediate design products, such as trends and scenarios, alongside studying the interplay between design and anticipation. In fostering a symbiotic relationship between research and education, she introduces innovative content into didactic contributions and initiates experimental activities for students aligned with foundational research. Manuela Celi's scholarly impact extends to publications in esteemed academic journals like Futures, The Design Journal, DIID – Disegno Industriale Industrial Design, The Design Management Journal, and The Strategic Design Journal. Email address: [Manuela.celi@polimi.it](mailto:Manuela.celi@polimi.it)

**Marcelo Antonioni Aguilar Montero** Junior Researcher. Industrial designer. Specialist in CAD-CAM systems. Master in Sustainable Development and

Environment. Innovation and technology leader at Sena Industrial Biotechnology Center, Colombia. Counterpart of the Japanese International Cooperation Agency - Jica in Valle del Cauca. Deputy Director at the Latin American Center for Minor Species. Designer of: (1) formula-type competition vehicle, (9) pilot plants for industrial biotechnology. Lean Manufacturing Consultant. Self-taught and passionate about Blockchain programming for reliable information management. Aware that human beings deserve to enjoy at their living environments, the quality and perfection that is achieved with industrial manufacturing. It promotes in its groups: digital transformation, disruption, and smart city concepts to design hardware and human habitation environments with respect for the environment. Email address: maguilar@sena.edu.co / maamdesign3@gmail.com

**Marco Borsotti** Architect, PhD in Interior Architecture and Exhibition Design. Associate Professor at Politecnico di Milano/DABC Dept. He works on Exhibition Design and Adaptive Reuse with special focus on Cultural Tangible and Intangible Heritage and interior spatial and narrative interactions. Email address: marco.borsotti@polimi.it

**María Astrid Ríos Durán** PhD. in history, magister in history, and industrial designer of the National University of Colombia. Professor at the National University of Colombia, Bogotá campus; research about the history of design and material culture in Colombia, with an international perspective, especially in the first half of the twentieth century in Colombia. Email address: mariosd@unal.edu.co, mariosdu@unal.edu.co

**Marleny Cardona Acevedo** Senior researcher and professor at the University of Manizales. Associate researcher at the Ministry of Sciences, Colombia. Economist and PhD of Social Sciences, Children and Youth. Specialist of sociology of work - regional economy - public policies - sustainable development. She thinks in Design as key to develop wellness to society. Concerned about the impacts that the lack of good design can have on people's lives and their ecosystem environment. Collaborates with Eafit University on issues of international cooperation for development in Medellín, labor markets and the maquiladora industry and comparative analysis of policies, legal foundations and reality of financing SMEs in China and Colombia. Collaborates with the Universidad de la Salle in Corporate Social Responsibility and Corporate Innovation. It elves into issues of vulnerable youth, multiple intelligences, environments of satisfaction, Governance and environmental services. Email address: mcardona@umanizales.edu.co

**Michele Ugolini** He graduated in Architecture at the Politecnico di Milano where he obtained a PhD. He is Associate Professor at the Politec-



nico di Milano, where he holds the Open Spaces Design Studio. He was a member of the teaching board of the PhD in Architectural, Urban and Interior Design AUID of the Politecnico di Milano. His research focuses on issues related to the design project, in the built environment. He deepened the themes linked to urban public open spaces both in urban contexts and in landscape contexts related to water (rivers, canals, lakes), by addressing the relationship between small and large dimension and scale, specifically taking in account the sustainability matter. On these issues he has developed, in collaboration with municipal administrations, regions and national parks, various multidisciplinary research financed through public tenders. Recently he has organized, as scientific supervisor, several international workshops and research, intertwining cultural exchange relationships between the Politecnico and universities of non-European contexts (Iran, Mozambique, United Arab Emirates). In Iran he followed an urban development Project on the village of Denhamak entitled “Design on the edge of the desert along the Silk Road”. In Mozambique he developed research in the Inhambane region called “Mo.N.G.U.E.” 2016-18, and in Dubai, entitled “Towards Dubai 2020: architecture in a transient city”. He has recently interested on the Healthcare Centers and the relationship between public spaces and health through research entitled “Coltivare-Salute.Com”, where Com means community. He has participated in international conferences and published in journals. Within his professional activity addressed the themes of his academic research on urban space and squares, in competition projects (some of them awarded). Email address: [michele.ugolini@polimi.it](mailto:michele.ugolini@polimi.it)

**Miguel Fernando González Arana** Master’s degree in teaching of exact and natural sciences from the National University of Colombia, Palmira (Unal Palmira). Industrial designer from Unal Palmira. He has worked as a teacher since 2008 at Unal Palmira and since 2014 at the Universidad Autónoma de Occidente (UAO) in Cali. Postgraduate teacher in the master’s degree in teaching of Exact and Natural Sciences at UnalPalmira. He worked as a product designer at Inorca S.A.S. between 2005 and 2008. In his professional career, he has participated in the design of chairs for automobiles for Renault, Mazda, and Chevrolet, as well as various models of chairs for cinemas and auditoriums, as an advisor and trainer in product development processes, innovation, and prototyping in the chamber of commerce of Palmira. Email address: [mfgonzaleza@unal.edu.co](mailto:mfgonzaleza@unal.edu.co)

**Mirella Sousa Vieira** Master in Forestry and Environmental Sciences (2011) and Bachelor in Industrial Design with qualification in Product Design (2010), both from the Universidade Federal do Amazonas (Ufam)/Brazil.

He has extensive experience in Research Projects with emphasis on Forest Resources Technology, for the use and valorization of timber species in the Amazon. He worked for ten years as a teacher in Higher Education courses in Design, in which he participated, in addition to activities teaching, research and extension practices, aimed at strengthening and developing the design in the region. He also has experience in Ergonomics and Design and Manufacturing of products with various natural raw materials. Currently Works in entrepreneurship initiatives in the design and promotion of related businesses with the local creative economy. In addition to working for eight years, the role of creative director in his company focused on the production of books manually, relating the use of traditional manufacturing techniques to new demands of this type of artifacts. This experience, which also allows her, as a researcher, exercise the study of this market and the relationships that guide the characteristics and preferences between industrial and artisanal products of this nature. Email address: mirella.sou@gmail.com

**Nathalia Valderrama Bohórquez** Professor of the Department of Rural and Agri-Food Development of the Faculty of Agricultural Sciences of the National University of Colombia, Bogotá. She is a graduate in agroindustrial engineering with a master's degree in food science and technology from the National University of Colombia and a PhD in rural development from the Federal University of Rio Grande do Sul (UFRGS). She was a Technical Fellow of the Brazilian Agricultural Research Company (Embrapa) in Rio de Janeiro, Brazil (2021–2022). Visiting Researcher at the School of Humanities and Development (COHD) of China Agricultural University (CAU) (2019-2021). She has expertise in public policy issues, rural development, family farming, agri-food systems, and food and nutrition security. Email address: nvalder-ramab@unal.edu.co

**Nélida Yaneth Ramírez Triana** Industrial Designer, PhD in Design, Manufacture, and Industrial Project Management from the Polytechnic University of Valencia. Associate Professor at the National University of Colombia, Dept. of Design; his research has focused mainly on the relationship between product design and human welfare, from a historical perspective, and methods applied to product design; another field of study is related to design to end poverty. Email address: nyramirez@unal.edu.co

**Sabina Cardenas O'Byrne** D. in Architecture with an emphasis on safe urban public space, Master in Criticism and Projects, and Fellow in Urban Policy and Studies at Johns Hopkins University. She is currently the director of the Center for Consulting and Continuing Education at the Pontificia Universidad Javeriana in Cali, where she has been a professor and research



associate of the Faculty of Creation and Habitat. She has been an advisor on public space for different national, district, and municipal agencies. Author of decrees 0888 of 2017, 0816 of 2018, and 1308 of 2020 for Santiago de Cali. Winner of the Javeriano Biennial Award for Research in Engineering, Architecture, and Design, 2019. Author and co-author of books and articles in international indexed journals related to issues of safe urban public space, safe space regulations, human rights, and ecojustice concepts applied to the city, among others. Email address: [sabinac@javerianacali.edu.co](mailto:sabinac@javerianacali.edu.co)

**Sonia Marcela Rojas Forero** Industrial designer with an emphasis in sustainability from the National University of Colombia, Bogotá. Specialist in technology education. Experience in knowledge transfer processes in design and marketing with indigenous and rural communities in Colombia. Technology educator for elementary school children and currently leader of product and educational media development in the Trilab brand focused on the development of sustainable solutions for different organizations. She is part of the “Semillero de Investigación Innovación en Territorio” of the laboratory of co-creation and social innovation LabCIS of the Unal Sede Palmira in the framework of the “Centro de Innovación en gestión de Agua Territorio y Paz CI-ATP”, in the line of education. Email address: [sonia.rojas83@gmail.com](mailto:sonia.rojas83@gmail.com)

**Stefania Varvaro** Graduated in Architecture obtained a PhD in Interior Architecture at the Politecnico di Milano, where she is a contract lecturer holding an Interior Design course together with a Built Environment Conservation course. She carries out her university research activity at the Department of Architecture and Urban Studies as a research fellow in the field of urban and architectural interiors, built environment, and cultural heritage enhancement with specific interest in the transcalarity and multidisciplinary of the project. She has worked on the constituent elements of the architectural project as operational and thought tools, in the didactic work, through the assigned research topics, in seminar meetings and in collaboration with a scientific group (coordinator prof. G. Ottolini) dedicated to deepening the Interiors in the Architect & Almanac from an idea by Renzo Piano. In the field of open spaces, particularly linked to the presence of water courses, the research has produced feasibility studies, publications and exhibitions. Some of them financed through participation in Fondazione Cariplo tenders has been developed through extensive analytical mapping, preparatory to the definition of river requalification master plans, where man and his measurements always find a specific match. She worked in her

studio developing professional activities in the field of urban, architectural and interior design. Email Address: stefania.varvaro@polimi.it

**Ximena Alejandra Flechas Chaparro** PhD in Administration from the School of Economics, Business Administration, and Accounting, University of São Paulo, Brazil (FEA-USP). She holds an undergraduate degree in industrial design from the National University of Colombia in Bogotá, Colombia. Alongside her academic career, she has held positions in the development of new products and currently focuses on corporate innovation management. Her research interests include innovation, entrepreneurship, entrepreneurial decision-making, and pivots in startups. The outcome of her research has been published in the International Journal of Entrepreneurial Behavior and Research, the International Journal of Project Management, and the Journal of Knowledge Management, among others. Email address: xaflechas@gmail.com





## Presentation

*Design and Territory* compiles different approaches related to the appropriation of design by communities, their identity, and their affectivity with the environment. Design is subject and action; it works from several disciplines in configuring spaces, objects, systems, communication, and strategies. The territory promotes dynamics that constitute the interaction systems of people and communities.

The interrelations between design and territory allow its study from multiple perspectives. The interaction between people and objects, images and spaces, shape multiple realities in the territory, where the local, the regional, and the global overlap and interrelate, giving rise to different forms of perception and valuation of experiences. The text compiles 17 approaches/interpretations of this relationship, channeled from inter-institutional collaboration and academic networks; these approaches focus on diverse contexts, moments, and geographies, with visions from the periphery and the center, presenting courageous and sensitive interpretations of the territories explored; and are organized in four parts:

Part 1. Space. Integrates design proposals focused on developing projects or actions from architecture, urban planning, and the configuration of social space.

Part 2. Culture and Identity. The studies focused on identity processes established in the knowledge and actions of people in the territories.

Part 3. Collaboration. This part centralizes the design proposals directly applied to the territories, from work between designers with people, groups, or institutions to solve or develop problems in specific territories.

Part 4. Learning. It compiles research where design is related to the community through pedagogical actions and teaching-learning scenarios; with this, the transformation of the territory is sought based on the transformation of the people.

The book *Design and Territory* contributes to the study of the role design plays in different territories and outlines its role as mediator, planner, catalyst, mitigator, and promoter of different human dynamics.

The book's richness focuses on the variety of approaches, projects, solutions, and proposals to understand emerging scenarios in design from knowledge, practices, or processes in different contexts through the creati-





ve and suggestive integration of humanistic, technological-productive, artistic, and cultural knowledge.

This compilation results from the collaboration between the Design Research Group (GUIA) of Universidad Nacional de Colombia-Palmira, the Department of Advanced Design of the University of Bologna, and the Department of Architecture and Design of the Technological Institute of Monterrey.

The Latin Network for the Development of Design Processes is a group of researchers, university professors, students, and entrepreneurs, of Latin language and culture who are committed to the study of design processes; this group meets periodically in a forum conceived as an International Thematic Conference to debate, discuss and exchange their work, findings, and experiences. The Network, founded in 2008 with the manifesto “Carta di Torino” and under the direction of Professor Flaviano Celaschi, aims at inter-institutional collaboration and academic, scientific, and cultural exchange of its members from 15 countries around the world, mobilizing more than 500 international speakers in the multiple editions of the forum.

## Introduction

Territory establishes a direct link with space. It refers to the environment itself, as well as to the region or geographical point and the relations of cooperation, study, or conflict between people.

Part I explores the relationship between design, **space**, and territory from six perspectives: the reuse of space, the security of open spaces, the generation of housing with a sustainable approach, pedagogical practices focused on the management of space, the urban design of mobility plans taking into account the landscape with water sources and the urban study of Latin American cities constitute a selection of approaches where the places of study, areas, focus, practices, and methodologies make up a broad panorama in which design is a catalyst, support, and mediator.

In the study of the relationship between **territory and space**, Marco Borsotti, in “Reinventing Railway Embankments, New Form of Urban Inhabiting,” presents a comparative study of adaptive reuse of disused railway infrastructures with innovative design practices, where design is a catalyst that defines new states of perception of the urban identity of the places involved. In “Vitality or fortification, designing open space in Palmira, Colombia,” Sabina Cárdenas proposes a vital model focused on open space, free of fortifications or barriers in terms of public space; it is a study of the territory and people’s perception of safety, which studies dimensions of the environment such as human density, use of transitional spaces, cleaning and maintenance, and lighting, among others. Marcelo Aguilar and Marleny Cardona, with “Manufactured housing, design for social and human welfare and development,” address the manufacture of housing with a sustainable approach and present a model of identification and definition of the elements that brings together the disciplines of Architecture and Industrial Design.

In “The Water Potential in the Design of the Territory. Three Cases Compared”, Michele Ugolini and Stefania Varvaro present the comparison of three cases where the territory is related to the environment, proposing and redesigning the sustainable mobility network, emphasizing multifunctionality and interdisciplinarity and using water as the axis of the landscape. Concluding Part I, Daniel and Germán Ferradas propose with “Design in Chaotic Territory Collective design of public space in Latin America” the study of chaos in urban design in Latin America, and with “Chaotic design”, they propose open and collaborative tools as an alternative to traditional urbanism.



**Identity and culture** are defined by what we do and who we are as human beings. The practices, objects, and places that make up the different territories are essential to the culture. The second part moves between proposals that interpret the territory from cultural practices such as handicraft products, food, and the manufacture of adapted products. It continues with a reflection between the environment and consumption to finally make an approximation in understanding the link between food production, rurality, and armed conflict.

Andrés Sicard and Fabio Fajardo, with: “Design of food as a space of creativity and cultural interchange”, approach the new field of food design in Colombia, from the creation of new dishes and their presentation at the table, supported by some traditional Colombian practices, and reflect on the relationship between food and cultural identity in the communities.

From the application of historical analysis Maria Astrid Rios in “Adaptation as a Stage in the Production and on the Product Design in Colombia. A Reflection based on the Experiences of Bogota’s First Factory of Pottery, The Salman Industry and the Metal Industries of Palmira”, addresses aspects of the local manufacture of products with an adaptation of foreign forms and designs. Diego Echeverry proposes a reflection on the habitat, territory, environment, art, and culture concerning the consumption scenario in “Design and Territory: Culture and Environment. Observations about the Interdisciplinarity and the Interculturality in Industrial Design.”. Finally, this second part closes with Nathalia Valderrama, who develops the “Links between Food, Armed Conflict and Rural Development Learnings from the Colombian Case” and tries to advance the understanding of the dynamics of Colombian society.

**Collaboration** is determined by the development of a project among multiple people, communities, institutions, or different organizations. Part III focuses on the design developed jointly by several actors in the territory. It explores the application of new methodologies in projects with communities, cases of collaboration between universities from different countries to develop projects in a specific territory, as well as collaboration between groups from different countries to develop actions for companies and proposals to develop ventures focused on design management.

Design methods are applied to analyze and evaluate the dynamics and practices in the territories and interpret the reality of the communities to propose changes and develop models that help existing companies or allow the formulation of new business possibilities supported in the territory. Manuela Celi documents the search for greater impact of design to

understand and solve problems in collaboration with communities, under the ideation and development of frugal innovation in “Discovering the frugal attitude of Social Innovation. Bricolage as activism” (in the framework of the European project Simpect).

Lucas Ivorra Peñafort presents a study where two universities (Australia and Colombia), a company, and the plastic packaging industry are articulated in sustainable collaborative projects in “Mapping Emotional Connections to Foster Engagement in Sustainability Projects. A Case in the Plastic Packaging Industry in Medellín (Colombia)”. In the context of implementing the peace process and post-conflict in Colombia, Diana Castelblanco presents “Design Solutions to Confront Excessive Tourism Development. The case of Colombia’s Caribbean Sea Flower Reserve and the Benefits of a Collaborative Team- Based Approach?” focused on the construction of responsible and sustainable tourism practices in the Colombian Caribbean. Finally, Eduardo Naranjo and Sonia Rojas in “Business Strengthening Model Acunar. A Proposal from Design” exposes how this design knowledge transfer program (focused on design management) allows the creation of enterprises with a university approach to society.

The **learning** process is the focus of the final part, which gathers studies focused on methods, practices, or products resulting from design processes that respond to specific territory characteristics.

Karla Mazarelo, Almir Pacheco, Mirella Vieira, and Claudete Nascimento present the process of carrying out academic work in a subject where wooden products are designed based on Amazonian legends in “Appreciation of Regional Identity and Culture in the Teaching of Amazonian Wood Products Design”. Miguel González, Boris Villamil, and Keidy Perea, in “Impact of Teaching Materials in Learning Geometry”, focused on product development for geometric spatial thinking in territories vulnerable due to poverty.

Ximena Flechas and Daniel Reyes with “Creative Industries as a Vehicle for the Projection of the Territory. The Case of Abacko” address the topic of creative industries, analyzing a digital learning spin-off, inviting to explore the links between creative industries, design, technology, and new narratives, and promoting scenarios of action and interaction in the territories. Finally, Johanna Merchán Avenia, in “Proposal of a Methodological Tool Inspired by the *Heliconiaceae* Family”, studies the native flora of Colombia and proposes suggestive elements for the formal development of production systems as a strategy for the generation of identity based on shapes and colors of the environment.





## Acknowledgments

This publication is possible thanks to the interest and support received from many people and friends. Special thanks to Elena Formia, Roberto Iñiguez, and Ruth León, who generously shared their knowledge and experiences; we also thank Flaviano Celaschi, Manuel Lecuona, Andrés Sicard, Alejandro Echeverry, Terry Irwin, Giulio Vinaccia, and Maria Eugenia Rinaudo, who enriched this work with their valuable contributions.

It is important to highlight the collaboration of the Latin Network of Design Processes, the Department of Advanced Design of the University of Bologna, the Department of Architecture and Design of the Technological Institute of Monterrey, and the Design Research Group GUIA of the National University of Colombia, Palmira.

Special thanks to the authors who contributed with invaluable information, contributing significantly to the discipline of design with a territorial approach; this group is formed by Marco Borsotti, Sabina Cardenas, Marcelo Aguilar, Marleny Cardona, Michele Ugolini, Stefania Varvaro, Daniel Ferradas, German Ferradas, Andres Sicard, Fabio Fajardo, Diego Echeverry, Maria Rios, Nathalia Valderrama Bohórquez, Manuela Celi, Lucas Ivorra, Diana Castelblanco, Eduardo Naranjo, Sonia Rojas, Karla Mazarelo, Almir Pacheco, Mirella Vieira, Claudete Nascimento, Miguel Gonzalez, Boris Villamil, Keidy Perea, Ximena Flechas, Daniel Reyes, and Johanna Merchán.

We are also grateful for the interest of the group of researchers with whom there was an exchange of information, which allowed us to delimit some of the topics of this book: Andreas Sicklinger, Augusto Solorzano, Carolina Blanco, Carlo Franzato, Daniel H. Nadal, David Bihanic, Dijon De Moraes, Jimena Alarcón, José R. González, Juan M. Salamanca, Karen Lange, Leonardo Gómez, Lorenzo Imbesi, Pedro Medina, Pier Paolo Peruccio, Raffaella Trocchianesi, Rodrigo Ramírez, Alberto Calleo, Alessandra Bosco, Ana Paula Perfetto, Andrea Medina Gómez, Andrés Roldán, Carolina Blanco, César Galán, Clara Giardina, Cleuza Ribas Fornasier, Daniele Fanzini, Diego Hernández, Eleva Vai, Elingth Simoné Rosales, Elisabeth Herreño, Erik Civravegna, Giorgio Dall'Osso, Juan Carlos Briede, Julio Rivera, Laura Picca, Laura Succini, Luis Octavio González, Marcela Cabello Mora, Michele Zannoni, Paola Castillo, Patricia Herrera, Sergio Sosa, Susana Paixão-Barradas, Valentina Gianfrate and Xochitl Arias González.



Thanks to the support of the Universidad Nacional de Colombia-Palmira and the invaluable and unconditional work of Ana Milena Palacio. We also thank the Deans of the Faculty of Engineering and Administration, professors Oscar Chaparro Anaya and Juan Gabriel León Hernández for believing in this project. Finally, Laura Fuertes and Thalía Yumbra, and her constant support from Unimedios.







# Reinventing Railway Embankments. A New Form of Urban Inhabiting

Marco Borsotti  
Department of Architecture, Built Environment  
and Construction Engineering (DABC)  
Milan, Italy  
Politecnico di Milano

Chapter I





Often in our cities, the decommissioning of architectural structures connected to the collective mobility infrastructure is particularly problematic, both for their volumetric consistency and for the objective difficulties of the redesign. However, if we applied the innovative practices of adaptive reuse, we could let them play the part of fragments of hypertext ready to be associated and dissociated through individual or collective choices of connection. This paper illustrates a research project focalized on mapping and analyzing the main international case studies about the requalification of urban environments characterized by the presence of disused railway infrastructures to verify how these, despite their architectural conformation, initially constituted an apparent limit to the development of new forms of habitability, instead, have revealed the ability to become significant places for an alternative development of their context. Often the triggering of these virtuous processes of reactivation comes from collective initiatives, a spontaneous expression of new forms of approach to public policies, practices of social innovation, and shared activism. A methodological analysis carried out through a critical reading of some paradigmatic examples of regeneration of railway embankments allows, therefore, to identify different alternative strategies adopted to achieve a positive shift in the perceived metropolitan structure in the areas affected by their presence, the result of which has defined new states of perception of the urban identity of the places involved.

## Introduction

Adaptive reuse has existed since time immemorial. The reuse of caves as domicile and animal skins as clothing is an early instance of man's resourcefulness. The same resourcefulness is evident in today's-built environment when we extend structures that can no longer accommodate their program of use or give another life to materials through recycling. Such a project of reuse, born of common sense and economy, is referred to by many names today: refurbishment, renovation, rehabilitation, remodeling. They are serviceable and respectable and provide for the quotation spatial needs of society. (Wong, 2017, p. 6)



The great phenomena of urbanization and industrialization of the recent past have caused massive concentrations of new buildings, according to a logic almost exclusively linked to the pure monetization of the land value, without particular attention to its conservation and the implementation of sustainable and reversible systems. Today, this indiscriminate land consumption is paradoxically accompanied by the exponential increase of portions of land already built but now underused or even abandoned. These are building systems linked to rapidly changing socio-economic dynamics, especially under the pressure of the relentless waves of economic crisis. It is a vast patrimony of buildings expelled from the daily dynamics of use in a context of unplanned abandonment. It is quickly destined to become highly problematic subjects for their environmental impact and for the social tensions they generate.

This widespread condition represents one of the greatest design challenges of the contemporary world: faced with these phenomena of accelerated obsolescence. It is necessary to define new activation strategies and return to the community of these places. Strategies that can reconcile new sustainable economic models with renewed policies of social participation to define the final objectives and methods of implementation to generate innovative architectural approaches. In other words, a new awareness of the value of this “already built” heritage, both in terms of historical sedimentation and consumed resources, is needed to look at disused buildings as opportunities for a sustainable and conscious redesign characterized by a flexible and innovative use, sensitive to the phenomena of socio-economic and cultural reorganization of the urban scenarios in which they remain.

Referring to Marc Dumont’s reflections on urban globalization:

The model of the cohesive city explodes (...) to the advantage of “in layers” forms of its spaces. (...) The pieces of old cities play the part of fragments of hypertext always ready to be associated and dissociated through individual or collective choices of connection. (Dumont, 2010, p. 135-136)

These “fragments of hypertext” represent an important opportunity for shared design. The designer assumes the role of mediator and catalyst of bottom-up instances, local economic balances, and potential new attitudes: a design consciously attuned to the nature and urgencies of the territorial. In this way, can be launched virtuous processes of requalification, which are often triggered by spontaneous initiatives, whether “planned” or “differently planned,” with the active involvement of urban categories formally alien to the official dynamics of economic and political planning of the urban fabric,

but engaged in first person by the need to overcome strategic impasses and reach the availability of new housing opportunities, whether residential, aggregative, or productive.

If a catalyst for the infinite place could be identified, it would be always an encounter between individuals and a place in which they see the potential. The most common example is a pre-existing, abandoned site. Previous activity on the site has ceased and nothing remains, but an empty building, available—at least in terms of the imagination (Encore, 2018, p. 17).

These architectural practices of adaptive reuse of disused architectural complexes trace new paths for converting situations of apparently irremediable conflict into moments of reflection on social and economic inequalities, activating processes of renewed territorial identity.

The final characteristic that we believe make these infinite places important is that they encourage new types of sociability. They often come about as a result of a particular vision. Individual to start with, but only existing thanks to the input from others. (...) They have many coexisting interests, so that shared governance is a necessity. (...) Finally, the potential is encouraged by availability. And it is sometimes spatial opportunities that stimulate social innovation. (Encore, 2018, p. 19)

## Living Railway Embankments

Among the many types of architectural structures in a state of decommissioning, those connected to the collective mobility infrastructure could be more problematic, both for their volumetric consistency and for the objective difficulties of redesign. Although emptied of their specific functions over time, many of their constituent architectural elements still belong to larger structural supersystems, making them “physically” necessary.

This is typically the railway embankment case. These are, in fact, “hard” infrastructures, built during periods of intense development of the railway transport system, with an original tendency to settle on the crowning suburban spaces of large urban centers, towards the heart of which were projected some approaching lines.

These presences have a profound effect on the landscape, influencing the design of the urban fabric. The sediments of these railways are generally made at ground level, but, especially in larger and more congested cities,



often overhead, doubling the different levels of mobility and generating interference in the location of their structural load-bearing elements. The latter, intended to support the elevated rail traffic plan, represents these infrastructural systems' most evident urban legacy in their different forms (from the sequence of pillars to the embankments). Alongside and, above all, beneath them, they have often found hospitality, various activities, and sometimes real alternative spontaneous and temporary forms of housing.

A research project was developed to map and analyze the main international case studies about the requalification of urban environments characterized by the presence of disused railway infrastructures to verify how these, despite their architectural conformation, initially constituted an apparent limit to the development of new forms of habitability, instead, have revealed the ability to become significant places for an alternative development of their context.

New use configurations have been introduced at some railway embankments, capable of radically changing their perception and social destiny, as they had progressively become places of abandonment. Often the triggering of these virtuous processes of reactivation comes from collective initiatives, spontaneous expression of new forms of approach to public policies, practices of social innovation, and shared activism. Therefore, the request for social attention has often been accompanied by the capacity of the public administration to act, showing itself capable of opposing even the "underground" orientations of private speculative interests. A methodological analysis carried out through a critical reading of some paradigmatic examples of regeneration of railway embankments allows, therefore, to identify different alternative strategies adopted to achieve a positive shift of the perceived metropolitan structure in the areas affected by their presence, the result of which has defined new states of perception of the urban identity of the places involved.

The research, still in progress, has identified some international reference projects, which have been analyzed and compared through desk and field research and, where possible, direct contact with institutions and designers, according to some fixed parameters, such as:

- the historical evolution of the structure and the causes of its decommissioning.
- the architectural conditions of the structures before and after the realization of the project.
- the economic development models adopted and their dynamics (public, private, mixed, and planning practices planned, concerted, shared, etc.)

- the socio-economic outcomes of the actions undertaken and implemented and their effects on the urban context.

The main case studies dealt with so far are *Im Viadukt Zurich*, *London Bridge Station*, *Station F. Halle Freyssinet Paris*, *Ventura Centrale Milan*, *Stadtbahn Viaduct Wien*, *Koganechō Keykyu Yokohama*, *Promenade Plantée Paris* and *High Line New York*.

Here, for the sake of synthesis, we will only mention the three most significant cases in terms of architectural results and social outcomes achieved, as well as the methodologies adopted, one spontaneous and shared (*High Line*), one programmed and institutional (*Promenade Plantée*) and one “semi-participated” (*Koganechō Keykyu*).

## The High Line of New York, United States of America (USA)

The reputation of the High Line in New York (USA), a linear park located in Lower Manhattan, built on the site of an elevated railway system, is well established, with an estimated tourist flow of about 5 million visitors per year (Huebner, 2019, p. 2). The High Line does not simply offer a suggestive “green” overhead walk next to the large urban buildings. However, it is a place of entertainment and meeting activities, acting as a catalyst for the need for aggregation and socialization (see Figure 1.1).

Its history is well known: the original route, a steel elevated structure, was created to eliminate from the streets the dangerous presence of goods traffic, connected to the numerous manufacturing companies and warehouses in the West Side of Manhattan. Active from 1934 to 1980, its fate followed the rapid decline of these activities. With its definitive closure, the High Line became an “absent” presence, forgotten by the inhabitants, colonized by nature, and destined to be demolished. It was also perceived as an element of depreciation of the value of the surrounding areas. Its reconversion process results from an exemplary dynamic of opinion movement that started “from below” in an unorganized way but quickly equipped itself with innovative tools for comparison, dissemination, and proactive project proposals, in antagonism with the dominant speculative dynamics.

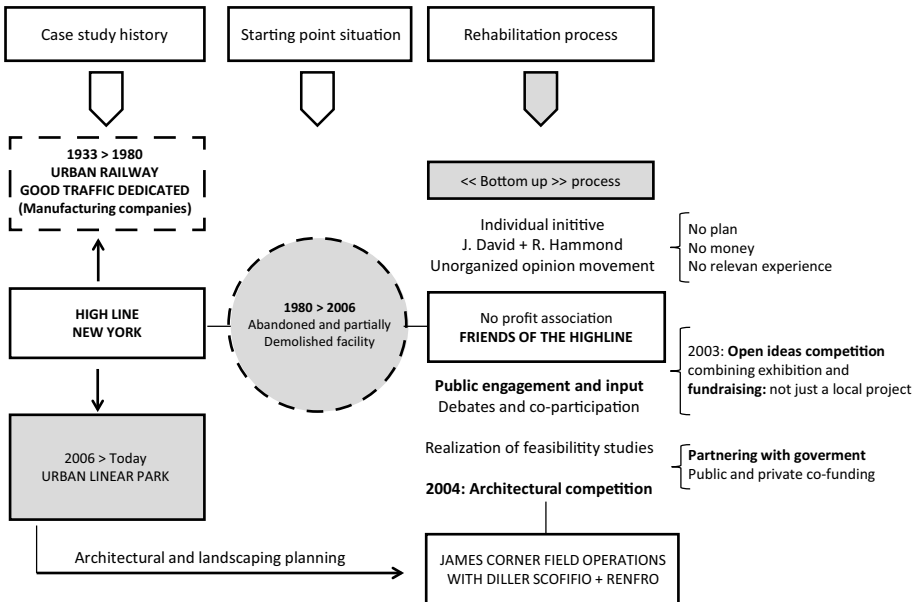
Two ordinary citizens—writer and journalist Joshua David and marketing consultant Robert Hammond—convinced of the High Line’s historical identity value and social potential of the started a voluntary process





of collective awareness, creating the non-profit association Friends of the High Line. Their first tools are intuitive: a site, a logo, some surveys of the structure, and many meetings that have achieved the goal of changing the negative opinion on the structure, revealing its spontaneous poetic park (documented by a famous photo reportage by Joel Sternfeld). The increase in public attention strengthened participation in the Association, whose voice also begins to reach the city and state of New York administrative centers of power. A fundamental tool for comparison will be the realization of feasibility studies aimed at demonstrating that the conversion of the High Line to a park would have been economically sustainable and advantageous, with positive effects in the long term. In 2003, with great success, the Association launched an open competition of ideas. “It was just captivating people, creating ideas, unusual ideas, creative ideas, innovative ideas of what you could do up here” (Zambelli & Pessoa Alves, 2012, p. 24).

**Figure 1.1.** High Line, New York (USA), Before, During, and Current State



Source: own work.

The following year, a second competition, this time operational, was won by James Corner Field Operations and Diller Scofidio + Renfro. They will be explicitly asked by the Association for a joint design action with the resident community, according to a “Community-Based Planning” methodology. This long-shared path of mobilization and openness towards non-speculative urban design approaches, which involves resident communities, public administration, and private investors, finally materializes a project that embodies a progressive collective awareness. This awareness, first and foremost, creates opportunities for identity cohesion and real interaction in the construction of a vision of the city as an evolutionary system of its historical, architectural, and social memory.

## The Promenade Plantée of Paris, France

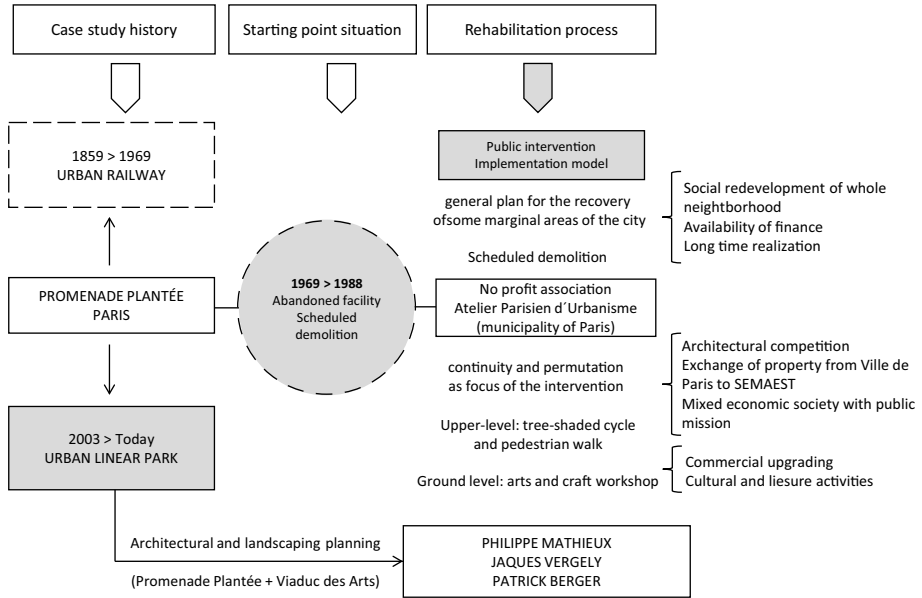
The Parisian project for the recovery of the Paris-Vincennes line, a connecting route between the city center and the suburbs, which became obsolete in the 1970s due to the opening of faster lines, was the precursor of the very idea of transforming the great urban barriers of rail transport infrastructure systems. Invaded by vegetation and causing the collapse of the surrounding land value due to its state of abandonment, it becomes a source of urban degradation. Its redevelopment process presents an implementation model of public intervention as part of the general recovery plan of some marginal areas of the city activated in the late eighties by the *Atelier Parisien d’Urbanisme*, a non-profit association created in 1967 by the municipality of Paris.

The railway line has characteristics: a section consists of a railway viaduct that, over time, has become an integral part of residential and production buildings, while a second section lies below the road level. Its redevelopment, which lasted almost a decade, takes on the theme of the symbiotic relationship between the existing building, the architectural context, and nature as the founding principle of the master plan of intervention, defined by Jacques Vergely and Philippe Mathieux.

The Promenade Plantée today aims to maintain a balance between elements of permanence and transformation through the physical stitching of the different heights characterizing the structure, read as superimposed sediments able to define coordinated levels of urban habitability. Above, a pedestrian walk in the continuity of the greenery reaches its privileged autonomy, while below, the large arches of the embankment become showcases of the arts and crafts, with a mix of craft and art workshops and meeting places (Figure 1.2).



**Figure 1.2.** Promenade Plantée, Paris (France), Before, During, Current State



Source: own work.

## Keykyu Koganechō, Yokohama, Japan

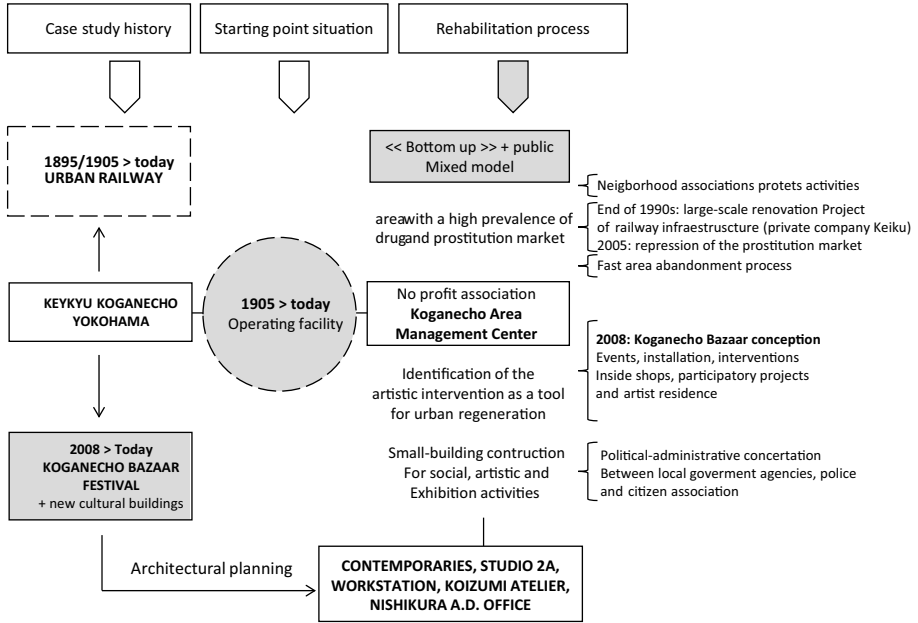
The case of Koganechō (Yokohama) presents unique and distinctive factors that have led to the redevelopment of the area below the elevated railway belt. Koganechō, always characterized by small and medium enterprises and wholesale distributors linked to the activities of the port of Yokohama, which faced a severe economic and social crisis during the Second World War. The elevated railway, one of the few structures that survived the American bombings, became the makeshift refuge of many dispersed people. In contrast, in the immediate post-war period, its proximity to the new base of the American occupation army favored the establishment of numerous illegal activities, from the black market fed by goods stolen from the base to drugs and prostitution. This last “business” becomes, finally, the one that identified the district.

In 2000, a precise tightening of the government's policy to combat the prostitution phenomenon, accompanied by local movements of protest against the widespread urban decay, led to the closure of all Koganechō sex shops, causing, paradoxically, a radical emptying of the area, with hundreds of small, abandoned businesses. The neighborhood associations that had undertaken the first protests are active and searching for a new urban identity for the neighborhood, capable of repopulating many abandoned buildings according to economically and socially sustainable strategies. So, through some small outdoor events, which aim to involve the population and the local media, begins a process that can be defined as "semi-participatory."

This process assumes collaboration between local government agencies, police, and the non-profit association Koganechō Area Management Center (AMC), starting from a centralized political public order initiative. AMC plays a central role in selecting and managing environmental requalification practices, with its predominant vision of the new territorial identity and direct control of the space, albeit in a strongly shared and mediated manner. AMC identifies artistic action as the fundamental trigger for urban regeneration. Even before the work of art itself are the presence of the artist and his prolonged interaction with the resident community that is placed at the base of the most important opportunities for aggregation. The artistic presence is intended, therefore, as a "social substitute" that saturates the urban voids and redefines them with its capacity for cultural attraction, according to a practice whose greatest limit is probably the cancellation of the memory of the recent past, tolerated, to the limit, as a possible reminiscence filtered by the sensitivity of the artist. It is undoubtedly a successful model, able to build new community awareness, establishing a solid principle of change in perception of the relationship between inhabitant and place along trajectories whose evolution shapes a renewed idea of belonging. The artistic intervention as a tool for urban reconversion is also useful to intercept financial and organizational support at the city level, allowing the creation of the Koganechō Bazaar. This art festival uses the daily spaces of the city as its stage. Architecturally, the process of redevelopment materializes with the construction of some small but significant new buildings that have "colonized" portions of empty spaces below the elevated structure of the Keihin Express railway line, owned by the Keikyu Corporation, giving space to social, artistic and exhibition activities that consolidate the availability of collective places of reference (Figure 1.3).



**Figure 1.3.** Keykyu Koganechō, Yokohama (Japan), Before, During, and Current State



Source: own work.

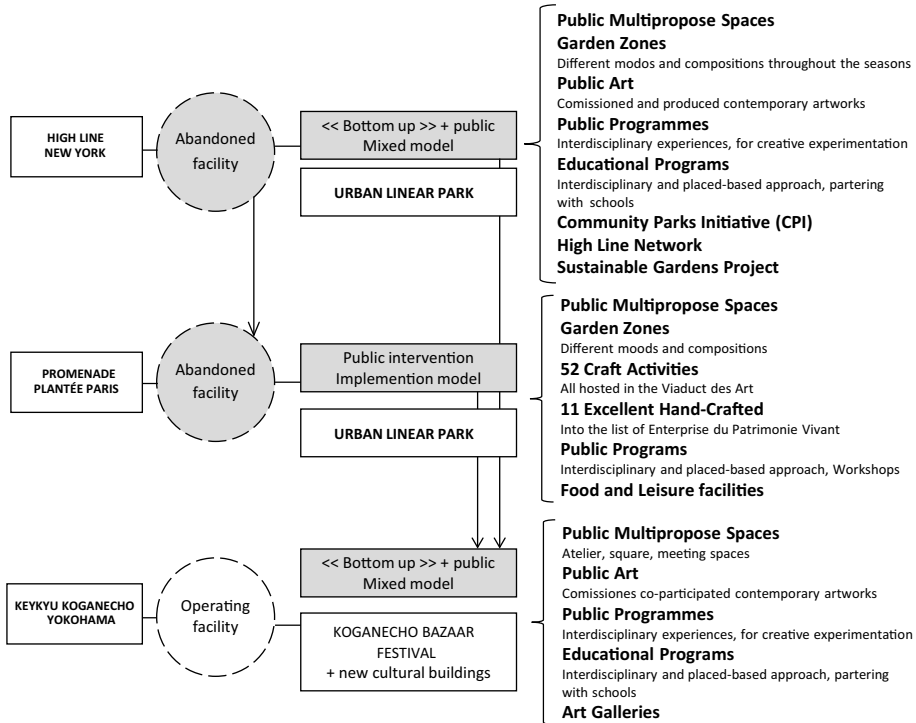
## Conclusion

In many cities, urban wastelands and vacant structures suddenly metamorphose into exuberant places. After city planners and the real estate market have failed in their initial attempts to develop them, these sites become the setting for clubs and bars, start-up firms and art galleries, migrant economies and informal markets, recreational activities and nightlife. InCeed, it is often precisely here that innovative cultural production and a vibrant public sphere are to be found (Urban Catalyst, n.d.).

The sediments of the great transport infrastructures innervate the anthropized territory, deeply marking it and often acting as almost insurmountable limits, which generate marginality. Reinterpreting them as inclusive spaces capable of producing attractiveness for the community around them, restoring them (or even “inventing” them) to conditions of full habitability is nevertheless possible. However, it requires careful reconnaissance of the real vocations of use

from the territory itself. These indications must be configured in socio-economic models capable of finding new ways of “profitability,” no longer calculated only in monetary terms, but above all as social repercussions capable of enhancing what is defined as the human capital involved and involved.

**Figure 1.4.** Case Studies Comparison



Source: own work.

The three case studies briefly analyzed here present two different socio-political approaches: the Parisian one is a public initiative concerning both strategic choices and budget availability. At the same time, the other two are based on mixed forms of “bottom-up” participation, able to tune in with the city’s administrative policies (Koganechō) or even to modify and attract them to new positions (New York). In New York and Paris cases, the railway structures are both disused and are “reinvented” as new urban green arteries, sort of elevated ecological walks, which detach themselves from the daily chaos of the “ground floor” and become an opportunity to attest new aggregating and identity activities.



In Yokohama, the “ground floor” itself has been reinvented as a free interstitial space to be redefined by introducing new, small but significant, architectural presences and, above all, able to become real social places. The High Line and Koganechō are the primary expressions of a city mobilization able to organize itself autonomously and to propose itself as an alternative model of territorial governance, while the Promenade Plantée is the result of the state’s ability to express itself through its Podies of redesigning the territory, capable of intercepting and organizing new economic potential.

In all these cases, the architectural intervention defines the qualitative and recognizable criteria for redesigning these places, demonstrating their unsuspected ability to adapt to new functions, completely open to citizenship: from the impassable to the permeable and the habitable. Together with many similar projects carried out or planned in various parts of the world, they demonstrate the validity of an approach that looks at the social rethinking of railway embankments and their economic sustainability (Figure 1.4).

The case studies examined show that these complex, inflexible, and even cumbersome places, especially in the presence of shared design actions on all phases of redevelopment, can become new engines of urban sociality, revolutionizing the pre-existing territorial conditions of socio-economic inequalities, defining new quality standards of the urban environment and its livability and initiating processes of reconstruction of the identity of these places, which from obstacles, are transformed into “urban catalysts.” As noted by Juliet Davis, the “urban catalysts,” in fact “ (...) are involved in the production of ‘artifacts’ and/or constitute ‘events’, (...) their role is to initiate and/or accelerate change, (...) their ‘reactants’ constitute existing situations and their pasts, and that they may be more or less transient” (Davis, 2009, p. 305).

## Note of the Author

The research project the paper refers to was developed as a part of the academic workshop LABZONE2. LABZONE2 was founded in 2013 and ended in 2023, as part of the Architectural Design Studio for Interior Design and Building Conservation, coordinated by Marco Borsotti and Sonia Pistidda, at the Polytechnic of Milan–School of Urban Architecture and Building Engineering.

## Bibliography

- Abrahams, T. (2010, August 21). *Viaducts: new urban encounters*. Architonic. <https://www.architonic.com/it/story/tim-abrahams-viaducts-new-urban-encounters/7000516>
- Ascher, K., & Uffer, S. (2015). The High Line Effect. *Council on Tall Buildings and Urban Habitat*, 224–229. <https://global.ctbuh.org/resources/papers/download/2463-the-high-line-effect.pdf>
- Barozzi, J. (1996). *La promenade plantée: un jardin en continu sur plus de quatre kilomètres*. Mairie de Paris.
- Boriani, M. (2008). *Progettare per il costruito: dibattito teorico e progetti in Italia nella seconda metà del Xx secolo*. Città Studi Ed.
- Bollack F. A. (2013). *Old buildings, new forms: new directions in architectural transformations*. Monacelli Press.
- Conte, S. (2015). Una promenade plantée sulla ferrovia (dismessa) di Vincennes. *Ananke*, 75, 88-91
- Darren, J. P. (2013). The matter of displacement: a queer urban ecology of New York City's High Line. *Social & Cultural Geography*, 15(8), 920-941. <https://doi.org/10.1080/14649365.2013.851263>
- Poli, M. D., & Incerti, G. (2014). *Atlante dei paesaggi riciclati*. Skira.
- Jakob, M. (2015). *Cette ville qui nous regarde de la promenade plantée au High Line Park*. Éditions B2.
- Jesty, J. (2017). Assessing Art Projects Aimed at Revitalization: The Case of the Koganechō Bazaar. *Field*, 8(2). <https://field-journal.com/editorial/assessing-art-projects-aimed-at-revitalization-the-case-of-the-koganecho-bazaar>
- Liotta, S.-J. A. (2013). Architettura reincarnata. *Domus* 969, 5. [https://www.domusweb.it/it/architettura/2013/06/26/architettura\\_reincarnata.html](https://www.domusweb.it/it/architettura/2013/06/26/architettura_reincarnata.html)
- Marron, C., & Gili, O. (2013). *City parks: public places, private thoughts*. Harper.
- Mitchell, J. (2011). Koganecho transformed: from sleaze to teas. *The Japan Times*, 24, 3. <https://www.japantimes.co.jp/life/2011/03/24/lifestyle/koganecho-transformed-from-sleaze-to-teas/>
- Morenas, L. (2014). A Critique of the High Line: Landscape Urbanism and the Global South. In A. Duany & E. Talen, (Eds.). *Landscape Urbanism and its Discontents Dissimulating the Sustainable City* (293-304). New Society Publishers
- Scarton, D., & Simon, L. (2002). *Un espace vert linéaire dans Paris: la perception de la Promenade Plantée Bastille-bois de Vincennes: maîtrise de géographie*. S. l.: s. n.
- Tesoriere, Z. (2010). Recuperare l'infrastruttura. l'High Line di New York, 1929- 2009. *Agathón*, 2, 17–22.





## References

- David, J., & Hammond, R. (2013). *High Line: the inside story of New York City's park in the sky*. Farrar, Straus, and Giroux.
- Davis, J. (2009). Urban catalysts in theory and practice. *Architectural Research Quarterly*, 13(3-4), 295–306. <https://doi.org/10.1017/S135913551000014X>
- Dumont, M. (2010). La mondializzazione dell'urbano. In Lévy, J., (ed.), *Inventare il mondo. Una geografia della mondializzazione* (pp. 134-164). Bruno Mondadori.
- Encore, H. (2018). L'urgence d'espérer/hope. Why we need it now. In E, Heureux, (Ed.), *Lieux Infinis. Construire des bâtiments ou des lieux/Infinite Places. Constructing buildings or places?* (pp. 13-23). Éditions B42
- Huebner, J. (2019). High Line in New York – An Unusual Park in the Centre of Manhattan. *IOP Conference Series: Materials Science and Engineering*, 471, 092085. <https://doi.org/10.1088/1757-899x/471/9/092085>
- Urban Catalyst. (n.d.). Research. <http://www.urbancatalyst.net/forschung.php?lang=en>
- Wong, L. (2017). *Adaptive reuse: extending the lives of buildings*. Basel: Birkhäuser
- Zambelli, M., & Pessoa Alves, H. (2012). *La High Line di New York. Un parco nel cielo*. Mimesis

## Onomastic Index

### A

Armstrong, Leah 168, 177

### B

Baron, Mauricio 153, 157

Basu, Radha 171, 176

Bauman, Zygmunt 58, 147

Benavente, José Miguel 263-264

Bermejo, Roberto 67

Bhaduri, Saradindu 177

Bound, Kirsten 171-172

Breznitz, Shiri 262, 264, 270

### C

Colombia 26-31, 50, 52, 59, 64-65,  
67-69, 112, 114-115, 128, 133,  
152-154, 159, 180, 196

### D

De Garrido, Luis 65, 68, 70-71, 75

### F

Fligstein, Neil 152, 154

Florencia, Colombia 152, 154-157

### G

Gehl, Jan 53-54, 56-58

Granada, Colombia 152, 154-155

### H

Habraken, John 106-107

Heidegger, Martin 142, 146-147

### I

Italy 88

### J

Jacobs, Jane 52-53, 57-58

### K

Krucken, Lia 229-230

### L

Lamo, Carolina María

LeGrand, Catherine 153, 157

Leroi-Gourhan 141-142

Loos, Adolf 105

### M

Mestre, Rossana 263, 265

Müller, Kathrin 262-264

### N

Nariño, Colombia (place) 119, 122,  
152-156,

Naviglio, Grande 83, 94-96

New York 40-41, 46, 133



**P**

Palmira, Colombia 50, 52-57, 59, 128,  
133-135

Paris, France 42-43

Parnell, Matthew 183-184, 186, 189

**R**

Radjou, Navi 170-171, 175

Richani, Nazih 153, 156-159

**S**

Sampson, Robert 53, 57

Saronno (places) 82, 84, 88-90

Sunley, Peter 173, 176

**T**

Tung, Vincent 263, 265, 270

**V**

Valle del Cauca, Colombia 18, 265,  
280

Villoresi Canal 83, 88, 94-96

Virilio, Paul 53, 58

**Y**

Yokohama, Japan 43, 45-46

# Design & Territory: Emergencies and Conflicts

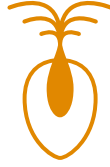
Is part of the  
**Colección Pacífico**

Designed and programmed at the  
Editorial Universidad Nacional de  
Colombia.

Its composition used characters: Amerigo  
Md BT 11/13 points.

Format: 16.5 x 24 centimeters.





**D**esign and Territory compiles different approaches related to the appropriation of design by communities, their identity, and their affectivity with the environment. Design is subject and action; it works from several disciplines in configuring spaces, objects, systems, communication, and strategies. The territory promotes dynamics that constitute the interaction systems of people and communities.

The interrelations between design and territory allow its study from multiple perspectives. The interaction between people and objects, images and spaces, shape multiple realities in the territory, where the local, the regional, and the global overlap and interrelate, giving rise to different forms of perception and valuation of experiences. The text compiles 17 approaches/interpretations of this relationship, channeled from inter-institutional collaboration and academic networks; these approaches focus on diverse contexts, moments, and geographies, with visions from the periphery and the center, presenting courageous and sensitive interpretations of the territories explored; and are organized in four parts.