



Francesca Vanelli

Nationality: Italian **Date of birth:** 25/06/1991 **Phone number:** (+39) 3496856030

Email address: francesca@vanelli.it

LinkedIn: <https://www.linkedin.com/in/francesca-vanelli-640b4342/>

Website: <https://francescavanelli.wixsite.com/my-site>

Home: Via Padova 157, 20158 Milano (Italy)

PROFILE

Profile

Francesca is an Architect, Urban Planner, and Land Specialist. She is a Dual PhD Candidate under the REDI program, in cotutelle with Politecnico di Milano (Italy) and RMIT (Australia).

Her research currently focuses on **Fluid governance: a System Approach to Flood Adaptation**. She is working on the topic of flood risk management and risk governance in Italy and Australia, employing multi-criteria analysis and participatory methods with local communities and authorities. Her thematic interests include land and natural resources management, (peri) urban governance for adaptation, social cohesion, and disasters and conflict risk management. Her past working experience cut across architecture and planning, research and development projects.

She graduated cum laude from the MSc. in Urban Management and Development at IHS, Erasmus University, Rotterdam (NL) in 2019, specialising in Urban Land Governance. Here, she completed a thesis on the land titling policy in Tirana, Albania, and its social impact on informal settlers. In 2016, she obtained an MS. in Architecture at the University of Ferrara (IT), with an awarded research on the climate-sensitive regeneration of the seafront of Havana, Cuba, focusing on climate resilience, natural-based solutions and land use planning for redevelopment.

WORK EXPERIENCE

Marie Skłodowska-Curie fellow under the REDI Program

Politecnico di Milano [01/11/2022 – Current]

City: Milan | **Country:** Italy

Dual PhD Candidate under the REDI program, in cotutelle with Politecnico di Milano (Italy) and RMIT (Australia)
Marie Curie Fellow

Research Topic:

Fluid governance: a System Approach to Flood Adaptation.

The research grant is titled "Housing and settlement design and governance strategies for climate change adaptation and mitigation in fragile settings". For this position, the partners are the Department of Architecture, Built Environment and Construction Engineering (DABCE) of the Politecnico di Milano (POLIMI) in Italy (ITA) as the host university in Cotutelle with the Department of Architecture and Urban Design at RMIT, and the CMCC (Euro-Mediterranean Centre for Climate Change) as the industrial partner.

REDI is co-funded by the European Union's Horizon 2020 research and innovation program under the Marie Skłodowska-Curie grant agreement N° 101034328.

Abstract:

Flooding poses significant challenges, particularly in peri-urban areas where development pressures, weak governance, and environmental fragility intersect. Current flood management practices, often siloed and focused on efficiency, fail to capture the complexity and synergies between different scales of intervention and the contribution of private adaptation actions. This research explores a system approach to flood adaptation in response to climate change in the built environment, focusing on Fluid Governance to flood adaptation as a practice-in-the-making. The research reflects on how flood design actions can be strategized through a collaborative and multidisciplinary decision-making process that enables to identify the most system-oriented design scenarios; it then tests public and private adaptive design scenarios across geographical scales in two specific case studies; and reflects on how local agents and designers contribute to flood adaptation across different projects. By framing floods as both natural and socially constructed phenomena, it promotes collective governance to prevent maladaptation.

Dissemination activities:

- Poster presentation and Lighting Talk at the Marie Curie Alumni Association Conference, Milan, 14-16 March 2024
- Lecture at Lombardy Region, DG Difesa del Suolo, on global case studies for Flood Risk Management 27/06/24
- 'North Sea Rising' book launch, ViPer Gallery, Prague, 25/06/24
- Vanelli, Lavagna, Minifie, 'A distributed approach to Flood risk Management through Participation: results from a literature review', NMP conference proceeding,, 2024.
- Vanelli, Lavagna, Minifie, 'Valuation criteria for a system approach to flood risk management: stakeholders' perspectives', *Techne*, vol. 28, 2024.
- Vanelli, Lavagna, Minifie, 'Flood management in the built environment: the micro-scale contribution to a distributed strategy, Next Built conference proceeding, 2024.
- Editor and author, with Nabi Agzamov (REDI program) of the book 'North Sea Rising'
- Conference and Proceeding on A systemic approach to distributed flood adaptation: flood risk management and governance across case studies to the UPhD Green Conference 2023
- Conference and poster Presentation at the ECCA Conference 2023: A systemic approach to micro-scale flood adaptation: opportunities and challenges in peri-urban areas.

Research assistant in university

Institute for Housing and Urban Development studies (IHS), Erasmus University, Rotterdam [16/02/2020 – 31/10/2022]

City: Rotterdam | **Country:** Netherlands

Urban Land Governance Academic Assistant at Institute for Housing and Urban Development Studies (IHS), Rotterdam, the Netherlands.

- Academic courses: i) *Urban Land Governance for Sustainable Development*, ii) *Urban Governance, Policy and Public-Private Partnership*, iii) *Research Workshop*, iv) *Urban Data Analysis with STATA*, v) *Transition to Land-Based Financing*, including the content development, the design and implementation of hybrid and online workshops, communication, tutoring and supporting lectures on land tenure, natural resources management, case study research strategy, quantitative research methodology.
- Projects: *Study on positioning toward LVC and provision of data for the global compendium in selected countries*, for GLZ, Lincoln Institute and OECD (January-June 2021); *H2020 [Smart Control of the Climate Resilience in European Coastal Cities \(SCORE\)](#)* project, with 28 partners, four years.
- Proposal writing and support of awarded tailor-made training in Rwanda, Uganda (10/21), Sudan (12/21), related to land governance, food security, natural-based solutions
- Supporting the coordination of the *IHS Financing Resilience through Land Value Capture Conference* (9th of July 2021, 300+ participants)
- Budgeting and scheduling
- Assistance in executing projects, including content contribution, data collection and analysis, meeting minutes, proposal writing, literature review and case study development
- Published research

Architect

Freelancer [31/03/2018 – 31/10/2022]

- Supported the writing of project proposals and technical reports
- Carried out the design of data collection and sampling strategies
- Contributed to drafting, editing, and fact-checking reports

- Carried out peer-reviews of scientific papers
- Developed technical documents, reports, graphic design with research and references compilation

Project assistant

Shelter Centre [30/09/2019 – 30/01/2020]

City: remote

Concept Development Project Assistant at Shelter Centre, Geneva, Switzerland

- Contributed to developing an innovative project funding proposal on *Post-Conflict Engineering* involving desk research and project management
- Developed familiarity with ECHO funding proposal guidance and logical framework
- Supported Shelter Centre Library communication team
- Supported PCE by project-leading five interns for three months and project coordination

Intern

Nauta Architecture and Research [14/09/2016 – 14/02/2017]

City: Rotterdam

- Coordinated workflow and meetings with clients and partners in the Netherlands, Italy, and China
- Supported a team for first and second competition phases
- Drafted meeting minutes and technical reports
- Developed durable solutions for mobility and sustainable development
- Developed technical documents in 2D, plans, 3D

Architectural planner

UNLAB [14/03/2017 – 31/07/2018]

City: Rotterdam | Country: Netherlands

Junior and Trainee Architect, Urban Designer at UNLAB (NL)

- Coordinated workflow and meetings with local authorities, clients, and colleagues in the Netherlands, Italy and Albania
- Supported three interns for technical drawing production for nine months
- Supported financial budgeting plans
- Drafted meeting minutes and technical reports
- Carried out site inspections and assessments in coordination with partners and local authorities
- Developed durable solutions for mobility and community participation strategy
- Developed technical documents in 2D, plans, urban data information, graphic design and layout with research and references compilation following technical guidelines, 2D and 3D design
- Drafter preparatory research, report, and concept development at Wave Workshop at IUAV

EDUCATION AND TRAINING

Master in Urban Management and Development

IHS, Institute for Housing and Urban Development Studies [30/09/2018 – 20/09/2019]

City: Rotterdam | Country: Netherlands | Final grade: 8,7, CUM LAUDE

Master with Research component.

Specialization in Urban Land Governance - **CUM LAUDE**

Thesis:

Social effect of land titling: the link between private property and social cohesion in the case of Greater Tirana, Albania.

Supervisor: Geoffrey Payne (GPA)

Presentation of the final work in 3 international conferences.

Laura Magistrale in Architettura

University of Ferrara [14/09/2010 – 19/03/2016]

Country: Italy | **Field(s) of study:** Engineering, manufacturing and construction: • Architecture and town planning
| **Final grade:** 109/110 | **Thesis:** Habanamar, from the city to the sea; path for the recovery of the Malecón, Havana,.

Architecture Department, University of Ferrara (UNIFE), Italy, Exchange program at Hochschule Für Technik (HFT), Stuttgart, Germany

Specialization in urban planning - Grade 109/110

Admission to Practice - September 2016

Thesis Research Program (08/2015-11/2015) -Awarded

Instituto Superior Politecnico (CUJAE), Havana, Cuba - Scholarship Atlante for fieldwork

Thesis: *Habanamar, from the city to the sea; path for the recovery of the Malecón* Supervisors: Romeo Farinella, Laura Gabrielli, Sara Maldina, Kiovet Sanchez Alvarez. Publication in 2 magazines and honorable mention to urban planning competition.

Diploma in Environmental Mainstreaming Techniques.

Volontariato Internazionale per lo Sviluppo, University of Trento [31/03/2021 – 29/07/2021]

Field(s) of study: Natural sciences, mathematics and statistics: • Environmental sciences

ENVIRONMENT AND CLIMATE CHANGE IN INTERNATIONAL COOPERATION: Sustainable Development Projects with Environmental Mainstreaming Techniques Advanced Course. 4 months online course with participants working in cooperation and development. Participation in lectures, workshops, take-home exercises, and organization of a Closing Conference 'The Pandemic of Plastic'.

LANGUAGE SKILLS

Mother tongue(s): Italian

Other language(s):

Engl

LISTENING C2 READING C2 WRITING C2

SPOKEN PRODUCTION C2 SPOKEN INTERACTION C2

Spanish

LISTENING B1 READING B1 WRITING A1

SPOKEN PRODUCTION A2 SPOKEN INTERACTION A2

Dutch

LISTENING A1 READING A2 WRITING A1

SPOKEN PRODUCTION A1 SPOKEN INTERACTION A1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

Microsoft Office / Microsoft Excel / Microsoft Powerpoint / Outlook / Microsoft Word / LinkedIn / Adobe Suite (Adobe Photoshop, Adobe Illustrator, Adobe Lightroom, Adobe InDesign) / Wordpress, SEO, Analytics / WIX Platform / IBM Statistical Package for the Social Sciences (SPSS) - Utilizador Independente / basic STATA use / Auto CAD 2010 / SketchUp basic user / CINEMA 4D / ARCHICAD / Geographical Informational Systems (GIS)

PUBLICATIONS

[2024]

Evaluation criteria for a systemic approach to flood risk management: stakeholders' perspectives

Flood risk management authorities rely on structural engineering measures centralised at the spatial and governance levels. These are mainly evaluated based on damage reduction without considering social, economic and environmental criteria. The research proposes an evaluative and procedural methodology to support the choice of spatially distributed measures. After illustrating the research project and the applied methodology, the paper

focuses on the first methodological step, which involves identifying multi-scalar and multidisciplinary evaluative criteria through a systematic literature review and interviews. The paper concludes by presenting the criteria, reflecting on the topic and the subsequent developments of the research.

Vanelli, F., Lavagna, M., & Minifie, P. (2024). Evaluation criteria for a systemic approach to flood risk management: stakeholders' perspectives. *TECHNE - Journal of Technology for Architecture and Environment*, (28)

[2024]

Flood management in the built environment: the micro-scale contribution to a distributed strategy

The built environment offers an opportunity to implement Flood Risk Management measures by spatially distributing them as a complementary alternative to large-scale protection schemes. Specifically, micro-scale solutions focus on buildings, open spaces, users, and small infrastructure, addressing various flood management strategies with different performance indicators. These measures encompass, for instance, private precautionary measures like floodproofing or elevation, and nature-based solutions. However, their adoption faces technology, economics, and social challenges. To effectively reduce flood risk and increase the built environment's resilience to floods, a systemic approach is necessary, evaluating and jointly implementing diverse measures across the built environment. Drawing from a systematic literature review and expert interviews, this study explores micro-scale Flood Risk Management measures within the built environment, examining their barriers and drivers. Additionally, it introduces an atlas of multi-strategy measures, qualitatively comparing their performance. The paper concludes by emphasizing the need for a holistic perspective on flood adaptation and highlights opportunities to enhance building-level adaptation actions through collaboration with various stakeholders.

Francesca Vanelli et al 2024 IOP Conf. Ser.: Earth Environ. Sci. 1402 012012

[2024]

A Distributed Approach to Flood Risk Management Through Participation: Results from a Literature Review

With the increasing occurrence and strength of disasters, adaptation to flooding in the built environment is articulated into different strategies and measures to manage the risk and increase local adaptation capacity. Nevertheless, the high reliance on spatially centralized and large-scale engineering measures is linked to a top-down decision-making and implementation approach. Instead, participatory methods may reduce conflicts and increase acceptance of measures. Moreover, the engagement of private stakeholders supports the distribution of measures in the built environment, including private assets; this generates a potential to decrease vulnerability to flood, which can be considered in new construction standards and urban regeneration processes. Building on ongoing research on a system approach to distributed flood adaptation, this contribution investigates the state-of-the-art of participation in flood risk management through a literature review. It produces conceptual clusters that result in recommendations for the following research steps.

Vanelli, F., Lavagna, M., Minifie, P. (2024). A Distributed Approach to Flood Risk Management Through Participation: Results from a Literature Review. In: Calabrò, F., Madureira, L., Morabito, F.C., Piñeira Mantiñán, M.J. (eds) NMP 2024, Springer.

[2022]

Territorial peace: land governance and sustainable peacebuilding

Vanelli, Francesca, and Daniela Ochoa Peralta. 'Territorial Peace: Land Governance and Sustainable Peacebuilding'. *International Journal of Urban Sustainable Development* 14, no. 1 (31 December 2022): 368–87. <https://doi.org/10.1080/19463138.2022.2054814>.

[2021]

The Emergence of Urban Community Resilience Initiatives During the COVID-19 Pandemic: An International Exploratory Study

Fransen, J., Ochoa Peralta, D., Vanelli, F., Edelenbos, J., and Calzada Olvera, B. "The Emergence of Urban Community Resilience Initiatives During the COVID-19 Pandemic: An International Exploratory Study." *The European Journal of Development Research*, January 12, 2021. <https://doi.org/10.1057/s41287-020-00348-y>.

[2020]

Transboundary Water Management in the Western Balkans: Challenges of the Land-Water Nexus in the Drin River Basin."

Vanelli, F., Dyca, B., and Rabé, P. "Transboundary Water Management in the Western Balkans: Challenges of the Land-Water Nexus in the Drin River Basin." *Annual Review of Territorial Governance in the Western Balkans*, no. 2 (December 23, 2020): 118–39. <https://doi.org/10.32034/CP-TGWBAR-I02-08>

The non-normativity of public and private property

Vanelli, F., 2019. The non-normativity of public and private property. Contribution for the Tirana Design Week, Polis University, 2019. *Foreseen Uncertainty: Design and Non-Normativity*,

Vanelli, F., 2019. The non-normativity of public and private property. Contribution for the Tirana

[2016]

Habanamar, from the city to the sea; path for the recovery of the Malecón

Pellizzola, C., Vanelli, F., 2016. Habanamar, from the city to the sea; path for the recovery of the Malecón. Contribute in: R. Farinella, A. Massarente, 2016. *Habana baila. Regeneration perspectives of a city on the move*, Paesaggio Urbano, Maggioli Editore.

[2019]

Social effect of land titling: the link between private property and social cohesion in the case of Greater Tirana, Albania

Vanelli, F., 2019. Social effect of land titling: the link between private property and social cohesion in the case of Greater Tirana, Albania. Contribution for the IFAU 2019 Conference, Modernization & Globalization, Faculty of Architecture and Urbanism Polytechnic University of Tirana.

COMMUNICATION AND INTERPERSONAL SKILLS

Skills

Working in international contexts for almost 10 years, I developed strong networking, diplomacy, communication and organizational skills. I conducted as project leader, team member or students design and research projects in Italy, Netherlands, Spain, Turkey, Albania, Cuba, Australia, Rwanda, Sudan, and India. I support educational courses and training through interactive approaches, write project proposals and scientific papers, and act as a reviewer. I conduct quantitative (SPSS, STATA) analysis, basic spatial analysis (GIS), research using co-creation and participatory tools.

PROJECTS

[05/2023 – Current]

RE- FLOAT Resilience of Flooded Territories in Emilia-Romagna

The Emilia-Romagna Observatory, by Politecnico di Milano, aims to open a multi-disciplinary and multi-scalar investigation into the catastrophic events in the region in May 2023. It offers a range of technical-scientific and social skills to contribute at different levels, from addressing short-term challenges to long-term planning, outlining a

collaborative path with local actors and communities. Activities are piloted in one of the most affected municipalities, Modigliana.

Link: <https://www.dabc.polimi.it/ricerca/osservatori/#15>

[01/07/2021 – 30/09/2022]

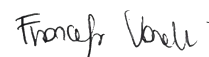
Smart control of the climate resilience in European coastal cities (SCORE)

European coastal cities must urgently address the intensification of extreme weather events, coastal erosion, and sea-level rise. To tackle these challenges, SCORE outlines a comprehensive strategy developed via a network of 10 coastal city 'living labs' (CCLs) addressing water and climate-related hazards. The strategy enhances coastal city climate resilience through an Ecosystem-Based Approach (EBA), smart technologies, and hybrid Nature-Based Solutions (NBSs) while facilitating financial sustainability.

I participated in the inception of the project as a team member of IHS.

Link: <https://score-eu-project.eu/>

Sincerely,



Miln, 29/01/2025

Francesca Vanelli