• Paper / Proposal Title:
Concrete perceptual qualities: a changing paradigm?

• Author(s) Name:
Tatjana Leblanc, Tara Harb

• University or Company Affiliation:
1Professor & Director of School of Design, University of Montreal, Montreal, Canada
2Masters in Design and Complexity student, University of Montreal, Montreal, Canada

• Abstract:
Concrete is one of the most common building materials that dominates many fields including architecture, landscape and urban design, interior design, and more recently industrial design. And yet, despite concrete’s economic accessibility, its physical deterioration and ecological footprint seem to affect its reputation. Its quality perception is indeed facing a dualism, opposing its technoeconomic advantages with its inevitable aesthetic degradation.

From a sustainability perspective, modern society’s fascination with perfection has led to unsustainable habits, filling landfills with prematurely discarded concrete artefacts. In fact, people tend to reject products that show defects, opting for their replacement rather than their repair. However, in some cultures, wear and tear is seen as a natural sign of aging and a significant part of an object’s history; stains, cracks and imperfections add value and meaning, increasing product attachment. Designer are thus naturally drawn to philosophies that promote sustainable practices and lifestyles. Quality perception of the built environment is often confronted between the old and the new, all while bringing forward innovative, sensitive and adaptable solutions that address urban challenges. New technologies have been developed in recent years in an effort to improve the physical properties, ecological performances and quality perceptions of concrete.
Our research is therefore looking at how these emerging materials, techniques and applications influence perception by comparing their perceptual features through a product and material semantics framework. Empirical observations help interpret findings related to aestheticism, material deterioration and sustainable design approaches. The study examines the shift in paradigm from “premature deterioration” towards “embracing imperfection”.

• Author(s) Biography

Tatjana Leblanc
1Professor & Director of School of Design, University of Montreal, Montreal, Canada
Tatjana Leblanc has graduate in industrial design from the Kunsthochschule Berlin-Weissensee (Germany) and The Ohio State University (USA) and pursued afterwards a professional career, working for several internationally renowned design firms in the USA and in France. After fifteen years of professional practice she developed an expertise in the fields of consumer electronics design, office furniture design, urban furniture design, user interface design, medical and industrial equipment design. As a designer, project manager and director, she contributed to the development of many innovative products design strategies for many of her clients. After an accomplished professional career, she joined the academic community where she works as a professor and Chair of the School of Design at the University of Montreal (Canada), teaching industrial design, semiotics, and research-driven design approaches. She founded the GRAD research lab, where she and her team work on government-funded research program for the urban environment and technology-driven design innovation. Several award-winning projects that she directed over the last years have been studying challenges of urban development and elaborating innovative alternatives for urban equipment, urban furniture and urban infrastructures. Many of them received prestigious recognitions, including four Red Dot International Design Awards, of which three were honored as the “Best of the Best”.

Tara Harb
2Masters in Design and Complexity student, University of Montreal, Montreal, Canada
Tara Harb graduated with a bachelor’s degree in industrial design from the University of Montreal in 2017, after completing an award-winning thesis project, which proposes the use of an ecofriendly glass concrete material (UHPGC) for a system of modular floating concrete docks. The project Peninsula received several recognitions including the Red dot design award and the label “best of the best” in its category. Her work offers an outlook on urban infrastructures and highlights innovative materials and sustainable urban design practices. After graduating, Tara Harb worked for several years as a lead designer and project manager for an internationally renowned company that designs and produces urban water features, fountains, and water play installations. Currently, she is enrolled in the Design and Complexity research program as a master student,
which allows her to pursue her academic ambitions and participate in design research. Within the GRAD research lab, she contributes to the government-funded research by investigating the deterioration of materials used in the urban setting and how it affects perception. More specifically, she is focusing on the quality perception and uses of novel concrete composites and emerging manufacturing techniques, as well as their impact on design practices. As a design researcher, instructor and professional, she combines teaching, research and practice, which benefits her research in a significant way.