
Digital-Cultural Ecology and the Medium-Sized City

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Abstract Submission Form

- 1. Paper / Proposal Title:** The Digital Image as Topological Surface
- 2. Format:** Written paper
- 3. Author(s) Name:** Gavin Perin and Linda Matthews
- 4. Email contact details:** Gavin.Perin@uts.edu.au; Linda.Matthews@uts.edu.au
- 5. University or Company Affiliation:** The University of Technology, Sydney

6. Abstract (300 words):

The promotion of the city through its digital image opens an array of new digital techniques that extend the dominant procedural and discursive frameworks of current digital design practice. Like many other digital transformations, the use of digital production and dissemination technologies to represent the city profoundly alters our engagement with the world. The general unwillingness to examine the topological surface through the Image is odd given that the code underpinning parametrics, scripting and animation can be viewed as just another representational language mediating architectural form. The reintroduction of the Image as a topological condition instead unburdens digital discourse from its rhetorical problem with Meaning, and helps to transfer the issue of formal legitimacy away from the logics of formal novelty or performance. This new formal logic for the architectural surface calls for a critical awareness of the social and political work done by the architectural image, thus enabling the confrontation of the real promotional and surveillant jobs undertaken by these technologies. The current pervasive effect of these technologies, now present within even medium-sized urban space, presents an opportunity to undertake this confrontation at a different urban scale.

Using digital visual data captured from a range of medium-sized cities, the paper will examine these formal and discursive changes through formal tests and studies that derive topological form through the manipulation of the geometric and organizational protocols of the camera colour filter array and pixel scanning strategies. It will be argued that such processes function through a relational, topological interplay between image production, dissemination technologies and the architectural surface.

7. Author(s) Biography (200 words each):

Gavin Perin is a Lecturer in the Architecture program at the University of Technology, Sydney. Gavin has completed a Masters of Architecture Degree at Royal Melbourne Institute of Technology. This project employs a design-based research methodology to explore critically the issues associated with the generative agency of the figure in the making of architectural and urban form. He is currently enrolled in a Ph.D. exploring the formal consequences of digital design practices on architecture. Gavin's main area of academic interest is the role of representation in architecture and the generative and instrumental affect of the forms of representation on design practice and its artifacts. Gavin Perin is also co-director of the Locative Media Lab at UTS, which is an interdisciplinary research group engaged in theoretical and practice based research exploring the design potential of a range of digital representational tools and techniques.

Linda Matthews has recently completed a design-orientated PhD concerned with urban design methodologies that procedurally utilize the optical logics of digital surveillance systems. The aim of the research is not only to understand how these systems frame and re-present the city but to use these virtual spaces as a source of qualitative and quantitative information sets that can then be digitally reconfigured to generate architectural and urban form. Linda has won a number of significant academic awards including the prestigious Design Medal from NSW Chapter of the Royal Australian Institute of Architects and the University Medal from the University of Technology, Sydney. She also has a Master's Degree from the University of NSW.



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