

# V!RUS11

It's para-  
metriza-  
tion, baby!

revista do nomads.usp  
nomads.usp journal  
Issn 2175-974x | CC BY-NC  
vnomads@sc.usp.br

## It's parametrization, baby!

**Marcelo Tramontano,  
Maria Julia Martins,  
Gabriele Landim,  
Dyego Digiandomenico,  
Luciana Santos Roça**

**How to quote this text:** Tramontano, M.; Martins, M. J. S.; Landim, G.; Digiandomenico, D. and Roça, L. 2015. It's Parametrization, baby!. *V!RUS*, São Carlos, n. 11. [online] Available at: <<http://www.nomads.usp.br/virus/virus11/?sec=1&item=1&lang=en>>. [Accessed dd mm yyyy].

Marcelo Tramontano is Architect and Associate Professor in Architecture and Urbanism. He teaches and is a researcher at the Institute of Architecture and Urbanism (IAU-USP) of the University of Sao Paulo, Brazil. He directs the Nomads.usp, Center for Interactive Living Studies, publisher of *V!RUS* journal.

Maria Julia Martins is Pedagogue, MSc in Education, Knowledge, Language and Art and researcher at Nomads.usp. She investigates the field of contemporary arts body and its relationship with the urban public space.

Gabriele Landim is Architect and researcher at the Post-graduate Program of the Institute of Architecture and Urbanism of the University of Sao Paulo, Brazil. She is a voluntary researcher at Nomads.usp.

Dyego Digiandomenico is Architect and researcher at the Post-graduate Program of the Institute of Architecture and Urbanism of the University of Sao Paulo, Brazil. He is a voluntary researcher at Nomads.usp.

Luciana Santos Roça holds a BA degree in Audiovisual and a Master degree in Architecture and Urbanism. She is a researcher at Nomads.usp, studying the use of sound interventions in urban spaces, seeking to integrate Sound Studies and Architecture disciplinary fields.

# V!RUS 11

It's parametrization,  
baby!

revista do nomads.usp | nomads.usp journal  
issn 2175-974x | CC BY-NC  
www.nomads.usp.br/virus | vnomads@sc.usp.br

The eleventh issue of V!RUS journal proposes an exercise of broadening the concept of parametrization from different theoretical and methodological approaches in different areas of knowledge. In order to implement this debate, we are pleased to present fifteen texts, all in Portuguese and English: an interview, nine articles selected among the submitted ones, one of them presented in the Project section, four free texts in the Carpet section, and one article written by Nomads.usp researchers. We are grateful to all thirty authors of the contributions that compose this edition, resulting from research carried out in ten countries institutions, for participating so generously of the dialogue proposed by Nomads.usp through its journal.

To discuss the concept of parametrization, we received the philosopher Ruy Sardinha Lopes for a conversation with Marcelo Tramontano, the V!RUS journal editor-in-chief. To discuss the concept of parameterization, we received the philosopher Ruy Sardinha Lopes for a conversation with Marcelo Tramontano, chief editor of V!RUS. The interview **Parametrization as mediation, or man and his fate** offers a historical perspective from ancient Greece to the present day, showing the movements of human thought facing the dilemma between control and chance, and the parameterization as perhaps an eternal human quest for mathematizing nature and the world to intervene in it.

Four texts propose theoretical discussions and criticism on issues related to parameterization. In **Data aesthetics and the role of narrative in generative devices**, Luiz Gustavo Zanotello discusses different narrative aspects inherent to generative devices, and explores their role as evidence of ontological speculation of these artifacts, from the concepts of Bruno Latour's actor-network theory and of Graham Harman's ontology oriented to objects; in **The Parametricism manifest: prospects about a "new global style" for architectural design and urban planning**, Rodrigo Scheeren and Daniel Costa Lima propose a reflection that seeks to explain and deepen the theoretical discourse of parametricism, its proposals, concepts and techniques in addition to its position among others manifests in history; in **Between clichés and intentions: reflections on the creative process in digital environment**, Aura Celeste Cunha and Ney Dantas seek to sketch a parallel between analogue and digital, in art and architecture, by a critical reflection about digital environment in the creation process, and potential research methods on creative processes. Finally, in **How cybernetic is parametrization?**, the Nomads.usp researchers Anja Pratschke and Mariah Di Stasi expose theories situated in the parametric design background, as well as necessary principles, advantages and fields of knowledge to dominate ways of doing or to design by code.

In the Architecture and Design areas, three texts explore the subject of design teaching and academic research from a parametric approach, its challenges and contributions: Henriette Bier's **Parametric design strategies: robotic building in academic architectural research and education** focuses the Dutch context, **Reflections on the introduction of parametric thinking into design education**, by Neliza Romcy, Marcelo Tinoco and Daniel Cardoso, considers northeastern Brazilian context, and **Using Rich-Prospect Browsing for design scenarios conversation**, by Celso Scaletsky, Stan Ruecker and William Meyer presents an experience in southern Brazil. As a common plea, these texts identify the need to build new methods to teach and develop research in architecture and design by parametric processes.

In the urban scale, Carlos Vanegas presents the text **Inverse design of urban procedural models**, in which he discusses the procedural modeling of urban as a counterpoint to conventional modeling techniques of streets, plots, buildings and facades using the



parametrization to extend the possibilities to anticipate events and to conceive urban planning interventions.

At the intersection of urban planning, parametrization, audiovisual and society, the text **Mapping the urban commons: a parametrical and audiovisual method** presents a project which brings together researchers from different countries around the mapping of urban commons. The text was written by Pablo de Soto (Rio de Janeiro, Brazil), Daphne Dragona and Demitri Delinikolas (Athens, Greece), Aslihan Senel (Istanbul, Turkey) and José Pérez de Lama (Sevilla, Spain).

Within musical research, the text **What is cognitive parametric music?**, by Fernando Egido, discusses how parametrization changes compositional processes and ways to perceive and understand sound phenomena and, in particular, musical ones.

Pointing out challenges and perspectives in the field of digital manufacturing of biomaterials and human tissue cells, the text **Biomanufacturing and its strategies**, by Janaína Dernowsek, Rodrigo Rezende and Jorge Lopes da Silva, approaches 3D printing of virtual and physical models which incorporate biological concepts.

The use of parametrization in technical and constructive universe is approached in three articles, two out of them addressing specific issues: **Automating the rationalized masonry design**, by Levi Pinheiro, Daniel Cardoso and Alexandre Bertinio, and **Parametrization applied to building energy performance**, by Joyce Carlo. The authors argue that parametrization can provide a systemic view of both project and construction processes, resulting in greater efficiency. The text **Digital Techne**, by Santiago Albarracin, presents the parametrization usage modes aiming at the realization of architectural objects in some architectural offices from different countries.

We are also pleased to inform our readers that, from the next edition, the journal's frequency will return to semiannual, with the launch of V!RUS 12 scheduled for July 2016, and that of V!RUS 13 scheduled for December 2016. We wish you all good reading, good debate, good reflections.