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Extended Resume January 2011

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PROFILE

Architect, designer, programmer, organiser, teacher and researcher with an extensive experience in using digital media in creative practices - architecture, arts, design, creative coding, VJ-ing, media and sound design. I have specialised in modelling complex geometry, parametric modelling, scripting and creative coding. I combine this with an interest in physical, material model making, prototyping and construction. Bridging the digital and the physical through digital fabrication (3D printing, Laser cutting, Aqua-jet, CNC milling), interaction and media design.

PROFESSIONAL EXPERIENCE

2010 - ... : co-founder of the Mixed Media Lab, Sint-Lucas School of Architecture

MMLAB is a research lab at Sint-Lucas School of Architecture Ghent. The MMLAB is a permanently under construction free-space, a platform that brings together people from different fields, a laboratory that engages with creative potential of media and technology in architecture. MMLAB houses a digital fabrication and physical modelling workshop and an audiovisual studio and office spaces.

2009 - ... : coordinator Mixed Media Department, Sint-Lucas School of Architecture

Since August 2009 I coordinate the Masters programme of the Mixed Media Department, which employs 25 teachers and researchers with a background in architecture, visual arts and media. The main focus was setting up a new curriculum for 2010-2011.

2009 - ... : co-founder of fabriek.org, a digital modelling and fabrication agency

Fabriek was set-up by an interdisciplinary team consisting of an architect, a product designer, interior designer, and engineer architect. Fabriek provides modelling and digital fabrication services for artists, architects and designers.

2007 - ... : teacher and researcher, Sint-Lucas School of Architecture

I have been teaching media classes and design studios, and organising workshops and events, within and outside the Sint-Lucas School of Architecture. To name some:
what do maps want? // physical & digital modelling // superModels // 99H99m² // manifest // digital design and fabrication // conquest of space // 15 seconds //
Results of these are collected on www.mmblog.be

2006 - 2007: freelance designer for Wim Delvoye Art

For artist Wim Delvoye, I have designed and coordinated fabrication of several artworks, mainly for his gothic series. Advanced modelling and fabrication techniques were used in the production of these works (scripting, shape grammars, 3D printing, lasercutting, plasmacutting).

2006 -: registered architect with Orde van Architecten

2005 - 2006: intern-ship with Volt Architecten

2004 - 2005: intern-ship with Lefebure Architecten

2004 - 2007: co-founder of ccdc.architects with David Claus

I worked as intern and project architect for several architectural offices, mainly specialising in social housing and healthcare. I have completed a have designed and build a few buildings in my own name with ccdc.architecten (which has been renamed urbain architecten collectief).

RESEARCH EXPERIENCE

conferences & seminars

2010: Share && Tell, timelab, Ghent (Belgium)

"Share && Tell" is a creative coding symposium I have initiated and is hosted by timelab and dorkbot. Share && tell invites artists, designers, architects who write code as integral part of a creative practice to present their work and share source code.

2010: Dream Team Dinner, Design Vlaanderen Gallerie, Brussels (Belgium)

As part of the Toegepast: Fit to Boost, dream team dinners were organised bringing people around the table discussing a specific topic. I was invited for the session on innovation in digital design moderated by Liesbeth Huybrechts.

2009: Open Platform (Smart Geometry), TU Delft (Netherlands)

The SmartGeometry Group organized jointly with the Computation & Performance research group of the Faculty of Architecture Open Platform, a 3-day workshop at TU Delft University on the 27th-29th of November. I participated in the *open workshop* where users were invited to work on personal design projects on a chosen platform. I worked on implementing a NURBS sketch in processing.org.

2009: Design Modelling Symposium, Universität der Künste, Berlin (Germany)

The Design Modelling Symposium is an interdisciplinary platform of designers, developers and scientists of the disciplines architecture, design and engineering. Rather than the prospects of modelling complex geometries and structures, the main focus lies in new concepts and design strategies emerging from the application of new technologies. Another emphasis is the discussion of the role of analogue and digital models in the design and planning process as well as questions regarding realisation of complex geometries and construction systems.

2009: eCAADe – Computation: the New Realm of Architectural Design Istanbul Technical University (Turkey)

2009: Computational Toolmaking Seminar, Yildiz Technical University, Istanbul (Turkey)

This workshop, conducted by Onur Yüce Gün, focussed on hands-on design-exploration studies via computational tool making. Script, accepted as one of the emergent tools for design, is not necessarily easily applicable, yet very customizable and flexible. Attendees worked on individual designs in the advanced stages of the workshop. 3D models were produced with available rapid prototyping machinery.

2009: Communicating (By) Design, Sint-Lucas School of Architecture, Brussels (Belgium)

International conference that focuses on current doctoral research and fundamental discussion on design-based artistic research. Main themes were: Communicating Knowledge, Communicating Design and Communicating Processes.

2009: By Design For Design, Sint-Lucas School of Architecture, Brussels (Belgium)

By design for design explores the designerly dimension of research and the research dimension of design. It asks participants to present an artefact that demonstrates the research qualities of their creative practice.

2008: NODE08: Forum for Digital Arts, MESO, Frankfurt (Germany)

NODE08 is dedicated to the arts and digital media [...] The focus of NODE08 lies on workshops and lectures in which artists, designers, architects and technical minded share their knowledge.

2008: eCAADe – Architecture in Computero, Artesis Hogeschool Antwerpen (Belgium)

2008: Hybrid Spaces: How art creates networks and visualises hybrid space, Z33, Hasselt (Belgium)

space cowboys seminar, Z33, Hasselt Moderation: John Hopkins, speakers and guests: Armin Medosh, Anne Nigten, Jeanne van Heeswijk, Eric Kluitenberg, Kurt Vanhoutte, Peter Westenberg, Maja Kuzmanovic and Pieter Bogaert.

publications

2010: Parametric Design and Digital Fabrication: new Modes of Digital Design, in Kwintessens, 4e trimester, jaargang XIX, pp 46-52

Abstract: this article investigates new modes of digital design that open up through parametric design and digital fabrication. Instead of focusing on stylistic implications – parametricism as style – it stresses the important shift in focus from object to system and the possible new design scenarios this generates.

2010: [Mixed [Media [Lab], in MMMAG01, Sint-Lucas School of Architecture, Brussels, pp 62-69

Abstract: This article describes the starting up of the Mixed Media Lab at the Sint-Lucas School of Architecture and outlined a further research agenda.

2009: *Projective Modelling: Shifting Media Spaces*, in Reflections 13 (Research Training Sessions), Sint-Lucas School of Architecture, Brussels (Belgium), 2009, pp 237-250

Abstract: Architecture is a mediated activity: while designing architects represent design ideas through other means – sketching, drawing, drafting, writing, modelling... Media used by designers are not neutral tools for representing design ideas. Mediation acknowledges the idea of the guilty medium: media extend possibilities of a design process but influence the design outcome. No design is mediation free. This paper investigates the mediated nature of a design process. Using the rich meaning of the notion of the model in architecture it argues for hybrid modelling process that incorporates digital and physical design media, and explores deliberate media shifts as important moments in advancing design ideas.

2009: *Models of / Models for Architecture: Physical and Digital Modelling in Early Design Stages*, Computation: The New Realm of Architectural Design [27th eCAADe Conference Proceedings], Istanbul (Turkey), pp. 781-786

Abstract: This paper questions whether physical and digital models can be seen as *models for* rather than *models of* architecture. Stressing the mediated nature of the design process, it questions the role models play in the early stage of architectural design. This research draws from an experimental digital & physical modelling workshop. The conclusion argues for a hybrid modelling process that incorporates both physical and digital modelling, and acknowledges the mediated nature of the design process.

2009: *Teaching Physical and Digital Modelling in Architecture*, Concepts Beyond Geometry, proceedings of the Design Modelling Symposium, Berlin (Germany) 2009, pp 99-105

Abstract: Developments in the fields of digital fabrication and measuring are blurring the divide between digital and physical modelling. Recently we have seen a renewed interest in physical model making both in academia and practice, in publications and exhibitions. This comes not coincidentally at a moment where the digital is going beyond the virtual and reaching out into the physical domain of fabrication and construction. This paper investigates the consequences of the shift towards a post-digital design methodology sketched above on teaching modelling within the architectural curriculum. Can physical model making be a way into modelling complex digital geometries? Does a hybrid modelling approach, that includes physical and digital form finding from the first design stages, help in developing a performative architecture?

2008: *Digital Bricolage: New Media and Architecture*, in Reflections 9 (Research Training Sessions), Sint-Lucas School of Architecture, Brussels (Belgium), 2009, pp 237-250

Abstract: Emerging technologies and the proliferation of digital media are having a profound impact on architectural practice: on the tools architects use to design, on the field in which architectural design takes place and on the subject matter of architectural design. Architects can learn and expand their toolbox by looking at other creative disciplines that are dealing with these technologies. This paper argues for a multidisciplinary approach to incorporating digital design media into architecture, stressing the importance of experiment, bricolage and the notion of play. Instead of trying to fully master the ever fluid digital design medium it explores modes of design that allow serendipity, the ability to be surprised by the medium we use to design.

EDUCATION

2007 – 2009: Research Training Sessions, Sint-Lucas School of Architecture

The Research Training Sessions (RTS) is a 2 year postgraduate research programme aimed at architects, designers and artists who intend to develop research on their creative practice.

2003 – 2004: Master in Architecture of Human Settlements, Katholieke Universiteit Leuven

Graduated with Cum Laude in the international programme Architecture of Human Settlements at KUL.

Final design project: 'Territories in Transition' dealing with intensifying local identities in suburban fringe of Bayamo (Cuba). Dissertation: 'Imagined Cities: Tourism, Colonialism and the Image of Fès (Morocco)'

2001 – 2003: Master in Architecture, Universiteit Gent

Final Project: 'Kortrijk Heide'

Thesis: 'The Image of the Wolkenbügel'

1998 – 2001: Bachelor in Architecture, Universiteit Gent

Final Project: 'Meulestede Noord'

SOFTWARE

CAD: Rhinoceros, AutoCad, Revit, 3DS MAX, VectorWorks, Cinema4D, Blender.

Parametric Modelling: Generative Components, Grasshopper, RhinoScript, MaxScript.

Creative coding: processing, eclipse, openFrameworks, vvvv, pure data, max/msp, arduino

Media: Photoshop, Illustrator, Indesign, Premeire, Ableton Live