What boundaries?
Of Imagination

Lars Hesselgren
Director Research PLP ARCHITECTURE
Visiting Professor
Chalmers
What we design

• Urbanism v Sprawl
How we design

• Complexity v Simplicity
How we build

• Sustainably v Exploitation
Transport
Pod 2 DoF Technology
The Crick Institute
IMAGINING THE FUTURE OF URBAN MOBILITY
WHAT IS AN IDEAL TRANSPORT SYSTEM?

LARS HESSELGREN
DIRECTOR RESEARCH

PLP/ARCHITECTURE
THE EVOLUTION OF (AUTO) MOBILITY

PLP ARCHITECTURE
THE EVOLUTION OF (AUTO) MOBILITY

HORSE & CART

PLP/ARCHITECTURE
THE EVOLUTION OF (AUTO) MOBILITY

STEAM TRAIN

HORSE & CART  CAR

PLP/ARCHITECTURE
THE EVOLUTION OF (AUTO) MOBILITY

STEAM TRAIN

TRAIN

HORSE & CART

CAR

ELECTRIC CAR

PLP/ARCHITECTURE
THE EVOLUTION OF (AUTO) MOBILITY

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PLP/ARCHITECTURE
CARTUBE

SAVES TIME
CONNECTS PEOPLE
GIVES FLEXIBILITY
SAVES TIME
CONNECTS PEOPLE
GIVES FLEXIBILITY
FASTER
CARTUBE

SAVES TIME
FASTER

CONNECTS PEOPLE
BETTER

GIVES FLEXIBILITY
“The Edge is part of my team; it proactively works with me”
Lightweight Conical Components for Rotational Parabolic Domes: Geometric Definition, Structural Behaviour, Optimisation, and Digital Fabrication

Roberto Narváez-Rodríguez and José Antonio Barrera-Vera

Advances in Architectural Geometry Conference

Geometry lies at the core of the architectural design process. It is omnipresent, from the initial form-finding stages, to novel manufacturing techniques, to the construction, and to post-occupancy monitoring. But the role of geometry in architecture and engineering is also continuously evolving. Geometry increasingly plays a role in modeling environments and processing sensing information. Modern geometric computing provides a variety of tools for the efficient design, analysis, and manufacturing of complex shapes. Besides descriptive geometry controlling form algorithmic processes play a crucial role in integrating disciplinary input. On the one hand this opens up new horizons for architecture. On the other hand, the architectural context also poses new problems to geometry. Around these problems the research area of architectural geometry has emerged. It is located at the common border of architecture with applied geometry, computational design, mathematics, and manufacturing.

Advances in Architectural Geometry (AAG) is a conference where both theoretical and practical work linked to new geometrical developments...