

Modern Art Scanning

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XXIII International FIG Congress
INTERGEO®
8-13 October 2006 • Munich, Germany



Cooperation Partners

- + Doerner Institut
- + Die neue Sammlung



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Documentation of Installation Art

- + Installations consist often by many objects
- + The objects expression is effected by their topological arrangement
- + Geodetic measurements serve as documentation of each objects position
- + Derived scaled plans allow later an almost authentically reconstruction of the installation



Pipilotti Rist, *Himalaya Goldstein's living room (1998)* in exhibition view



and in storage.



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Document Topology by Geodetic Methods



Fred Sandback, *Mikado*



Donald Judd, *Untitled Plywood Wallwork*



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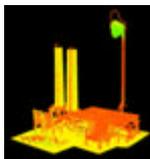
Documentation by Laserscanning



Mark Manders, *Silent Factory*

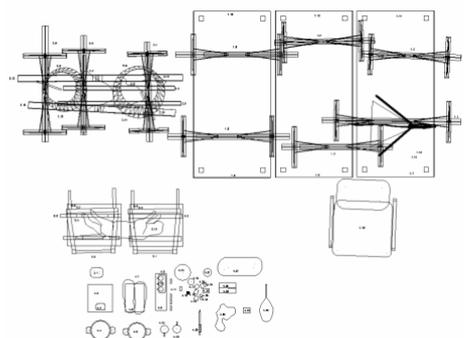


Thomas Hirschhorn, *Doppelgarage*



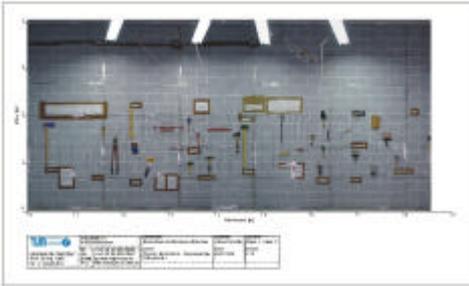
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2D-Plan generated from laserscans



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Documentation by Photogrammetry

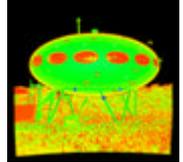


Revers Engineering of Modern Design

- + Detailed 3D Model of an exceptional habitation design was needed for documentation and for analysis done by the restorers
- + Futuro was scanned completely inside and outside in two days
- + A self-developed software tool classified surfaces of second order degree of pointclouds to reconstruct the geometry of Futuro's shapes

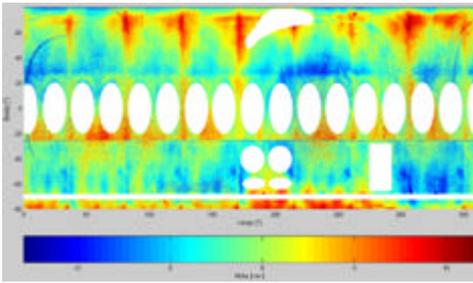


Scanning Futuro house from a lifting platform

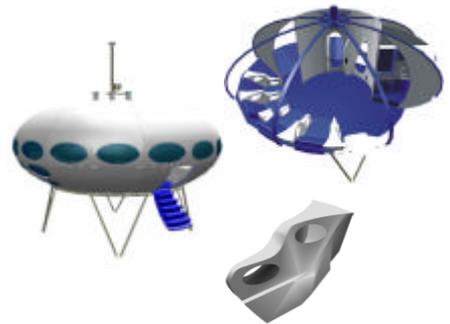


Deformation analysis of Futuros surface

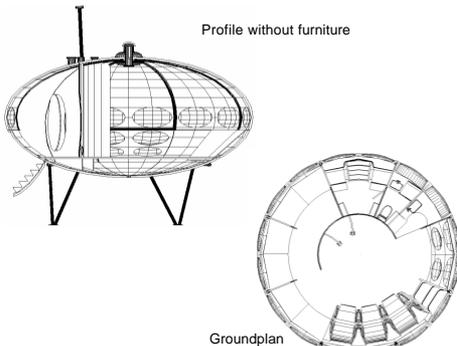
- + Ellipsoidal coordinates allow analysis by the ellipsoidal heights



3D Model of Futuro



Plans of Futuro



Prospect

- + Geometric data should be the base of an informationsystem for restorers which helps them by documenting damages on Futuro's surfaces
- + Documentation of the Futuro will be part of an exhibition shown in Paris next year



Questions ?

We would be pleased to welcome you
at our booth "Geodätisches Prüflabor":

INTERGEO Hall C1 Booth 1751



Chair of Geodesy
Prof. Dr.-Ing.
Wolfgang Wiesner