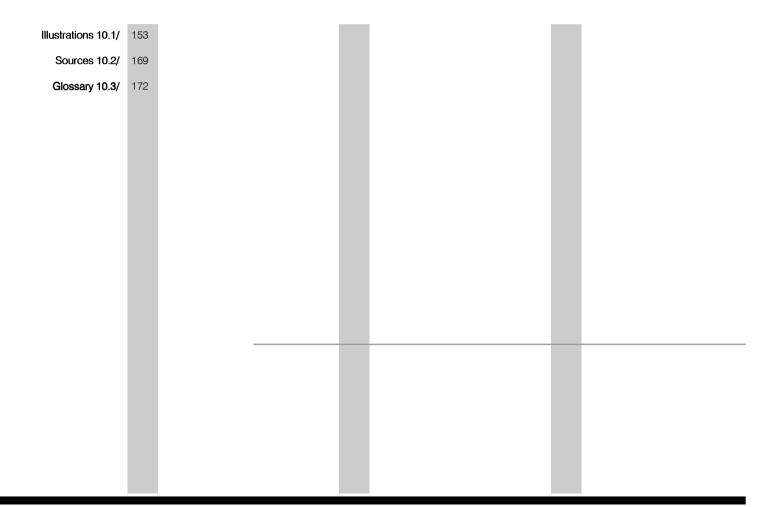
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ADDENDUM 10/ Sources 10.2/

Sources 10.2/

10.2/ Bacon, Edmund 1967. "Design of Cities", Thames & Hudson, London

10.2/ Ballim, Goolam 2005. "Economic Profile South Africa 2005", Standard Bank, Johannesburg

10.2/ Bohigas, O 1999. "Ten Points for an Urban Methodology", in Architectural Review, September, 1999

10.2./ City of Cape Town, "Municipal Spatial Development Framework", August 1999

10.2/ Conway + Roenisch 2005. "Understanding Architecture— An introduction to Architecture + Architectural History", Routledge, London

10.2/ Curl, James Stevens 1999. "A Dictionary of Architecture", Oxford University Press, Great Britain

10.2/ Damaz, P 1956. "Art in European architecture", New York, Reinhold

10.2/ Dewar, Dave and Uytenboogaardt, Roelof 1991. "South African Cities: A Manifest for Change", Cape Town: Urban Problems Research Unit, University of Cape Town, Cape Town

10.2/ Easterling, Keller. "The New Orgaman: Logistics as an Organising Principle of Contemporary Cities" in Graham, Stephen 2004. "Reader-Urban Reader Series", Routledge, London

10.2/ Fassler, J 1955. " Art in public buildings", SA. Architectureal Record, July + August

10.2/ Forty, Adrian 2000. "Words and Buildings- A Vocabulary of Modern Architecture", Thames & Hudson, London

10.2/ Frampton, Kennith 1995. "Studies in Tectonic Culture", MIT Press, England

10.2/ GA DOCUMENT 75. Oct 2003: Ada Editia. Tokvo. Japan

10.2/ GA DOCUMENT 86, July 2005; Ada Editia, Tokyo, Japan

10.2/ Gautrain Rapid Rail Link Document, Bombela Civil Works Joint Adventure, "Horizontal Plan + Longitudinal Profile km 600 000 to km 600 700", HHO Africa Infrastructure Engineers + Ingerop

10.2/ Giberrd, Jeremy 2004. "Design for Sustainability"

10.2/ Giberrd, Jeremy 2005. "CPD 711 SBAT Course Notes: University of Pretoria, 2005"

10.2/ Giedion, S, 1958. "Architecture you and me- The diary of development", Harvard University Press, Massachusetts, USA

10.2/ Graham, Stephen 2004. "Reader-Urban Reader Series", Routledge, London

10.2/ Greene, Herb, 1976. "Mind & Image- An Essay on Art & Architecture", University press of Kentucky, Kentucky

10.2/ Hartzog, Paul. 2004 "Cities Without Boarders- Digital Culture, what matters?" www.mindjack.com 08/11/2005

ADDENDUM 10/ Sources 10.2/

Sources 10.2/

10.2/ Herder, J. G von 1827. "Treatise on the Origin of Language", London

10.2/ Hillier, Bill 1984. "The Social Logic of Space", Cambridge University Press, Great Britain

10.2/ Hillier, Bill 1996. "Space is the Machine- A Configurational Theory of Architecture", Cambridge University
Press, Great Britain

10.2/ Hillier, Bill. "Designing for Context: the uses of 'space syntax' as an interactive design tool in urban developments", www.spacesyntax.org : 23/06/2006

10.2/ Lawson, Fred, 1981. "Conference, Convention and Exhibition Facilities- A Handbook of Planning, Design and Management", Architectural Press, London

10.2/ Mashall, S 2003. "The integration of art and architecture and its relevance in the new South Africa", UNISA, Academic Journals. [www.unisa.ac.za 20/10/2006]

10.2/ Mathur. V. K 2005. 'The Central Building Research Institute [CBRI]' in "Architecture and Architecture of a New World 2004: Vol. 7 Challenging Convention".

> 10.2/ Matthews, Geoff, 1991. "Museums and Art Galleries- A Design and Development Guide", Butterworth Architecture. Oxford

10.2/ Mohr, Philip, 1998. "Economic Indicators", Third Edition, University of South Africa, Pretoria

10.2/ Norberg-Schulz, Christian. 1980. "Genius Loci - Spirit of Place: Towards a Phenomenology of Architecture", Academy Editions, London

> 10.2/ Nuttall, J (ed) 1993. "Roelof Uytenboogaardt- an extract on Urban Design", in 'TIA Journal 06', November 1993.

10.2/ Righini, Paul. 2000. "Thinking Architecturally- An introduction to the creation of form and place", University of Cape Town Press, Cape Town.

10.2/ SAIC 1994. "South Africa Structural Steel Detailing Manual", First Edition, Johannesburg, South Africa

10.2 Szokolay "Solar Geometry" + Environment Notes from the University of Cape Town BAS 5

10.2/ "The Phaidon Atlas of Contemporary World Architecture Travel Edition", 2005, Phaidon Press, China

10.2/ Trancik, R 1986. "Finding lost Space", Van Nostrand Reinhold Company Inc., New York

10.2/Tshwane Inner City Development and Regeneration Strategy, 2005

10.2/ Thompson, D (ed) 1996. "The Pocket Oxford Dictionary of Current English", Clarendon Press, Oxford, United Kingdom

10.2/ Todaro, MP + Smith. SC 2003. "Economic Development", Eight Edition, Pearson Addison Wesley, England

10.2/ University of South Africa Property Plan 2005-2015, Development Manuel, Executive Summary

ADDENDUM 10/ Sources 10.3/

Sources 10.2/

10.2/ University of South Africa New Entrance Proposal Document

10.2/ Wegelin, H 1998. "Model Building Specifications and Standards- Guide for Archiects 4.2", 4th Edition

10.2/ Wegelin, H 2006. "The Craft of Building-Bou Vernuf Volume 1.", preliminary edition

10.2/ Wegelin, H 2006. "The Craft of Building-Bou Vernuf Volume 2.", preliminary edition

10.2/ Wolfflin, H, 1886. "Prolegomena to the Psychology of Architecture", in Mallgrave and Ikonomou 1984. "Empathy, Form and Space" trans. K. Simon, Collins, London

10.2/ Zevi, Bruno 1957. "Architecture as Space- How to Look at Architecture", Congress Catalog, USA

Material Websites 10.2/

Concrete

- www.concretesociety.co.za
 - www.cma.org
 - www.holcim.co.za
 - www.lafarge.co.za
 - www.ppc.co.za
- www.cnci.org.za/structural concrete
 - www.tiltupnews.com
 - www.tilttech.co.za
 - www.sapta.co.za

Steel

- www.mittal.co.za or www.iscor.co.za
 - www.amsteelesystems.com

Glass

- www.pilkington.com.au
- www.nano.uts.edu.au/nanohouse
 - www.nano.csiro.au
 - www.myretsu.com
 - www.v-lool.com
 - www.coverfg.co.za

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ALT_ Altitude **AZI** Azimith

CBD_ Central Building District
GDP _ Gross Domestic Product
HAS_ Horizontal Shadow Angle
HDI_ Human Development Index
M²/p_ Square meters per person
SABS_ South African Bureau of Standards [National Building Regulations]
SAIC_ South African Institute of Steel Construction
SAPTA_ South African Post Tensioning Association
UNISA_ University of South Africa
WC pan_ water closet [toilet]
VSA_ Vertical Shadow Angle

Architectural Concepts + Definitions

Defining of Spaces

The defining of clear spaces to accentuate place, thresholds and order requires solid forms such as walls. Courtyards consisting of a defined nesting qualities with the option to view out defines a difference between being within the courtyard and being beyond it. Defined spaces emphasise the difference between spaces and thus connection, which is communicated physically and visually through materials.

Thresholds

The concept of a threshold is that which is before or after something and thus should be communicated through level changes, material changes, change in scale and difference in light qualities. These are all approaches essentially attempting to make a physical change to ones experience and define one space from another through a distinct character embedded in each space.

Circulation Strips

The intention of circulation routes sets an order to access and thus process of experience. The idea of creating a space which though open and interactive still has a character of it's own and quality of experience different to those spaces connected to it.

Transparent Edges

Visual Connection from inside to outside and outside to inside enables a truly connected form of architecture which glass allows for in the expression of communication through connection. Thus bridging the gap whereby architecture is essentially about forming enclosure yet only on a physical level. Technology is able to allow for visual connection whilst still providing enclosure. Its surroundings even more. A wall no longer needs to only function as a wall it can do so much more.

Display Surfaces

Advances in technology and especially display can enable building elements to become more than structuring forms but surfaces for display. The building envelope has the potential to display and communicate with