

## CONFERENCE ABSTRACTS

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## **1.1 Conference Welcome:**

The Conference Steering Committee welcome all delegates to the:

### **The Fourth International Design Education Conference in South Africa**

**The Fourth International Design Education Forum (DEFSA) conference is hosted this year by a group of Gauteng Education Institutions:** Technikon Pretoria, Technikon Witwatersrand, University of Pretoria and Vaal Triangle Technikon.

The conference takes place a time where the culmination of design events have been grouped together within the first **National South African Design Week**. With the support from the Department of Art, Culture, Science and Technology a design exhibition was organised parallel to the 2001 Conference. This exhibition focuses on research output within design education and presents examples of value added design input into the South African community.

A special word of welcome to the three keynote speakers: Professor Olle Anderson, Professor Pamela Allara and Mr. William Harald-Wong. The keynote speakers represent diverse design and art specialisation areas which can open new angles of insight to the conference delegates. We trust delegates would interact and exchange valuable information around the conference theme: "Mapping New Territories in Design Education."

We hope this conference would give all delegates inspiration and opportunities to build design education bridges.

#### **Conference Steering Committee**

Amanda Venter – Chair Person (Technikon Witwatersrand)

Eric Dinkelmann – Technikon Pretoria

Hennie Reynders – University of Pretoria

Thinus Mathee – Vaal Triangle Technikon

## 1.2 Theme and aim of conference

The oppositions created between developing technologies and indigenous knowledge, between an established design servicing industry and popular design, provides a powerful force for developing new models in design education.

As boundaries break down between disciplines, design education needs to be more responsive to social needs, and to technological developments, and be flexible enough to be able to rapidly adapt to changing circumstances and new challenges. The Fourth International Conference will investigate and workshop the boundaries and interface between disciplines within the conference theme:

### **“Mapping new Territories in Design Education”**

#### **The aim of this conference is to examine:**

- the interface between high technology and indigenous design and traditional technology
- how design education can be responsive to social needs and technological developments in diverse and rapidly changing contexts.
- how design education should respond to the need for professional development in the new technology driven work environment
- how design education can assist economies to function in the global markets and to develop appropriate solutions to local problems in a diverse and rapidly socio-economic context.

## 1.3 Conference sub themes

### 1.3.1 Bridging into New Territories

Forged through technological innovation and altered value systems. Emerging fields of design with the focus on multidisciplinary design activity and collaborative work between design education and industry.

### 1.3.2 Thinking Deep

Building a body of theory through research by design and the mapping of future trends in the creation and use of our built environment.

### 1.3.3 New Awareness

North meets South in a matrix of inter-related argument between the traditional disciplines of craft, art and design and with the designer caught within the apparent requirements of the generic and the specific contexts dictated by global trends and local needs.

### 1.3.4 Embracing Reality

The accountability of the designer, of design education and of industry in our relationship to the user, to each other and our role within the community.

## 2. Keynote Speakers:

### **PROFESSOR OLLE ANDERSON (SWEDEN)**

Professor Anderson is the artistic leader and Chairman of White Design –an interdisciplinary design studio in Gothenburg, Sweden. He is a senior partner in White Architect's, one of the largest architect's practices in Europe. Olle Anderson is the President Elect of International Federation of Interior Design/Architects as from September 2001. He is a professor of Interior Architecture and Furniture Design at the Universities of Gothenburg, Oslo and Chalmers, and the receiver of numerous design awards. He is the founder and organiser of the international and experimental WOOD workshops and currently also involved in the design and making of textiles, glass art works and conceptual art installations.

### **PROFESSOR PAMELA ALLARA (BOSTON)**

Pamela Allara is an Associate Professor in the Fine Arts Department at Brandeis University in Waltham Massachusetts, where she teaches modern and contemporary art, the history of film and video art, and women's art. The author of Pictures of People: Alice Neel's American Portrait Gallery, she is currently a Fulbright Senior Scholar at the Technikon Witwatersrand, where she is conducting research on contemporary South African art for an exhibition at the Rose Art Museum at Brandeis.

The present a keynote address titled: **Design Feeds the Poor, and Art Historians, too!**

### **WILLIAM HARALD-WONG (MALAYSIA)**

Born in Malaysia in 1956, Year of the Monkey  
Graduated from Malaysian Institute of Art (fine arts and photography)  
Essentially a self-taught graphic designer

William is the principal of William Harald-Wong & Associates, a corporate identity design consultancy based in Kuala Lumpur. Having worked on many far-flung projects, from Bali to Sydney, Mozambique to Uzbekistan, the company places a high value on local culture and beliefs, weaving them into its concepts and design where appropriate.

William also heads MOMENT Font Studio which focuses on intercultural research and documentation. Its research is aimed at traditions and beliefs throughout Southeast Asia from ancient times to the present and its findings will serve as a resource for the creation of meaningful contemporary Southeast Asian graphic design.

Moment's projects include recording the stories of elderly Balinese dancer and musicians, and the reconstruction of lost dance pieces; documenting shamanistic ritual-performance and healing along the Malaysian/Thai border; and tracing Malay woodcarving design motifs back to the ancient Hindu/Buddhist kingdom of Langkasuka.

Exhibitions include "Cities Discoveries" (Berlin 2000) "The Global Exhibition - 33 Designers from around the World" (Osaka & Tokyo 1997), "Tokoh-tokoh Werdha Seniman" (Bali 1997), "6 Asian Designers" (Osaka 1995) and various group exhibitions at the National Art Gallery (Kuala Lumpur).

### **Graphic Design at the Cultural Crossroads of Southeast Asia**

Southeast Asia was one of the world's original multicultural melting pots. For centuries, interactions between the indigenous cultures of the region with Indian, Chinese, Arab and European traders have brought about the continuing cross-fertilization of local beliefs and traditions with foreign ideas.

In Malaysia, as in other Southeast Asian nations, ancient values are being challenged by the values of mass consumption, with the threat of globalisation reducing all the richness of the region's cultures to logos, not least because the majority of the people have a great propensity to erase the past and embrace the new and banal, equating it with being progressive and modern.

This collision of values spurs the creation of graphic design that is meaningful and vital, ideas that can reawaken our sense of place (geographical, historical, psychological, communal), push us to re-examine our own multicultural realities and reflect on the future of our past.

The 40-minute presentation will explore the following topics with slides taken from around the region, and illustrated with works from William Harald-Wong & Associates and Moment Font Studio:

**Image and Symbol** < origination, originality and the 'bestowed blessings' of appropriated designs

**Language and Text** < the perplexity of diversity, the post-colonial revenge: Asianisation of the English language.

**Multiculturalism** < a fragile harmony, the inextricable linkage of politics, religion, race, culture, language and education; the influence of Islamic principles on contemporary logo creation

**Arts of an Ancient Land** < belief systems and the ritual of creation as inspiration for contemporary designers.

**Sub theme 1: BRIDGING INTO NEW TERRITORIES**

**Paper title: Teaching Inclusive Design**

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South Africa has one of the most forward thinking Constitutions in the world. Few countries have been able to define and legislate for equality in such an all-encompassing way. It is a challenge for design educators who must be aware of the likely future implications for design students, and who need to question their own views and current practice.

Designing for Disability has long been a specialism for a minority group. However, international trends are redefining it as a mainstream, user-lead concept. There is great potential for South African designers to embrace the meaning of equality for disabled people within the Constitution and use it to guide design practice.

This paper will examine:

- How we in South Africa can rethink and redefine disability, taking into account international developments, the situation in South Africa and the meaning of the Constitution.
- How we understand barriers that disabled people, and people disabled by design, encounter when trying to participate as equal citizens.
- The ways in which design educators can move from teaching 'designing for the disabled' as a specialist topic.

**Sub theme 1: BRIDGING INTO NEW TERRITORIES**

**Paper title: Industrial Design at the University of Botswana: Designing Designers as if Botswana's Setting Matters**

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The University of Botswana is proposing to introduce an undergraduate degree program in Industrial Design. It is inevitable that a new program must have local relevance while not losing touch with the global realities. This paper discusses the need for the course, the proposed program structure and its rationale within Botswana's social, economic and industrial setting. The submission discusses global factors that were considered in designing the program. It also highlights the implementation plan in terms of student enrolment and their exits profile, staff, resources, and industry collaboration. The article would be of use to policy makers, Industrial Design academics and design professionals who would like to understand how to design new courses in context. The paper arrives at an inevitable conclusion that the aim of the program is to produce designers who will operate efficiently within Botswana's peculiar environment.



**Paper title: The Multimedia Matrix**

**Author: Tiffany Turkington**  
Design Centre

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This paper will investigate the relevance of Multimedia design and Multimedia design education to the local South African cultural perspective.

The nature of design education is an unfixed one, forever having to keep in touch with new demands from the industry, new developing technology and with the ever changing nature of the design disciplines. Design thus appears to be intrinsically linked to the notion of the “new” and within this Multimedia design is inextricably linked to the very cutting edge of this “new”.

The Conference theme has outlined some fundamental oppositions in a country coming to grips with not only a new education system, but one that needs to cater for the needs of a largely under privileged society. The opposition in question lies buried in the gap between developing technology and a population defined by its poverty and lack of material wealth. This gap is exaggerated between the design professionals in South Africa and the very population which it serves. Within this social phenomenon, this paper will begin to look at the broader and specific social needs of South Africans for Multimedia technology and design. Whilst multimedia design is a popular medium in the sense that it is designed for the people, is it popular amongst the people, and does the mass population have enough access to it to substantiate its fast increasing growth?

These are some of many factors that have to be considered when designing local courses and curricula for Multimedia design. It should be recognised that to merely adopt existing Western trends and methodologies of Multimedia design education would be undermining the relevance of this new media to South African design. South Africa has its own unique set of problems and changing criteria which need to determine the outcomes, methodologies and solutions to our design education. At the same time, our graduating students need to compete in the international design field and need the relevant standards, knowledge and skills to do so competently. The mapping of Multimedia design education needs to relate directly to the local South African environment but it would be futile to ignore advancements made in other countries.

It is within this mapping that design educators play a major role and it is important that Multimedia design is understood as more than just a medium, and that its fundamentals still lie in the basic principles of design and communication.

**Sub theme 1: BRIDGING INTO NEW TERRITORIES**

**Paper title: Buchanan's matrix: A framework for strategic alignment.**

**Author: Ria van Zyl & Professor Marian Sauthoff**  
University of Pretoria

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The relationship between design and business management becomes critical when contexts change and new problems emerge. Some new problems in the design industry are a redefinition of disciplinary boundaries, new technologies and shifts in business thinking and client expectations. Design educators need to understand current demands and anticipate the future requirements of design clients when devising courses and content. This requires conceptual flexibility and continued scenario planning.

In this paper a matrix formulated by design theorist and educator, Richard Buchanan, is explored as a functional framework to assist design educators align design and management thinking. Buchanan describes the matrix as the history of the "character and disciplines of design thinking as they are formed through encounters with new problems". In the matrix designer ability and design thinking intersect, moving design through four orders. An expansion of the orders allows for the simultaneous historical and theoretical comparison of design and management. Four critical aspects that penetrate both management and design are detailed so that the alignment between the two disciplines is made apparent, providing a useful model for decision making and planning in design education.

**Sub theme 1: BRIDGING INTO NEW TERRITORIES**

**Paper title:** “...*fluid Interfaces*.....”

**Author:** **A Joint Workshop**  
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Chair Department of Fashion, SAIC  
Chicago  
**Hennie Reynders**  
Programme in Interior Architecture  
University of Pretoria

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Interdisciplinary design workshop

Architecture gives us space through form and structure as urban artifact in the ecology of culture, which we use, move through and in which we experience the play between interior and exterior.

Garments are a second skin that can be endlessly fascinating or profoundly disturbing and also employ movement, form and structure – often with a mysterious relationship between the body, the fabric as second skin and the space through which we move.

By cutting across the various fields of design activity the exhibition will illustrate the blurring of boundaries and the sharing of ideas in layered languages dealing with form and content, object and space, surface and material, communication and representation. Through various forms of imagery and the translation of arguments, text, models, graphic representations and actual garments, the workshop and exhibition will explore the fluid interface that exists on the fringes of the traditional disciplines of fashion and architecture.

Within this fluid interface the reconfiguration of body and building and the linguistic possibilities of the play between mind/body, material/immaterial, reality/vitality, enclosure/exposure will no longer appear to be what they once were and point towards new interpretations of our collective sensibilities and critical future possibilities.

**Sub theme 1 & 2: BRIDGING INTO NEW TERRITORIES/ THINKING DEEP**

**Paper title: Indigenous Knowledge Systems amongst artisans in India and South Africa: A collaborative cross-cultural project.**

**Author:** Project Leaders:  
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**Hester du Plessis: Workshop**  
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The craft sector is currently one of the fastest growing industries in South Africa. It involves commercial and industrial interest in the manufacturing, marketing and design aspects. Within this proposed project we will focus on the study and development of traditional and appropriate technologies in the manufacturing processes of crafts.

Modern techniques will be adapted, adopted and incorporated with traditional technology. Research done on ground level will help to identify rural development projects, problem areas and technological innovation possibilities.

The Arts forms a crucial part of the IKS+T knowledge base. Arts and craft based research can make a positive contribution to the documentation of IKS+T activities, how IKS+T reflects in the public understanding of science and the identification of possible interventions towards improved production processes.

In order to initiate research activities within the Arts Faculty of the Technikon Pretoria, an agreement and proposal for a research project has been signed between the Arts Faculty and the National Institute of Science Technology and Development Studies (NISTADS), CSIR, in India. By making use of the experience and expertise of NISTADS within the field of social research on craft production and skills, the focus of the research is on Indigenous Knowledge Systems and Technologies (IKS+T) and the public understanding of science (PUOS) within various craft activities. In the South African context this is compatible with the research aims of the Focus Area on IKS+T, as well as the aims and policy of research done on PUOS, an initiative initiated by the Department of Arts, Culture, Science and Technology (DACST).

The scope of such a project is vast and the project partners decided to initiate research with a survey of artisans involved in the production of pottery. Information will be gathered on the economic and cultural environment of the artisan in question. Data on IKS+T and therefore also their understanding of scientific principals will also be collected.

The outcome of this research offers the potential for links with the tourist industry, the architectural profession and other developmental disciplines.

**Sub theme 2: THINKING DEEP**

**Paper title: Academic Knowledge Management**

**Author: Johann van der Merwe**  
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Cape Technikon

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Many corporate firms, although operating within this age of information and the knowledge economy, still rely on the skill and expertise of individuals to the extent that the 'organisational memory' can be severely weakened when that individual's store of knowledge (skill, know-how, individual memory of corporate behaviour) ceases to function as an input. This highlights a parallel lack of system in organising collective and strategic knowledge - to collate and retain the most valuable and necessary units of knowledge. These circumstances will be compared to the general technikon situation, in which a related lack of academic knowledge management is evident. The DET emphasis on strategic planning for institutions of higher learning will position technikons as either vocational training colleges or as research oriented technical universities. The issue of "research" thus becomes key to academic knowledge management as well as the means of institutional survival. The positive and encompassing role of grass-roots research will be discussed, ultimately linked to what amounts to the accessing of "Indigenous Knowledge Systems"/Prior Learning via a social constructivist approach to knowledge construction. This paper will conclude with particular reference to the identification and management of the tacit knowledge process within the academic knowledge transformation system.

**Sub theme 2: THINKING DEEP**

**Paper title: Developing a theoretical framework for understanding the communicative value of typographic elements in moving image products.**

**Author: Nicole Cunningham**  
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Department of Visual Arts  
University of Pretoria

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It is accepted that design is moving away from static, two-dimensional outputs to multiple hybrid media which play out in four dimensions. This shift away from design as an art of composition to one of choreography involves understanding “how the conventions of typography and the dynamics between words and images change with the introduction of time, motion, and sound”(Pullman in Heller 1998:109). Time-based media enable words to move as if living, thereby extending the expressiveness of traditional typographic language. The communicative value of time and motion as powerful and persuasive design elements must be explored and understood in order for designers to create meaningful four-dimensional design products.

This paper will briefly describe a theoretical framework for understanding and analysing the communicative value of moving typographic elements. The framework is loosely based on film theory and is designed to enable students to critically evaluate the choice and use of animated or dynamic typographic elements in a design product. The objective for providing students with such a framework is to enable them to make more meaningful decisions when introducing motion into the typographic elements of any moving image product.

**Sub theme 2: THINKING DEEP**

**Paper Title: Workshop  
Mapping ancient territories: South African graphic design  
history**

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As far as many scholars are concerned, 'design' is industrial design ( Walker, 1989). Paula Scher ( 2001 ) suspects that the general view is that the 'practice of graphic design is essentially a trivial service, a banal exercise of organising and styling other people's messages.' Rick Poynor ( 1998 ) admits that compared 'to a building, or even a sofa, a sliver of paper is never going to look very impressive or important.' However, Poynor then sets out to defend the art of graphic design as a 'signification that interpenetrates every corner of our lives, shaping contemporary reality.'

The proposed theme of this workshop is the lack of documentation of the history of graphic design in South Africa. For example: as early as 1963, the journal *Lantern* ( Vol XII:4 ) dedicated an entire issue to the discipline of industrial design ( written by the editor, Vivienne Wood ) but there did not seem to be much to say about graphic design, apart from curious snippets like 'Italic handwriting at a rural school' ( Vol 4:3 ) and 'The Romance of Roman Letters' ( Vol 1:5) by Georges Duby. Significantly, Duby was art director of *Lantern* for several years: graphic design *did happen*. Possibly, what Scher suspects is true: graphic designers are so busy styling other people's messages, that they never get around to styling their own. In a lone article in 1958 (Vol 8:2 ), wedged in-between 'Portuguese pioneers in South Africa' and 'Volkspeler', Ernst and Gwen de Jong bravely proclaim the importance of 'Design in Advertising,' yet de Jong's own oeuvre has had no critical evaluation in over forty years.

Beyond the issue of graphic design's status within the broader design discipline, lies another issue identified by Anne Bush ( 1997 ) who takes historians and graphic design critics to task for dwelling on the physical objects of design, rather than introducing more general questions regarding the effects of social and cultural shifts that define human preoccupations, for example 'modernism'. It is possible that this dwelling "inside of art ...the art historical tradition of internal comparison" has contributed to the reluctance to write about the history of South African graphic design. The objects *themselves* may not

look so promising, may not necessarily offer a rich source for formal analysis and are, therefore, ignored.

For those embarking upon criticism or history writing, it is tempting, especially within the South African context, to start recording the map of graphic design in the here and now. However, maps are the accumulation of cultural activities (Wood, 1993) and every map refers to some earlier version of itself. To enable graphic design to map new territories, it needs to explore its past.

**Questions which the workshop should address are, inter alia:**

**Theme One**

- A definition of the term “graphic design.”

**Theme Two**

- Does South Africa currently possess a history of its graphic design activities?
- How does history benefit the present ( or, in the context of this conference, the future )? Is a local history of graphic design desirable?

**Theme Three**

- Who should write these histories? Who would like to write these histories? What is preventing these histories from being written?
- How far back should the histories go?

**Theme Four**

- Is there a particular format or approach that would be more interesting, more useful or more politically correct than any another?
- Should the histories be separate from other design disciplines or should a history be trans-disciplinary?
- Should the emphasis in a South African context be on the *observed* (the object ) or *the observer*?
- Should this be called *history*? And is this still “graphic design?”



**Sub theme 3: NEW AWARENESS**

**Paper title: Shared initiatives: Exploration of Partnerships**

**Author: Professor Jackie Guille**  
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"From the tree to the dugout.... but the canoe is letting in water"

- an exploration of partnership and shared initiatives in the local and global context

Development may be defined as the widening of opportunities and choices, embracing tradition not as a static entity but as a continuous process of change, giving expression to cultural exchange. It is culture which connects people together and cultures are neither isolated nor static, but interact and evolve.

We are becoming increasingly inter-dependent with different - but not necessarily equal - consequences. Culture and tradition is rooted in one place - like the tree, out of which is crafted the canoe.... the vehicle for communication, education and change - but there is a tension between the global and the local.

The report of World Commission on Culture and Development 'Our Creative Diversity' emphasised the need to build creative interactions between the traditional and the contemporary, acknowledging the inherent wealth of a society and capitalising upon the collective potential for innovation. It did so in the context of globalisation, which is an asymmetrical and unbalanced process to the extent that access to design education and training, and many of the technological tools and resources that underpin it are not equally available throughout the world.

Information is power. It is the accessibility of information that creates the learning environment essential for innovation. In a world dominated by the 'knowledge economy', information technology has become a strategic resource. Increasingly mobile populations, combined with the lack of controllable frontiers for the transfer of capital and knowledge, is profoundly changing the way we live and work with one another. Nonetheless, innovation and development is not solely dependent upon the acquisition of new technology - the capacity to accept and generate new ideas, new approaches to situations,

new models and ways of working is the cornerstone of creative practice. The challenge therefore is in realising that power lies not only in technical expertise, but also in capturing the local capacity for creative problem solving, ingenuity and invention, building cultural resources to use this appropriation, and forming partnerships between the local and global- promoting ongoing dialogue and exposure to each others circumstances, emphasising that learning and knowledge is not exclusively held.

In the past decade globalisation and aid fatigue have only heightened the centrality of building viable partnerships. Although there is no 'one-way' to build effective partnerships, however it is done they must be underpinned by clear, shared understandings of each partners expectations and recognise the importance of 'ownership' and the principal of reciprocity.

How can this trust be developed? Who are the partners? Can they be institutions or is it down to individuals? It is no coincidence that, in today's world where increasing importance is given to autonomy and accountability, adaptability and flexibility is more often displayed by individuals than by larger organisations.

Effective partnerships must place a 'premium on knowledge of local circumstances - the diversity of needs, community structures, culture and traditions must be acknowledged. Since practice is local, much of the knowledge needed to plan and guide it is contextually specific, intuitive and intrinsic to the settings of daily practice. A perverse effect of ignoring local knowledge is that too many projects tend to focus on 'solutions' to poorly identified problems.

Design cannot only be about commodity production..... it must also embrace the conditions in which people live. Conditions which define and create communities and embody all the tensions that we live with in the world today.

**Sub theme 3: NEW AWARENESS**

**Paper title: African Content in the History of Graphic Design**

**Author:** Piers Carey  
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Technikon Natal

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The paper will start by discussing some aspects of the state of History of Graphic Design, concentrating on content and, particularly, the question of African content in the discipline. This will refer to historical rather than contemporary material.

The inclusion of material in Philip Meggs' History of Graphic Design, for example, has been explicitly based on the author's judgement of what has led to the current condition of the discipline in the USA, and this has been accepted as being largely accurate for South Africa. However, looking at the functions of the material included gives a much broader range of applications than the current condition of the discipline (the teaching of Graphic Design in South Africa, that is) would suggest. Professional graphic design today is overwhelmingly orientated towards commerce, with graphic design work for other fields, such as for example education, often being handled by people who are not trained in graphic design. Graphic Design and History of Graphic Design courses generally follow this orientation. They also follow the main system of cultural influence in today's world, that of Euro-American popular culture. The pressure of globalisation further increases the influence of this culture and the economic power behind it. The widespread use of Meggs' volume is a natural consequence of this attitude.

The result is that material from outside the current condition of the profession, and from other cultures, tends to be neglected. There exists a wide range of visual material in the world that is functionally comparable to subject matter commonly taught in history of graphic design. Amongst this material is a large quantity of visual knowledge from African sources, which I suggest is relevant to us. My own interests in this material are writing and proto-writing systems (pictographs, etc), and the paper will discuss some of these briefly: for examples, the writing systems of Ethiopic, the Vai and the Bamum; and pictographic systems such as the Adinkra symbols of Ghana and Zulu ceramic symbols of KwaZulu-Natal. Examples will be shown of how such material could be included in the History of Graphic Design as an academic discipline, or in current practical graphic design work.

The paper will finish by discussing the possible benefits of adding some of this material to the syllabus. Firstly there is the need to encourage a syllabus that is more psychologically inclusive than before. This will certainly involve alteration of value systems, because

even when African visual material is taken seriously in aesthetic terms, graphic design has tended to be defined in such a way as to exclude it. Secondly although some departments encourage study of contemporary design from different parts of Africa, it is important to demonstrate that such design has historical roots. Finally, a comparison will be drawn between the current cultural situation of South Africa, and examples of how other countries or cultures have recovered or protected their cultures, and built a vibrant national identity in the process. If South Africa is ever to establish a culturally independent mindset, such a national identity will have to be developed.

**Sub theme 3: NEW AWARENESS**

**Paper title: The Response of Design Education to Social Need: with particular reference to Development**

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Over the last 45 years, certainly in the North, interest in this field would seem to have been cyclical in nature with 'waves' of interest growing then dissipating, followed by a period with little or no apparent interest. We seem at this time, to be at the beginning of another 'wave.' The distinctive characteristics so far, especially in the academic community, have unfortunately been those of much talk and little action. There are a small number of exceptions to this rule that could be characterised as having a 'quick & dirty' approach, participating with local people to identify local needs and provide sustainable answers.

**The Response of Design Education to Social Need**

My research asks the question, "Is there a place for design education/training to engage with the issues raised by social need in a development context?" - including an evaluation of this 'quick and dirty activity' as a possible basis for design training strategies.

At the start of this new 'wave' it would seem to be timely for a structured investigation into the most appropriate method of providing design education and training; to enable local people to identify, analyse and provide sustainable solutions to relevant design & production problems using appropriate technology.

*This paper outlines the Doctoral programme embarked on at Cardiff in summer 2000 and discusses its progress and some preliminary outcomes.*

**Sub theme 3: NEW AWARENESS**

**Paper title: Development of Design and Technology at the University of Botswana: A curriculum innovation**

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This paper is a retrospective analysis of the development of an integrated curriculum in Design and Technology at the University of Botswana, which brings together science, Engineering, Education, creative design, and Technology. This was done to cater for the local needs and to bring Botswana in line with international thinking in the field of technology education.

In the 1980's, the then Botswana Polytechnic introduced a diploma course called Technical Studies, which prepared students to be teachers of technical subjects in secondary schools. That is, they were to teach Woodwork, Metalwork and Technical Drawing. This curriculum was reviewed and it was later followed by the introduction of a Bachelor of Education [Design and Technology] in 1990 and the first graduates were in 1995. The main objective of this program was to service secondary schools with Design and Technology teachers. During the same year, Design and Technology was first introduced in Botswana secondary school curriculum. It was offered as an optional subject.

From 1990 to 2000, there were a lot of changes and innovation both local and globally in technology education. On the local scene, in 1993 the government set up a National Educational Commission. One of the Commission recommendations, which affected Design and Technology, was that, it was to be offered as a compulsory subject at Junior Certificate level. By then the Junior Schools were following an American model of Design and Technology while Senior Secondary Schools followed a British model. There was no continuity between Junior and Senior schools. This compelled the Ministry of Education to develop a local program, which was to respond to local needs and at the same time maintaining continuity between the two streams. Last year all these streams were now following the local made programs.

All these changes necessitated the University of Botswana to review its own curriculum, which was prepared in 1990. It seems this curriculum has been overtaken by events especially the localisation of the Junior and Senior Secondary School curriculum. This review came up with an integrated program of Science, Engineering, Design, Education and Technology.

This paper will reflect on the evolution of this curriculum in Design and Technology Education over the last decade concentrating on the following areas: An analysis of the old versus the new curriculum at the University of Botswana and how the new program would meet the future design, educational, technological and sociological needs through curriculum development.

**Sub theme 3: NEW AWARENESS**

**Paper title: Workshop  
Specialization versus generalization in design education:  
where to draw the line?**

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The current debate on the direction that graphic design education should follow, seems to be caught in a flux between anti-intellectualism on the one hand and a more rigorous intellectual approach on the other hand. This is brought about by the techno-optimism of new media in contrast to design education which answers to the demands of the ever-expanding complexities of the communication industry. The conflict between the legitimacy and value of these two vastly different paradigms represent the current identity crisis for design education and is marked by more than one paradox.

This paper examines the nature and complexity of these paradoxical dilemmas and contrasts two perceptions on the nature of the profession:

- the notion that graphic design is becoming an extremely specialized field that requires highly trained designers who are literate in cognitive theory and perceptual processes - strategic thinkers who can handle the analysis and solution of large-scale or complex communication problems.
- the notion that sophisticated desktop publishing and multimedia software allow virtually everyone to become a designer, resulting in great numbers of self-taught 'digital artisans' who seem to flourish on the perception that digital technology had actually made it easier to produce design.

Since these two notions challenge the traditional role of the graphic designer, the paper examines the apparent new extended role and function of the graphic designer in a technologically driven society. This extended role presents a new platform for the formulation of current design curricula.

In the context of this extended new role of the designer, the paper views specialism versus generalism in design education to be the implicit problem beneath the debate on the consequences of working with new media. It advocates that the need for a broader knowledge base is clear, but asks whether educators can attempt to enrich design studies



by crossing departmental divides to include subjects from other disciplines (humanities, a second language, semiotics, history, business, psychology, dance, music, film) and still keep pace with technology's relentless pace?

The paper concludes by demonstrating how the vocabulary of design as discipline has changed with the introduction of new media and warns that the overwhelming bombardment of media options to design students may result in neither specialization nor generalization.

## **2. Workshop questions based on the proposed paper**

1. While design for new media originates in many of the same visual communications history, theory and method, it must also reach far beyond. Should new media be viewed and educated as a separate sister-discipline of graphic design?
2. This expanded knowledge base points to the possibility that four-year degree programs may not provide a sufficient grounding for this incredibly wide and complex field. What are the implications of a new educational model based on a four-year pre-design program followed by a two- or three-year professional degree, similar to law or medicine?
3. To what extent can design education promote the role of intuition, experimentation and the 'play-principle' in teaching methodology when the pressure to become acquainted with the realities of the complex and diverse industry are so overwhelming?
4. Does generalization in design education serve the relative small South African design sector better than specialization?
5. It is not at all clear that anything resembling the traditional role of the graphic designer is really necessary and/or needed in the context of new media. To an ever-expanding extent, the work of artists and designers overlaps the work of other specialists in the field of cultural communication. How should design education view and accommodate this new extended role of the designer in current curricula?
6. The design industry has subdivided into very diverse and technologically complex specialisms and the divisions between design and other fields of cultural production have been blurred to a great extent. Is it possible to train a specialized generalist when the trade is not consistent and so complex?
7. How did the vocabulary of design change with the introduction of new media and what are the implications of this shift for the formulation of design curricula?

**Sub theme 4: EMBRACING REALITY**

**Paper title: Grasping Culture**

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In order to take on an accountable role within the community, it is essential for any designer to grasp not only the starting point / centrism of their own positioning, but also to develop the tools for understanding another's. In short, to grasp the concept of multiculturalism.

When dealing with issues of Multiculturalism with students, it was ascertained that many students still reduce "culture" to racial stereotypes and a strategy was needed to push these students to move beyond this reductivist perception.

This paper aims to share the development and results of this strategy, which resulted in a successful research project.

Students first had to define the full and complex nature of their own cultural positioning. The *varied* base of a small group avoided individual isolation/ polarization and introduced the process of the research within safe, sensitive parameters, which focused on interest and acceptance of cultural difference. Only then, was a cultural positioning that was different from each groups, selected and the effects of culture and lifestyle on visual/ design identity critically considered.

Primary research was essential as it facilitated the move beyond "outside knowledge" or assumptions. It allowed direct and immediate experience within the different cultural positioning and a greater level of understanding, so essential for graphic/design communication.

**Sub theme 4: EMBRACING REALITY**

**Paper title: Shaping Design Leaders for the African Continent**

**Author: Adrienne Viljoen:** Manager, Design Institute, **SABS**  
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ICSID Africa Advisor 2000-2002  
Founding member: DEFSA (Design Education Forum of Southern Africa)

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Since the late eighties the numbers of foreign African students studying design at South African institutions have risen gradually. Some institutions report that students from neighbouring countries account for up to a third of their student intake in 2001. The reasons include positive word of mouth reports, quality and affordability. The implied message is that South Africa has increasingly for the past years been shaping the future design leaders and therefore the design thinking not only of our own country but for the continent of Africa.

This is a new view on South African Design Education as an industry with an important commercial value and also with a design educational responsibility reaching beyond our borders.

The impact of this changing student profile was brought home dramatically at the Design Institute annual Design Achievers event in 2000 when a fifth of the top young designers nominated were Africans from elsewhere studying in South Africa. This experience gave rise to the commissioning of a survey into the available design training opportunities elsewhere in Africa and into the extent of foreign design students in South Africa.

This paper interprets the results of these surveys intended to be used to give direction to a motivation for the expansion of the Design Institute projects.

**Sub theme 4: EMBRACING REALITY**

**Paper title: Documentary photography and indigenous knowledge. Some methodological challenges.**

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The paper focuses on the role that documentary photographs may play in indigenous knowledge research. Visual methods, or qualitative research where visual images play an integral part of the study design, have the advantage that power imbalances between the researcher and the study population are typically low in comparison to more conservative research designs, especially when the visual material is produced by the members of the study population themselves. The paper specifically discusses methodological aspects of scenarios where

- (1) the researcher that produces the documentary images is an outsider to the study population and there is researcher reactivity,
- (2) the images are produced by members of the study population after receiving training and the creative possibilities of the photographic medium interfere with the accuracy and reliability of the visual data collected, and
- (3) documentary images are used as a prompting device during interviews in a study population with low levels of visual literacy.

**Sub theme 4: EMBRACING REALITY**

**Paper title: Bridging the gap: Design and Product Development Education in a Development context**

**Author: Mel Hagen**  
Dean: Faculty of Built Environment and Design  
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South Africa is a typical developing country in that it has a relatively well developed industrial and manufacturing sector which exists side by side with a subsistence economy. Disparities in the levels of development and income within these different sectors, and between urban and rural economies, pose potential threats to our fledgling democracy, and major challenges for all those involved in education and training. In a developing country context, design, which is usually associated with industrial processes, needs to become more integrated into hand-manufacturing and craft, in order to assist in the realization of the full economic potential of a country and its peoples. In South Africa design and product development input has been identified by the government as a priority within the craft sector. This has major implications for the training of designers in the country. This paper will examine the changing nature of craft production in South Africa, together with some of the problems associated with the craft sector, and how it can interface with design processes in addressing the challenges of global competition. Some of the problems associated with the current structure of design education in South Africa, together with an analysis of the types and quality of skills required of designers in differing contexts, is discussed, and a model is proposed as to how design education can be shaped to address, and become more responsive to differing priorities in the country's job creation programmes.

#### **Sub theme 4: EMBRACING REALITY**

#### **Paper title: Workshop: Giving Value to Waste**

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In order to achieve sustainability within the design industry, designers and educators working within changing value systems need to develop practical and contextualised solutions based on our own specific cultural, economic and environmental condition.

This paper examines ecological principles based on growing environmental awareness and the need to imbue responsibility towards our environment and relate appropriate technology. Although the issues surrounding 'green' or 'ecologically friendly' designs are many and varied, the choice and use of suitable materials can play a major role in achieving sustainable design.

In order to demonstrate how ecological principles can manifest themselves in the development of sustainable practices and products, I will discuss the process that I implemented for the design and manufacture of furniture items made from post-consumer waste, largely influenced by the 'Life cycle analysis' of materials.

Other factors I considered most significant during this process were: a sensible use of available resources, accessible technology, reduction of waste, ease of disassembly to facilitate re-use and the spirit of craftsmanship.

This paper will also discuss our roles as 'specifiers', 'designers' and 'educators':

- As designers we need to explore the possibilities of 'green' materials without misconceptions or prejudice, and make them successful by accepting and exploiting their inherent properties.
- As specifiers of materials we should be placing greater demands on manufacturers and suppliers to ensure the production and development of more 'environmentally friendly' materials.
- As educators we need to substantiate that through education we can contribute towards a greater environmental awareness by evaluating success according to new sets of values.

Victor Papanek suggests "We must examine what each of us can contribute from our own specific role in society...., and ask ourselves, What is the impact of my work on the environment?"

**Sub theme 4: EMBRACING REALITY**

**Paper title: Workshop  
Incorporating traditional design skills into the mainstream  
Jewellery industry.**

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The Jewellery Industry in South Africa has no design tradition rooted in the people of our country. Designs are mainly copied from Europe.

Unlike other African countries such as Ghana and Mali, where working and wearing gold is part of an age- old tradition, South Africa has been exporting most of its mineral resources (pertaining to the jewellery industry), in raw form to other countries. The result - a country, rich in resources but with no inherent skills or relationship to work and design in gold. Various design competitions held at National level (with African themes), are attempting to encourage own design trends in South Africa. This certainly serves as a breeding ground for fresh ideas, but unfortunately very little of these ideas or the trends they represent, find their way to the display window of our jewellery stores.

The lack of indigenous design should be addressed by incorporating traditional jewellers and craft-skills such as bead working, weaving, woodcarving etc. into the mainstream Jewellery Industry.

A recent jewellery project, which was embarked upon in the rural areas of Tzaneen, revealed the viability of this concept, which might just change the future of our Jewellery Industry.