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On Clarity

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Director: Communication Research Institute of Australia

Communication, design, and clarity

One of the ways in which people describe the quality of communication is to talk about its clarity. Insofar as designers are involved in communication, clarity matters. Whether it is communication with clients, stakeholders, fellow collaborators or users, the quality of communication is important. Also, in some areas of design—such as information design—clarity is not just a means to an end, but is often an end in itself. Making instructions, bills, forms, websites, labels, way-finding systems and so on clear and easy for people to use is the raison d'être for information design.

Outside design, but with strong implications for design, are the advocates for clarity in language. Where these advocates have been successful in influencing lawmakers, there is now a growing body of legislation which requires people to use clear language. For example, in Australia, where the Commonwealth Government initiated a plain English policy in 1983, the regulations governing financial advisers require the information given to be 'clear, concise and effective'. Similar laws and regulations exist in many jurisdictions.

Thus clarity in communication is of interest to many, and the ways in which we might productively talk about clarity have philosophical, practical and legal implications.

Everyday talk about clarity in communication

In everyday language when describing an item of communication, we can say that it is clear, it has clarity. So for example we could say of a document that its text is clear, it has clarity.

When we say "this text is clear" or 'it has clarity', we are attaching the adjective 'clear' or the noun 'clarity' to the noun 'text'; thus, at least in grammar, the clarity is a property of the text.

It follows that we can ask are what the characteristics of the text that give it this clarity and make it clear. In answer, we usually point to the text's use of simple words, short sentences, simple punctuation, and so on. Many people then take the next step: to construct a clear text we must use simple words, short sentences, etc, thus giving the text the property of clarity, and similarly to determine whether or not a text is clear we examine it to see if it has simple words, short sentences, etc. If it does, the document is pronounced 'clear'; if not, then changes have to be made to make the document 'clearer' .

This simple logic and simple set of rules, derived from the everyday grammatical construction of language—that

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Invitation

The fourth conference in our current series is an important opportunity to take stock. We will be using it to reflect on and develop the way we run these events as well as aiming to provide an important oversight of the state of the art in research across the designing disciplines. We will to pay equal attention to the quality of content and the quality of your experience at the conference.

The conference theme, attending to the new kinds of designing that are emerging to challenge our framework of specialisms and reshape our field, will provide some focus for keynote speakers and debates and you may find that relevant to your own work. However this is the main conference for the whole of our society and we are open to all research that informs or arises from designing.

You can find out more about the conference theme and other aspects of the event at the conference website at www.drs2008.designinquiry.wikispaces.net where you can also join the conference mail list to receive updates on the call for papers and the conference arrangements. The call for papers will be announced on 1st September 2007.

The City of Sheffield has a long association with design and the study of design. Sheffield Hallam University is one of the oldest design academies in the world, starting out as Sheffield School of Design in 1843 and today it is home to an interdisciplinary teaching and research centre that brings together the different arts and sciences that make up the landscape of 21st century design. The city was once a watchword for heavy industrial production, with a dark utilitarian image to match, but today, partly through the influence of its designers and artists, it is a centre for new cultural industries. Imaginative work on urban design over the past 10 years has created a new and delightful city centre, surrounding our university with enjoyable spaces as well as public artworks, galleries and cafes. It is also a very friendly city.

I look forward to welcoming you to our city in the middle of next year's English summer. We will have serious work to do but we also aim to create an enjoyable occasion for you to make new friendships and renew old ones—the real glue of any community.

Chris Rust

DesignResearch Society
4th Biennial Conference

Undisciplined!

Rigour in emerging design disciplines and professions

16-19July, 2008

Sheffield Hallam University,UK

Provisional schedule (consult site)

2007	01 Sep	Call for Papers
	15 Nov	Deadline for abstracts
	Dec–Feb	Abstracts accepted
	01 Apr	Deadline for full papers
	01 May	Authors notified
	01 Jun	Deadline for corrected papers

http://drs2008.designinquiry.wikispaces.net

clarity is a property of texts—are used in instructions for clear writing, plain language, and the many, many guidelines for clear communication in all walks of life.

This is both useful and misleading: useful, because it suggests that by learning and applying simple rules we can achieve the desirable outcome of clear communication; misleading, because, as research shows and arguments demonstrate, applying these rules is neither a necessary or sufficient condition for achieving clear communication .

But it is not my intention here to catalogue the many research findings that lead to this conclusion—the many occasions in human conduct where misunderstanding, incomprehension, and disagreement arise because, despite the efforts by well-meaning people who follow the rules, the communication is not clear. Rather, I want to explore how the ways in which we talk about communication, and the arguments we use to demonstrate a point of view, inevitably lead us away from or towards clarity.

About rules

The starting point in the argument is with the nature of rules of usage in human communication. Rules of usage in communication are human inventions: we try things out between us; if they work we use them again with each other; if they keep working we keep using them; and we teach other people by showing them what we have done and describing how we have done it. Somewhere along this process of moving from trial to a consistent way of doing something, we put the describing of how to do it ahead of the doing—we teach people by describing how to do something before they do it—and at this point the description becomes an articulated rule.

This goes for language usage too. The single largest repository of these rules of usage in a culture is a grammar book. Dictionaries and style guides are also repositories of rules of usage.

The problem is that usages continually change ahead of the articulated usage rules. The world changes and we make changes to it in such a way that the old ways of doing things no longer work and we have to invent new or different ways of doing things. We try them out, and those that work eventually become new rules of usage. But there is some delay between a newly-invented usage becoming consistently used and its articulation as a rule. The result—with new usages continually appearing and old usages being abandoned or changed—is the inevitable creation of opportunities for misunderstanding, incomprehension and argument.

This is further exacerbated by the fact that rules of usage exist at many intersecting levels. A way of talking or writing in one context may be totally inappropriate in another. For example a parent talking to a child would likely use a different way of talking to that of an employer talking to an employee. The rules about rules of usage are different in each context. There are rules within rules and rules about rules.

One of the features of social life is that it provides many contexts in which communication takes place, and increasingly few of those contexts are necessarily shared. The government official writing a letter to a citizen is in a quite different context to the citizen trying to make sense of the letter over the kitchen table, and the rules of usage in these contexts differ.

Conversation is the key

It may seem, with all these different contexts and changing usages and the endless opportunities for misunderstanding, that we are doomed to the curse of Babel. Not so. No floodgates of incomprehension are in danger of opening and drowning us in confusion; that is, not as long as there are opportunities for conversation.

Considering how rules come about (trying things out between us and using them again with each other if they work) provides a clue to why communication works despite the opportunities for failure. At the heart of this joint action is conversation and agreement between people. I cannot sit quietly in my own room and alone invent a new usage in communication. It can only become a new usage if I share it with others, perhaps only one other, and we agree to the new usage. Conversation is the key .

Indeed, the process of sustainable and user-centred design practice is suffused with conversation. In my own professional design practice I describe our sustainable user-centred design process as consisting of seven stages.

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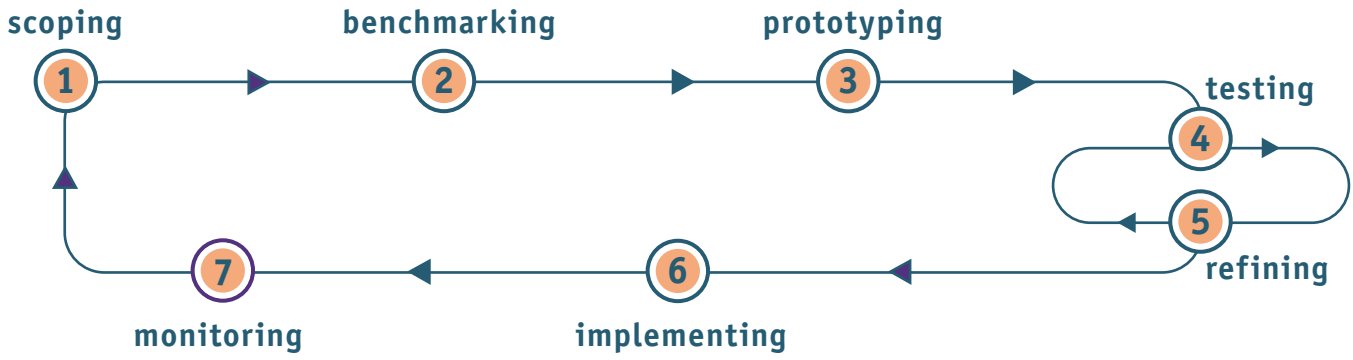

Figure 1

At each stage there are conversations between designers and participants. In particular, when it comes to the detail of teasing out current shared usages at the benchmarking, testing and refinement stages we invite people to have conversations with us that help us find out what is wrong with a current design or new prototype. The conversations are open ended and exploratory, yet at the same time structured and conducted with rigour. When describing them to clients we call these conversations 'diagnostic testing', but that describes what we do from the point of view of the outcome of the conversation: data on faults in a design. What we actually do in the 'testing' is have a conversation with one person at a time in which, with their help, we tease out the things in a design that make it unclear and unusable.

What is clarity?

How does all the foregoing relate to clarity? In a literal sense, clarity is an uninterrupted, undistorted view or sound: seeing clear to the horizon, seeing the stars on a clear night, seeing the bottom of a lake through clear water, seeing the edge of a clearing after emerging from a forest, seeing the landscape clearly from the top of a mountain, hearing a far away church bell clearly.

But clarity is not just a physical phenomenon describable in terms of the uninterrupted, unmediated, and undistorted transmission of light or sound; significantly, it is an experience that we value. There is an important visceral and palpable pleasure to be derived from clarity of both vision and sound. People pay for the pleasure of standing on the top of a large building and having a clear view of the city; and if one walks for a long time in a forest or jungle, there is a sense of pleasure and relief when one emerges into open grasslands. It may well be that part of the experience of having a clear view or sound is biological. If we can see and hear clearly then we are safe from unseen, blurred, silent or muffled dangers and we don't have to maintain a state of readiness for fighting or fleeing; any danger is a long way off, giving us time to decide what to do about it, if anything.

Clarity of communication

This literal meaning of clarity becomes subtly inflected when the term 'clarity' is applied metaphorically to communication.

When we talk about clarity literally, it makes sense to describe it as a quality of objects and media: absence of particles in the air or water, no objects in the line of sight between the observer and the object, and so on—an unmediated experience.

But in communication, clarity is not achieved by an absence of mediation. Far from it. The clarity of, say, a document is achieved by the mediation of highly structured and refined document design based on conversations about the document in its many contexts of reading, writing and usage, as well as by the application of rules of usage to its text. In saying "this text is clear", all these processes of construction and reading are implicit; although unfortunately, in not being stated, they are sometimes forgotten or, worse, treated as if they did not exist. Saying "the meaning of the text is clear to me" might wrongly imply that the meaning—the 'content' of the text—comes to me unmediated; it is as if meaning is simply transmitted from text to reader, or more ambitiously, from writer to reader.

But as with clarity in its literal sense, a visceral and palpable pleasure is derived from clarity in its metaphorical sense, expressed in statements like "It's clear to me what

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this means", "I understand clearly what is being said", "It's clear to me what I need to do", "They've made out their case very clearly", and so on. Strong feelings of trust, closure, enlightenment, and satisfaction accompany these statements. Clarity in communication adds value.

At its best, clarity is seen by readers as an endorsement of their own worth, because someone has made the effort on their behalf to make something clear. At its worst it is a form of deception where something has the superficial attributes of clarity—plain language and graphics—and misleads the reader into a false sense of security.

Conversely, readers finding a text unclear might imagine that the writer neither values them nor cares about their task, or that the writer is intent on deliberately attempting to deceive them, or that the writer does not have the skills to make the text clear to them. Or faced with their own uncertainties, readers might also imagine that the failure is theirs, that they do not have the necessary skills to see what is 'clearly' in the text.

Thus there is always the danger, when we use the grammatical construction "this text is clear", that we are beguiled into thinking that this is a simple statement about the qualities of the text rather than a highly complex one about people, usages and rules.

Indeed, making something clear for a reader involves a designer in a great deal of effort, with continual refinement and testing before the final 'clarity' is experienced by readers.

A paradoxical conclusion

Thus the quest for clarity in communication is paradoxical. The moment when all construction seems swept aside to reveal meaning and understanding directly is also the moment when the construction has been subtly erected by artifice and sensitive conversation. It is as if we build a fence to define and clarify the garden.

David Sless

Design Research Society
Design Research Quarterly

The Design Research Society is the multi-disciplinary learned society for the design research community worldwide.

We have an international design research network in around 40 countries comprising members who maintain contact through our publications and activities.

Our members are from diverse backgrounds, not only from the traditional areas of design, ranging from expressive arts to engineering, but also from subjects like psychology and computer science.

We:

- Recognize design as a creative act common to many disciplines
- Understand research and its relationship with education and practice
- Advance the theory and practice of design
- Encourage the development of scholarship and knowledge in design
- Contribute to the development of doctoral education and research training
- Share knowledge across the boundaries of design disciplines
- Facilitate networks to exchange and communicate ideas, experience and research findings among members
- Disseminate research findings
- Promote awareness of design research
- Organise and sponsor conferences, and publish proceedings
- Encourage communications between members internationally
- Respond to consultative documents
- Collaborate with other bodies
- Lobby on behalf of members' research interests
- Recognise excellence in design research through awards
- Sponsor e-mail discussion groups and a monthly e-mailed newsletter: **Design research News**
- Publish **Design Research Quarterly** to members

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www.designresearchsociety.org

Election of Fellows of the Design Research Society

Nigel Cross

Most recent elections ratified by DRS Council:

- **Professor Alan Bridges**: Strathclyde University, UK
- **Professor Toshiharu Taura**: Kobe University, Japan

The current list of DRS fellows:

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- **John Christopher Jones**
- **Professor John Langrish**
- **Professor Thomas Maver**
- **Professor Charles Owen**

The Design Research Society has established a new grade of membership – Fellow of the DRS.

Conferment of the title of Fellow of the Design Research Society acknowledges an established record of achievement in design research, and attainment of peer recognition as a researcher of professional standing and competence. Fellows of the Society may use the personal suffix of FDRS.

The purpose of the Fellow membership grade is not to reward only the most exceptional people, but to provide an acknowledgement of consistent professional contribution to design research. Fellows must be full members of the Design Research Society, who satisfy the criteria for election.

Full information and an application form are available on the DRS website, under the 'Fellows' menu item.

Presenting Your Research

Ken Friedman
Norwegian School of Management, Oslo

Conferences

Every year, research scholars in every discipline and professional practitioners in every field present their work to each other in conferences and seminars around the world. Today, several dozen of these conference cycles take place in design research and the allied fields of research-based professional practice. For the readers of Design Research Quarterly, regular conferences include the Design Research Society, the International Association of Societies of Design Research, The Design Society, the Japanese Society for the Science of Design, and the Korean Society for Design Science. Many also attend the conferences of the Design and Emotion Society, Design Forum, the Design History Society, the Nordic Design Research Conference, the European Academy of Design. Professional association conferences in every field of design practice increasingly sponsor research streams. Research papers at these conferences cover a range of issues as wide as the different fields of design process, design research, and design education, the physical, digital, and social artifacts they create, and the social issues they influence.

Wonderground conference, 2006

One virtue of a conference is the opportunity to meet colleagues from different cultures and nations, representing a wide variety of schools, scholarly disciplines, and professional practices. Because of this, however, we speak many different languages: different working languages and dialects, and the different languages of our many disciplines and professions. Sharing ideas and learning from each other requires communicating our research effectively. This article is a simple guide to the basic elements of effective conference presentation for speakers who are still mastering presentation style.

If you have presented at twenty or thirty international conferences, you may feel this guide to be basic. Nevertheless, it may contain useful ideas—and those who teach research skills may want to share it with students.

As I see it, it is always possible to learn something new and useful from outstanding presenters. At conferences, I gain new insight into presentation skills from scholars such as Yukari Nagai, Kun Pyo Lee, Ezio Manzini or Saki Mafundikwa. Every year, I review Robert Anholt's (2006) presentation skills book, and I learn something valuable each time. I also polish my skills by attending David Durling's Presenting On Screen workshop at the Design Advanced Research Training (DART). Those who want to master professional presentation welcome such opportunities.

This article is a written conversation that emulates a DART workshop or research seminar. We're sitting together around a table with cups of coffee or tea or glasses of water. It's a sunny afternoon outside, but the front of the room is darkened for presentation materials. We're rehearsing the papers we'll present at a conference next month, sharing suggestions with each other on how to improve our presentations.

We're not reviewing or commenting on the content of papers. We may offer ideas or suggestions for future research, and we may share ideas about what an author might do on another occasion. Today, referees have made their decisions and the papers are complete.

We're here to help each author communicate ideas as effectively as possible.

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Most older scholars and scientists would have loved to have this kind of information at the start of our careers in academic life. We developed our skills slowly, improving our ability gradually through years of public speaking.

It is now forty-five years since my first presentation at a conference. It was a small conference on international language with fifty or sixty participants. Nevertheless, it was international, and speaking to an international audience for the first time was a challenge to a very young man. In the years since, I have given presentations to audiences ranging from seminars and classes of a dozen or so to international audiences of several hundred. While this experience has often been rewarding, it has sometimes been difficult and even painful. It would have been a great help to have a book with explicit advice on presentation skills, in a well structured, easy-to-use format. This guide will help the reader find them. My experience suggests that beginning speakers who read and use these resources do far better than those who do not.

Much of what I have learned about presenting research can be summarized in a few brief pages. This article presents key issues. Read it, use it, and go further by using the free web resources. Then, get Robert R. H. Anholt's Dazzle 'em with Style. Those who learn and apply the contents of this book will earn a strong reputation for solid presentations.

What you learn here will take you a long way if you practice. You can improve any presentation by presenting it to colleagues at your own university or design school before presenting it in public. There are two reasons for this. The first is a chance to polish and improve your presentation in a relaxed and supportive environment with colleagues who know your work. The other is that you should use every minute of the conference to meet people you do not know and to hear about research that will help you to expand your horizons.

At some conferences, I have been surprised to see masses of earnest young researchers sitting around laptops to rehearse and review their presentations while sessions and even keynote speeches by leading scholars are relatively empty. Rehearsing on-site wastes the time and money these people spend to attend a conference. We don't go to conferences only to present what we learn before we arrive. We go to learn from others. It is in the sessions and the keynotes that we learn something new. Every presenter should arrive ready to speak—and ready to hear others speak.

Use these ideas and practice.

Stayin' Alive

'Got the wings of heaven on my shoes.
I'm a dancin' man and I just can't lose.'
Bee Gees

John Badham's 1977 movie Saturday Night Fever opens with Tony Manero strutting down a Brooklyn street as the Bee Gees perform their disco anthem, Stayin' Alive. This scene captured the audience, drawing viewers into the story of a teenage paint store salesman in Brooklyn who spent his weekend nights in a disco. The premise of this story hardly suggested a film classic, but the enthusiastic yet humble charm of the actors and a simple story told well gave the film a durable reputation, and the role of Tony Manero established John Travolta as a star.

Presenting research at a conference is a bit like playing the role of Tony Manero in Saturday Night Fever. The role of an ordinary session presenter is a career requirement rather than a path to fame. Since most research topics interest specialists, most sessions are relatively small. Those who do attend a session are primarily interested in their own work. To influence the session audience, a presenter must make his or her work interesting and memorable. Like an actor at the start of a career, the presenter who is not an established figure must transform his or her role into star material.

Mastering the art of presentation makes the difference between dying on stage and staying alive.

Fortunately, every presenter who is willing to develop the basic skills of good presentation has a good chance to master the art. Basic presentation skills involve a simple set of actions, behaviors, and practices. Those who adopt these actions, behaviors, and skills can develop a strong conference presence at the start of an academic career. Those who do often develop a better presentation style than experienced conference speakers who do not present their research well. Once a scholar learns the basics, repeated practice leads to mastery in seminars, conferences, and lectures.

This short article describes the basic skills and offers key resources for those who wish to learn more.

If research is worth presenting, it is worth presenting well. There are many reasons to master the art of presentation. Good presentation helps the audience to understand the content and remember key points. Audiences remember

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speakers who help them to learn and remember the content of a presentation. This is a major source of speaking invitations and a good way to become visible in the competitive academic job market. It is a good way to attract the attention of journal editors and book publishers. It also attracts the interest of scholars who work on similar topics, and leading to effective scholarly and scientific networks. This is an important step in developing successful research for increased learning and greater impact.

Conference presentations take work. Those who invest the work will find presenting a rewarding experience. Each presentation makes the next easier.

Because the conference audience consists of specialists, most audiences will identify with the speaker. Conference audiences want speakers to succeed. Because those who attend conferences session are primarily interested in their own work, they want to learn something new that they can take home and put to use. Any presenter who makes research interesting and memorable offers valuable resources to those who attend the session. Even though a session presentation sometimes seems to be a minor conference role, speakers who deliver a solid, well-crafted paper every time they speak soon become visible for leading roles.

1.

Speak directly to the members of your audience. Explain your ideas as you explain ideas to a colleague in a face-to-face meeting. Never read your paper from a prepared text.

The audience has come to listen to you. The more directly you communicate, the more they understand.

How you interact with members of the audience is the key factor in communicating your work. A paper on presentation by The Oceanography Society (2005: 20) points to communications research showing "55% of interpersonal communication comes from facial expressions and body language, 38% comes from vocal quality or tone of voice, (and) 7% comes from the content, the actual meaning of the words."

Four Golden Rules

1.
Speak directly to the members of your audience. Explain your ideas as you explain ideas to a colleague in a face-to-face meeting. Never read your paper from a prepared text.

2
Your speech must be careful, and clear. Pronounce every word. Master the tone and rhythm of spoken English. If English is not your native language, rehearse with a native-born English speaker who can coach you on pronunciation and speaking style. If English is your native language, rehearse with a foreign-born English speaker who can coach you on clarity and comprehensibility for those who are not native-born.

3
Use PowerPoint slides to emphasize your main points and to present key evidence. Use clear, visible slides with large, legible type. Use audio-visual resources only when you need them to demonstrate processes, concepts, or empirical evidence. Never use special effects or standard PowerPoint tricks.

4.
Keep to the schedule. Never run over your time. Never.

Speakers who read a text from paper lose the audience. It does not work. Don't do it.

Two legitimate questions deserve answers here. Can you cover all the key issues and crucial arguments if you present your ideas rather than reading the paper? Will the audience understand and remember your work if you only present your key ideas in a talk?

You cannot cover every crucial argument in a short, spoken presentation. You don't have to. Your complete, written paper presents your research in full form. Interested readers will find the key issues and crucial arguments, along with evidence, sources, and references. Your live talk invites people to read your work. If you interest them in your ideas, they will read your paper. At most conferences, you have twenty minutes of idea time. If you use them well, readers will spend an hour or two in careful reading.

Idea time is the key, and it answers the second question. A conference day is intense. Participants generally attend a keynote by a well-known scholar or scientist before hearing six to ten papers. The day is filled with dozens of small meetings, conversations, reunions, coffees, and dinners. Each has a stream of information for individuals to assimilate. George Miller's (1956) classic limit comes into play here: the magic number seven. As Edward Tufte points out, there is no reason to limit visual artifacts to seven data points, stimuli, or information items. Miller (2003) concurs, writing, "7 was a limit for the discrimination of unidimensional stimuli (pitches, loudness, brightness, etc.) and also a limit for immediate recall, neither of

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which has anything to do with a person's capacity to comprehend printed text." That is the point: your presentation is more complex than a visual artifact for immediate information and it is not the full-text paper for careful reading. It is a series of information stimuli in a crowded information environment.

For a presentation, I hope that listeners will remember three to five key points. One of Miller's (1956) key concepts is information chunking, a processing skill that allows us to aggregate sets of objects into larger classes. This means that some of the evidence I present and some of the arguments I use will come together in the key points that people remember. What they remember, if I am skillful and lucky, is three to five key points. In the crowded information environment of a conference, that's all I can hope for, even when I am a keynote speaker. If I can achieve three to five memorable points, it means that some people will read my full paper. That is what I want. If you take the time to survey session participants after the session and again the next day, you'll find that few speakers leave three to five clear points with listeners—and listeners remember far less the next day. If you make three to five clear points, you will be memorable.

Speak directly with your listeners. Use tone, rhythm, and pacing to create an appropriate sense of narrative flow. Use emphasis and appropriate physical gestures to create a sense of intellectual drama.

Keep your eyes on the members of your audience with direct eye contact. Speak directly to individual members of the audience, shifting your attention to individuals in different parts of the room to create a sense of contact. Watch for reactions and interest to gauge your impact. With experience, you will learn how to adjust your presentation to hold an audience, changing the pace to create excitement for a drifting audience, repeating key points when the audience does not seem to understand what you are saying. According to The Oceanography Society (2005: 20), you should "have your eyes on the audience 90 % of the time you are speaking, particularly at the opening, the closing, and at the end of each emphasized statement."

In a conference session, you communicate the content of your paper by communicating memorable ideas. If you succeed, you convert listeners into readers.

Robert R. H. Anholt (2006: 119-156), Michael Alley (2003: 165-204), and Cindy Todoroff (1997: 89-104) all give excellent pointers on delivery and presentation skills.

2.

Your speech must be careful, and clear. Pronounce every word. Master the tone and rhythm of spoken English. If English is not your native language, rehearse with a native-born English speaker who can coach you on pronunciation and speaking style. If English is your native language, rehearse with a foreign-born English speaker who can coach you on clarity and comprehensibility for those who are not native-born.

This is a golden rule for conferences where people come together from many different nations, language groups, and dialect groups. While Anholt (2006), Alley (2003), and Todoroff (1997) offer excellent advice on presentation and delivery techniques, they cannot tell a non-native English speaker how to speak well. Native-born English speakers must also master new skills.

Many foreign-born scholars use English as a second, third, or sometimes fourth language. Those who do often fail to pronounce words properly. In some cases, the tone and rhythm of their native tongue makes their English incomprehensible. A member of my doctoral committee was the best example of this I've ever heard. He spoke sixty-five different languages. His grammar and spelling were perfect in a dozen or so, and excellent in several more. His reading knowledge and listening ability were excellent in the rest. His listeners had problems when he spoke, when his thick Czech accent made it difficult to understand him.

The difficulties that a native English speaker may have in understanding such speakers multiply dramatically when a foreign-born speaker from one language group speaks English to the foreign-born listener from another language group.

The way to move beyond this communication barrier is to approximate as closely as possible one of the major English language forms. These include BBC News British English, NBC News or CBS News American English, CNN News English, ABC News Australian English, or CBC News Canadian English. The news channels exemplify clear, comprehensible pronunciation for worldwide audiences. Today's international broadcasting generally makes it possible for you to listen to one of these channels on a regular basis to get the tone, rhythm, and feeling of spoken English. If you are not an expert English speaker, choose one channel and learn to speak one form of English well rather than adapting language habits and patterns from several channels.

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Before you present, rehearse your presentation with a native-born English speaker. Ask for specific advice and coaching on your pronunciation, tone, and rhythm.

If you are a native English speaker, practice at least once with foreign-born listeners. Most native speakers do not speak clear, broadcast standard English. Even in live presentation, we are "broadcasters" to an audience of listeners. While English is my native tongue, I have worked with foreign-born English-language audiences for many years. Through practice, I speak more slowly and clearly than native English speakers do in their own nations. This has two results. One is that my audiences always understand me. The other is that I no longer sound like a native speaker to my countrymen.

When I visit native North America, people often praise my English and ask me where I come from. Many years ago, I got so tired of explaining that I started to answer, "Norway" The law of unintended consequences took hold in a second, unexpected question.

"Norway?" they'd ask. "Why do you speak such good English?".

There was only one answer left: "We watch all your movies."

3.

Use PowerPoint slides to emphasize your main points and to present key evidence. Use clear, visible slides with large, legible type. Use audio-visual resources only when you need them to demonstrate processes, concepts, or empirical evidence. Never use special effects or PowerPoint tricks.

A few years back, information design expert Edward Tufte (2003) made international headlines when he published an article in Wired magazine titled, "PowerPoint Is Evil. Power Corrupts. PowerPoint Corrupts Absolutely."

Tufte is not opposed to effective presentation graphics. Quite the contrary, he is one of the leading experts on the effective, honest, and persuasive representation of visual information. Tufte's argument against PowerPoint is that most PowerPoint techniques are ineffective and often dishonest. They create noise rather than information. They use chart clutter and purposeless tricks that tend to confuse viewers rather than helping them to understand information and issues clearly. He argues that the worst feature of PowerPoint is that PowerPoint tools and defaults change the way presenters build an argument, ultimately changing the way that they think.

Tufte summarizes his arguments in on "the cognitive style of PowerPoint. Pitching out corrupts within" (Tufte 2006: 156-185).

For many years, I avoided PowerPoint presentations for the same reasons that Tufte does. I made this decision because I felt that direct audience contact permitted me to emphasize the rhetorical development of my argument in a presentation, adjusting it to audience needs in a way that would be impossible with a planned sequence of slides.

In 2005, I began using PowerPoint. There were several reasons for the shift. The most important of these was the fact that visual headlines permit audiences to follow a presentation more effectively than spoken words alone. This helps audiences who speak English as a second or third language that they do not use in daily communication. This is the kind of audience you will meet at international conferences.

While most designers and design researchers use PowerPoint, many fail to use PowerPoint well. The challenge is using PowerPoint or Apple Keynote effectively.

The way to start is to ask three questions for each visual piece or slide you present. You should answer yes to each of these three questions before using the visual piece: "Will it add to my presentation? Does it relate to material covered in my talk? Is the graphic quality acceptable?" If you cannot answer is yes to all three questions, delete the piece or revise it. (The Oceanography Society 2005: 12)

The three key problems I see in many design research presentations involve clutter of different kinds, visibility, and legibility.

Clutter takes two forms. The first is needless or irrelevant images, including tricks openings, headlines that jump around and dance, or cute illustrations. The second form of clutter is what Tufte calls "chart clutter," rendering bars in bar charts in three dimensions, adding needless colors to pie charts, and the like.

Visibility is a key issue. If the members of your audience cannot see your visuals, they will not understand or remember them. This generally takes such forms as careless use of color, dark text against dark backgrounds, light text against light backgrounds, color fades that render half the text less visible than the other half, and text that is too small.

Legibility problems involve both too small text and too much text. I generally suggest three to seven items on a slide or five to seven lines of large, bold text. In most cases, more lines render text illegible to much of the audience. The one

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exception to this rule involves explicit definitions or quotations that I read slowly and carefully to the audience.

David Durling delivers a valuable and entertaining workshop about presenting on-screen at the Design Advanced Research Training Seminars. His Keynote overheads are available free from the DART web site (Durling 2007).

Anholt (2006: 73-117) offers an excellent chapter on "visual displays: how to (and not to) use them," and Michael Alley (2003: 93-164) provides an excellent, detailed chapter on visual aids.

4. Keep to the schedule. Never run late. Never run over your time. Never.

Most conference sessions are designed for two or three twenty-minute presentations with ten minutes for questions from the audience. Some conferences have sessions with three twenty-minute papers followed by a time for questions and answers to all presenters. In both systems, it is important to keep to your time. There are three major reasons for this.

First, conference sessions run parallel. The schedule places papers in such a way that participants can move between sessions during the change between speakers. If you run over, you make it difficult for people to change smoothly.

Second, running over your schedule is a waste of time. Unless you are the last speaker, the time you waste belongs to the next speaker. Nothing is worse than stepping to the podium as the last speaker after two earlier speakers have gone over time. People who prepare their twenty minutes carefully at home with repeated rehearsal and commentary cannot cut their presentation in half, especially if the presentation includes visual material. This is a problem for skilled speakers. It is devastating for beginning speakers.

The Oceanography Society (2005: 12-19) presents ten commandments for visual aids, along with some principles on technological support. The commandments are:

I. "Each visual aid shown must enhance, support, exemplify and/or facilitate understanding of material covered in your talk.

II. All information presented visually should be brief and concise. It should be presented in the most comprehensible format and edited to the minimum number of words possible.

III. Visual aids must be legible and clearly visible to the entire audience.

IV. Two or three facts or information points per image are best; six are considered the absolute maximum.

V. Do not load too much visual material into a talk.

VI. Use color for emphasis, distinction and clarity.

VII. Do not read your visual aids to the audience instead of giving a talk.

VIII. Be aware of the "life span" of each visual piece.

IX. Rehearse your talk with your visual aids.

X. Prepare visual aids that can be accommodated by the technology on hand and the speaking environment."

My worst speaking experiences have taken place at conferences where the speakers before me went over time. In one case, we were both keynotes. The keynote before me went twenty minutes over. Even though my speech was designed for the scheduled time, the organizer asked me to make up lost time on the schedule to allow for coffee—and acted as though I had gone on too long when I was unable to make up for the full twenty minutes.

When you are standing on the platform, fifteen or twenty minutes may seem like nothing. Each of those minutes is an eternity to the speaker whose time you are wasting.

This is crucial in the conference format. In every session, three speakers share an hour, 20 minutes per speaker, with time for questions and answers. You must keep to the schedule.

Rehearsing your presentation will help you present your key points within your 20 minutes. Rehearsing will also help you to make a better, more memorable presentation.

The Oceanography Society (2005: 9) calls for "death (or worse) to those who run overtime." Most research communities today consist of scholars who generally oppose the death penalty—until you run three minutes into their time.

Jenkin Lloyd Jones, the distinguished social reformer, made an exception to his pacifism for speakers who waste time: "A speech is a solemn responsibility. The man who makes a bad thirty-minute speech to two hundred people wastes only half an hour of his own time. But he wastes one

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hundred hours of the audience's time-more than four days—which should be a hanging offense" (quoted in The Oceanography Society 1995: unpaged).

Speakers who run over their allocated time cause the most common problems at design research conferences. If you develop a reputation for keeping to your time in conference sessions, you will dramatically increase the number of invited presentations that come your way. This, in turn, will increase the impact of your research.

Michael Alley (2003: 189-193), and The Oceanography Society (2005: 9) both discuss ways to ensure that you are on time—with enough time to say everything important to your success.

The Next Step

The reference list for this article includes several useful web sites with free resources on presentations and presenting.

These include Alley (2007b), Durling (2007), and Tufte (2007b). The Oceanography Society (2005) offers a complete manual for easy download in PDF format.

I recommend seven outstanding books on presenting research in live conference format. Every university library should have them all. If your library does not, ask your librarian to order them.

The best and most widely used among these is probably Robert R.H. Anholt's (2006) Dazzle ëEm with Style. The Art of Oral Scientific Presentation. Michael Alley's (2003) The Craft of Scientific Presentations. Critical Steps to Succeed and Critical Errors to Avoid runs a close second. If you hold a seminar on presentation skills, Anholt should be your text. If you only have time to read one book, I recommend Anholt.

Each of the other five books has virtues, and each emphasizes slightly different issues or approaches: Booth (1993), Conradi and Hall (2001), Feibelman (1993), Tierney (1995), and Todoroff (1997).

These resources will help you to succeed in a research career in academic life, science, industry, and government. As you gain experience, you will have a context into which you can integrate advice, adapting it to your needs and these books will become even more useful. While these books generally deal with scientific presentations, the advice they offer works for scholars in the humanities and for practice-based researchers in design and the arts.

That brings me to the end of this little guide. I'll close with a valuable checklist for effective presentations from the first edition of Anholt's (1994) book: "Checklist for Scientific Presentations.

- Create an informative title.
- Place your presentation in the context of a major scientific principle.
- Focus on a single issue and adjust it to the interests of your audience.
- Identify the underlying question you will address, divide it into sub-questions, and answer each question.
- Follow a logical line of thought. Explain scientific concepts unambiguously with a minimum of professional jargon.
- Avoid backtracking. Make sidetracks brief and always return to the point.
- End with a concise, clearly formulate conclusion in the context of your chosen scientific principle. Stop after you've delivered the take-home message.
- Design visual displays to be simple, error-free, and clearly visible.
- Practice your presentation to build confidence in delivery skills."

Ken Friedman

Ken Friedman

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DRS
Special Interest Groups
ANNOUNCEMENT AND CALL:

In response to suggestions of international membership, the Design Research Society (DRS) has begun to set up Special Interest Groups (SIGs) as a way of providing members with a forum for your interests and to engage and work actively together around the world. The aims of SIGs are:

1. **SIG**s are concerned with a developing area of research in design and be able to demonstrate that. Ideally the area of interest should have implications for a range of disciplines in design.

2. **SIGs** are international in scope – not bounded by a regional or institutional interest. The main aim is to develop collaborations between DRS members.

Three SIGs have been proposed, the first SIG has been approved and the second is pending as follows:

☞ **Special Interest Group on Experiential Knowledge** (approved) **EKSIG** is concerned with understanding the nature and role of knowledge in research and practice in order to clarify fundamental principles and practices of using practice in research both with regard to research regulations and requirements, and research methodology.

☞ - **Special Interest Group on Design for Health and Well Being** (pending) The SIG will focus on bringing together designers, design researchers, health professionals and others responsible for the delivery of health care services and products and 'less traditional' well being therapies.

DRS members are invited to join any Special Interest Group, or to propose new SIGs.

SIG page and contact information:
http://www.designresearchsociety.org/joomla/content/view/79/26/

Current SIGs and SIG rules and regulations:
http://www.designresearchsociety.org/joomla/content/view/84/100/

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Raga India: architecture in the time of euphoria (6-11)
Kazi K. Ashraf
- ▸ Salman Rushdie's midnight's children; the Husain-Doshi Gufa in Ahemdabad; MF Husain; Balkrishna Doshi; Vritra; Vastupurusa; Surendran Nair'
- ⁕ 'holding up a barometer to the nation's identity'

TheIndia project (12-15)
Sunil Khilnani
- ⁕ asking 'what remains of the universalist project of India's political founders. Has architecture, in the rush for market and economic success, lost its self-understanding?'

Indian Panorama (16-17)
- ▸ software/IT; Peter Eisenman; tradition and technology; Balkrishna Doshi, Charles Correa, Raj Rewal, Ranjit Sabikhi; global and transnational links; Shailja Patel; migritude; excess is good; Nargis; Satyajit Ray; Ghautam Bhatia; modernitis plague; Mulk Raj Anand's challenge; mistries'

Chris Lee/Kapil Gupta (19)
- ▸ Jewel Tech, Mumbai, 2002; Fort School, Mumbai, 2005; deGustibus, Mumbai, 2007
- ⁕ exploring the 'issues that lie at the intersection between architecture and urbanism with a particular focus on developing ... for these environments'

TEAM (Snehansu Mukherjee and A.R. Ramanathan) (20)
- ▸ Aishwarya at Baroda; Baroda, 1999; Amby Valley Sahara Lake City Leisure Center (AVSLC), Lonavla, Maharashtra, 2003
- ⁕ embodying 'the new ebullient economy of India in the various townships, housing schemes, malls and new building types'

Fabian Ostner (21)
- ▸ Kodaikanal Hotel and Spa, Kodaikanal, Tamil Nadu, 2004; Midford Garden, Bangalore, 2003
- ⁕ 'bridging traditional building culture with a modern approach to architecture'

Tod Williams Billie Tsien Architects (22-23)
- ▸ Banyan Park, Mumbai, 2003
- ⁕ 'known for producing lyrical designs that are materially rich and spatially innovative'

One space, many worlds (24-29)
Ramish Biswas
- ▸ SLOAP (Space Left Over After Planning); Jan Morris; emerging India; Nissel and Mehrotra; three different poses in three different modern dresses; second-hand Vegas/Dubai; change your clothes, change your lifestyle
- ⁕ Examining 'how ... housing developments of ... middle classes are creating townships that intensify sprawl and further decentralise cities'

The visceral city and the theatre of fear (30-33)
Ravi Sundaram
- ▸ Monica Narula, night vision, Sarai Media Lab, Delhi, 2004; traffic; Mrityunjay Chatterjee, The Sensorium 1, Sarai Media Lab, 2006; The Sensorium 2; Walter Benjamin's suggestion
- ⁕ Explaining 'how in Delhi ... the media provided the catalyst for mass hysteria and psychosis during the summer of 2002'

Mumbai Architects (34-35)
- ▸ world city; Suketu Mehta's urban paean The Maximum City; Greg Roberts' para-autobiography Santaram; most expensive real estates in the world; Rahul Mehrotra; Kapil Gupta; Nuru Karim, Quaid Dongerwalla and Rahul Gore

Studio Mumbai Architects (Bijoy and Prija Jain) (36-41)
- ▸ Hiremath House, Kashid, Murud, 2006; Shroff House, Bandra, Mumbai, 2004; Shakti Resort, Leti, Uttaranchal, 2007; Jamshyd Sethna House, Nandgaon, Alibag, Maharashtra, 2004; Nikhil Kapoor House, Kashid, Murud, 2003; Nilofer Kapadia House, Satirje, Alibag, 2004
- ⁕ 'a collaborative, multidisciplinary firm integrating architecture, landscape and interior design with product and furniture design'

Rahul Mehrotra Associates (42-45)
- ▸ corner plot House, Chennai, 2003; rural campus for Tata Institute of Social Sciences (TISS), Tuljapur, Maharastra, 2004; house for a film maker, Alibag, near Mumbai, 2001; house on an orchard, near Ahemdabad, 2004; Laxmi Machine Works (LMW) corporate office, Coimbatore, Tamil Nadu, 1998; restoration of Chowmahalla Palace, Hyderabad, 2002
- ⁕ giving 'expression to the multiple worlds, pluralism and dualities that so vividly characterise the Asian landscape'

Samira Rathod Design Associates (46-49)
- ▸ karjat farmhouse, Karjat, Maharashtra, 2001; Interactive Maze, Colaba Woods, Mumbai, 2002; Palete, Mahalaxmmi, Mumbai, 2004; office interiors for Asian Age, Mumbai, 2002; tree house, Bharuch, Gujarat, 2000; Kishore Mariwala House, Alibag, 2006
- ⁕ displaying 'an exacting sense of materiality, tactility and crafting combined with playful experimentation and innovation'

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Auroville: an architectural laboratory (50-55)
Anupama Kundoo
- ▸ Sri Aurobindo Ghose; Mirra Alfassa, the mother; Antonin Raymond; Frank Lloyd Wright; Golconde; reinforced-concrete building
- ⁜ how 'the dream of building a new city' is "a magnet for architects around the world"'

Local stone (a fragment) (56-59)
Reinhold Martin
- ▸ local grey granite, Sanjay Mohe, Indian Institute of Management (IIM), sandstone cladding, Charles Correa, Raj Rewal, Life Insurance Corporation of India (LIC)
- ⁜ 'a particular choice of stone can potentially set off a complex string of associations with geopolitical connotations'

Material formations (60-61)
- ▸ Achyut Kanvinde; Balkrishna Doshi and Laurie Baker; scenography and mythography; metal and glass panels; substantiality and sustainability; Le Corbusier and Louis Kahn; Gandhian ethos; Reinhold Martin

Matharoo Associates (Gurjit Singh Matharoo) (62-63)
- ▸ Prathama Blood Center, Ahmedabad, 2000; Cattiva mobile blood-donation van, 2005; house of Ashok Patel, Ahmedabad, 2006; Ashwinikumar Crematorium, Surat, Gujarat, 1999
- ⁜ 'Projects from private residences to public facilities brandish a rough, impenetrable shell that conceals a cocoon of animated space.'

Anupama Kundoo (64-65)
- ▸ Wall House, Auroville, 2000; Creativity, Auroville, 2003; Pierre's House, Auroville, 1992
- ⁜ 'Informed by research into and experimentation with eco-friendly construction methods' .... 'fundamentals of Indian tectonics in forming its architectural language'

Vastu Shilpa Consultants (Rajeev Kathpalia) (66-67)
- ▸ Arjun Machan, Ahmedabad, 2004; Imax Theatre, Ahmedabad, 2002
- ⁜ 'commentary on the cosmic and mythological dimension of architecture and thus continues the larger-than-building imperatives of the practice'

Architecture Autonomous (Gerard da Cunha) (68)
- ▸ Nrityagram Dance Village, Bangalore, 1994; Museum of Traditional Goan Architecture, near Panjim, Goa, 2004
- ⁜ Practicing in Goa; 'a unique culture and architecture that is evident in da Cunha's lively and rather Gaudíesque work'

Urbana (69)
- ▸ A5 architects' residence, Dhaka, Bangladesh, 2002; NEK10, Dhaka, 2001
- ⁜ based in Dhaka; displaying 'a heightened sense of material crafting within an invigorated Modernist ethos'

In depth: inscribing the Indian landscape (70-77)
Anuradha Mathur and Dilip da Cunha
- ▸ British surveyors; 18th century; maidan; Hobson-Jobson, an open space, an esplanade, parade-ground or green, in or adjoining a town; Oval and Azad Maidans in Mumbai, a place released from the confines of programme, but held by space
- ⁜ 'a new, deeper reading of the landscape that fully acknowledges the multiple uses and potential initiations of public spaces'

The background in Bangalore; architecture and critical resistance in a new modernity (78-83)
Prem Chandavarkar
- ▸ Fatehpur Sikri; Jaisalmer or Jaipur; Indian architecture; CR Narayana; Rao; LN Chitale; Bennett Pithavadian; Narayan Chandavarkar; Pesi Thacker
- ⁜ Bangalore's 'architectural culture continues ... [to be] one of intellectualism, valuing the background, a sense of ... contextualism over the ... facadism of other cities'

A trip to India (84-89)
Michael Sorkin
- ▸ SMLXL; Coorg; Jimmy Lim; Lim Sorkin Design (LSD); minimal use of energy; natural ventilation; on-site waste treatment and local materials; wooden architectures; Dravidian holy places
- ⁜ 'the delirious quality of global practice'; 'the unique chance to design one-off residences for a lush, Garden of Eden-like setting'

Bangalore architects (90-91)
- ▸ India Inc; Prem Chandavarkar; Anuradha Mathur and Dilip da Cunha; Delhi-Ahmedabad-Mumbai axis; architecture of the background; Mathew &Ghosh Architects; Hundredhands

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Mathew & Ghosh Architects (92-97)
- ► Mathew & Gosh office and design studio, Bangalore, 2004; Benjamin House, Banaglore, 2001; SUA House corporate office, Bangalore, 2002; St Mark's Cathedral Resource Centre, Bangalore, 2006; Kuruvila House, Bangalore, 2002; Bhopal Gas Tragedy Victims Memorial Competition, 2005 (Awarded Second Position); Trinity-Malabar Escapes at Stuber Hall, Fort Cochin, Kerala, 2004
- ⁜ 'a sustained dialect to the architecture ... that includes consummate materiality and fine crafting, light as a medium, ... good spatial possibilities'

Hundredhands (98-99)
- ► The Center of Hope, Tiruchchirapalli, Tamil Nadu, 2005; 69/70 Residency Road Bangalore, 2004
- ⁜ 'a multidisciplinary design studio'; 'focus[es] on the urban context ... questions of scale, character, spatial and visual impact, and remaking the public domain'

Chandavarkar and Thacker (100-106)
- ► Office interior for MindTree Consulting, Bangalore, 1999; Hill Resort, Chikmagalur, 2007; Biotech Innovation Centre, Hyderabad 2007; College and School of Nursing, Apollo Hospitals, Chennai, 2004; ValueLabs Software Campus, Hyderabad, 2006; Rubix commercial complex, Bangalore, 2007
- ⁜ 'thoughtful and reflective responses as architecture finds itself at a critical juncture in this city of a euphoric present'

Mindspace (Sanjay Mohe) (107)
- ► Office for Bharatiya Reserve Bank Note Mudran, Bangalore, 2003
- ⁜ 'the architectural ethos of Bangalore that mediates between a modulated Modernism and the contingencies of the city's specificities'

Sharifa's house (110-113)
Dr Adnan Morshed
- ► Grameen Bank, Bangladesh-based microfinance organisation, microcredit to the rural poor, domestic space, bungalow, reinforced concrete pillars, corrugated-tin sheets
- ⁜ 'how a ... loan from the Grameen Bank allowed Sharifa and her family to build a house and to realise what amounts to ... more than ... a permanent home'

This is not a building! handmaking a school in a Bangladeshi village (114-117)
Kazi K Ashraf
- ► Anna Heringer and Eike Roswag; Hand-Made School for METI, Rudrapur, northern Bangladesh, 2006; Aga Khan Award for Architecture; Kenneth F Brown Asia-Pacific Architecture Award; Kerry Hill; Itsuko Hasegawa; Architectural Record; Richard Ivy
- ⁜ 'how this collaborative community effort has resulted in ... inventive and intriguing design, realised ... with traditional materials and local skills'

Subcontinental Panorama (118-119)
- ► Qurratulain Hyder; The River of Fire; paradigms for building in a hot-humid milieu; Team Architrave (Madhura Prematilleke); C. Anjalendran of Sri Lanka; Shattoto:Architecture for Green Living (Rafiq Azam); Ann Pendleton-Jullian and Piercy Conner Architects &Designers

Kerry Hill Architects (120-121)
- ► Amankora, Bhutan, 2007; ITC Sonar Bangla Hotel, Kolkata, 2003
- ⁜ committing to 'creating innovative and regionally appropriate architecture'; 'in the vanguard of ... a pan-Asian tropical Modernism'

Piercy Conner Architects & Designers (122)
- ► SymHomes Mk1, Kolkata, 2006
- ► demonstrating 'a profound understanding of its cultural and communicational possibilities' of 'the theory and practice of architecture'

Shatotto: Architecture for Green Living (Rafiq Azam) (123)
- ► Gulfeshan Apartment Building, Dhaka, 2003; Meghna Residence, Dhaka, 2006; Mizan Residence, Dhaka, 2004
- ⁜ dematerialising 'the ... anti-urban boundary wall that characterises the city with new layerings of gardens, plantings and ... gardens in the air'

Ann Pendleton-Jullian (124)
- ► Access Program Buildings; Asian University for Women; Chittagong, Bangladesh, 2006
- ⁜ 'the intersection between pragmatic concerns and the ambitions of the imagination'

Saif Ul Haque Sthapati (125)
- ► Govinda Gunalanker Hostel, Chittagong, Bangladesh, 1998
- ⁜ 'an architectural provocateur in response to the urgency of place and time'

Tsunami Design Initiative (TDI) (126)
- ► Tsunami Safe(r) House, various sites, Sri Lanka, 2005
- ⁜ Winning 'the Tsunami Challenge Competition in 2005, ... which called for ideas for rebuilding efforts following the catastrophic tsunami in South Asia in 2004'

Madhura Prematilleke (Team Architrave) (127)
- ► Long House 1 (Chandan and Nadhini De Silva Residence), Colombo, 2003; Royal Bakery, Colombo, Sri Lanka, 1999
- ⁜ ''a robust architecture' that 'can accommodate – and indeed thrive upon – the manner in which it is used, misused or otherwise 'Asianised'''

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Recent Artcles. continued from p. 18

Boston Institute of Contemporary Art (130-133)
Jayne Merkel
- ▸ Diller Scofidio + Renfro; clamp-like shape; glass-and-steel skin; Water Café; harbour views; glass-walled elevator; mediatheque; 325-seat theatre; Perry Dean Rogers Partners of Boston
- ⁜ 'how the interiors are individualised and energised ... in a scheme that minimises the location's drawbacks and turns a visit into an art experience in its own right'

AD+ Interior Eye

Casa Kike, Costa Rica (134-137)
Jeremy Melvin
- ▸ Gianni Botsford; computer-generated fractal patterns; traces regulateurs; two volumes; elevation on stilts; tall engineers; timber frame
- ⁜ 'infusing 'traditional practices with a technological sophistication that enhances rather than sets itself against local conditions'

AD+ Building Profile

DSDHA (138-143)
Helen Castle
- ▸ Iliffe Yard; nursery architecture; CABE; Hoyle Early Years Centre; RIBA award; British Construction Industry Award; Sure Start initiative
- ⁜ discovering a 'practice that thrives on the heady mixture that educational buildings offer, combining social engagement with complex client needs'

AD+ Practice Profile

Good Natured Stuff (144-145)
Neil Spiller
- ▸ David Green's Logplug; John Frazer's Evolutionary Architecture; Zoomorphic design; Dennis Dollens; Cloud 9; Enric Ruiz Geli; aviaries
- ⁜ 'on nature and what the odd naughty leaf has contributed to art and architecture over the years'

AD+ Spiller's Bits

On green design (part 2): the basic premises for green design (146-147)
Ken Yeang
- ▸ integrated with nature; balancing the biotic content; ameliorating biodiversity; Mewah Oils Headquarters; Kuala Lumpur; landscaped ecological bridges; human-made ecosystems; layer-cake method; sieve-mapping
- ⁜ second of three parts; 'How a prospective site can provide the essential springboard for eco-masterplanning'

AD+ Yeang's Eco-Files

McLean's Nuggets (148-149)
Will McLean
- ▸ Checking Out Kakamigahara Crematorium in Japan; human termini; Aldo Rossi's Rationalist Palais de Death; Hunter S. Thompson; Professor Hilary J. Grainger; Distressingly Banal: the architecture of early British crematoria; death redesigned

AD+ Article

Sensible objects for digital environments (150-153)
Valentina Croci
- ▸ temporary; interactive installations; dotdotdot; Laura Dellamotta; Giovanni Gardi; Fabrizio Pignoloni; Alessandro Masserdotti; involvement of the visitor; RFID (radio frequency identification)
- ⁜ developing 'interactive installations with a participative dynamic'; communicating messages 'through the immediate and exclusive involvement of the visitor'

AD+ Userscape

Forming Climatic Change (154-157)
Steve Hardy, Werner Gaiser
- ▸ the environments; ecology and sustainability (EES) research cluster; Brette Steele; Mike Weinstock; Steve Hardy; Werner Gaiser; environmental tectonics; BAD
- ⁜ 'a new series edited by Michael Weinstock ... The activities of the units are brought under the spotlight'

AD+ Unit Factor

Gods are in the Details: The Ambika Temple at Jagat (158-159)
Adam Hardy
- ▸ The Ambika Temple; Jagat; complex designs; goddess Ambika; Nagara tradition; Latina shrine form; Shekhari mode; aedicular structure
- ⁜ 'the lessons that contemporary architects might learn from this ancient structure'

Architectural Design, 78:1
Special Issue: Cities of Dispersion
Jan.–Feb. 2008:

ISSN: 0003-8504 WEB LINK

Urbanism Without Density (6-11)
Rafi Segal, Els Verbakel
- ⁜ 'Sprawling, low-density urban environments throughout the world begs the question: What constitutes a city?': rethinking public space, the 'challenges and opportunities' presented

- ▸ The public and the V**2** (12-15)

Bruce Robbins
- ⁜ The Blitz: Was World War Two 'a watershed after which the ideal intact city and its community were ultimately destroyed?'

Terminal distribution (16-21)
Albert Pope
- ⁜ After modernism, for whom are cities being designed?

Public lifestyle in the low-density city (22-27)
Alex Wall
- ⁜ Could shopping centers be 'urban sprawl's redemption?'

Continued p. 20

Recent Artcles. continued from p. 19

Old dispersions and scenes for the production of public space: the constructive margins of secondarity (28-33)
Bruno de Meulder
- Belgium as one open city: the 'logic of this unbroken urbanscape' and 'reinserting informal spaces'

Water and asphalt: the projection of isotropy in the metropolitan region of Venice (34-39)
Paula Viganò
- the Veneto region as 'an alternative definition of the dispersed territory'

Intermittent cities on waiting spaces and how to inhabit transforming cities (40-45)
Claudia Faraone, Andrea Sarti
- the 'Transient contemporary city' and 'highly dynamic, ready-made urban culture'

String block vs superblock patterns of dispersal in China (46-53)
Kjersti Monson
- the chinese 'superblock' as the 'unit of urban planning': its raisons d'etre and better alternatives for market-driven economies

In the our beautiful future (54-57)
Martha Rosler
- a project in 'imagining alternative publics to rescue the utopian hopes of modernity'

Archipelago of the Negev desert: a temporal/collective plan for Beer Sheva, Israel (58-63)
Rafi Segal
- creating connectivity in a city of multiple communities without a central core

Peripheral landscapes, El Caracol, Mexico City (64-67)
Jose Castillo
- providing leisure, open space and exchange between communities where 'unplanned illegal development exists cheek by jowl with developer-driven housing'

Urban voids grounds for change reimagining Philadelphia's vacant lands (68-73)
Deenah Leob
- 'Cities...can simultaneously experience contraction and expansion.'

Urban [im]plants tactics for recombining landscape and collective space in Bonheiden, Belgium (74-79)
Els Verbakel, Elie Derman
- making settlements livable in areas of natural beauty 'by creating public spaces that use the town's original landscape as the base material.'

User-focused public space (M)UTOPIA in Denmark (80-83)
Serban Cornea
- 'MUTOPIA': bringing 'to public space a strong sense of delight and playfulness, while demonstrating an overriding concern with the end user.'

Royal Dutch Military Police Campus: Zvi Hecker's landscape urbanism (84-87)
Rafi Segal
- a police campus in a dispersed urban environment 'with a notion of the urban that creates a city within a wall'

Ville-Port, Saint-Nazaire The Historic Periphery (88-93)
Manuel de Solá-Morales
- addressing 'the structural, visual and mnemonic divisions that have grown up over time between a working port and seaside resort'

Nam Van Square, Macau (94-99)
Manuel Vicente
- 'a plaza that was able to assimilate the past forms of the historic city without absorbing the symbolism of its colonial history'

Mur Island, Graz, Austria (100-101)
Vito Acconci
- a cultural center as a 'missed the opportunity to rejuvenate areas of the city beyond the historic core'

Architecture and dispersal (discussion) (102-107)
Rafi Segal, Els Verbakel, Stan Allen, Marcel Smets, Sarah Whiting, Margaret Crawford
- 'What constitutes public space in the contemporary city? Can the public sphere still exist in the urban context? Should public space be fought for by architects and urban designers? Or... is it the landscape architects alone who have been quick to realise the potential of the empty spaces in our cities as a ripe terrain for change?'

Reinvigorating childhood (110-113)
Howard Watson
- the 'pared down spaces' and 'brave, graceful subtlety of Caruso St John's redevelopment of the Bethnal Green Museum of Childhood in East London.'

Kieran Timberlake Associates (114-119)
Jayne Merkel
- building for the 21st century: 'developing new materials and ways to save energy ... and fabrication drawn from the automobile, aeroplane and shipbuilding industries'

Natural methods of interaction or natural interaction in the everyday digital world (120-123)
Valentina Croci
- 'more natural ways for people to interact with digital environments through physical or tactile triggers.'

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Recent Artcles. continued from p. 20

Putting the isquoIrsquo back into architecture (124-125)
Neil Spiller
- the 'spatial experimentation of the work of Charlotte Erckrath'

Radical interface: AA New Media Research Initiative (126-129)
Joel Newman, Theodore Spyropoulos, Vasilis Stroumpakos
- a research initiative that calls for architecture 'to abandon its hold on the formal qualities of the physical in favour of a mode of experience that provides an interface that fully reflects the way we inhabit space today'

On green design (part 3): the basic premises for green design (130-133)
Ken Yeang
- 'the alternatives that are on offer to designers who want to ensure comfortable internal conditions in their buildings.'

AD+ McLean's Nuggets (134-135)
Will McLean
- The de- and re-materialisation of the art object , 'Documenta'

Artificial Intelligence for Engineering Design, Analysis and Manufacturing: 21:4 Design Computing and Cognition 2008

ISSN: 0890-0604 Web Link

The routine design–modular distributed modeling platform for distributed routine design and simulation-based testing of distributed assemblies (1-18)
M. Taner Eskil, Jon Sticklen and Clark Radcliffe
- distributed simulation; modular modeling; off-the-shelf parts; proprietary information; routine design

Aesthetic evolutionary algorithm for fractal-based user-centered jewelry design (19-39)
Somlak Wannarumon, Erik L.J. Bohez and Kittinan Annanon
- computational aesthetics; evolutionary art; interactive evolutionary design; iterated function system fractal; jewelry design

Prediction of stress in fillet portion of spur gears using artificial neural networks
M.S. Shunmugam and N. Siva Prasad
- artificial neural network; backpropagation algorithm; fillet geometry; finite element method; spur gear; Taguchi method

Comparing mathematical and heuristic approaches for scientific data analysis
Aparna S. Varde, Shuhui Ma, Mohammed Maniruzzaman, David C. Brown, Elke A. Rundensteiner and Richard D. SissonJR.
- comparative study; computational estimation; heat treating of materials; heuristic methods; mathematical modeling

Design Issues: 24:1 Winter 2008

ISSN: 0747-9360 web link

Introduction: Design and organizational change (2-9)
Richard Buchanan

Managing as designing: lessons for organization leaders from the design practice of Frank O. Gehry (10-25)
Richard J. Boland, Jr., Fred Collopy, Kalle Lyytinen, Youngjin Yoo

Product development as a vehicle for organizational change (26-35)
Sabine Junginger

On the case study method of research and teaching in design (36-40)
Maggie Breslin, Richard Buchanan

ZIBA Design and the FedEx project (41-54)
Maggie Breslin

Design in the Australian taxation office (55-67)
John Body

Information design for strategic thinking: Health of the System Reports (68-77)
Julian Jenkins

High-reliability organizations: changing the culture of care in two medical units (78-90)
Daved van Stralen

Book reviews:

In the bubble: designing in a complex world. John Thackara

The design of dissent: socially and politically driven graphics. Milton Glaser and Mirko Ilic

The graphic imperative: international posters for peace, social justice and the environment, 1965–2005. Boston: Massachusetts College of Art, 2005

The Design Journal: 10:1 Winter 2007

ISSN: 1460-6925 web link

Diversification, design, strategic planning and new product development: a jewelry industry knowledge transfer partnership
G. Penfold

Designing the interface between dementia patients, caregivers and computer based intervention
Gowans et al.

A case study of a touch based interface for in-car audio systems
Bjelland et al.

Student use of virtual and physical modelling in design development – an experiment in 3D education
C. Charlesworth

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Review:
You have to pay for the public life: selected Essays of Charles Moore. Kevin Keim (ed.)
Michael Todd McCulley

Design Management Review, 18:4
The State of Design Management Education
Fall 2007

ISSN: 1460-6925 WEB LINK

Design methodology as a migration from analytic methodology
Darius Mahdjoubi
- '...Design's value lies in its integrative perspective.'

Design strategies for technology adoption
Alonzo Canada, Pete Mortensen, Dev Patnaik
- a framework for uniting innovation and success in the marketplace

Design value: a framework for measurement
Thomas L. Lockwood
- ten categories on the basis of which 'return on investments in design' can be measured

Innovation in organizations in crisis
Todd Cherkasky, Adrian Slobin
- innovation as a disciplined process and the catalysts and capabilities that support it

Insights at the nexus of design and business success
Thomas Walton

Managing the evolution of Microsoft's hardware business
Andy Cargile

Measuring the future brand effect of graphic design
Gert L. Kootstra
- using five criteria 'to quantify the brand impact of specific designs'

The (ir)relevance of technology: creating a culture of opportunity by design
Anthony Pannozzo
- '...The biggest contribution to the bottom line is a keen understanding of consumer opportunities coupled with the management of design and technology to innovatively fulfill those opportunities.'

The best strategy is the right strategy
Sohrab Vossoughi
- achieving consistency through 'a pyramid of rational steps'

Transforming into Dell 2.0: the customer's strategic role in design innovation
Kristina Goodrich
- 'where Dell is headed today as it blends an awareness of marketplace realities with a nuanced assessment of user preferences'

Visual thinking: a leadership strategy
Mark Dziersk
- 'Dziersk urges designers to communicate with those responsible for strategy by taking advantage of their talent for visualization and storytelling, "languages" that can powerfully convey content...'

What does it mean to be design-led?
Michael Beverland and Francis Farrell,
- four qualities with implications for managers

Design Philosophy Papers, 3-4 2007

ISSN 1448-7136 WEB LINK

What is so sustainable about services? the truth in service & flow
Carleton B. Christensen
- 'This paper contrasts the original, commonsense reasoning which makes the idea of a service economy seem plausible in the first place with the way it has typically been elaborated in the literature. '

The existential self as locus of sustainability in design
Philippe d'Anjou

Congestion & movement: cities, crowds & Chandigarh
Michael Chapman and Steffen Lehmann

Sustainable mobility services in Kolkata
Sukanta Biswas

Review:
Vital Nourishment: Departing from Happiness. François Jullien. Arthur Goldhammer tr. Zone Books
Tony Fry

Design Studies, 28:5
Sep. 2007

ISSN: 0142-694X WEB LINK

Capturing and analysing own design activity (463-483)
Owain Pedgley
- design activity; research methods; industrial design; reflective practice; practice-led research

Diagnosing the creativity of designers: individual feedback within mass higher education (485-497)
Karl K. Jeffries
- creativity diagnostics; design education; evaluation; reflective practice

Less is more original? (499-512)
Ann Heylighen, Paula Deisz and Ilse M. Verstijnen
- design process; creative design; productivity

Toward a framework of product development for global markets: a user-value-based approach (513-533)
Suzan Boztepe
- user-centered design; product adaptation; cultural factors; user value; ethnography

Evaluating spaciousness in static and dynamic media (535-557)
Arthur E. Stamps II
- spaciousness; virtual reality; simulation

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Recent Artcles. continued from p. 22

Design Studies, 28:6 Nov. 2007

ISSN: 0142-694X WEB LINK

The role of design in the development of technology-based services (559-583)
Marina Candi
- case studies; design activity; design practice; innovation; service design

An underlying cognitive aspect of design creativity: Limited Commitment Mode control strategy (585-604)
M.H. Kim, Y.S. Kim, H.S. Lee and J.A. Park
- limited Commitment Mode control strategy; creative design; design cognition; design processes; protocol analysis

Banking on social capital: towards social connectedness in distributed engineering design teams (605-622)
Andreas Larsson
- collaborative design; distributed design; engineering design; teamwork; know-who

The development of a design behaviour questionnaire for multidisciplinary teams (623-643)
Miranda A.G. Peeters, Harrie F.J.M. van Tuijl, Isabelle M.M.J. Reymen and Christel G. Rutte
- design behaviour; teamwork; questionnaire; engineering design

Design Studies, 29:1 Jan. 2008

ISSN: 0142-694X WEB LINK

Design research: a revolution-waiting-to-happen (4-11)
Kees Dorst

User evaluation of HCI concepts for defining product form (12-29)
Bahar Sener and Paul Wormald
- design management; design strategy; marketing; product development; styling

Should new products look similar or different The influence of the market environment on strategic product styling (30-48)
Oscar Person, Jan Schoormans, Dirk Snelders and Toni-Matti Karjalainen
- design management; design strategy; marketing; product development; styling

Problem analysis and thinking tools: an empirical study of non-hierarchical mind mapping (49-69)
Vasilije Kokotovich
- conceptual design; creativity; design cognition; design education; thinking tools

Investigating the cognitive behavior of generating idea sketches through neural network systems (70-92)
Yinghsiu Huang
- drawings; computer supported design; visual reasoning; neural network

Information Design Journal, 15:3 2007

Special Issue: Discourse, Cognition and Communication

ISSN: 0142-5471 WEB LINK

Discourse cohesion in text and tutorial dialogue
Arthur C. Graesser, Moongee Jeon, Yan Yan, Zhiqiang Cai

Problems in the Field
Linguistics markers of coherence improve text comprehension in functional contexts
Ted Sanders, Jentine Land, Gerben Mulder

Interview
Using structural cues to guide readers on the internet
Jan Spyridakis, Kathryn A. Mobrand, Elisabeth Cuddihy, Carolyn Y. Wei

Research Challenges
Reading aloud and the delay of feedback: explanations for the effectiveness of reader protocols
Leo Lentz, Henk Pander Maat

Information Design Journal, 16:1, 2008

Special Issue: Discourse, Cognition and Communication

ISSN: 0142-5471 WEB LINK

The metapragmatics of remediated text design
Volker J. Eisenlauer and Christian R. Hoffmann

Problems in the Field: Instructions on how to resolve conflicts in the workplace
Gillian Harvey

Rhetoric in advertising: attitudes towards verbo-pictorial rhetorical figures
Renske van Enschot, Hans Hoeken and Margot van Mulken

Research challenges: research challenges in narrative persuasion
Melanie C. Green

User centred information design practices and processes at the Australian taxation office
Nigel Martin, Shirley Gregor and John Rice

Review:
Flow: the psychology of optimal experience. Mihalyi Csikszentmihalyi
Dev Kumar Bose

Review:
The Cambridge handbook of multimedia learning. Richard E. Mayer (ed.)
Caroline Pelletier

Business discourse Francesca Bargiela-Chiappini, Catherine Nickerson, Brigitte Planken. in research and practice in applied linguistics. Christopher N. Candlin and David R. Hall (eds).
Kaija Pelsmaekers

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International Journal of Art and Design Education
26:3, Oct. 2007
ISSN: 1476-8062 0260-9991 WEB LINK

Winter art education project (238-250)
Timo Jokela
- art– study & teaching; art teachers; community arts projects; artists & community; European Union

Electronic paint: understanding children's representation through their interactions with Digital Paint (251-263)
John Matthews, Peter Seow
- artists' materials; children; painting; digital art; programming software

Artists becoming teachers: expressions of identity transformation in a virtual forum (264-273)
Adams, Jeff
- art – study & teaching; art students; art teachers; artists; identity (psychology); design – study & teaching

Towards a theory that links experience in the arts with the acquisition of knowledge (274-284)
Ylva Dahlman
- education – curricula; design– study & teaching; graphic arts– study
- teaching; John Dewey, Charles Peirce; Michael Polanyi

Aesthetics; popular visual culture, and designer capitalism (285-295)
Duncum, Paul
- aesthetics; art– study & teaching; capitalism; dolls; consumer goods; everyday life

A Stitch in time: gender issues explored through contemporary textiles practice in a sixth form college (296-307)
Hyde, Wendy
- art – study & teaching; art students art teachers; artists; art– modern– 21st century

Creating new identities in design education (308-313)
Hannah Rose Mendoza, Claudia Bernasconi, Nora M. MacDonald
- graphic arts; interior decoration; landscape architecture; students; fashion design; design – study & teaching

Visual art as a vehicle for educational research (314-324)
Richard Hickman
- art– study & teaching; art students; rts; education – research; learning; teaching

The evaluation of community arts projects and the problems with social impact methodology (325-335)
Paul Clements
- art – study & teaching; social problems; community arts projects; artists & community; social impact

Can the process of transition for incoming secondary pupils be supported through a creative art project? (336-344)
Lyn Matthews
- art – study & teaching; education – curricula; school children; self-esteem

Black History Month and African Caribbean student learning in art (345-353)
Paul Dash
- African Americans – history; art – study & teaching; African American history month; design– study & teaching

International Journal of Art and Design Education
27:1, Feb. 2008
ISSN: 1476-8062 0260-9991 WEB LINK

The necessity of studio art as a site and source for dissertation research (4-18)
Kristin Baxter, Hugo Ortega López, Dan Serig, Graeme Sullivan
- art – study & teaching; research; art – provenance; art – philosophy; artists' studios; art – research
- 'Three accounts of dissertation research are given that incorporate studio activity as a central agency of inquiry in conceptualising and theorising issues.'

Navigating a way through plurality and social responsibility (19-26)
David A. Gall
- cultural identity; multicultural education; teaching methods; diversity in education; art in education

A (con)text for new discourse as semiotic praxis (27-42)
Marie Fulkova; Teresa M. Tipton
- art; modern– 21st century educational technology; art– study & teaching; research; art teachers; digital media; congresses

From obstacle to growth: Dewey's legacy of experience-based art education (43-52)
Eva Van Moer; Tom De Mette; Willem Elias
- critical thinking; museum visitors; museums – educational aspects; visual education; people: John Dewey – views on education

A visual culture art education curriculum for early childhood teacher education: re-constructing the family album (53-62)
Laura Traf
- art – study & teaching; research; curriculum planning; art teachers – training of; nostalgia in art; teaches – psychology

Gestalt: a learning theory for graphic design education (63-69)
Ian Jackson
- experiential learning; gestalt psychology; graphic arts – study & teaching; design – study & teaching; learning ability

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Recent Artcles. continued from p. 24

The use of projective drawings to determine visual themes in young Kuwaiti women impacted by the Iraqi invasion (70-82)
Yvonne Pepin-Wakefield
- art therapy; research; art – themes; motives; projective techniques; psychic trauma; women artists – study & teaching

Craft-Art as a Basis for Human Activity (83-90)
Seija Karppinen
- art – study & teaching; research; education; humanistic; art – philosophy; multicultural education – activity programs; handicraft – study & teaching

The intertextual method for art education applied in Japanese paper theatre –a study on discovering intercultural differences (p91-104)
Martina Paatela-Nieminen
- multicultural education; art – study & teaching culture in art; kamishibai in education; Japanese paper

Review:
Making a difference: global citizenship in initial teacher training (book). B. Baughen, M. Baughen, M. Glackin, G. Hopper, S. Inman

International Journal of Design 1:2, Aug. 2007
ISSN: 1991-3761 WEB LINK

Fluency as an experiential quality in augmented spaces
Jonas Löwgren
- 'Interaction design would benefit from attempts to articulate experiential qualities of digital products and services.'

Towards female preferences in design – a pilot study
Lishan Xue , Ching Chiuan Yen
- an investigation of 'gender perception as it relates to product language, identity, and preferences'

Effects of visual-auditory incongruity on product expression and surprise
Geke D.S. Ludden , Hendrik N.J. Schifferstein
- 'how sounds contribute to the overall experience of a product's expression'

Materials in products selection: tools for including user-Interaction in materials selection
Ise van Kesteren , Pieter Jan Stappers , Sjef de Bruijn
- 'defining the sensorial properties of materials required to create a desired user-interaction with the product'

Path-dependent foundation of global design-driven outdoor trade in the northwest of England
Mary B Rose , Terence Love , Mike Parsons
- an exploration of 'path dependency in the design-based outdoor clothing and equipment sector in the northwest of the United Kingdom in the 1960s'

Unstated contributions – how artistic Inquiry can inform interdisciplinary research
Chris Rust
- oversight of 'how research in the creative disciplines might contribute to knowledge and understanding'....'how incomplete or tacit contributions to inquiry can be a valuable and sometimes necessary part of the enterprise of creating knowledge'

International Journal of Technology and Design Education 18:1, Jan. 2008
ISSN: 0957-7572 WEB LINK

Metaphor and pedagogy in the design practicum (1-17)
Cheri Logan
- practicum pedagogy; metaphor; graphic design; learning discourse; design knowledge
- an empirical study of 'distinctive modes of teaching and learning', assessing 'practicum pedagogy in promoting design understanding and the professional preparation of students'

The use of design practice to teach mathematics and science (19-44)
Stephen John Norton
- technology practice; design; mathematics and science learning; perceptions
- using 'technology and design practice ...to integrate the study of mathematics so students could produce and explain a useful artifact'

The locating of emotion within a creative, learning and product orientated design and technology experience: person, process, product (45-57)
David Spendlove
- creativity; learning; emotion; person; process; product
- locating emotion across the triad of 'Person, Process and Product'; 'meta-theorising the place of emotion within a creative, learning and product orientated design and technology experience'

The contribution of project-based-learning to high-achievers' acquisition of technological knowledge and skills (59-77)
David Mioduser, Nadav Betzer
- project-based learning; design learning; design styles; technological knowledge; high-achievers
- using 'Project-Based-Learning (PBL), as pedagogical means for supporting the students' knowledge acquisition and problem-solving process'

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Recent Artcles. continued from p. 25

The technology fair: a project-based learning approach for enhancing problem solving skills and interest in design and technology education (79-100)
Alexandros C. Mettas, Constantinos C. Constantinou
- decision-making; hands-on activities; problem-solving; science fair; technology fair; university–school partnership
- using test data and reflective diaries to assess technology fairs in 'the development of positive values and attitudes in technology education'

Rehearsal of professional practice: impacts of web-based collaborative learning on the future encounter of different disciplines (101-117)
Ahmet Fatih Karakaya, Burcu Senyapılı
- architecture; design communication; interdisciplinary collaboration; interior architecture; web-based collaborative learning
- a case study of web-based collaborative learning in design education and bringing 'different disciplines ...together'

Journal of Engineering Design 18:6, 2007
ISSN: 0954-4828 WEB LINK

Computational methods to support sketching, reverse engineering, and optimization of shapes (391-394)
Editorial

Semantic-based operators to support car sketching (395-41)
V. Cheutet, C. E. Catalano, F. Giannini, M. Monti, B. Falcidieno, J. C. Leon
- aesthetic design; semantic-based modelling; shape grammar; two-dimensional sketches; ontology

Reverse engineering of aesthetic products: Use of hand-made sketches for the design intent formalization (413-435)
M. Mengoni, M. Germani, F. Mandorli
- reverse engineering; design intent; character lines; hand-made sketches; cognitive perspective

Principal component and Voronoi skeleton alternatives for curve reconstruction from noisy point sets (437-457)
O. Ruiz, C. Vanegas, C. Cadavid
- curve reconstruction; surface reconstruction; unorganised points; range imaging; principal component analysis; Delaunay triangulation; Voronoi skeleton

Repairing triangle meshes built from scanned point cloud (459-473)
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- reverse engineering; integrated design; geometric modelling; holes in meshes; triangle mesh deformation; approximated curvature variation minimization; shape manipulations

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- **3**D scanner; reverse engineering; surface reconstruction; surface registration; rapid prototyping; medical prosthesis

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- feature recognition; free form feature; template matching; feature definition

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- shape optimisation; fatigue analysis; ultibody systems

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- fixture planning; sheet metal assembly; quality design

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- new product development; product design solution; Fuzzy Delphi method; analytic network process; zero-one goal programming

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- helmet design; **3**D anthropometry; computer-aided design

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- durability; design life time; marginal cost; cost per day; satellite design

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- conversation piece; Devis; eighteenth century; interior; portraiture; Zoffany

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- country house; domestic; eighteenth century; interior; public; sculpture

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- architecture; classicism; Georgian; Jourdain; Margaret; magazines; twentieth century

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- '...the relationship between the visual and the headline in 1,562 Chinese print advertisements

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http://www.cltad.ac.uk

19-22 May, Dubrovnik, Croatia
DESIGN 2008
http://www.designconference.org

30-31 May, Bern, Switzerland
Swiss Design Network Symposium 2008
http://symposium-konkret-08.hslu.ch/

23-25 Jun., Atlanta, USA
Third International Conference on Design Computing and Cognition DCC08
http://mason.gmu.edu/~jgero/conferences/dcc08/

10-12 Jul., Torino, Italy
Changing the Change: Design Visions, Proposals and Tools
http://www.changingthechange.org/

15-19 Jul., Sheffield. UK
Design Research Society Conference
http://drs2008.designinquiry.wikispaces.net/

3-6 Sep., Falmouth, UK
Networks of Design: Design History Society Annual Conference
http://www.networksofdesign.co.uk/

18-20 Sep., Odense, Denmark
Second International DREAM Conference: Digital Content Creation
http://www.dreamconference.dk/

21-24 Sep., Seoul, South Korea
Tenth International Conference on Ubiquitous Computing
http://www.ubicomp.org

30 Sep.-4 Oct., Bloomington, USA
Participatory Design Conference
http://www.pdc2008.org

6-9 Oct., Hong Kong
Design & Emotion - Dare to Desire
www.sd.polyu.edu.hk/de2008/

9-12 Oct., Lisbon, Portugal
Society for the History of Technology 50th Anniversary Conference
http://www.historyoftechnology.org/fiftieth.html

24-27 Oct., Osaka, Japan
ICDHS 2008 The 6th International Conference on Design History and Design Studies
http://www.cscd.osaka-u.ac.jp/user/icdhs2008osaka/index.html

27-28 Oct., Malmo, Sweden
Sustainable Innovation 08
www.cfsd.org.uk

31 Oct., London, UK
Research into Practice Conference 2008
http://www.herts.ac.uk/artdes1/research/res2prac/confhome.html

19-22 Nov., Istanbul, Turkey
DESIGN CINEMA 2008 'Design-en-scène': 3rd International Design and Cinema Conference
http://www.designcinema2008.org

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