

# Futures Fair<sup>08</sup>

THE GLOBAL AND THE LOCAL



## *Futures in Focus: Seminar Reviews- 15/05/08*

*This document details highlights on each of the break-outs and includes summaries of speaker's presentations and the discussions that followed.*

### **Energy and Transport**

**Chair- John Baggaley** - *Projects Director, MVA Consultancy.*

**Toby Proctor** - *Director, Trend Tracker Limited.*

Toby addressed the extent of the urban space taken by the car-bound commuter. Urban congestion and scarce parking spaces are likely to have a greater effect on drivers than the cost of their cars. What is the cost to the landscape and physical impact?

Influence of the car is huge on the UK and the options for public infrastructure improvement are extremely limited. Smaller, less emissions-intensive cars do not promise much reduction in the negative effects of car use- physically the pattern of low density and need for services will remain. Complementary solutions are available, from car prohibition via incentives for two-wheelers to more intelligent use of roads by collective transport. Difference will only be made when planners (and politicians) price transport choices strategically, based on their true costs. In this assessment must be made on economic, physical, social and environmental.

**Stephen Marshall** - *Bartlett School of Planning, UCL.*

In his presentation Stephen explored the relationship between transport and cities, first noting the historical co-evolution of transport modes and different kinds of urban form- the pedestrian city, the tracked city of metro systems and the auto- metropolis espoused by modernists such as Le Corbusier, the city on the highway and the auto-suburb. The city has shifted hugely in the past 60 years with services and infrastructure based on the assumption of car based access. Stephen looked at future urban environments and adaptive processes that would encourage 'green' transport modes – and greater use of traditional modes such as walking and cycling. The impact of such an approach was aimed at reducing emissions, but also to encourage a denser form of development referencing earlier built forms that were less energy intensive.

Stephen closed, stating that if we want drastic change in behaviour, we need drastically different policies in transport. There is an alternative. He noted that this needn't be radical or 'fantastic', the technology is there- the ideas merely need some intelligent revisiting and soft introduction. The car needn't be done away with- it has some quite clear benefits especially at middle to long distance, but in the city a modal shift is necessary and conventional car users discouraged. Compact cars should be promoted by designing landscapes for them, alternative forms should be actively pursued and 'green' streets introduced and expanded.

### **Discussion.**

Several themes kept re-surfacing during the debate, surprisingly which often returned not to the issue of energy use but on why we fundamentally object to the use of cars. Core strands of argument centred on:

- **Cars as 'urban litter'**. There was a feeling that the abundance of cars on our roads (parked and moving) is an eye sore in our cities.

- **Cars being overtly dominant on roads, at the expense of other users** such as cyclists or pedestrians. There was a lot of discussion around new street layouts or signage to take the emphasis away from cars having priority on roads (both in the city and the countryside), re-addressing the balance between drivers and other road users.

- **Economic constraints** of the car on a city; some cities, places or regions cannot be accessed except by a car. In turn many cities cannot develop without providing extra roads to absorb extra people and their uptake of travel, especially when public transport infrastructure is lacking or does not keep up with demand. In the extreme, in growingly dense cities, there will simply be no capacity for more private cars and we will have to think of other ways of mass transportation. Many precedents exist around the world including Singapore and Hong Kong that suggests alternative city models not reliant on the car.

- **For many people, the car is still perceived to be the only option** such as in the case of travelling with the elderly or very young children. Though John Baggaley did conduct a straw poll and found that only 2 people in the room grew up without access to a car, therefore most people are conditioned to having a car. But once people have lived without a car, people adapt very quickly. There was also the example given of a Der Spiegel foreign correspondent who stopped flying for a year and discovered an alternative social world in his own country.

- **Isolation**. On the one hand, to return to Jane Jacobs' critique, drivers are cocooned from their surrounding environment and the interaction with it reduced. On the other hand not having access to a car isolates people in rural communities, which is a real concern.

There was an overall agreement that there needs to be a better balance between the different users of roads. This could be done via a number of different methods from designating multiple use lanes on roads through to banning cars altogether along certain routes. The latter would give a very strong signal to all travellers. There have also been pilot schemes that cleaned up street signs, levelled roads and pavements, so that all users become more aware of actions of others. As a result cars slowed down and a more varied group of people used the roads. All of the above have had precedents both in the UK and abroad and illustrate the success innovative schemes can have.

There was also a call for more confident and courageous government policy on transport and pricing. People should be able to make an easy choice when choosing between using their car or an alternative form of transport. Both speakers expressed a 'carrot' rather than 'stick' approach, through urban design, pricing and taxes. Indeed Stephen Marshall suggested that the built environment can be used as a transport policy tool, on top of the pricing and taxes suggested by Toby Procter.

There was a strong divide in the room between those who cannot see an equitable and convenient alternative to the car (and questioned the motives behind attaching energy saving to the case against the car), and those who voiced strong preference to take up other forms of transport should the incentive and practice of using them be made easier. There is also a level of ignorance in people's knowledge that mitigates how they can make that best informed choice – people can only make rational choices if they know how to access those choices.

Finally, it was pointed out that the emphasis and the agenda should not be on restriction, but instead should focus on how to preserve the opportunity of moving in the future because current density and infrastructure does not allow it as it stands.

## Retail and Leisure

**Chair- Kees Van Der Sande** - Associate Director, Formation Architects.

Kees opened the discussion by picking up on two major trends in retail

1. The ongoing process of high streets becoming standard, and 'anywhere' places.
2. The high-end of the market, whereby retailers use top architects to enhance their brands, make their stores adverts in themselves and not so much places to buy something.

These themes were to be a constant throughout.

**David Dalziel** - Managing Director, Daziel and Pow.

David opened the discussion by setting the futures debate in context of current trends.

Through examples from his own practice, he highlighted how premier high street retailers are in the process of upgrading the experience for everyday items and low cost clothing- referred to as, the 'Push for Posh.'

Design in this context isn't exclusive, but even stores like Primark, go to great lengths to ensure they have the right triggers at each level of shopping. The brand increasingly promotes design for everyone and it permeates everything. Through this approach shops are pleasant places to be – so designed as a good place to meet friends and do other things. This approach has not been detrimentally affected by internet shopping – it hasn't been the disaster that some predicted. Design has to be consistent throughout a brand – so a shop and a website have to look and feel the same – good example is John Lewis. Some web-based shops have transferred to high streets, so face-to-face and web-based support each other. Aligned aspirations go hand in hand with aligned visuals.

### Future Proofing:

David speculated around the drivers for successful retail.

- Sustainable and good design will be driven by technology. Even materials for outlets are being checked for responsible sourcing.
- As economic problems bite in the UK, quality will prevail. Advice to retailers: this is the time to hold your nerve – don't skimp on the design, this is a great time to be spending.
- Design will always need refreshing, this can be done literally overnight: reinvent (the inside of) a box with £20 000 of paint and vinyl. Customers always want something new, need inspiration. If not paint and vinyl, rolls of magnetic paper = high design values with low investment.
- Engage and be loyal to customers. Bring them in, give food and drink and entertain them. Retail is the latest version of the amusement arcade where people do stay longer. Apple's 'brand temples', say 'we trust you, we'll let you play, we'll provide advice.' Stores should encourage a social element.
- Define the brand and live it. UK has not been good at this. Architects and technicians should take on this challenge.

**Alistair Parker** - Development Consultancy team, Cushman Wakefield.

Alistair opened by confirming that he's not as optimistic about the future of retail architecture as David, and confessed that he gives more or less the same paper every few years. This was seen as a reflection of the nature of the topic.

He noted that not much speculation about the future of retail has gone right! He said that like most who are involved in shopping centres, he never uses them, and prefers instead to hang out in Tuscan hillside towns!

The future of retail is all about market economies and rising affluence. The greatest factor for any developer is the timescale to ensure that they take full opportunity of favourable conditions. Another factor should be about environmental sustainability, this is often overlooked. Given that half of our commercial buildings date from before 1940 (hence three quarters of our shopping premises) this should be a more crucial consideration.

In order to speculate on Future predictions, Alistair's presentation looked at the lessons of history within the sector.

In 1970's USA, the giant department store was a vital anchor of large scale malls. They began to close in the 80's and by cinemas. The concern then was with encouraging a retail and leisure interface. Department stores offered products only in windowless warehouses. It was thought the American 'mall' might be equivalent of town centre. In fact by 1980s shopping was understood as leisure in itself, so speciality retail spread, affluence at the time was on a massive scale with malls usurping historical centres.

In Europe during 1990's design-led innovation for mixed-use, multi storey urban schemes instead of enclosed out-of-centre machine malls were promoted, yet enclosed retail malls were built and have been very successful, e.g. Bluewater – the building is, in retail terms, efficient and sweeps away competition. Victor Gruen – father of malls – according to Malcolm Gladwell “invented the shopping mall in order to make America more like Vienna. He ended up making Vienna more like America”. Few shopping malls have won any architectural awards. Where market economics determine output, retail developers have learned to be cautious. Large scale transformations from the 1960's boom created poor environments and aimed at permanent change – but have now been rebuilt. E.g. Birmingham's Bullring – the new version, Alistair believes, is a triumph.

Retail is coloured by a 10 year delivery time. This relatively short time period means that we already know what future will look like. But the market is again changing; as a result, mixed use development beyond London is difficult to build. Alistair cited 'site values' as a core problem where regeneration through town centre investment becomes simply too expensive and unpredictable. The trend is towards local affluence – for example Poundbury – this is where the money is and lowest risk. America built extensively at high risk. The country is now full of empty and redundant malls (see Deadmalls.com). This has spawned a curious new urbanism whereby former 'out of town' are re-invigorated as new towns. Could this be a model for UK mall/out of town sites?

## **Discussion.**

**Q:** *Is it easier to be distinctive in a high street than a mall?*

**David:** The Big box gives tight brief, but some do give sense of different social ambitions, like Bluewater with its different parts. Outdoor space is important too. Allowing retailer's flexibility; for example a solid shop front if they want one. Or design an entrance through a small alley way, can create intrigue.

**Q:** *What about the relationship between big box retail centres and thriving high streets?*

**David:** There's polarisation in the market, where the small and the very large are doing well. The bit in the middle suffers. But it's not about the 'biggest' it's about quality. On a vast scale malls can be soul destroying, especially when they age and social side/catering breaks down.

**Q:** How is all this sustainable?

**Alistair:** It's not frocks that keeps retail going, they're cheaper now than ever, it's technology.

## **Smart Materials**

**Chair- Bobbie Johnson** - *Technology, the Guardian.*

**Rob Thompson** - *Research Associate, Royal College of Art.*

### **'Smart' Materials and 'Eco' Lifestyles.**

N.B. Be wary of multiple meanings. In this case 'smart' = 'advanced'. Perhaps 'eco' = smart 'repositioned'?

### **Nanotechnologies**

**Aerogel:** Super-light. Super-insulating. Aerogel is a low-density solid-state material derived from gel in which the liquid component of the gel has been replaced with gas. The result is an extremely low density solid with several remarkable properties, most notably its effectiveness as a thermal insulator.

At the moment is used mainly as a core composite (e.g. sports rackets) rather than for insulation (very expensive to produce). But has potential to have very high insulation performance at only 5-10mm thickness.

**Self-Cleaning Materials:** Self-cleaning materials use a nano-scale coating, for example a thin film titanium dioxide using photo-active and hydrophobic cleaning processes, or via 'lotus leaf' surface technologies which apply the observed super-hydrophobic and self-cleaning property found with lotus plants' leaves.

Self-cleaning can reduce the need for maintenance, and the use of detergents. However, the savings versus the embodied energy and resources used in the materials' manufacturing cast doubt on their green credentials. The long term health effects of the materials used are also in doubt, and their continued use cast a spotlight on the possible negative impacts, long term, between people and a smart but untested environment.

**Coloured Metals:** use enhanced chromium within the alloy to create permanently coloured steels. These are decorative and long lasting. But are they just for luxury? Or will such advances in fact change the way we use and manipulate previously 'raw' materials?

### **Self-healing Materials**

**Self healing Materials:** have the built-in ability to partially repair damage occurring during their service life time. They have traditionally been an engineering fix with a limited and volatile lifespan and limited eco-opportunities. Examples include epoxy systems containing microcapsules. These microcapsules are filled with a (liquid) monomer. If a fracture occurs in this system, the microcapsule will rupture and the monomer will fill the crack, leaving reconnective 'scar' polymer. Recent developments include recyclable self-healing rubbers with more wide scale applications that may provide an eco-friendly alternative technology.

**Unbreakable Ceramic:** materials have been developed using silicon coatings that maintain integrity even when fractured or 'smashed'. As well as practical uses such materials present design opportunities. Objects 'record' their social dynamics, their uses and abuses, as 'memories', not just a different physical state but one that evolves over time.

### **Responsive Materials**

**Shape Changing Materials:** Such materials include shape memory alloys which will 'remember' a particular shape and revert to it, usually at a certain high or low temperature. It also includes two-way memory metals that remember a shape at both a high and low given temperature, pseudo-elastic metals (as used in glasses frames).

A further material type is **self-disassembling materials or products**. These can allow reuse of parts or components, or recycling of pure material fractions, enabling much simpler recycling techniques. The performance of such materials and processes is improving rapidly to an economically viable level of performance.

**Flexible LCDs and Minimised Display Technologies:** Such small-scale, flexible, low energy displays are beginning to question our continued wasteful use of everyday materials such as paper, and the way that information is portrayed through our traditional media. Despite falling prices, embodied energy is still a concern.

**Decorative Materials:** glass printed circuitry, and already well known examples such as switchable/smart glass can have eco applications. Based on a range of technologies, including electrochromic devices, suspended particle devices, and liquid crystal devices, the use of smart glass can save costs for heating, air-conditioning and lighting and avoid the cost of installing and maintaining motorized light screens or blinds or curtains. They can turn previously blank materials into evolving and responsive decorative displays and practical heat/light manipulation.

### ***Biotechnologies***

**Engineered Natural Materials:** Emerging technologies allow the manipulation and use of existing, natural materials in a range of contemporary methods and to higher or more consistent performance specifications. Such materials include molded/injected wood composites make use of otherwise waste lumber and are hard wearing and low maintenance. They,

**Plasticised Wood Products:** rely on heat, moisture, microwaving, friction or chemical processes to plasticise the natural cellulose found in the cell walls of wood. This enables bending and manipulating and can produce hardened wooden materials.

**Recycled 3D Objects set in Composite:** This designed material sets small, recycled objects in molded composites and plastics. This transcends the boundaries of 'new' and 'old', and creates new patterns of wear that can have a desired or random commentary. Designers are harnessing new technologies to great effect.

Such processes and composites open up new markets for traditional materials, and a greater range of applications due to greater performance tolerances and new geometries. Traditional material-based substances have more instant social acceptance while also reflecting contemporary 'boxfresh' engineered spaces and lifestyles. Social artifacts can become the building blocks of smart materials.

**Professor Peter Walker** - *Director of the BRE Centre for Innovative Construction Materials at the University of Bath.*

### ***'Reinventing the Past – Modern Uses For Traditional Materials'***

**Traditional materials** – stone, slate, lime, timber, earth, plant-based, animal-based  
Although these are considered 'natural' materials, not all are unprocessed (e.g. lime)  
Reintroduction of these materials has been driven by eco sensitivities. Originally their use was to maintain the local vernacular, e.g. cob and timber buildings. However, eco uses have increased interest and these materials' uses. Many are renewable, many are low-carbon and some are carbon-sequesting. This has opened up new markets, and introduced fresh ways of using these more traditional materials.

There are challenges to traditional materials' more mainstream use:

- Ability (and perception of their ability) to comply with modern building requirements/performance/regulation

- MMC/off-site/deskkilled on-site installation versus the traditional need for highly skilled/ specialised installation
- Ability to maintain or demonstrate performance over time
- Cost
- Adequacy of supply chain
- Lack of design guidance/experience
- Questions of insurability
- Testing to full validation (can take 20+ years)

Examples of materials:

**Lime Mortar/Render:** low embodied energy, positive aesthetics, wide availability and existing skills base

**Rammed Earth techniques:** good use of on-site aggregates or local materials, great aesthetics, simple technology but lasting performance

**Adobe (unfired) Brick:** e.g. ecobrick. Widely available and good green credentials – less than 10% of usual embodied energy. Clay is hygroscopic with ability to regulate humidity. Large manufacturers crucially now coming onboard.

**Hemp-lime mix:** often used with timber frames. Good insulator and humidity regulator. Can be used in prefabricated panels or sprayed in onsite (both widely recognized MMC), sequesters CO<sub>2</sub>.

#### **The way forward for traditional materials**

The existing drivers for continuing wider use of traditional materials include:

- Climate Change
- Code for Sustainable Homes / targeting zero-carbon by 2016
- Energy costs
- Emerging materials markets
- Corporate Image / PR
- Client / social demands
- Passive materials benefits

To maximize the future uptake of traditional materials:

- Primarily, traditional materials must be able to compete on **cost, performance and supply**
- A step change in construction methods, and attitudes to waste and performance, is required
- Both emerging and traditional materials must have their image repositioned, and be seen as less 'extreme' and more mainstream. Greater consumer confidence is required. This is a marketing issue, as well as involving the level of public/client exposure to their use

## **People and Planning**

**Chair- Andrew Curry** - *Director, Henley centre Headlight Vision.*

**Dr Ayona Datta**- *Cities Programme, London School of Economics.*

Ayona's talk looked at the impact of human movement on places. It discussed how largely unprecedented demographic patterns of migration are affecting the shape and business of cities and directly influencing the interconnectivity of the global economy.

Three cities: **London, Izmir** and **Delhi** were discussed to highlight the range and variety of movements and its impacts.

In recent years London has experience huge growth in the number of people from so called 'A8 countries.' This new political acronym refers to the group of new EU members states that joined in 2004. One of the most visible signs of East European influx has been through construction workers arriving and who are building the city of the future and living in shared and rented accommodation in London's East end. The phenomenon of workers has lead steadily to the establishment of especially Polish food shops and cafes. Where it once seemed impossible to get eastern European products, it is now common place. London occupies a duality for these groups and a set of high contrasts which workers experience daily. Two cities exist side by side. The expanding city of the office district: of towers, retail destinations and wi-fi, but also the expanding city of the migrant coloured by the colonisation and changing geography of older districts, under constant threat of further redevelopment. It illustrates how wider structural changes in the EU and UK migration policies transform the future of London's built environment.

In Izmir, Turkey's third city and second biggest port, movement has been manifested in a wealthy elite whose desires for particular kinds of 'western' lifestyles have resulted in luxury gated housing. This trend has created great boundaries within the city and put its population at a distinct distance between one another. It suggests how particular forms of social capital vested within elite groups across the world produce the mobility of built forms across the world.

In Delhi, it is its squatters whose everyday lives and spaces are increasingly marginalized as 'illegal geographies', as the city gears up to present itself as a 'world city' during the 2010 Commonwealth Games. Poorer districts of the city are being redeveloped by stealth and the authorities have welcomed built forms arising from North America, often against their own building regulations, as a visible sigh of status and mobility. It illustrates how forms of 'bourgeois environmentalism' and the race for world city status can exclude rights to the city of certain social groups.

The three examples illustrate how the future of cities should be understood through particularities and the complexities of relationships between people, places, and built environments.

**Reinier de Graaf**- *Partner and Director, OMA & AMO.*

In his presentation Reinier, similarly, highlighted two distinct patterns of development where both cases the global city has been produced and manifested in two different ways. The case studies identified national trends of people movement and strategies and included China and cities in the Middle East.

The case of China explored the rapidly developing economy and its affect on the demands of the city and its services. As Europe in the 19<sup>th</sup> century moved from a rural to an urban society, so in the the 21<sup>st</sup> century China will move. Huge numbers of people pour into Chinese cities each day from the countryside. It may be deemed the traditional or organic trend. The City is developing in order to accommodate and the pattern is a well known one of stress on housing provision, infrastructure, utilities and transport. China is responding to this movement in a manner close to that of its neighbours Japan and the so-called 'tiger economies' of Korea and

Taiwan. The key difference is the unprecedented scale of movement within such a short time frame.

In the Middle East the traditional example is the other way around. The model is inverted. They are building cities to attract people. The city is built because there is no-one there. The most notable example of this is Dubai. The emirate is controlled by authoritarian rule and this can make huge difference – it encourages rapid development and investment. If the Sheikh commands it, it will happen- (parallels between this and the 'Sun King' of 17<sup>th</sup> century France?). Dubai is empowered by its vast oil wealth and small population.

Once urban plans were designed to accommodate the masses, today the masses have to be seduced. Dubai is building attract investment and settlement. The discipline of urbanism now must give shape to developments whilst at the same time it finds itself entirely at the mercy of the market to make those developments happen. The task at hand becomes the accommodation of an imagined future: to *pre-empt* an urban experience while the precise substance of that experience remains as of yet undefined. An imagined future is also based, in this case, on the very real future where its reliance on oil production will one day falter. What will replace this economic imperative?

Dubai is all spectacle- a promise of a place. The consequences of this shift have largely left the profession of urbanism in limbo. It is as though the ethic of thorough analysis and accurate planning has become worthless overnight. In its place have come advertisement slogans and marketability. Renderings precede plans, the sale of land precedes the planning of infrastructure, the image precedes the substance... for every engineer there are a hundred sales representatives.

## Discussion.

The discussion that followed looked at the results of an authoritarian led market economy. Dubai may be a successful model in persuading people to live in the desert, but the resulting architecture lacks diversity. The pressure to create spectacle again and again has produced blandness- the excess and scale has become monotonous. Dubai will be a city of elites. All cities are trying to attract this group- including London? The discussion explored the range of ways each respective cities maintain this high spending demographic- reputation, range of luxury services, climate, lifestyle, culture, tax breaks....

The group speculated around the transient experience of architecture. What will migrant workers take back to their respective countries? What, if they are here to stay, will they create? Is there such a thing as new colonialism? What affect are foreign owned property developers having on what is built here and in what style?

The new global destination cities are hugely polluting, yet insist on demonstrating due consideration to climate issues. In order to appear more attractive Dubai has introduced codes on pollution and initiated green building practices and technologies. However it cannot escape the very plain fact that its natural climate is inhospitably hot. It can build in the style of any city, yet it will never be similar. The city suffers from a lack of public realm and streets are freeways. People move in air conditioned taxis from one hotel lobby to the next.

The seminar closed with a short note on the UK's perceived inability to plan for better, more flexible, open spaces. The Dubai model shows how a city can suffer from a lack of open space and hospitable public realm. There is much to be learnt from the experience of the past 4 years with regards to Eastern European movement. We ought to be able to anticipate such shifts in future and identify where in our cities and economy such peoples will be absorbed.

## **Land Systems**

**Chair- Prof. David Fisk-** *Imperial College.*

**Prof. Paul Selman-** *Department of Landscape, University of Sheffield.*

### **'Multifunctional Landscapes'**

Professor Selman began by trying to dispel, or rather challenge traditional connotations on the notion of 'landscape'. First and foremost, landscapes should be looked at as multifunctional. The term landscape also needs to be applied to an entire territory rather than the assumption of predominantly rural or amenity sites. Landscapes should really be looked at as part of a continuum encompassing, the urban, the rural and rivers/lakes and wetland.

There is a clear need to start planning for living with wetter land. For this reason Selman prefers to talk about a blue/green infrastructure rather than an exclusively green one.

Settlements should be seen as privileged to sit in the landscape, they should therefore, sit lightly. However, Selman believes that the lack of confidence that occurred in the post-modern age has led to an almost exclusively preservationist outlook. Construction and functionality can however be more successfully coupled with the landscape.

### **Landscape is more than just 'the view'**

Current drivers of landscape change need to be re-assessed. The main drivers affecting the landscape today seem to be pastiche in design and the overbearing presence of agricultural subsidies. Rather than driving true change this maintains or re-instates obsolete systems.

Selman says we must search for new cultural landscapes and start using new drivers. Should we be questioning containment the predominant special strategy? Intensive food production and new development need to be the main drivers, taking forward the use of Blue/Green infrastructure.

### **Roland Grzybek-** *Water Management Planning, Halcrow Group.*

Roland spoke about the Quaggy River Alleviation Project in East London. The focus of the project was to restore the original river channel through a recreation ground. The outcome resulted in a lower maintenance budget (with no need to keep the area permanently level and the grass mown) and a much better piece of parkland for the community.

The project team had to take an entirely holistic approach to the scheme. The use of telemetry, or flood warning for the people who lived downstream was very important. The current and potential biodiversity of the site was factored-in, with careful consideration for bird boxes, natural shelters and rare plant retention. Early stakeholder involvement was important for this project and others Grzybek has worked on. In some cases local home-owners have been successfully persuaded to agree to the likelihood of a certain degree of flooding, with adequate defense systems built within very close proximity.

Grzybeck thinks that projects like the Quaggy River are going to be increasingly widespread as landscapes and land systems change. However this type of approach to flooding can only go so far in alleviating the affects of climate change, indeed some think that by 2100 translocation rather than adaptation will be the main challenge in the Thames Estuary.

Sustainability was until very recently something of a vapid term, it is now however a fundamental principle that demonstrates itself in schemes such as Quaggy River.

## **Discussion.**

One major question that resulted from the two presentations was how to make landscape friendly solutions less 'niche' i.e: exclusively low intensity, mainly recreational or amenity space projects. The real challenge is finding land system solutions that provide the intensive, development driven infrastructure that today's world so clearly needs.

The increasing damage caused to infrastructure by flooding was also a major concern, electricity supply of non-affected areas being affected by neighboring flooded areas. This is another example of how intelligent, localised and intensified land systems are needed.

One local councilor present at the break-out questioned the rationale and feasibility of creating energy self-sufficient land systems. It was acknowledged that it was indeed a big ask to turn the clock back the 100 years or so since we've been self-sufficient. In short, land systems will have to be re-localised.

The group also identified what is seen as a discrepancy between globalization and localism. Of great concern is the fact that the land system solutions that we are applying on a local level are not in line with changes occurring globally. Energy wastage in food production (especially increase in crop production to supply live-stock) has to be a concern on a local and global level.

To what extent can we see a regional dimension to the way we treat our landscape?

The group agreed that as climate change effects become more dramatic, those regions that are affected will quickly adopt a very different stance that those that are not. Conflicts and pressures on the landscape will also become very much more apparent; nowhere perhaps more apparent than in the East of England (low-lying, agricultural).

**Futures Fair 08- Building Futures RIBA 2008.**

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