

Futures Fair⁰⁹

SOCIETY AND STIMULUS

Infrastructure: Systems and Interventions

02/06/09

'THE UNBELIEVABLE TRUTH AND THE TRIPLE SZ.'



RIBA's Chief Executive, Richard Hastilow, introduced the final installment of Futures Fair 09 by reiterating the importance of quality infrastructure and the impact it can have on our built environment. This opened up wide ranging conversations that explored 'intelligent infrastructure', the future of our waste disposal, land ownership, transport networks, broadband and the idea of virtual mobility.

Before the formal presentations were given, audience members were invited to actively participate in the last in the series of the 'speed dating' Futures-*links* exercise. During this exchange of ideas on 'greener' infrastructure, Madeleine Adams of Research Design spoke of her belief that "a greater exchange between business and occupants" is needed and said "Green infrastructure is not a luxury for a restored economy – it is necessary."

Opening the formal presentations, Stephen Hill of CO2 Future Planners, posed as a 'panelist', evoking the BBC Radio game '*The Unbelievable Truth*' leading the audience through his speculative Britain in the year 2030. Hill proposed that we would be living in an age of major constitutional reformation in terms of climate change and land ownership. His vision of the future saw political parties coalesce under the government of national unity in an attempt to "defend society against political and social chaos". Social order has seen dramatic change in Hill's future climate with the introduction of "carbon trading accounts for every citizen, business and public body." A new land-use management plan for every owner and occupier of land is now defined by its carbon-carrying capacity and annual rate of which its carbon production has to be reduced. Hill contended that this future link between carbon trading and land will stop carbon credits from being speculative as, "all pieces of land would be on the same carbon value footing."

Returning back to the present day, the relationship between the state and the citizen was questioned, much like Adams' desire to re-evaluate the relationship between corporations and occupants. Hill's proposals revealed that the best ideas on our future depend on a different arrangement of this state-citizen relationship.

Individual actions could transform the kinds of products and services that are available. A few examples include growing hemp for bio-fuels, building products, cleaning contaminated land for organic food production; bulk rainwater runoff can be used and stored in local communities' storage units and geothermal heat stores can be powered by mass photovoltaic collectors, providing localised electricity. If greenbelts are abandoned for Sustainable Settlement Support Zones (Triple S Z's - areas that reach up to 30km in radius around towns and cities), neighbouring communities might stop competing with each other, as settlements can begin to integrate and function more efficiently.

Robin North of Imperial College's Centre for Transport Studies emphasised the need for 'intelligent' infrastructure in order to minimise the impact of travel. Infrastructure, he argued, reaches maximum 'intelligent efficiency' when it is 'fit for purpose' in terms of its design. Intelligent infrastructure would collect and collate information to optimise use and would employ built-in technology, enabling it to work autonomously. North questioned where the boundaries of our personal security lie, as most of us are willing to have our information stored as we openly use our credit cards, for example. So, why not push technology further forward? Speaking from the audience, Evelyn Pellow of Enabling Concepts suggested that the feeling of reticence to rely heavily on technology in our everyday lives comes from a technology's own inconsistencies. If we are to rely more on technology to facilitate our work, then "technology needs to be made more reliable."

Hugh Mulcahey of Cyril Sweet, picked up the theme of transport and turned it towards the straightforward need for improved high-speed railway networks, pointing out the shocking

trends of rising rail use and shrinking investment over the next 20 years where other nations are doing the exact reverse. Supported by brother Ian, at Gensler, the two spoke of their desire to see a worldwide increase in quality infrastructural investment, such as the high-speed rail network that is planned for the US. Both Mulcaheys stressed the importance of broadband and the benefits of 'virtual mobility' - overcoming geographical boundaries through increased broadband efficiency as a first step in greater connectivity. Unsatisfied and dismayed with the UK's broadband speed ranking at a mere 11th in world for access per capita, the Mulcaheys yearned for greater investment to ensure a high level internet speed can be accessed in every home. There was the suggestion that the private sector should be leading on this.

Nick Gibbons of Jones Lang LaSalle spoke of redevelopment sites where big thinking has already been employed for services. Speaking of Envac's innovative waste system developed at Wembley City, he listed the beneficial results it will have for its occupants and the local authority. The two million square-metre mixed-use site uses an automated waste collection service that sucks rubbish via underground pipes, transporting it to a central collection hub. This technologically advanced waste disposal system saves space on bin storage; eliminates the need for refuse lorries; and "doubles recycling rates", enabling infrastructure to provide a platform for a sustainable future. Here, the infrastructure works long-term, so expensive retrofitting is unnecessary. From this one site, we can now look forward to thinking about how green infrastructure can affect whole regions. Gibbons looked at the bigger picture, and using the 2012 Olympic site reminded us that government can make change if it so desires. The London based exemplars needed regional application and

government funding to make bolder commitments towards making them happen.

Martyn Gilbert closed the formal presentations by supporting Gibbons and his assertion that there needs to be new revenue streams for the construction industry. Gilbert stated that for the construction industry to move forward, commercial and governmental egocentric thinking needs to stop in favour of collaboration. With new infrastructure such as Envac's disposal system, local authorities, developers and dwellers co-benefit, as the infrastructure improves the desirability of the area. But, as Pellow pointed out – this technology needs to prove itself in terms of efficiency and reliability. The audience discussion followed that this needed to be tested on a grander scale, but that

central government held the key to implementing it through a new cross party commitment and long term agreement. Only after such reformation could we begin to embrace a meaningful understanding of green infrastructure to its fullest.

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