

# Earth Building Association of Australia Annual Conference

Eltham, 17th to 19th September 2010

## **Welcome address by Prof Allan Rodger, Patron of EBAA.**

It is my privilege and great pleasure to welcome all the participants in this EBAA Conference. I also welcome you to a gathering that will be as significant for what is achieved in discussions outside the formal sessions as in. The sharing of information and the personal and professional connections that are formed are a very important part of this event

Inevitably I reflect on the first meeting of this organisation in Malden all those years ago and perhaps especially on the caravan of vehicles that made their way after that foundation meeting, almost as pilgrimage, from Malden to Maryborough where earth building had had a very exciting resurgence – alongside the emergence of the first Permaculture programmes. There was also the small but symbolically powerful dome and vault building to be visited.

I also reflect on my own first exposure to earth construction. Living in Khartoum from 1968 to 1971 we were alongside the huge traditional mud constructed city of Omdurman and of course out in the surrounding desert the typical house was often a single round room of mud constructions with a pointed thatch roof. But it was neither Omdurman nor the local desert tradition that really brought the significance of earth construction to the forefront.

Following its formation the Democratic Republic of the Sudan experienced a succession of military coups. The one in the summer of 1970 was strongly communist. With the communist inspired government came Russian 'advisors'. Their focus was firmly on heavy industry and infrastructure. This became very apparent when the new national budget was proclaimed. Except for £50,000.00 there was to be no money for housing. What do you do with a population of 15M many of whom are in very substandard squatter settlements clustered around the established towns?

It was a topic to be explored within our Department of Architecture. There was a lot of discussion that focused mostly on the hopelessness of the situation. However there was an underlying reality to be confronted. Eventually a proposition emerged. The answer was "Buy copper". The contemporary version of this would be to buy plastic plumbing.

Eventually we had come to realise that almost everything within the built environment could be achieved through the application of work to the terrain. Access routes, surface water drainage and faeces disposal in cess pits provide the basic infrastructure and earth could be used to provide shelter, including roofing using the Hassan Fathy methods of dome and vault construction. (Yahia Younis, an architect colleague of mine at the University of Khartoum, was actively researching and demonstrating this technology at

the time.) What could not be done without modern inputs was the provision of safe drinking water

A few months later three of our students took this message with them into public sector practice. True to form the Russian advisors insisted that there would be money to employ people even if there was no money for them to do anything. Once inside, however, the new graduates persuaded the Ministry of Housing to devote a significant part of that £550,000.00 to buying copper. The three of them set out for Port Sudan, persuaded the army to help with moving earth and set about re-housing a vast squatter settlement. It proved to be one of the very first do-it-yourself squatter resettlement projects and was subsequently published by the Architectural Association in London.

A distinguishing feature of building in earth is that it presents a huge spectrum of labour intensity. You can have extremely labour intensive methods or you can have machine intensive methods – and everything in between. Earth building runs right across the whole spectrum – depending on specific local and project circumstances. Because of this in some circumstances building in earth provides opportunity where no opportunity otherwise exists.

### **Recent challenges**

I hope we are now coming out of a very difficult time for all the people associated with earth building. Particularly in Victoria this started a few years ago with changes in the regulatory system. In a purely technical sense the new framework allowed earth construction provided the proposer could demonstrate that the building would meet the declared energy requirement. This added such uncertainty and delay to the approval system the many earth building projects were abandoned in favour of building technologies that could achieve approval much more easily. Fortunately that situation has now been resolved but much damage has already been inflicted.

More recently we have experienced horrendous bush fires in areas where there was a high preponderance of earth construction. Very positive lessons have been learned that may now serve as a stimulus to the use of earth as a particularly appropriate building material. The opportunity is there. It is now for those involved to turn this into practice.

### **The Sustainability Agenda**

Now further recognition of the long term need for very low levels of environmental impact, long life, adaptability, and eventually re-use suggests new opportunities for building with earth. A price on carbon (as called for recently by BHP) would be a price on added processing and therefore on almost everything other than the raw earth. While earth constructions and earth construction activities currently account for only a tiny proportion of the built environment and its industry the demand so a low consumption future may well call for that situation to be radically changed. This presents a huge challenge that is in part, but only in part, technical. The big challenge is in changing community perceptions and expectations and this will be

achieved only by demonstrating the attractive quality of life options that can become available.

### **A Reflection**

John Turner in his classic book *Freedom to Build* headed one of the chapters, "Housing is a Verb!" (He might also have said, "Settlement is a verb". Housing is something that we do and keep doing. It is a continuing quest rich with opportunities not only for the creation of physical structures but also for fulfilment and satisfaction. Housing ourselves is Good Work. That is it is rewarding and worthy of our efforts and it contributes to the cultural heritage that we pass on to future generations. Earth construction is one of the most accessible of all building technologies. In the right circumstances and with a little help almost anyone can do it. Rediscovering that housing is something that we can and should do and from which we can obtain great personal and societal satisfaction is a worthy objective.

All of us involved with earth building are therefore engaged in a culturally important endeavour with great potential for the continuing development and evolution of sustainable and convivial futures. I commend EBAA's efforts in advancing this worthy mission.

Allan Rodger