

Your Royal Highness Ladies and Gentlemen,

It is an honour to have been nominated by The Royal Society of Arts for your Prince Phillip Designers Prize. The honour is special because the engineering of services installations in buildings is not usually associated with design. So I am grateful to the RSA and the judges of this prize for their acknowledgement that engineering design really is design, and should be encouraged. I should not be surprised since engineering is at the core of the Arts Manufactures and Commerce of our society.

The fashion for sustainability is not my main motivation. The scope of design should start with the edge of the universe as its boundary and then quickly narrow down to the specific problem. As the boundaries are brought in, the operations of thermodynamics and the sources of intense energy cannot be ignored. The need to address these problems takes a primary place in the design, but only forms a part of the problem of providing for human well being.

Design becomes a part of considering how to govern and develop society. Designers consider the scope of the problem and finally make a synthesis as something to be made. Democracy is a way of governing by consent, but it is clearly not a design method. What can designers do about that? I do not know.

When I changed from being a scientist to engineering I was brought up face to face with a difference of attitude.

A scientist with a difficult experiment goes through a process of excluding variables until the results are repeatable.

An engineer cannot exclude the variables but has to embrace everything that impacts on the engineered artefact. The breadth of this statement is only just beginning to be accepted by engineers, but they are catching up by their recognition of the meaning of Systems engineering.

A designer has to search for inspiration by exploring the whole environment of people and produce an idea that adds to their pleasure and experience of the culture around them.

The stream is beginning to run strongly to get engineers to understand that applying science to technology involves satisfying the needs and desires of sentient people. Design has to take on the widest scope.

I hope my place as winner for this prize helps to promote the view that engineers are designers in the widest sense.

Thank you Sir very much.



*Professor Max Fordham OBE at the ceremony for the Prince Philip Designers Prize 2008*