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## The invisible engineering designer: the real meaning of the word designer

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## THE INVISIBLE ENGINEERING DESIGNER

About fifteen years ago I wrote in these hallowed pages that every time that I said that I was an engineer someone would ask me to fix their car. Well, things have improved over the years and it is better now - cars are much more reliable and don't need so much fixing! It is now the word 'designer' that confuses them. Any 'd' grade celebrity that can hold a paintbrush and daubs a walls lime green and pink calls themselves a designer. This does nothing to promote the genius of our profession. Join the words together into 'engineering designer' and this really throws those I meet on the sophisticated cocktail party circuit. You can almost see the confused look on their face as they wonder 'why should anybody want to paint their car engine pink and lime green?'

Even in design circles we engineering designers seem to be invisible. There is a well-respected lady who does a talk on the history of the design profession who mentions all types of designers in her talk but never mentions we engineers. I did ask her once 'who does all the work to make sure these designs are made?' Apparently this isn't design. Occasionally one typically hears of a design 'guru' who claims to have 'redesigned' the entire mainstay of their company's product line on the back of a menu on a flight between New York and London. In fact, they have cobbled together a few sketches that some poor soul has to interpret. The poor soul is usually the engineer. The sketcher gets the plaudits and the engineer remains the unsung hero.

David Walker, an excellent lecturer and practitioner in design, once referred to these 'sketchers' as 'fibre-tipped fairies'. I find that it is a term that I use a lot. Of course, design needs both of these types of people but if the sketch is to be translated into something that you can own or use who is really the most important? I think it is something to do with the percentage of inspiration and perspiration. Thomas Edison actually said that it was 5% and 95% and Louis Pasteur said it was 1% and 99% but either way, we engineers have the bulk of the work to do without the same sprinkling of recognition.

In spite of this 'whinge' above, we shouldn't be down hearted and we shouldn't keep banging on about our 'status'. I'm much more interested in doing something about our money or even just maintaining our existence in this apparent 'Post Fordism' era. Of course there are lots of tranches of design and all are vital in the iterative process to ensure products (and increasingly services) are designed in the 'total' sense to be 'world beating'.

Perhaps we should do more to link up with those from other factions of design to see how (if) the others think and how we can help each other to produce the best designs. Perhaps this is just an extension of the thinking that started in the 1970's with 'design for manufacture' and progressed to the 'internal customer' principles of Total Quality Management?

Oddly, in the same article that I mentioned earlier I made the rather 'bold' comment that some people would never understand about design 'such as the Design Council'. It was probably a foolish comment to make as the Design Council had great strengths and did do a lot of good things at that time. I just felt at that time that they were aiming mainly at 'an educated elite' (David Walker again) and losing sight of the

majority of people who could benefit from well-designed products (and today we would add 'services'). Anyway, it didn't go down at all well with the Design Council and I was invited to explain my views. The meeting ended when I was told 'if you had your way we would stick up a big notice outside this place saying, "design for the market". I said 'that is exactly what I would do' whereupon I was told 'you are wrong'. I left the building at their request.

Anyway, in my opinion, the Design Council is like car engines and so much better now. I was always moaning that they would tell us how important design was but seemed lost for words if asked 'then what do we do on Monday morning?' Now things are different. They have an excellent 'Knowledge Cell' giving real advice on all types of design as well as undertaking design projects in all areas. Having visited our excellent website why not log on to theirs at <a href="www.designcouncil.org.uk/xxx">www.designcouncil.org.uk/xxx</a> and wade through the excellent things on offer. Apparently, this site now gets 30,000 visits per month. The net is now certainly spreading wider than an educated elite.

The 'ordinariness' of successful design was brilliantly shown in a television programme some while back. I hope you were lucky enough to see that excellent programme presented by Oliver King called 'Made for the Masses' (which was heavily promoted by the Design Council). It was shown on peak viewing time on ITV 1, which is unusual for design programmes that do not involve paint. The focus was on design successes and really showed 'ordinary' almost mundane everyday items that have been successful over the years - from custard creams to string vests. The shows were presented with humour but always aimed to put over the message that successful products need to be well designed, cost effective and appeal to people. A simple message well put across to a mass audience in a most approachable way. If you missed it, it is bound to be repeated on Freeview (without the mass audience) so look out for it and enjoy. High spot for many of the female viewers is when Oliver casts off his shirt to show that he had been working out for six months before the show specifically for this scene.

So over the past fifteen years car engines and the Design Council have really improved. As for the word 'design' there is still some way to go on that front. Incidentally, the British Standard BS 7000 – 10 'Glossary of Terms used in Design Management' is well past the time that it should be updated. This standard consists of words that we use in our profession and I personally think it is a most useful glossary to ensure that we all mean the same thing when we use the same word. Two examples of the many that cause confusion are 'concept' and 'brief'. These mean different things to people in different branches of design. Engineers tend to use the word 'brief' to be the document compiled near the start of the design process to inform people about the idea and this eventually builds into the 'specification'. In other areas of design the 'brief' is the word used for the 'specification'. Such a standard listing terms used really can help to diffuse any confusion. Some of the likely new definitions will come from the BS 7000-3 standard on managing design in the service sector discussed in my article in the May 2005 edition of Engineering Designer.

As this standard now needs a committee to update, refresh and include the new words that have appeared since it was first published in 1995 perhaps you would like to put yourself forward. You should be warned; talking about the meaning of words can be

hard going. After a few meetings you may prefer to be painting walls instead. Any pink and lime green paint anyone?

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