The responsibility of scientists to society

Science has more than once come under attack for failures to exert proper caution in its advances. Arguably the most notorious physicist of the last century, Albert Einstein himself had been blamed, in part, for the creation of the atomic bomb. Other examples include the morality surrounding stem cell research, the testing of drugs and cosmetics on animals and the economically draining 'space race'. Should scientists be more responsible in their fields, or will that too adversely affect the advancement of science as a whole?

On the one hand, the recent breakthroughs in science have accelerated our lives faster than ever before. Computers, for example, have made it simple and easy to write a report, book a holiday or play your favourite music whenever you will. It is no exaggeration to say that they have defined a new age – the so-called 'Computer Age'. No longer is it as struggle to talk to friends thousands of miles away or order a special gift for someone. In that respect, Scientists have objectively targeted the needs of the modern world, engaging with their responsibility to better it.

The flip side of this, of course, is that this acceleration may not be at all healthy. With minimal effort, you can do your day's shopping, work and other important business without even getting out of your seat. And now, almost inevitably, we live in a society with a record high level of obesity. Almost every day, we are reminded by trend lines and journalists that we are letting our health deteriorate cataclysmically. With the ever advancing computer technology, with many scientists now working on 'Quantum Computers', will this deterioration just get worse as time goes on? Is it the fault of the individual, letting themselves fall victim of the easy way of the computer, or is the fault imbedded within the heart of sciences itself – are scientists just too eager to improve their work?

Even now, the attention of scientists is concentrated away from the interests of society. Billions of pounds, Dollars and Euros are still being pumped into the space programme. Given the global economic crisis, is it still acceptable for this money to be going here, or would it be better suited in helping restart the economy? Or, perhaps, it should be invested in young people coming from a tough or deprived background. Space exploration is seen to be pure scientific ego, disengaged from the reality of the world and blindly consuming resources for what seems to be for satisfying curiosity.

However, it is not uncommon for purely scientific research to later be used for a practical purpose within society. For example, the Large Hadron Collider in CERN, Geneva, has been rumoured to be able to help with the treatment of cancer. At first, this giant machine of energy had just seemed to come about for scientific interest (finding the elusive Higgs boson, mainly), but now it has emerged that there is real life, society benefitting results to it.

With that said, science doesn't always have a beneficial use. Albert Einstein once proved that mass and energy are equivalent, and that given the right conditions, one can be turned

into another; that is to say, mass can directly be turned into energy. Years later, the hydrogen bomb fell on Hiroshima and Nagasaki, a weapon created as a result of this research. Could Einstein really have seen the consequence of his research when he was conducting it? It is hard to say, but nevertheless the zealous research of scientists had stepped outside of moral boundary. The scientific thirst for knowledge results in a glass full of unforeseen, and in this case deadly, consequences.

Perhaps the most immediate threat is that of global warming. Caused by excessive amounts of greenhouse gases emerging into the atmosphere, forecasts warn that sea levels will rise and the polar ice caps will melt. The bulk of this gas emission is from cars, which use the combustion engine designed by scientists. It is a strong argument to say that it is the fault of science why the world has been changed irreversibly, but there is truth embedded nonetheless. Even now, fully aware of the threat, bigger and faster cars are being designed and built, relentlessly flushing out harmful gas into the atmosphere.

But there is an effort by scientists to combat this too. The Gee Whizz, a perfectly environmentally friendly is available for anyone to buy. Scientists responded to the need for an alternative to classic cars and delivered, and are still working hard to better it. It is then, perhaps, the responsibility of the consumer whether or not to buy the environmentally friendly car. By either vanity or necessity, the electric Gee Whizz still majorly undersells classic petrol guzzling cars. Should scientists take more responsibility in the selling and promotion of this car, or is it their duty to better it? The latter seems more plausible.

In conclusion, scientists take enough responsibility in society for their research. Although many are quick to attack them for the creation of advanced weaponry and apparently blinkered vision, it is easy to see that the vast bulk of scientific achievement has helped build the society that we know today. The real blame for scientific research being used for death or political power lies with the individual governments that run our countries, not the scientists who, genuinely, have the will to better society.