Religion, Science and other Neotenous Behaviour

Samuel Johnson

Neoteny, or the retention of juvenile characteristics into adulthood, is a phenomenon observed in many species. In fact, modification of the typical times at which developmental changes take place can be seen as a "tool" available to nature for quite rapid evolution, since via this mechanism relatively little has to be altered at the level of genes for quite drastic changes to come about, say, in an animal's body or behaviour. A paradigmatic example of a neotenous species is the axolotl salamander, which, instead of becoming terrestrial upon reaching sexual maturity, has evolved to retain various juvenile characteristics such as gills and thereby lead an aquatic adult existence. (It is also famous for being able to regenerate most of its body parts.) Another example is Homo Sapiens (Morris, 1967). Among various neotenous features which stand out in comparison with other primates – like scarce body hair, a flat face or, in some populations, lactose tolerance – is a relatively large head, with a brain that continues developing well into puberty (Leigh, 2004).

It is likely that this child-brain of ours is responsible for much of the curious behaviour we exhibit. Two instances that spring to mind are the practices of religion and science. Infant mammals usually depend on the protection and guidance of a parent to survive, a powerful ever-present being to be admired and emulated, to oversee, judge and reward – or to punish. The members of most species except our own seem to grow out of this. Curiosity and playfulness are also celebrated juvenile characteristics, key to the learning process of any young mammal. And as Sir Isaac Newton famously put it:

I do not know what I may appear to the world, but to myself I seem to have been only like a boy playing on the seashore, and diverting myself in now and then finding a smoother pebble or a prettier shell than ordinary, whilst the great ocean of truth lay all undiscovered before me. (Brewster, 1855.)

Of course, as grown-up children, we squabble. But if science and religion are just expressions of different juvenile characteristics – of curiosity and playfulness on the one hand, and of the need for parental oversight on the other – is there really a fundamental difference between them? As we all know, there is.

However childish the motivation of the typical scientist, it seems that playing around with nature actually provides us with some sort of an understanding of how it works. That this is so is beyond dispute, as the success of spin-offs such as engineering and medicine shows (and we could note that no other approach has ever produced similar spin-offs). With a few exceptions – say a biochemist bent on curing AIDS, or a physicist distraught at witnessing nuclear warfare – it is safe to say that a majority of scientists are quite content with this description of their work: an indulging of their natural curiosity which may collaterally serve to throw a little light on unexplained phenomena, or perhaps be of some practical use one day. But how do theists feel about

the idea that their god is actually just a glorified invisible friend? Perhaps also with some exceptions, they do not like it. More often than not, they are convinced that their god knows the Truth. What is more, the Word of this god, a sample of his (seldom her) Truth, is taken to be written down somewhere, for his followers to learn from. Therefore, every time this Truth is revealed to be incongruous with whatever science may happen to be showing about the world, theists have to choose from a variety of defence mechanisms so as not to lose their faith (because loving gods are notorious for applying severe corporal punishment to followers who lose their faith):

- Ignore the incongruities. This is actually quite easy for most theists, since they have only scanty knowledge both of science and of whichever local religious doctrine they subscribe to.
- Adapt the Truth. That is, reinterpret metaphorically the Word until it can pass as compatible with science.
- Try to negotiate. Concede some terrain (all right, the earth *does* go round the sun then) but forbid any further trespassing (the moment of creation must forever lie beyond the scope of physics!)
- Attack science. This is, after all, supposed to be the best defence. Even if popular support has dwindled so that you can no longer just burn your enemies at the stake, you can still go a long way by making a lot of noise however nonsensical your utterances and appealing to the tribal instincts of your followers (just look at creationists).

It is interesting that as you go down the list from the most peaceful to the most belligerent of the defence options, the more "intellectual" the typical theist resorting to them will be. The pinnacle of antagonism is achieved by certain theologians and philosophers who, with this aim, spend their time concocting convoluted confabulations, expounding at length the weaknesses and dangers inherent in the Scientific Method – how it negates the Person, destroys Love, perhaps even how a balanced Ignorance is to be preferred to the holy grail of science, the Theory of Everything, what scientists so recklessly take to be the Truth (Cheetham, 2000). But they have completely misunderstood the nature of their rivals in neoteny. No scientist ever wrote "truth" with a capital T.

References

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