EVOLUTIONARY ADVANTAGE

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The absence of the things that Downâ€™s confers on a society means that we are incapable of seeing their value.
Category: Observations

If you've come to Kouyanet expecting the usual comment on world mission, theology or what-have-you, you are are likely to be disappointed today. This is going to be an odd post, firstly because of the subject matter and secondly because of the basis of my argument. I'll also freely admit that this is just me thinking aloud into a public space.

So, if I haven't put you off, here goes with a few thoughts on Down's syndrome and evolution.

I realise that it might upset some of my evangelical readers, but as an ex-biologist, I find evolution to be a great tool for understanding how life on earth works today. Whatever you believe about the origins of life (and please take those arguments elsewhere), evolutionary theory can help us think through things like the distribution of species in an eco-system and the way in which certain traits are present or absent in a population.

So, let's think about Down's syndrome, or trisomy 21 if you want to be technical. Basically, this is a condition which arises when a child is born with an extra copy of chromosome 21. It occurs in about 0.1% of children and tends to find its expression in distinctive facial features. Down's syndrome can also lead to mental and physical health problems and a reduced life expectancy, though much of this can be mitigated by modern medicine.

Much of society treats Down's syndrome as an illness or a problem and because you can test for it pre-nataly, a lot of parent's choose to abort babies with Down's before they are born. It is reported that Iceland is close to becoming the first country where no babies with Down's will be born.

So, with that background, let me take you on a little thought experiment. Evolutionary theory tells us that traits which give advantage to a population will be maintained while those that are harmful will be lost. At times, this can seem bizarre and counter-intuitive. For example, sickle-cell anaemia is a terrible disease but it does confer some degree of resistance to malaria and so it has been maintained in that part of the human population which was most likely to suffer from malaria - people of West African descent.

Now, trisomy 21 isn't a genetic mutation of the same sort as, say, sickle cell. It is caused by a one-off incident at fertilisation. However, it is maintained at a fairly steady level in human populations, when other trisomies are almost all fatal. The human population copes with trisomy 21 in a way that it doesn't cope with similar genetic abnormalities. The implication is that Down's syndrome confers some sort of evolutionary advantage for humanity.

Now, I am not saying that living with Down's is easy. It isn't, either from the person who has it for those who care for them. However, the parents and close friends of those who live with Down's almost all report that those with the condition have high levels of empathy and affection for others and that those around them learn to share that empathy. People with Down's help us appreciate and understand other people far more. This is precisely the sort of thing that is needed to make human societies work. We are fractious animals and prone to disputes, anything that helps to glue human

societies together is a good thing in evolutionary terms.

Of course, in the Western world, we have developed into a highly individualistic culture and we no longer see the great value that comes from a wider society. As a result, we see the individual difficulties surrounding Down's but we see no further. The absence of the things that Down's confers on a society means that we are incapable of seeing their value.

As I say, this is me thinking aloud. I don't think you need to have traditional Christian convictions to see value in people with Down's. However, I also think that we need a much better basis than expediency for making moral choices.