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Three parents? Sorry, but this is science gone mad

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The British are a pragmatic people, which is a good thing, in general, but doesn't make for much rigour in the way of ethics. Machiavelli got a bad press for saying the end justifies the means; in Britain he would have been right at home in the science community. So it isn't entirely surprising that this country is all set to be the first in the world to approve the creation of the first three-parent baby as a way of allowing people with mitochondrial defects to have healthy children of their own.

This would be done by taking the nucleus from a fertilised egg of a woman with these defects and putting it into the fertilised egg of a healthy woman from which the nucleus has been removed. The mother and father, then, would be the main parents, because the nucleus carries the genes that affect things like looks, so the offspring would look like them, not like the third parent who provides the rest of the egg.

A neat mechanical solution to a heart-rending condition; what's not to like? Most pundits have seized on a useful contemporary metaphor to explain it: it's like replacing the battery in a laptop, see? The hard drive, the useful stuff, isn't affected.

The Government's chief medical officer, Dame Sally Davies, is, she says, "comfortable" about this. "I think we will save some five to 10 babies born with ghastly diseases and from early death without changing how they look or behave and it will allow mothers to have their own babies," she says.

She concedes that "there are clearly some sensitive issues here". Well, yes. Big moral problems, more like.

Some people do suffer dreadfully from mitochondrial problems, including blindness and heart disease. But what we'd be doing here in the efforts to help them have healthy children is conducting genetic modification on a human being, with permanent results. We're manipulating life and our genetic material in a way that will go down the generations. In creating a three-parent baby, we're doing something that other countries haven't done for good reasons.

The European Convention on Human Rights and Biomedicine allows modifications to the human genome "only if its aim is not to

introduce any modification in the genome of any descendants". This is exactly what Parliament is likely to authorise. And although Dame Sally says there is "general support" from the public for change, that's not what the consultation figures show: half of respondents oppose a change in the law.

Of the three parents of the offspring that British scientists want to create, it's not quite true that the third is a cipher. The mitochondria of a cell, the bit the healthy mother would provide, may provide only about 37 genes out of around 2,000, but it contains about half of the actual biological make-up of a cell.

What's more, its genes relate to how effectively our metabolism functions, an important aspect of our physiology. The nucleus and the mitochondria in a cell, one scientist explained to me, don't operate separately; they talk to each other all the time. The third-parent bit matters.

One child in 6,500, on average, is affected by serious mitochondrial problems, which may be where Dame Sally got her figure of 10 babies with "ghastly diseases" who will be "saved". Except they won't be saved. Instead, this technique creates entirely different, disease-free children.

If it works, that is. The favoured process that Newcastle University hopes to adopt isn't very different from the one used to clone Dolly the sheep, which wasn't blessed with entire success. It's risky.

When researchers in Oregon tried the approach on monkeys, the embryos failed early on. But this being Britain, the great thing is to push the boundaries of science ever further on the off-chance that something will come of it.

This, after all, is a country that legalised the creation of animal-human hybrids in 2008, which didn't work either, but demonstrated that here, pretty well anything goes if you can promise that sick children will benefit.

Questions of identity, ethics, likely success, none of it matters so long as - as one paper put it - "Britain is leading the world". Down a slippery slope, unfortunately.

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