

## Where have all the mad scientists gone?

When I was an impressionable youngster, the scientists of fiction, be it literary or pulp, had real character. So did their depictions on celluloid at the cinema or on the cathode ray tube in the wooden box in the corner of the room.

There were two sorts. Most common was the mad scientist whose enthusiasm and/or hubris was going to change the world in an unhelpful way (blowing it up, for example). Each of these was either a misguided genius, like Victor Frankenstein, or an evil genius like Dr Moreau: whatever chaos they were about to unleash, their independence and high intelligence was never in doubt. With wild hair and wilder eyes, they worked at fever pitch among their bubbling retorts and



Just another day in the lab... (Horace Carpenter playing Dr Meirschultz, trying to advance medicine by curing people of death itself).

sparkling terminals, intent on pushing forward the frontiers of the possible and pushing away any notion of common sense. Most were recognizable by their white coat (improbably white, considering what they were up to), though a few, like Rotwang (from Fritz Lang's *Metropolis*), favoured the boiler suit.

The other sort of movie scientist was mildly eccentric rather than utterly mad, and his heart was in the right place. This either meant that he did do the good he intended to do, like Dr Who

of BBC Television, or perhaps did a mixture of good and some chaos-causing, like the wonderful Professor Branestawm who, to my surprise, has recently emerged from the printed page to have a life in film and television. Another TV hero of my younger days, Professor Balthazar, seldom caused any chaos but set the world to rights with highly unusual inventions that matched well the late 1960s, psychedelic era of the cartoon's creation.



Both the evil mad genius and the benign eccentric genius tended to have a side-kick. The archetype is the deformed Ygor of the Frankenstein films. A foil to the genius, and also a device to allow parts of the plot to be explained, the companion was essentially a super-loyal lab technician for whom nothing is too much trouble and nothing is too repulsive, too tiring or too maniacally evil. The trope was

Lampooned magnificently by the character of Eye-gore, in Mel Brooks' *Young Frankenstein*: not quite so loyal, he! Occasionally, the assistant is not born of woman but is made by the hands of the genius himself (it almost always is a 'he'). The archetype of this is probably Hei, the gynaecoform robot made by Rotwang to replace the love of his life, who died in childbirth. At least here we gain some explanation for the insanity of the scientist-engineer.



Dr Who, for his many generations, generally favoured young female companions to whom he could explain, in an avuncular and slightly patronizing way, what was going on. And my favourite of all television mad scientists, Dr Bunsen Honeydew, was inseparable from his long-suffering research assistant, Beaker. Beaker both acted as a reason for Honeydew to explain to viewers what he was doing and, usually, as the victim of the laboratory disaster that was about to unfold.



To a young person with his nose in a book or facing the cathode rays, all of these characters, who could see the inner workings of the universe more clearly than the common man, who spent their

days in labs full of bubbling things and hums and buzzes and sinister-looking meters and terminals, and who never seemed to have to write a grant application or a paper to the local ethics committee, were in their weird way quite inspirational. They were also central to public imagination – a full 30% of horror films made between 1930 and 1989 had a central character of this type.

But where have the mad scientists gone?

Part of the rather depressing answer is set out in a beautifully written paper by Angela Meyer and colleagues, published last month in the journal *Life Sciences, Society and Policy* (see links). They analysed a total of 48 sci-fi/ horror films that related in some way to building biological entities, to seek a current ‘typical’ depiction of a scientist. Except in films that re-told much older stories, they found evidence of a big change. Gone was the individual, working for himself and motivated by academic curiosity or some personal drive to power, or revenge, or simple companionship. In place of these titans were dull technical functionaries, often motivated by money, working in teams in some multi-national industrial corporation, their misdeeds often arising from incompetence rather than the megalomaniac mischief of their predecessors. There were occasional rebellious employees who did pursue their own ideas, but there were also many research teams in which rather anonymous scientists (of both sexes, now) worked and did their harm not as a deliberate expression of genius but in a rather unthinking, corner-cutting, nobody-taking-individual-responsibility way, pushed to compromise by corporate greed and job insecurity.

I am not much of a watcher of films (and most that I do watch are in black-and-white), but I find what has happened to celluloid scientists unutterably depressing. The mad genius of the mid 20<sup>th</sup> century B movie may have caused havoc, but at least he gave out a powerful message that scientific creativity and imagination could change the world in a good way as well: there are obvious links between the motives of Frankenstein (the scientist, not his monster) and those of the great pioneers of kidney and heart transplantation, or the creative drive of Rossum or Rotwang and the pioneers of real robotics. For teenagers sat in the popcorn-dusted seats of an auditorium, there could be real inspiration on the screen. Who could be as moved by the portrayal of a flock of weak-willed unthinking jobsworths in a corporate research team?

The old spirit has not gone completely. There are excellent science presenters such as Dr Bunhead (see links), who still project the mad image very well, and McGraw Hill produce a superb set of

construction project books, intended presumably for teenagers, the titles of which end ‘for the evil genius’. To their immense credit, these publishers are happy to include old-school projects that generate tens of kilovolts and ultraviolet-making sparks and trust that bright kids are perfectly capable of having fun with this stuff without killing themselves or anyone else. And dear old Bunsen and Beaker will no doubt still keep coming up on children’s TV, inspiring young people into the lab as surely as their colleague, the Swedish Chef, inspires them into the kitchen.

Jamie Davies,  
Edinburgh,  
October 2015

**Links:**

The Meyer article - <https://link.springer.com/article/10.1186/2195-7819-9-9>

Dr Bunhead - <http://www.bunhead.com/>