

Killing the Kwisatz Haderach: how Dune dismantles Eugenic Philosophy.

By Daniel Pritchard

The following contains spoilers for the entire Dune saga and therefore may contain spoilers for its film adaptations.

As a long-standing fan of Frank Herbert's Dune novels and a fan of heady sci-fi in general I've have been delighted by the mass adoption of Denis Villeneuve's Dune movies. The adaptation of a saga whose core themes are environmental protection, the dangers of charismatic leaders and allowing machines to think for us, itself feels more relevant than ever in an age of climate disaster, rising far right populism and AI. A theme that we as students of evolution should pay attention to however is that of Eugenics.

Like many readers of Frank Herbert's seminal Sci-Fi novel, I went in with some expectations based on its 1960s release date. This was a time in which countries like the US still practiced eugenic sterilisation of certain 'unfit' members of its population¹. Sci-Fi itself was in the throws of its 'golden age' and still mostly published in pulp magazines, giving editors with fascistic tendencies like John W. Campbell of Analog near total control of the entire English language genre. As such that golden age of sci-fi is, in both subtext and actual text, filled with racism, sexism, Ur-fascism and no shortage of white men given superman status by their superior genetics². It is in the pages of Analog, and its tendency towards teenage Übermensch, that Herbert's Dune World series, which would later be reedited into the novel Dune, debuted³. As such my first reading of Dune took the works at face value, Paul is after all a teenage Übermensch protagonist, powered not only by the mind-expanding spice melange (another facet of its pre-war on drugs publication) but by thousands of years of selective eugenic breeding of humans. I don't seem to be alone in thinking this as the lead up and aftermath of the both parts of film adaptation (at time of writing Dune part two is still playing in cinemas) saw the internet filled with think pieces about Paul's eugenic origins and subsequent 'white saviour' story⁴⁻⁶.

Is Paul just that then, a genetically superior gap-year bro hopped up on too many hallucinogens and a developing messiah complex? Well, no - as the rest of the Dune saga explored more explicitly; Paul is not the hero, the Bene Gesserit's manipulation of religion and eugenic program fail to the tune of trillions dead and their own power diminished for thousands of years to come. It is however easily missed in the first novel. Writer and director of the current film adaptation spoke about this when adapting the books, stating the view of Paul as a hero rather than anti-hero disappointed author Frank Herbert and directly resulted in his follow up novel Dune Messiah's more explicit messaging about the hypocrisy and danger of Paul's character⁷. Compared to its theme of the dangers of charismatic leaders however, the eugenics that produces Paul and his powers is relevant.

As a matter of fact, many of the major characters across the series which stretches into the far future are similarly the result of eugenic experiments. The subtext of each of these instances do however subvert the principles of creating a 'better person' through controlled breeding and genetic experiments ⁸.

The Bene Gesserit, who are the purveyors of these eugenic principles, fail to control their Kwisatz Haderach in Paul simply due to his mother Jessica loving his father and giving him a male heir as opposed to the female the sisterhood wanted. The simple human act of loving another undermines the entire basis for eugenics; humans are unpredictable argues the Dune series, and if they embrace that they cannot be controlled, by leaders or by other means like eugenics. Paul's own son, Leto, born outside the plans of the breeding program makes that human unpredictability his goal and takes yet more control from the Bene Gesserit. In later novels Leto, in control of his own eugenic breeding program succeeds, after hundreds of years, in producing a person who cannot be predicted by his or his father's prescient powers. Siona, another 'success' of eugenics does not fall of the influence and control of the tyrannical Leto as he predicts, following the explanation of his ultimate purpose to free humanity from control. Siona breaks Leto's control altogether by killing him, finding his methods to be vile and unjustified. The Bene Gesserit again look to control the galaxy through eugenics after the death of the God Emperor Leto, and again these experiments come with unintended side effects. Miles Teg, a later ancestor of Siona, gains unexplained powers through these experiments and ultimately plays a part in the dismantling of the Bene Gesserit order into one with a much less authoritarian philosophy. We see other quasi-Kwisatz Haderach created by means other than eugenics and other cultures' eugenic programs have some truly horrifying results as women of the Bene Tleilax are bred and genetically manipulated into being little more than machines called Axlotl Tanks. Every 'success' of eugenics in the Dune novels comes with unintended and sometimes outright disturbing consequences. Far from an endorsement of what was at the time of their publication a common trope of sci-fi, Dune instead warms against eugenics, and argues it cannot produce the control of people its champions desire for the simple fact that humans will do the illogical and wonderful. They will fall in love, or simply hate and break out of that control to follow those feelings.

While it may seem that this is a sci-fi of yesterday addressing yesterday's problems, I argue that this is another theme that is as relevant as ever as unwelcome eugenic ideas creep back into mainstream scientific and political discourse. There were always fringe idealists, often wealthy couples who believed their genes to be superior, though they avoid the tainted term of eugenics ⁹. This however has spread to more powerful elements of the modern right wing. Billionaire and big mouth Elon Musk has a large number of children, some of whom not with previous partners but other 'smart' people who share his ideals ¹⁰. The billionaire has had twins via artificial insemination with one of his female executives ¹¹. Science and genetics itself is far from out of the woods with regards to eugenic ideals from some members of its community. Population genetic studies have continued use terms of race, a social construct with no biological basis, for describing human genetic variation ¹². It is not difficult to find papers using genome-wide polygenic scores to predict social and behavioural traits like criminal intent despite the many methodological, and ethical concerns which

limit their usefulness¹³, or those arguing for the use of CRISPR to solve complex traits¹⁴. The controversial but foundational evolutionary biologist Richard Dawkins has argued that while abhorrent eugenic programs would “of course” work¹⁵. The *Dune* series, which in subtext argues that eugenics is simply a tool of control for those with power, and that control does not even work as intended thanks to human nature, remains as relevant as ever.

The idea that humans can be bred or edited for a purpose becomes absurd when considering the complexity of not only genotype and phenotype but of psychology, socioeconomics, and the interaction of all of them. Historical examples of countries serialising criminals, the poor, and mentally ill in order to remove them from society were not only abhorrent but useless¹⁶. That an adaptation of a work that began in 1963 (and novelised in 1965) can feel as fresh and relevant today serves as a reminder that ideas, even abhorrent ones, never truly go away. This is as true of eugenics as it is of *Dune*’s warnings about following populist leaders. The continuing relevance of Frank Herbert’s work should persuade us that if ideas never truly go away, we must always seek to disabuse those ideas, like eugenics, that would do harm to some, and thereby harm us all.

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