

## Moral Status, Illicit Bio-Economies, and Equity/Parity

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There are three issues about which I have some interest as both a rhetorician and a social scientist. First, there is the issue of defining “life” and moral status. I would argue that both removing the attribute “living” from any organism will change its moral status and adding the attribute “living” to a machine will change its moral status as well. The implications associated with moral status are important.

During wartime we observe the dehumanization of the enemy. Without defending the activities of ISIL/ISIS per se, we are already hearing them referred to as monsters. David Cameron on September 13 of this year pledged to work with Britain's allies to destroy the Islamic State, saying of the group's members, "They are not Muslims, they are monsters." A less articulate Ted Nugent on the 17<sup>th</sup> commented: “We should rain hell down on these Muslim monsters and all who provide them safe haven until there is nothing left of their hate and evil ways. A scorched-earth policy is a good policy as it pertains to exterminating these devils. Killing them all would send a message to every other voodoo nut job that America once again is all business.” Demonizing has long been a dehumanizing strategy in times of war. Said explained defense of his major work Orientalism that very little of detail reached American audiences and policy makers understanding that over simplified complex international issues by over generalizing the other, the enemy especially.



Figure 1 - Big Bug

With “otherizing”, demonization, and dehumanization we are changing the moral status of people, moving them into a category of thing. Much like reservations over cloning, we know that early attempts to produce viable “living” machines will be fraught with failure. Some of our creations will not live and indeed may die at our own hands because they are not optimally viable. Witness the “Dolly” rejects.

While we kill bacteria when we wash our hands and brush our teeth, we are talking about creating life and extinguishing life. As we move up the developmental ladder from bacteria and viruses to more complex life forms, we need to ask ourselves what moral status we are willing to award our creations as well as how we decide to remove its/their moral status.

Second, we need to consider the role synthetic biology might serve in the illicit bio-economy. This issue has mostly been raised by Markus Schmidt from the Organisation for International Dialogue and Conflict (Vienna) in two of his pieces. Schmidt in writing about the DIYBio movement and its members wanted to make certain that while he found them mostly harmless, there were other free agents with highly suspicious motivations.

In contrast to the amateur biologists who try to do things with a low budget, the illicit bio-economy and its players are known to have a very high budget. It is easily imaginable that drug cartels set up (semi-) professional laboratories using an easily available biological toolbox to design microorganisms to produce not the plant

product artemisinin acid but a plant derived semi-synthetic cocaine or heroin (2009: 96)

Schmit postures “there is no reason to believe that full biosynthetic of currently semi-synthetic drugs or fully synthetic amphetamine-type stimulants will not be possible and economically attractive using the toolkit of synthetic biology in the near future.... [T]he future illicit bio-economy could see some dramatic changes one the technology to manufacture metabolisms a la carte is out there” (2008: 3).

Third, there is the equity/parity issue associated with the costs and benefits shared by the same population. For me, this is a rhetorical issue. I have grown weary with the usefulness of the poor and marginalized as the backing for claims about the importance of scientific and technological developments especially when the benefits associated with advanced science and technology at best trickle down to the poor.

When we ask about drawbacks, we hear about applications as a counterbalance. The applications involve extrapolating discoveries and positing arguments about humanitarianism. When we complain about some futuristic down side to a new technology, we hear that we are not even close to developing the technology to the point where it might trigger the down side. Applications are a justified use of speculation but drawbacks and disaster scenarios are not. One begins to question this logic of scientific and technical rebuttals when populations of arguments as well as populations of fauna, including humans, are treated very differently.

Speculating about future contexts cannot justify accelerated development while at the same time discrediting reservations and precautionary trending.

Just three issues I think we need to address.

## REFERENCES

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