

# A Thesis on “Berserker” Self-Replicating Robotic War Machines, Hivebots, and Surprisingly, Evolution

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Hivebots, while enigmatic in their origin, paint a vibrant picture of the eventual future of any misguided future endeavours in self-replicating robotics. We know that these machines are advanced, and were conceived millions of years prior, but not for their exact purpose. It is most obvious to assume that a long-past war spawned these machines in an attempt to overwhelm an enemy, possibly long gone one way or another.

While carbon dating allows us to place a minimum age on these robots (read: The oldest machines to pass through the rift; it is possible there are variants throughout the universe that are much older) it is not until recently that a functional, disabled unit has been recovered and had its programming analysed. For those reading this report, it may be common knowledge that these “hivebots” are prone to self-destruction of code should their subprocesses be accessed.

Indepth analysis of a unit’s programming reveals many things about how the hivebots are designed, and also paints a very clear picture about their current state: Hivebot programming is debilitatingly corrupted. After several passes, we have ruled out this being a result of our forceful access, and can confidently say that the original purpose--and designs--of these self-replicating machines has fallen away at some point. Several blueprints for additional hivebot chassis, stored on the one we had access to, were missing vital information and specifications. As the program ran, the hivebot was apparently attempting to patch holes in these designs with information gleaned from other hivebot units wirelessly.

This goes a long way to explain the apparent poor construction of the hivebot and its ‘cousins’, and tells us a lot about swarm robotics and processing. These devices were seemingly never designed with operating alone in mind, relying on others of its kind to assemble a full unit. As time has worn on, these designs and blueprints have degraded in the face of the occasional miscopied algorithm. Interestingly, this has not resulted in the complete breakdown of the hivebots, as is to be expected in any sufficiently-aged system, and has instead allowed these hivebots to survive as long as they have. My hypothesis is as thus:

1. A hivebot is assembled initially to the exacting standards defined in its original architecture
2. As is the nature of a self-assembling entity, resources are consumed at an exponential rate (A Wistful Thought Nurtured by Promises of a Great Beyond, The Compendium of Swarm Robotics (Kal'lo: Federation Copyworks, 2391))

3. Valuable and rare resources dwindle, common materials are consumed at a slower rate
4. The availability of rare elements becomes a bottleneck to replication
5. Initial errors appear in blueprints, necessitating patching with substandard materials
6. Overall reliance on high-quality rare elements reduces, resulting in a weaker design built of cheaper, more common materials
7. The original complex, robust hivebot “genus” is outcompeted by units exhibiting “corrupted” assembly paradigms able to manufacture copies using more readily-available materials

Humans have an interesting saying: “Quantity is a quality of its own.”

My theory goes a long way to explain why hivebots as we know them appear to be poorly-constructed, cheaply-built and capable of proliferating in almost every environment. It is also a strong case against the development of similar systems, as even though their eventual decline to nothing more than a nuisance bodes well for the civilised species of the galaxy, their current design goes against their intended purpose, rendering them useless. Therefore, motivation for any species with rational goals to produce such a self-replicating war machine should be nil.

However, it is also a stark reminder of the dangers posed by them. As is theorised, initial, stable and robust designs were supposedly outcompeted and overwhelmed by sheer numbers, despite a potentially vast difference in quality of construction and materials. While the threat of a single hivebot, or even a cluster of hundreds, is relatively small, it is still there, and grows in significance in the face of larger numbers. Naturally-superior forces such as the Federation, the Human empires and other such groups could be annihilated by sufficient numbers.

*From the desk of Dr. Qowyh Shapiqe-wqm, staff aboard the NSS Upsilon*