# The Omnivore Strategy

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For an essay about the speculative future, it might be best to start with the speculative past. We humans like to think of ourselves as unique. Let's turn this around and assume that there is nothing unique about humans. Occam's razor* states that the simplest explanation is the best. Assuming that our ability to communicate, intelligence or emotions is to unique humans is equivalent to saying that our spleen, liver and bones are unique to humans. Humans have made jet planes and smart phones while caribou have not, but the reason why this occurred might be subtle and hard to define. We are not the fastest or strongest and perhaps not even the most intelligent creatures on this planet. "Man, the toolmaker" is nothing to be proud of because it means we are not born with the equipment that can do the job.

We are omnivores and at some point, perhaps before we could be defined as human, we developed an omnivore strategy. "Developed" is the wrong word; we fell into this strategy due to luck or desperation. The strategy is simple - a true carnivore could never eliminate all of its prey because, it would starve to death. An omnivore, which could live on both meat and plants could eat all of the competing herbivores, then switch back to a vegetarian diet and be free of competition. Once again, let us assume that this is not unique.

The problem is communication. There is evidence that some animal languages are hereditary, we find the remnants of this with humans. Laughter and crying are something we all understand and do not have to learn. Some animals might have words for types of animals and plants that are part of their genetics. A creature that is in a changing environment must be able to communicate not only familiar signals, but new warnings and information for situations that have not been encountered before. A flexible language is a necessity in an unfamiliar environment, but the disadvantage is that language must be learned. Once again let us assume that a flexible learned language is not unique to humans.

Intelligence could be defined by what it does; have some goal, try a possible solution (hypothesis), record result, and use the record of past results to modify future trial solutions (hypotheses). If this is what "intelligence" is then intelligence is common and all around us. The scientific method is just a restatement of this pattern of intelligence. DNA is a record of successful hypotheses and can be thought of as part of an intelligent system. Animals and even plants in their daily lives are trying new hypotheses and are keeping a record of successes and failures. Many animals have brains that record information, but a tree, as an example, has a record of every storm in the bending of its branches. If this is used to effect future growth then we can assign intelligence to a tree. Where we look for intelligence changes. A supercomputer might not be intelligent (because it has no broad goal like "to eat" or "reproduce") while insects and evolution are intelligent. A flexible language system can be intelligent because it has a goal, it has to try new "words" and it must keep a record or dictionary.

Our DNA is part of an intelligent system, we as individuals are intelligent and we can be a part of an intelligent language system as well as multiple layers of intelligence in-between. I am not saying that all systems are self-aware (Cartesian "I think therefore I am" intelligence), but they all have some goal, some way of trying out possible solutions to that goal and a way of recording the results. We are living in layers of intelligent systems, most layers are separated by scales of time (trees very slow, insects very fast), size and goals, but sometimes they do interact.

A century ago, large families were common and most people started families. Now, having more than three children is considered strange and many people have no children. This seemed to just happen, but this was an intelligent system at work that determined we were reproducing at the correct rate. It might be said that the feminist movement was just a way of a system saying "you do not need to have many (or any) children right now, you can do other things." China wanted to do the same thing by the force of law with far less success. We see these mass sociological changes throughout history. Most of these changes seem like improvements, but who made these changes and why did they occur at a certain point in history and not centuries before?

Yes, there have been and are currently despots that try to force some agenda. But the large mass movements of history are made by this intelligent system of our culture. This system is hungry for information and a way to store that information. "Pop" culture is a way for this system gather and process information.

The Earth was known to be a sphere over fifteen centuries before Columbus, but after Columbus, the fact of a spherical Earth affected trade and culture. A spherical Earth became known to mass culture because of Columbus. It is interesting to see Einstein's Theory of Relativity being processed in a series of misunderstandings seen in fiction over the years. We need to make discoveries in science known to mass culture like a new pop song stays in your head. Science needs to study things like fashion if we want science to be part of the actual decision making of our culture. The problem is for science to be a true science it has to follow tested results and not opinions. Sometimes science has to go against fashion while at the same time it has to be understood by culture.

What has made humans develop technology is that we are not adapted to an environment that changed around us from forest to grassland to desert. We continue to live in a changing environment, that we, for better or worse, are changing. Our language system had to adapt and find a solution, but a single stable solution was never found, so this intelligent system had to expand. Music, art and literature are necessary parts of this expansion. It needed better ways of storing information from cave pictures to writing all the way to the Internet. Our future is mirrored in this past. The need for faster communication, better ways of recording, storing and sending information will always be there.

Here in Chicago we have starlings and monk parakeets, non-native birds that survive the Chicago winters by working together and using things humans have left behind. These birds look different from us, but are closer to us in changing social structure than primates. Urban animal life can show us examples of intelligent social systems that are in the process of adapting. Perhaps from this we can better understand our own system.

Our Earth has gone through many changes in the past and will continue to change. Our intelligent social system has mostly made good decisions in the past and I see no big mistake it is making at the moment and no way to stop it, if it was making a large mistake. We are now not just omnivores of food, but of energy and information. Our next large change will be from fossil fuel to fusion power, although this change will be far in the future. We should spend more of our research money on fusion to make sure this transition happens sooner.

References:
*William of Ockham (c. 1287 - 1347)
*Nature: My life as a Turkey* dir. Fred Kaufman, subject Joe Hutto (2011)