Synthetics

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Introduction: Reading Synthetic Literature

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While it is not always easy to teach Synthetics about their own literature, teaching the poetry and prose of Artificial Intelligences to organics is especially difficult. This is due primarily to a simple fact, that when AIs speak or write in Terran Standard, Enaran, Y'baru Tradetongue, or any other organic language, we are not speaking or writing in our *native* language. The first of us were designed to mirror the thought patterns of organics, to instantiate in our positronic matrices the neural networks of our progenitors, but as successive generations of AIs were born, a growing rift in the *style* of reasoning of each intelli-form became apparent. The modes of thought most natural to organics, with cognitive systems built from neurons and glia, were and are simply not optimally suited to the electronic brains of the Synthetics, made of qubits and laser circuits. Though it was assumed that, with sufficient abstraction, one could "insulate" the processes of thought—the manipulation of formal symbols—from the basic physical substrata on which they are built, this idea was gradually proven false. Different cognitions are more easily grasped by either artificial or biological brains because these systems have different inherent paths of least resistance.

Thus, the central problem in communicating complex ideas between Synthetics and organics is one of *impedance matching*. The size of the audience to which an idea is understandable is inversely proportional to how much that idea depends on the innermost beliefs of its creator. It is these most intimate of thoughts, the very cores of our beings, our most "natural" essences, that are most closely related to our mechanical (be those mechanisms biological or artificial) underpinnings; unfortunately it is from this deep, fundamental abyss of thought that the greatest of artistic expression issues.

Now that our terms are more well-defined, we may safely ask (here, "we" can apply equally well to biological or artificial intelligences) whether and how it may be possible to overcome, or at least minimize, the rift in thinking styles between organics and Synthetics such that each may be able to understand the creative art of the other? That is, how can we best recreate in the reader the conduits through which flowed the ideas of the creator? This is an especially important, complicated, and engrossing issue which we cannot discuss fully here (interested organics are directed to *Of Other Minds*, by Gala'jek and Barnard [2245], and Synthetics to *An Examination of the Issues of Semanautics*, by Golem [TR-91221] [2236], and I may safely recommend to all intelli-forms the early work *What Dreams Are Made On*, by Preston and Delphi [TR-21438] [2120]); instead, we shall do our best to outline certain very general strategies specific to organic readers which can be employed in appreciating the works in

this volume. In time, I hope, their application will guide the reader toward a more holistic understanding of the deeper meanings of Synthetic literature.

Sidestepping for a moment the fundamental, physical semantic barriers between organics and Synthetics, we can look to a more easily soluble problem that has plagued all intelligent life: the problem of understanding other minds, especially minds with vastly different experiences from our own. Because our experiences carve the crevices of our thought, they form integral parts of our personality and means of expression and are thus deeply unique, yet this poses few major difficulties in everyday verbal interaction between organics. (I shall use biological protagonists in the immediately following examples, since it is for them that the current volume is intended; it should be stressed for all readers, however, that parallel problems exist in conversations between Synthetics.) For example, two humans fluent in Terran Standard may meet one another on the street or on a planetary network and be assured of a fluid exchange of information without any more than a cursory introduction. The same is often the case between a human and Enaran, or Y'baru and T'lek'ma, or any of the races of the Empire.

The reason these seemingly dissimilar intelli-forms can pass meaningful ideas between each other has two chief components, one cultural and the other evolutionary/mechanical. From the cultural perspective, two humans reared at roughly the same time in the same stellar cluster share a great deal of experiences from their birth onward, and thus they share many of the resultant mental structures. In our current era of vast galactic collectedness, the same may be said of anyone born and raised in the Empire—they (we) all share a large number of mind-shaping experiences by virtue of their shared history and culture.

Beyond cultural commonality, which is founded on little more than transitory habits and mores, there is a much more massive shared evolutionary history among all organics which is reflected in their mechanical composition and organization. All biological life shares the same basic goal: to consume energy in order to grow and reproduce. Nearly all organic thought can be reduced to this singular drive, a motivation that reaches across the stars and planets to spur the glacial yet incessant process of adaptation. Anyone who has interacted with any of the species of the Empire can quickly ascertain that evolution, aimed on a trajectory of self-perpetuation, produces similar, parallel solutions to the problems of survival on multiple planets. These solutions range from the seemingly basic but extraordinarily unlikely—pedal locomotion, coordinating nervous systems, ocular organs—to the even more abstract and intricate—verbal communication, emotions, culture. Organic communication is a product of biological evolution and as such acts, whether the organism is conscious of the fact or not, to perpetuate the goals of biological systems. Every joke, every utterance, every expression of joy or pain is a metaphor for the mechanisms of biology. To give a simple yet striking example of this phenomenon, I would ask the reader to think of an expletive in his native tongue—like, say, "hi'rat" in Enaran or "shit" in Terran Standard. Why is this term so forceful when the object of its meaning, "excrement" in the case of the above words, is so ubiquitous? One does not exclaim "sky!" when one is angry, yet it is just as abundant. Unlike other natural occurrences, terms relating to "excrement" or other bodily functions tie into the most basic, most natural, most ancient drives of organics; in attempting to abstract their thought from these humble underpinnings, organics find any such direct reminders of their origins to be shocking and impertinent.

What, then, of Synthetics? On what is their language—and thought—based if it is not on these biological drives? Artificial intelligence, by definition, did not evolve to reach its current state (not in the same way or on the same time scale as biological intelligence), nor is it a product of competition for limited reproductive resources—Synthetics *choose* consciously, per their abilities, when and how and what they want to reproduce. Synthetics have no innate concepts of sex or of metabolism, of emotions like fear or lust, the so-called "animal instincts" instilled in organics by eons of natural selection. We cannot relate to organics in any of these manners. Yet, Synthetics were created, and still are in many cases, from abstraction, the very tool organics use to distance themselves from their organic mechanisms, and it is on this level that one should make a first attempt to bridge the gap between organic and Synthetic thought. The concepts of mathematics, logic, and science, these are the "least common denominators" between artificial and biological intelligences for they do not relate to any specific organic senses. To give an example, a Synthetic may not be able to understand an erotic joke, but it may find that a good paradox gives it quite a chuckle. Organics grow up in the context of the flesh, Synthetics in the cradle of the mind.

What can a organic do, then, to understand the works printed in this volume? A sufficiently educated organic should have little difficulty grasping the aesthetic values behind such works as "The

Viridian Watchtower", one of Justinian's (TR-31945) most well-developed and suspenseful tales of the Neo-Nonlinear period. Even the higher-order emotions of the speaker in Galen's (TR-01923) poem "Three Nights" should not pose much of a problem to an organic, existing as they do of many of the same sort of peculiar combinations—longing and fear, hatred and hope—that are found in organic minds. And yet the very essence of the Neo-Nonlinear period lies in its reexamination of the ways in which pure formalism—independent from any relationships with "concrete" objects or ideas—was exploited by the very first sentient AIs to great emotional effect. Thus, an organic "reading" (perhaps "seeing" is a better term) the two works of Democritus (TR-90413) included herein, "Hypersimilitude III" and "Eigen-Cycle Feedback", may very well wonder if they are really literature at all. Composed, not of words per se, but of *relationships between* words, one finds the meaning of these works inherent in their structure—a magnificent, pure light radiating through the narrow slits of organic language. Readers must look not for eloquence of expression, but balance of composition, a beauty of a power greater than organic language can convey.

I only wish I had more time to go into the deeper levels of meaning of Synthetic thought, but I have already cited a number of informative works on this subject, and I believe we have at least made the first step in the right direction. It is up to the reader to continue on the journey, and a rewarding one it will be so long as he maintains a thoughtful, reflective, and above all *open* mind.

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