

## **FIGURE 12.1: Types A-Z (information-based)\*\* & Kardashev Scale Types I-V (energy-based)\*\*\* Civilizations Consolidated**

\*Note: The combination of the two scales determines overall technological advancement. The following is an expanded analysis from the original sources to include exclusive interpretations and predictions by the author.

<u><b>TYPES A-Z</b></u>	<u><b>DESCRIPTION &amp; TYPES I-V</b></u>
<b>A:</b> 5000 BCE.....	Very primitive society. Just prior to written history.
<b>B:</b> 4000 to 1500 BCE.....	Babylonians and Ancient Egyptians. First written records.
<b>C:</b> 800 to 500 BCE.....	Ancient Greeks.
<b>D:</b> 500 BCE to 500 ACE.....	Biblical times, Mayans, and Incans.
<b>E:</b> 500 ACE to 1000 ACE.....	Athens, Greece Periclean information obtained and incorporated.
<b>F:</b> 15th to 17th Century.....	Renaissance period.
<b>G:</b> 19th to 20th Century.....	Industrial Revolution.
<b>H:</b> 20th to 21st Century.....	(Type 0.7 Civilization) Current state of technology.
<b>I:</b> 22nd to 23rd Century.....	<b>Type I Civilization.</b> Fully harness all planetary energy; mastery of the planet.
<b>J:</b> 500 years.....	Type 1.5. Carl Sagan believes by then we will have established first contact with aliens via SETI.
<b>K:</b> 700 to 800 years.....	Type 1.8. Construction of artificial intelligence indistinguishable from a human being.
<b>L:</b> 800 to 2,500 years.....	<b>Type II Civilization.</b> Fully harness all Solar-System energy. Colonization of the Moon and Mars.
<b>M:</b> 5,000 years.....	Type 2.2. Perfection of virtual reality that looks and feels real.
<b>N:</b> 10,000 years.....	Type 2.4. Manipulation of the space-time continuum. Can warp space for interstellar mobility.
<b>O:</b> 25,000 years.....	Type 2.6
<b>P:</b> 50,000 to 100,000 years.....	Type 2.8. Ability to traverse wormholes.
<b>Q:</b> 100,000 to 1 million years.....	<b>Type III Civilization.</b> Fully harness power of galaxy or multiple star systems. Use of Dyson Spheres.
<b>R:</b> 10 million years.....	Type 3.2. Complete compilation of an Encyclopedia Galactica.
<b>S:</b> 50 million years.....	Type 3.4. Mastery of all applications of quantum mechanics.
<b>T:</b> 100 million years.....	Type 3.6. Compilation of every moment of the entire history of the Universe in an Encyclopedia Cosmologica.
<b>U:</b> 500 million years.....	Type 3.8
<b>V:</b> 1 billion years.....	<b>Type IV Civilization.</b> Fully harness power of multiple galaxies. Mastery of most quantum applications.
<b>W:</b> 2 billion years.....	Type 4.3. Ability to recreate a virtual reality that contains the entire history of the Universe.
<b>X:</b> 3 billion years.....	Type 4.6. Ability to recreate multiple alternate universes in a virtual reality program with alternate histories, all running simultaneously in real time.
<b>Y:</b> 4 billion years.....	Type 4.8.
<b>Z:</b> 5 to 8 billion years.....	<b>Type V Civilization.</b> Omega Point. Full mastery of the multiverse. Carl Sagan argued there is not enough time in the history of the Universe for a civilization to reach this point, but was and is based on known conventional means of space travel. Modern data suggests there is enough time in the history of the Universe for a civilization to have a five to eight-billion-year head start on Earth.

\*\*Generalized from *Cosmic Connection* by Carl Sagan.

\*\*\* Generalized from the Kardashev Scale devised by Russian astronomer Nikolai Kardashev in 1964.

