**Meaning of Technology**

The word technology comes from two Greek words, transliterated techne and logos. Techne means art, skill, craft, or the way, manner, or means by which a thing is gained. Logos means word, the utterance by which inward thought is expressed, a saying, or an expression. The historical derivation of the term technology comes from the Greek word **technikos**, meaning **“of art, skillful, practical”**

The portion of the word **ology** indicates**“knowledge of”** or a “systematic treatment of.”

Thus, the literal verbatim derivation of the term technology is literally**“knowledge of the skilful and practical”**
However, this definition is too general in nature and we have to transcend this narrow view of technology since every technology starts from a human purpose, from the intention to satisfy some human need or behaviour.

Lately, technology has come to mean something different. In one respect, the term has come to mean something narrower -- the above definition would admit art or politics as means of gain, yet though those activities are permeated by technology now, most of us would not consider them to be examples or subsets of technology. In another respect, this definition is too narrow, for when most of us speak of technology today, we mean more than just discourse about means of gain.

In this essay I will refer to technology in five different senses. Following are some working definitions.

First, technology is the rational process of creating means to order and transform matter, energy, and information to realize certain valued ends. The significance of this definition will become clearer below.

Second, technology is the set of means (tools, devices, systems, methods, procedures) created by the technological process. Technological objects range from toothbrushes to transportation systems.

Third, technology is the knowledge that makes the technological process possible. It consists of the facts and procedures necessary to order and manipulate matter, energy, and information, as well as how to discover new means for such transformations.

Fourth, a technology is a subset of related technological objects and knowledge. Computer technology and medical technology are examples of technologies.

Finally, technology is the system consisting of the technological process, technological objects, technological knowledge, developers of technological objects, users of technological objects, and the worldview (i.e., the beliefs about things and the value of things that shape how one views the world) that has emerged from and drives the technological process. This is what Ellul referred to as the technological system. In the remainder of this article, I will use all five senses, but when I use the term technology by itself, I mean the fifth and most comprehensive sense.

The use of the term *technology* has changed significantly over the last 200 years. Before the 20th century, the term was uncommon in English, and usually referred to the description or study of the[useful arts](http://en.wikipedia.org/wiki/Useful_arts). The term was often connected to technical education, as in the Massachusetts Institute of Technology (chartered in 1861). "Technology" rose to prominence in the 20th century in connection with the [Second Industrial Revolution](http://en.wikipedia.org/wiki/Second_Industrial_Revolution). The meanings of technology changed in the early 20th century when American social scientists, beginning with [Thorstein Veblen](http://en.wikipedia.org/wiki/Thorstein_Veblen), translated ideas from the German concept of [Technik](http://de.wikipedia.org/wiki/Technik) into "technology." In German and other European languages, a distinction exists between *Technik* and *Technologie* that is absent in English, as both terms are usually translated as "technology." By the 1930s, "technology" referred not to the study of the industrial arts, but to the industrial arts themselves. In 1937, the American sociologist Read Bain wrote that "technology includes all tools, machines, utensils, weapons, instruments, housing, clothing, communicating and transporting devices and the skills by which we produce and use them." Bain's definition remains common among scholars today, especially social scientists. But equally prominent is the definition of technology as applied science, especially among scientists and engineers, although most social scientists who study technology reject this definition. More recently, scholars have borrowed from European philosophers of "technique" to extend the meaning of technology to various forms of instrumental reason, as in Foucault's work on [technologies of the self](http://en.wikipedia.org/wiki/Technologies_of_the_self) ("techniques de soi").

Dictionaries and scholars have offered a variety of definitions. The [Merriam-Webster](http://en.wikipedia.org/wiki/Merriam-Webster) dictionary offers a definition of the term: "the practical application of knowledge especially in a particular area" and "a capability given by the practical application of knowledge". [Ursula Franklin](http://en.wikipedia.org/wiki/Ursula_Franklin), in her 1989 "Real World of Technology" lecture, gave another definition of the concept; it is "practice, the way we do things around here". The term is often used to imply a specific field of technology, or to refer to [high technology](http://en.wikipedia.org/wiki/High_technology) or just [consumer electronics](http://en.wikipedia.org/wiki/Consumer_electronics), rather than technology as a whole. [Bernard Stiegler](http://en.wikipedia.org/wiki/Bernard_Stiegler), in[*Technics and Time, 1*](http://en.wikipedia.org/wiki/Technics_and_Time%2C_1), defines technology in two ways: as "the pursuit of life by means other than life", and as "organized inorganic matter."[]](http://en.wikipedia.org/wiki/Technology#cite_note-10)

Technology can be most broadly defined as the entities, both material and immaterial, created by the application of mental and physical effort in order to achieve some value. In this usage, technology refers to tools and machines that may be used to solve real-world problems. It is a far-reaching term that may include simple tools, such as a [crowbar](http://en.wikipedia.org/wiki/Crowbar_%28tool%29) or wooden [spoon](http://en.wikipedia.org/wiki/Spoon), or more complex machines, such as a [space station](http://en.wikipedia.org/wiki/Space_station) or [particle accelerator](http://en.wikipedia.org/wiki/Particle_accelerator). Tools and machines need not be material; virtual technology, such as [computer software](http://en.wikipedia.org/wiki/Computer_software) and [business methods](http://en.wikipedia.org/wiki/Business_method), fall under this definition of technology. The word "technology" can also be used to refer to a collection of techniques. In this context, it is the current state of humanity's knowledge of how to combine resources to produce desired products, to solve problems, fulfill needs, or satisfy wants; it includes technical methods, skills, processes, techniques, tools and raw materials. When combined with another term, such as "medical technology" or "space technology", it refers to the state of the respective field's knowledge and tools. "[State-of-the-art](http://en.wikipedia.org/wiki/State-of-the-art) technology" refers to the [high technology](http://en.wikipedia.org/wiki/High_technology) available to humanity in any field.

Technology can be viewed as an activity that forms or changes culture. Additionally, technology is the application of math, science, and the arts for the benefit of life as it is known. A modern example is the rise of [communication](http://en.wikipedia.org/wiki/Communication) technology, which has lessened barriers to human interaction and, as a result, has helped spawn new subcultures; the rise of [cyberculture](http://en.wikipedia.org/wiki/Cyberculture) has, at its basis, the development of the [Internet](http://en.wikipedia.org/wiki/Internet) and the [computer](http://en.wikipedia.org/wiki/Computer). Not all technology enhances culture in a creative way; technology can also help facilitate [political oppression](http://en.wikipedia.org/wiki/Political_oppression) and war via tools such as guns. As a cultural activity, technology predates both [science](http://en.wikipedia.org/wiki/Science) and [engineering](http://en.wikipedia.org/wiki/Engineering), each of which formalize some aspects of technological endeavor.