



E.F. Schumacher
Small is
Beautiful
Economics as if
People Mattered

Chapter 10

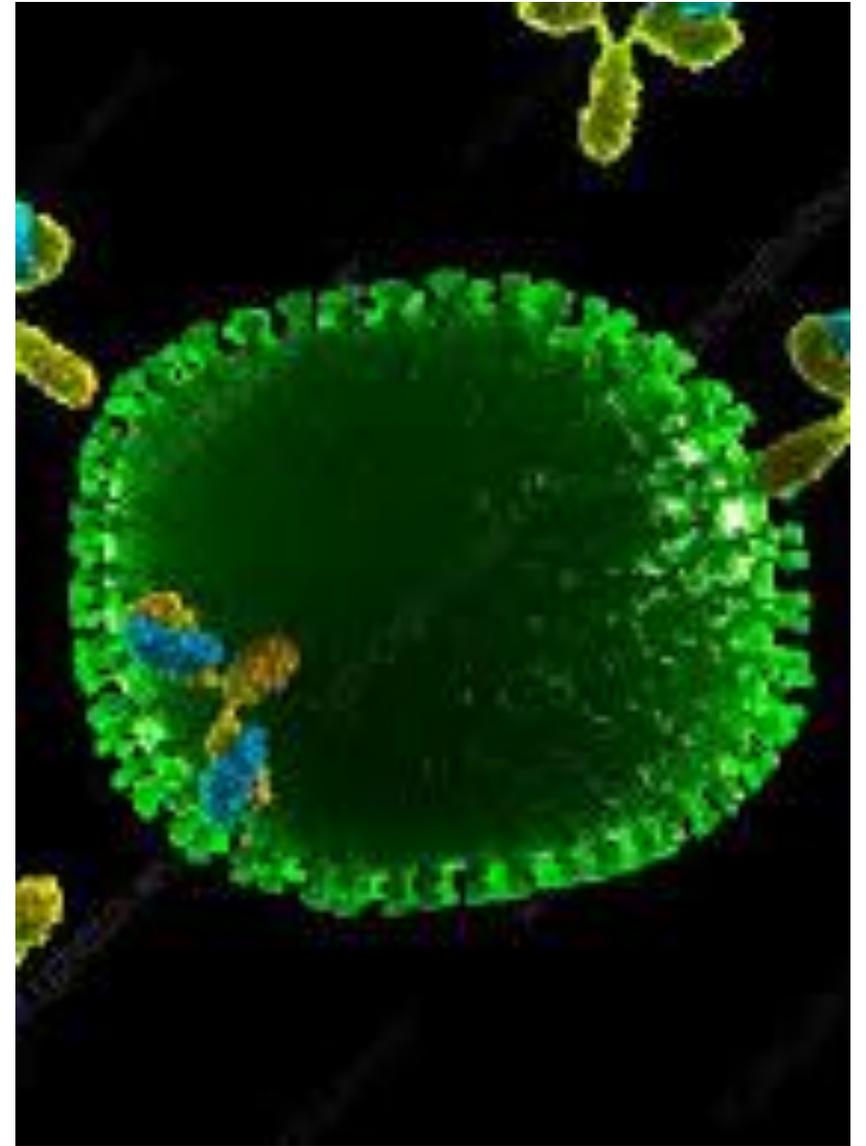
Technology with a Human Face

A Lonergan Institute Seminar

St Anselm's Abbey

From Schumacher, Chapter 10

"Nature always, so to speak, knows where and when to stop. Greater even than the mystery of natural growth is the mystery of the natural cessation of growth. There is measure in all-natural things - in their size, speed, or violence. As a result, the system of nature, of which man is a part, tends to be self-balancing, self adjusting, self-cleansing. Not so with technology, or perhaps I should say: not so with man dominated by technology and specialization. Technology recognizes no self-limiting principle - in terms, for instance, of size, speed, or violence. It therefore does not possess the virtues of being self-balancing, self-adjusting, and self-cleansing. In the subtle system of nature, technology, and in particular the super-technology of the modern world, acts like a foreign body, and there are now numerous signs of rejection."



Science Photo: Antibodies invade a virus

From Schumacher, Chapter 10

"Suddenly, if not altogether surprisingly, the modern world, shaped by modern technology, finds itself involved in three crises simultaneously. First, human nature revolts against inhuman technological, organizational, and political patterns, which it experiences as suffocating and debilitating; second, the living environment which supports human life aches and groans and gives signs of partial breakdown; and, third, it is clear to anyone fully knowledgeable in the subject matter that the inroads being made into the world's non-renewable resources, particularly those of fossil fuels, are such that serious bottlenecks and virtual exhaustion loom ahead in the quite foreseeable future."



Man versus Machine?



What is the Purpose of Technology?

From Schumacher: "So we had better face the question of technology - what does it do and what should it do? Can we develop a technology which really helps us to solve our problems - a technology with a human face?"

Excerpts from the web:

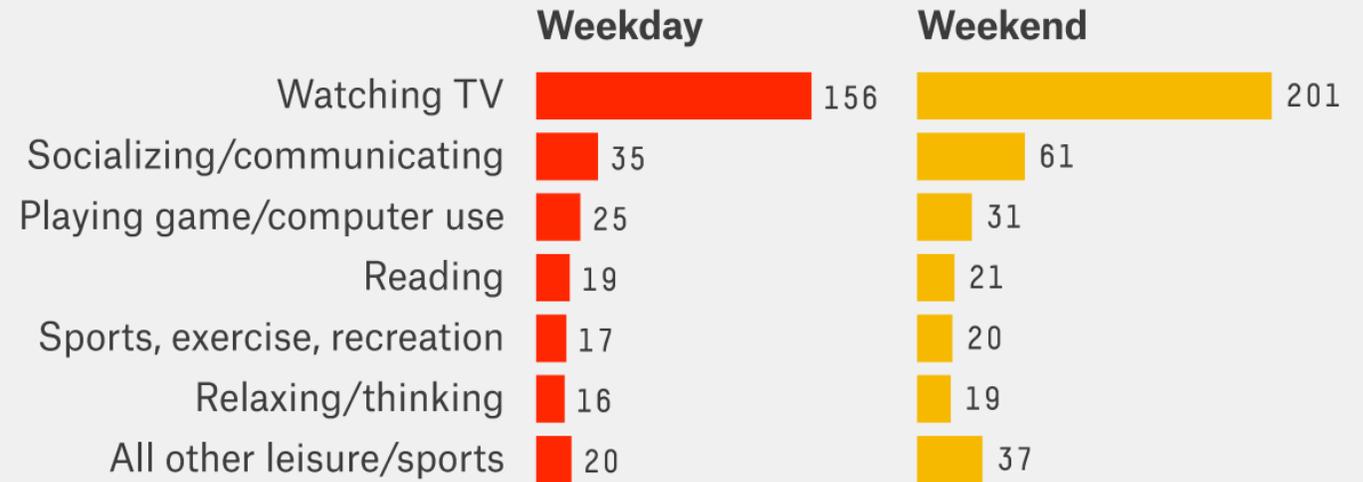
- The purpose of technology is to enable the effective sharing of data to address some of society's biggest challenges and help individuals and organizations be more innovative, efficient, and productive.
- Technology is all about helping people.
- The words science and technology can and often are used interchangeably. But the goal of science is the pursuit of knowledge for its own sake while the goal of technology is to create products that solve problems and improve human life. Simply put, technology is the practical application of science.
- Technology is the application of scientific knowledge for various purposes.
- Technology includes all tools, machines, utensils, weapons, instruments, housing, clothing, communicating and transporting devices and the skills by which we produce and use them.

How Do We Spend Our time?

- From Schumacher: *"When I first began to travel the world, visiting rich and poor countries alike, I was tempted to formulate the first law of economics as follows: 'The amount of real leisure a society enjoys tends to be in inverse proportion to the amount of labor-saving machinery it employs.'"*

TV Exceeds All Other Leisure Activities Combined

Average minutes per day Americans spent on leisure activities, 2014



FIVETHIRTYEIGHT

SOURCE: BUREAU OF LABOR STATISTICS

Americans average 5.3 hours of leisure time per day (4.8 hours on weekdays and 6.5 hours on weekends and holidays) and over half that is spent in front of the television. Socializing and communicating is the next most popular activity and is the only one to nearly double on weekends (35 minutes on weekdays, 61 minutes on weekends).

Source: <https://fivethirtyeight.com/features/heres-how-americans-spend-their-working-relaxing-and-parenting-time/>

From Schumacher, Chapter 10

"We may say, therefore, that modern technology has deprived man of the kind of work that he enjoys most, creative, useful work with hands and brains, and given him plenty of work of a fragmented kind, most of which he does not enjoy at all. It has multiplied the number of people who are exceedingly busy doing kinds of work which, if it is productive at all, is so only in an indirect or 'roundabout' way, and much of which would not be necessary at all if technology were rather less modem. Karl Marx appears to have foreseen much of this when he wrote: 'They want production to be limited to useful things, but they forget that the production of too many useful things results in too many useless people.' to which we might add: particularly when the processes of production are joyless and boring. All this confirms our suspicion that modern technology, the way it has developed, is developing, and promises further to develop, is showing an increasingly inhuman face, and that we might do well to take stock and reconsider our goals."



Craftsman: Metal Work

From Schumacher, Chapter 10



How does technology impact our identity, soul, or sense of self?

“The system of production by the masses mobilizes the priceless resources which are possessed by all human beings, their clever brains and skillful hands, and supports them with first-class tools. The technology of mass production is inherently violent, ecologically damaging, self-defeating in terms of non-renewable resources, and stultifying for the human person. The technology of production by the masses, making use of the best of modern knowledge and experience, is conducive to decentralization, compatible with the laws of ecology, gentle in its use of scarce resources, and designed to serve the human person instead of making him the servant of machines. I have named it intermediate technology to signify that it is vastly superior to the primitive technology of bygone ages but at the same time much simpler, cheaper, and freer than the super-technology of the rich. One can also call it self-help technology, or democratic or people's technology - a technology to which everybody can gain admittance and which is not reserved to those already rich and powerful.”

From Schumacher, Chapter 10

- *"I think we can already see the conflict of attitudes which will decide our future. On the one side, I see the people who think they can cope with our threefold crisis by the methods current, only more so; I call them the people of the forward stampede. On the other side, there are people in search of a new life-style, who seek to return to certain basic truths about man and his world; I call them home-comers.*
- *If there are problems about natural resources, we shall turn to synthetics; if there are problems about fossil fuels, we shall move from slow reactors to fast breeders and from fission to fusion. There are no insoluble problems. The slogans of the people of the forward stampede burst into the newspaper headlines every day with the masses.*
- *And what about the other side? This is made up of people who are deeply convinced that technological development has taken a wrong turn and needs to be redirected. The term 'home-comer' has, of course, a religious connotation. For it takes a good deal of courage to say 'no' to the fashions and fascinations of the age and to question the presuppositions of a civilization which appears destined to conquer the whole world; the requisite strength can be derived only from deep convictions. 'a breakthrough a day keeps the crisis at bay'.*



The Tower of Babel

LAUDATO SI: On Care for Our Common Home - Pope Francis

II. THE GLOBALIZATION OF THE TECHNOCRATIC PARADIGM

"106. The basic problem goes even deeper: it is the way that humanity has taken up technology and its development according to an undifferentiated and one-dimensional paradigm. This paradigm exalts the concept of a subject who, using logical and rational procedures, progressively approaches and gains control over an external object. This subject makes every effort to establish the scientific and experimental method, which in itself is already a technique of possession, mastery and transformation. It is as if the subject were to find itself in the presence of something formless, completely open to manipulation. Men and women have constantly intervened in nature, but for a long time this meant being in tune with and respecting the possibilities offered by the things themselves. It was a matter of receiving what nature itself allowed, as if from its own hand. Now, by contrast, we are the ones to lay our hands-on things, attempting to extract everything possible from them while frequently ignoring or forgetting the reality in front of us. Human beings and material objects no longer extend a friendly hand to one another; the relationship has become confrontational. This has made it easy to accept the idea of infinite or unlimited growth, which proves so attractive to economists, financiers and experts in technology. It is based on the lie that there is an infinite supply of the earth's goods, and this leads to the planet being squeezed dry beyond every limit. It is the false notion that "an infinite quantity of energy and resources are available, that it is possible to renew them quickly, and that the negative effects of the exploitation of the natural order can be easily absorbed."

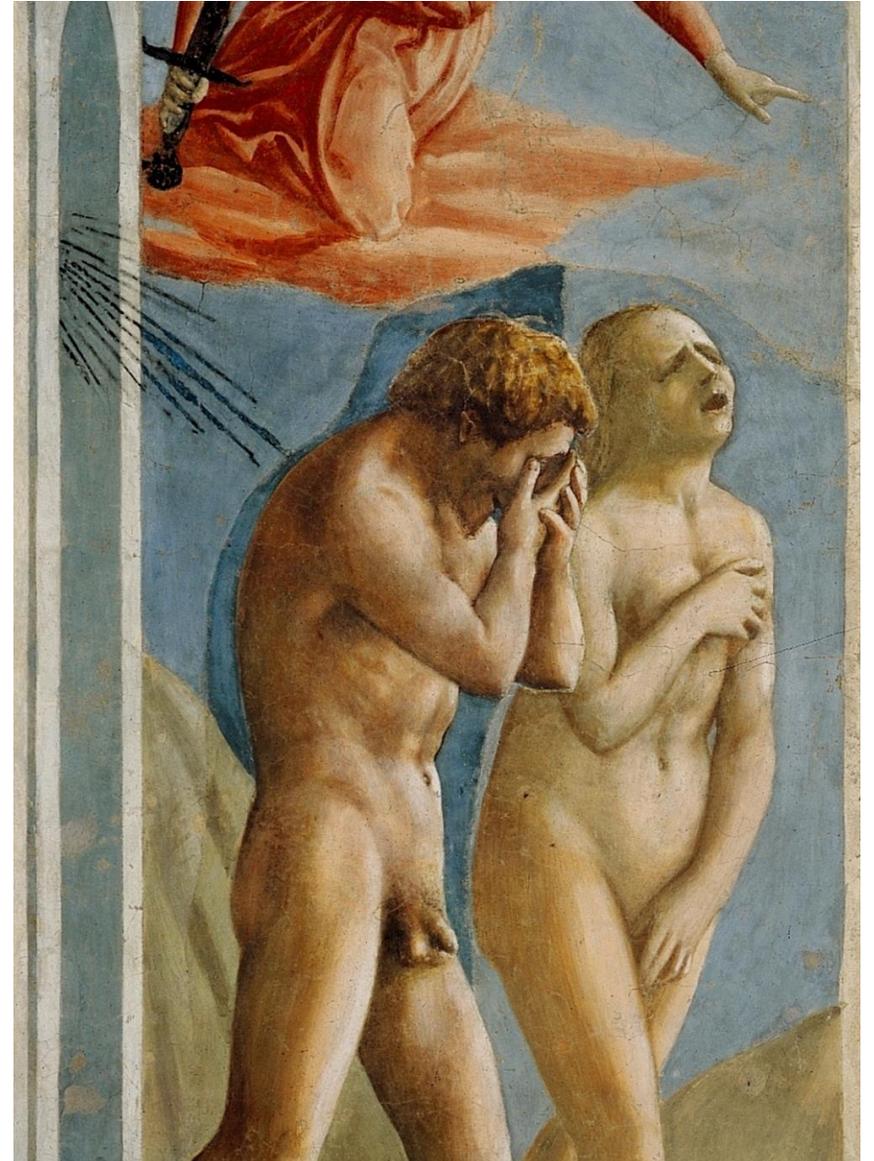


The Birth of Venus: By Botticelli

LAUDATO SI: On Care for Our Common Home - Pope Francis

III. THE CRISIS AND EFFECTS OF MODERN ANTHROPOCENTRISM

"115. Modern anthropocentrism has paradoxically ended up prizing technical thought over reality, since "the technological mind sees nature as an insensate order, as a cold body of facts, as a mere 'given', as an object of utility, as raw material to be hammered into useful shape; it views the cosmos similarly as a mere 'space' into which objects can be thrown with complete indifference".^[92] The intrinsic dignity of the world is thus compromised. When human beings fail to find their true place in this world, they misunderstand themselves and end up acting against themselves: "Not only has God given the earth to man, who must use it with respect for the original good purpose for which it was given, but, man too is God's gift to man. He must therefore respect the natural and moral structure with which he has been endowed."



Expulsion from the Garden of Eden: Masaccio



THE END



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