



## The Scientific Revolution with Dr. Ted Davis

### Lecture 8.1: New Views of Knowledge: Progress

#### Outline:

New views of knowledge – progress, utility, and praising God

- What is knowledge for?
  - Science is the engine of **progress**.
  - Science is **useful (utility)**.
  - Science is useful for enhancing our praise of God (**natural theology**, vis-à-vis revealed theology).

New views of knowledge: progress

- The History of the Royal-Society of London, For the Improving of Natural Knowledge by Thomas Sprat was a presentation to the public of what the society was about.
- During the Scientific Revolution, advocates of the new science not only found new sources of knowledge and developed new methods of obtaining knowledge; they also adopted new attitudes toward the knowledge they were creating.
- First, we consider the idea that knowledge is **progressive**.
  - This must be understood in light of **Christian interpretations** of the Fall...
  - and **the secular view** that ancient Greece and Rome were to be emulated as having brought civilization to its greatest heights.
- Technology is progressive.
  - You assume that the latest models are technologically better.
  - We assume that technology is getting better all the time. This is a modern idea.
- How much did Adam and Eve know about nature, before they fell? How much of their knowledge was lost? Can we get it back? The story of the fall was crucial in forming early modern attitudes toward knowledge.
  - Christopher Switzer, frontispiece to John Parkinson, *Paradisi in sole Paradisus Terrestris* (1629).
  - Consider the views of apothecary and botanist John Parkinson: “God, the Creator of Heaven and Earth, at the beginning when he created *Adam*, inspired him with the knowledge of all natural things...So no doubt but he had also the knowledge, both what Herbes and Fruits were fit, either for Meate or Medicine, for Use or for Delight. And that *Adam* might exercise this knowledge, God planted a Garden for him to live in.”



- When God places Adam in the Garden, Adam has the knowledge of all natural things.
- What about the fall?
  - “And although Adam lost the place [in the Garden] for his transgression, yet he lost not all the natural knowledge, nor use of them: but that as God made the whole world, and all the Creatures therein for Man, so he may use all things as well of pleasure as of necessitie, to be helps unto him to serve his God. Let men therefore, according to their first institution, so use their service to God, and not (like our Grand-mother Eve) set their affections so strongly on their pleasure in them, as to deserve the losse of them in this Paradise, yea and of Heaven also. For truly from all sorts of Herbes and Flowers we may draw matter at all times not only to magnifie the Creator that hath given them such diversities of forms, sents and colours, that the most cunning Worke-man cannot imitate, and such vertues and properties, that although wee know many, yet many more lye hidden and unknown, but many good instructions also to ourselves:...”
    - Parkinson says God gave us the knowledge of the creatures so that we may better serve God, so God will not take this away.
  - For a less optimistic view, consider Francis Bacon (1551-1626): “For man by the fall fell at the same time from his state of innocency and from his dominion over creation.” “Both of these losses however can even in this life be in some part repaired; the former [innocence – moral corruption] by religion and faith, the latter [dominion] by arts and sciences.”
  - “For creation was not by the curse made altogether and forever a revel, but in virtue of that charter ‘In the sweat of thy face shall thou eat bread,’ it is now by various labours (not certainly by disputations or idle magical ceremonies, but by various labours) at length and in some measure subdued to the supplying of man with bread, that is, to the uses of human life.” – Bacon, *The New Organon* (1620), II, sec 52
  - “Let no man...think or maintain that a man can search too far, or be too well studied in the book of God’s word, or in the book of God’s works; divinity or philosophy; but rather let men endeavor an endless progress or proficience in both; only let men beware that they apply both to charity, and not to swelling; to use, and not to ostentation; and again, that they do not unwisely mingle or confound these learnings together.” – Bacon, *The Advancement of Learning* (1605)
  - In his *Instauratio magna* (1620), Bacon drew an analogy between the voyages of discovery and the advancement of learning.



Science goes beyond knowledge of the ancients (the Mediterranean) and sails through the Pillars of Hercules, into the vast ocean toward a New World unknown to them. “Many will pass through and knowledge will be increased.” (Daniel 12:4).

- Leave the ancients behind and make progress on what we know.
- Robert Hooke, *Micrographia* (1665), University of Oklahoma: “as at first, mankind fell by tasting of the forbidden Tree of Knowledge, so we, their Posterity, may be in part restor’d by the same way, not only by beholding and contemplation, but by tasting too those fruits of Natural knowledge, that were never yet forbidden.” – preface to *Micrographia*
- Hooke: “What a prodigious variety of Inventions [discoveries of new things] in Anatomy has this latter age afforded...” “In Celestial Observations we have far exceeded all the Ancients, even the Chaldeans and Egyptians themselves whose vast Plains, high Towers, and clear Air, did not give them so great advantages over us, as we have over them by our Glasses [our telescopes].”
- Compare this with what Joseph Glanvill (1636-1680) said about our fallen senses, in *The Vanity of Dogmatizing* (1661), recast as *Scepsis scientifica* (1665). The loss of our Adamic abilities was partially offset by five new instruments – telescope, microscope, thermometer, barometer, and air pump.
- Glanville returned to the theme of progress in *Essays on Several Important Subjects in Philosophy and Religion* (1676). “Knowledge is capable of far greater Heights and Improvements than it hath yet attain’d...” “...and there is nothing that hath stinted its Growth, and hindered its Improvements more, than an over fond superstitious opinion of Aristotle, and the Ancients, by which it is presumed that their Books are the Ne Ultra’s [the last word] of learning, and little or nothing can be added to their discoveries...”