

Lecture 9: Precursors of marginalism

We are now starting up on what could be considered as modern or contemporary economic theory as initiated by the marginalists, who laid the foundation for the new approach to economics which gained impetus from 1870 and onwards. Our textbook has a separate chapter on the early marginalists which are indeed interesting not only as forerunners but also by their own contributions. As mentioned by E&H, the theory of monopoly as it appears in textbooks today is almost identical to that put forward by Cournot in 1838.

But there were many others, some of which merit a brief mention. Here is a brief overview (following the systematical presentation in Theocharis (1993)):

1. Engineering approaches to economics: Charles Ellit Jr. (USA), Dupuit (France), Fleeming Jenkin (England), Launhardt (Germany)
2. Early versions of supply-demand: Rau, Hagen (Germany)
3. Utility and demand: Gossen

Chapter 13 deals with the contributions of Cournot and Dupuit, both French and both with a background in either mathematics or engineering. In chapter 14, there is a supplementary section on the early German marginalists von Mangoldt and Gossen, together with von Thünen, who is difficult to place (we have already discussed his work). There is a box in chapter 13 about game theory, mentioning Prisoners' dilemma (the one piece of game theory all know), it is somewhat misplaced, since the ideas which later crystallized into the theory of games had been formulated much earlier but remained undeveloped until around 1930. We return to game theory later.

The section on Gossen in chapter 14 is important. Gossen was a pioneer in the development of utility analysis, formulating what was later termed Gossen's first and second law, and analysing commodity exchanges in a way which involved marginal utilities even without explicitly formulating it in this way. Even though Gossen remained unrecognized as an innovator and was never associated with the academic world.

We read: E&H, chapter 13 and the first section of chapter 14..

Reference:

Theocharis R.D. (1993), *The development of mathematical economics, the years of transition: From Cournot to Jevons*, Macmillan, London.