

Q. 26 (a group question). Say more about functional talk in Economics.

A.26. The flow of questions here ranges about a great deal and, while individual answers work, a general answer seems useful at this stage. Yesterday I was asked to move into a further book on economics, but in fact my writing days end with *Posthumous* 21, except for such rambles as these. I have turned out, on various levels of complexity, books and essays on the topic of Lonergan's economics, but yes, more needs to be written detailing ills and possibilities. It is an area where functional talk could take off earlier than in other zones. Indeed, I continue to advocate efforts to foster output from a feeble eighth specialty to the public in varieties of journalism. Perhaps we need a catchy U-Tube character exposing political and financial economic madness and nudging interest in Lonergan's humane economics?

Over the winter Conn O'Donovan has pushed forward questions regarding the power of Lonergan's first essay on economics, *For a New Political Economy* (1942) and, in his projected writing on the matter, pushes for a new level of understanding of the leap of scientific achievement. In Q/A I talked about bad strategies of comparison, but Conn brings out the power of cross-disciplinary comparison by his focus on Lonergan's text. I add, as an Appendix, one of the leads he gave me. But it is only one lead, a heavily theoretic lead. Nonetheless, even an impression of it could swing people into serious re-consideration of the mess of pseudo-theory that is destroying global finance. "Eighth Function" talk flowing into media-expression could be the source of the major breakthrough in Lonergan's recognition (a point I made in the *Compass* essay of 1984) that eventually (9011 A.D.?) will come.

But this is a huge topic which I have aired on many occasions: perhaps best in the first chapter of *Sane Economics and Fusionism* and in the Appendix to *The Road to Religious Reality*. So I halt, adding the Appendix that I already mentioned. Functional talk in general was popularly aired in *Economics for Everyone*. *Das Jus Kapital*, chapter 5 : "A Rolling Stone Gathers Nomos".

Appendix

The parallel between Newton and Lonergan.

There is/was a flow of observational data that was geometricized by Ptolemy and Kepler, differently, but effectively.

Newton picked up on the geometry of Kepler, including its temporal components [with the context of Galileo] and detected a correlation that, so to speak, crossed all the data: the correlation symbolized by $f'' = m_1 m_2 / r^2$. Each element in the flow of data has an m_i . Internal to this set of m_i is a complex of relations of all to all, not at all easily determined, especially if there are collisions. Think of the three-body problem, or the problem of accounting in detail for a game of billiards.

The flow of goods is economic data. The flow, an aggregate that is relatively easily distinguished descriptively in its components, has also a quite evident geometry or topology: local aggregates, meshings of aggregates, etc. Think now of the old political economists. For them, one good, gold, gives a basis of comparison of the 'weight' of goods. Furthermore, its increase – e.g. by import – thriftily oriented, was easily associated with a complexification of the flow. Could the geometry of the flow be better formulated, determined? Leon Walras, around 1870, did a massive lifting of discourse by proposing a full set of correlating equations that balance the 'gold weighing'. It was an economic statics. One can add to that balancing a control - by governments and banks, or even by hiding or hoarding – of gold and of rates of loaning it. The rates were weaved into the conventional statics. So we are up there with Keynes in, we may say, a more complex geometry of statics.

Lonergan swings in here somewhat like Newton. He mentally cuts across the flow of data to detect correlations. Note here, in passing, an indeterminacy in the economics that parallels the physics indeterminacy: no need to go into it for the present, but it helps dispel the illusion that the two fields contrast in determinabilities.

[1] The correlations - way more complex than Newton's, indeed better paralleled with Gauge theory stuff, charges and masses and potentials – are expressible in correlations of dynamic dependencies that include a sublation of gold's role. The dynamic dependencies are better expressed in something like a Laplacian venture, but elementarily they are pointed to by distinguishing goods in the flow as fundamentally of two types – or genera – consumer goods and productive goods. So, an elementary introduction would focus on distinguishing lightly the two types, and the two flows, but the correlations require a fuller understanding of the 'generic' differences.

[2] The dynamic paralleling of Lonergan and Newton is a vastly complex business, but it can be expressed briefly – and incomprehensibly for beginners – by paralleling the two sets, or rather aggregates, of second order differential equations that seed the working out of their respective achievements.

For Newton there is the aggregate of equations like

$$f'' = Mm / r^2$$

For Lonergan there is an aggregate of equations like

$$f_1''(t) - A_1 = k [f_2'(t - a) - B_2]$$

There is no point in venturing here into the details of these equations. I write them only to bring out that

[a] they are aggregates of equations, pointing to layers of indeterminacies;

[b] both deal with accelerations: that is the meaning of the double prime on f : f'' .

[c] even looking vaguely at the mathematical expressions it is evident that the dynamics introduced by Lonergan in economics is much more complex than what Newton introduced in physics.

A big problem of communication to present economists is that they recognize the two flows in the light sense, but are settled in their view that present economics is sufficiently mature in its geometry without the distinction, and/or that the distinction is either not relevant, or not workable. The detailed subtlety of the two genera, with the added geocomplexes of flow-dynamics, is quite beyond them.

All this needs to be filled out so as to make the point re the parallel between Newton's dynamics and Lonergan's economic dynamics more theoretically impressive. For example, one can present in wonderful parallel the manner in which Newton derives the fluctuations contained in Kepler's "sweep-out" law and the manner in which Lonergan's equations account for the fluctuations contained in the "sweep on" laws of Kitchin, Crum, Juglar.