

IN SEARCH FOR ANOTHER “FISH STORY”:  
STEFANO FENOALTEA’S LAST (UNFINISHED) REVOLUTION

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ABSTRACT

Stefano Fenoaltea devoted more than five decades of great scientific activity (1967-2020) to more than five decades of Italy’s economic history, 1861-1913, a central period to understand Italy’s economic development, its industrialization: a huge research project of which his last book, *Reconstructing the Past. Revised Estimates of Italy’s Product, 1861-1913* represents an important and vital part. The article focuses on this complex book, which is Fenoaltea’s last *grand effort* to understand post-Unification Italy and to propose a general method to study economic history. It is an important book. It offers new empirical material and new accurate thoughts to an old historiographical controversy: Gaetano Salvemini, and all historians who have pointed to a failure of Liberal Italy, would regard the latest Fenoaltea’s reconstructions as grist for their mill. His methodology, however, is broad and far-reaching, not limited to the historical context from which it originated.

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“The reader will forgive me if I do not indicate the direction I expect [the new interpretation] to take. One reason is that the relatively steady growth path of industrial investment does not manifestly restrict the set of possible correlates: nothing stands out as it did decades ago when that path appeared to follow the long cycle. Another is that what then first stood out, at least to my eyes, turned out to be a red herring. I corrected my error some twenty years later; at this point, with a much shortened horizon, I should in any case be reluctant to hazard what could be another fish story”

(Fenoaltea 2020a: 106).

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Stefano Fenoaltea devoted more than five decades of great scientific activity (1967-2020) to more than five decades of Italy's economic history, 1861-1913, a central period to understand Italy's economic development, its industrialization: a huge research project of which his last book, *Reconstructing the Past. Revised Estimates of Italy's Product, 1861-1913* (Fenoaltea 2020b) represents an important and vital part. It sets the stage for a new promising line of research, a new original perspective, though methodologically linked to his previous works. Unfortunately, and sadly, he will not be able to develop his new ideas, which is one more reason to go carefully through the dense pages of this book in order to understand their deep implications. The book's centre of gravity is a refined and important methodological discussion (part I, chapter 2), which is conceptually connected both with the illuminating epistemological previous chapter 1 and with the following three parts of the book concerning, respectively, the production side of national accounts, the expenditure side, and the composition of fixed investments.

*Reconstructing the Past* was written by a rigorous empiricist. Fenoaltea's empiricism is of the John Locke's type: we cannot know reality as such, our empirical observations do not carry their deep meaning with themselves. We deal with diverse and scattered bits of evidence and we have to use reason – logic, theory – as an instrument to order them, to transform them into what – somewhat naively – we call “facts”. In the first chapter Fenoaltea makes it clear in general terms: facts do not exist; a historian would delude herself if she thought of empirical evidence as “data” (from Latin “given”), i.e. as something ready to be gathered by researchers. “Facts” are interpretations based on observation. It would be wrong to define Fenoaltea as simply a historian in search for new data. In his works, he did not reconstruct data but provided us with verisimilar stories based on historical sources, economic theory and common logic: this is not methodologically different from how archival notes and letters are used by a biographer to reconstruct a person's life. As Fenoaltea put it, a historian's aim is to provide neither the “true” interpretation nor the most plausible one: historians struggle to minimize the implausibility of the stories they tell.

What we call “measurement” – Fenoaltea claims – is in fact a work of interpretation, no less than what we call “interpretation”; we quantitative historians cannot measure the past, we must interpret the sources to reconstruct it. And this interpretation is far more difficult than the subsequent “analysis” (Fenoaltea 2020b: 12).

Interpretation of historical sources is more difficult because the analysis of reconstructed “data” is constrained by codified economic theory and

standard econometric methods: when we reconstruct the past, we do not operate within such constraints. Sources are opaque and "evidence is not so evident": "it takes a Holmes to see clues where Watson sees nothing": wisdom, experience, creativity and phantasy are needed in order to reconstruct the past. This is why interpretation is the work "not of fungible 'scientists' but of non-fungible artisans, no two of whom will obtain the very same results from the very same materials" (Fenoaltea 2020b: 12).

But after such a high epistemological discussion one can wonder how it is translated into Fenoaltea's quantitative research. *Reconstructing the Past* helps us to get an answer, but in fact it is a difficult book, for at least two reasons. First, for its analytical content and its thorough use of sources. The second reason concerns the historiographical implications of the statistical reconstructions presented therein: the book does not provide much help; and, unfortunately, we have to read it without the guidance of the author's interpretative acumen.

What is important to stress is that the new reconstructions form the basis for a new possible interpretation of the economic history of the important five decades leading Italy from Unification to WWI. The author explains it in Fenoaltea (2020b: 110), where he says that the interpretations of Italian economic growth have paid more attention to aggregate investment than to its composition. The new reconstructions confirm the long cycle of the aggregate, but they bring in some very important novelties: we can now look inside the aggregate and discover a relatively regular and constant growth of investment in machinery, the investment that is our best approximation of investment in industry. We had all assumed that even this important economic quantity had followed a long cycle, like the overall aggregate to which it belongs; since this hypothesis now appears totally wrong, the historiography of the last half century and beyond is inexorably collapsing, Fenoaltea maintains. "Investment in industry appears actually to have grown relatively steadily from decade to decade, with no long swing at all". Thus, what we have to explain is not confined to what happened in a delimited period when Italy's industrialization was supposedly triggered; by the same token, we cannot attribute Italy's economic development to the sound policies of any particular government, ruling in a particular sub-period of the five post-Unification decades.

In a paper published only some months earlier than this book, Fenoaltea had claimed that

for half a century we chewed on, and fought over, a non-existent bone. The long swing in industrial production and in aggregate capital formation was rather a long swing in investment in infrastructure (and other government spending): as it turns out, the exceptional growth of the 1880s and again of the *belle époque*

was tied not to exceptional additions to Italy's industrial plant, to the more rapid modernization of its economy, to anything dear to our hearts, but to exceptional surges in the activity of Italy's blacksmiths and bricklayers, in branches of production little changed from classical times. *Sic transit* (Fenoaltea 2020a: 106).

But how did the author obtain such new results? This is the hard part of the story. In order to answer this question we have to face a central topic that Fenoaltea particularly cared about, as a historian, which is related to the use of historical sources in quantitative history.

It is no coincidence that until a few years ago, when Fenoaltea began his latest research project, there were no disaggregated reconstructions for investment goods produced by the engineering sector. On the one hand, as he explains, we were all victims of a prejudice, according to which it is believed that the engineering industry is an industry that simply transforms metal into machines; but in this book Fenoaltea shows that this is simply a wrong assumption. On the other hand, our prejudice had found a powerful ally in the lack of direct sources; this had forced us to rely on a very indirect estimate, that is on the consumption of metals in the engineering sector production. Absent good historical sources, we needed to rely on a fundamental act of faith: we had to (pretend to) believe that the relationship between productive inputs (the metals consumed) and output (the engineering sector output) is sufficiently stable to allow to estimate the latter by applying a coefficient to the former.

Fenoaltea attributes the lack of historical sources to the circumstance that engineering is a sector where the State did not operate as a regulator, for instance granting concessions, or as a customer: it follows that no information, reports, bulletins conveying at least some traces of those activities are now available. For this very reason the reconstruction work, upon which some important pages of the book are built, is very complex: Fenoaltea used various sources and combined them together to extract the information necessary to unbundle the aggregate.

The work Fenoaltea did to disaggregate investment is documented in Fenoaltea (2020b): chapter 12 (237-287), chapter 14 (295-310), and chapter 15 (311-314). In such chapters, fixed investment is estimated "by summing the investment-good components of production, activity by activity, and the analogous components of international trade" (*ibid.*: 237). Such a thorough and meticulous analysis allowed Fenoaltea to obtain an estimate of the composition of fixed investment (*ibid.*: 102, Table 4.5) or, rather, almost to obtain it. Indeed, before achieving a reliable disaggregation he had to cope with an important conceptual problem: Fenoaltea's reconstructions are quantity indices, aggregated at 1911 prices; it is easily understood that if we calculate shares based on such time series, we end up examining the

composition of aggregate investment based on the wrong relative prices (*ibid.*: 311). He deals with this methodological question in the last chapter:

Conceptually, the problem is that if we use constant (1911) prices, as we go back in time the technologically more progressive activities are increasingly undervalued relative to the less progressive ones; the conceptually simple solution is to correct the various constant-price series to reflect relative technical progress.

In general, of course, the best evidence we have of relative technical progress is the evolution of relative prices; but credible price series are not yet available [...]. In the interim the practical solution is to lower one's standards, and to accept a quick-and-dirty calculation that is at least a step in the right direction (*ibid.*: 311).

This is the route he took to build Table 4.6 in Fenoaltea (2020b: 103): using ancillary sources, "the 1911-price series of goods and activities that benefited from (significant) technological progress" were consistently corrected; the other goods and activities were taken as they were.

Based on these operations, Fenoaltea is able to state that the activity of the engineering industry did not consist only in the transformation of metal into machines, as we all had thought so far. It was, arguably, a whig-ish bias in interpreting the economic history of the nineteenth century, a typical bias which we find in historians looking into the past with today's eyes; it provides a reading of history as a progressive ascent towards where we are now, it looks for the roots of our age instead of explaining the observed period independently. Fenoaltea was very critical about such a widespread philosophy of history (Fenoaltea 2006b). In fact, it had been fingered by Herbert Butterfield in *The Whig Interpretation of History* (1931) who noticed that:

On this system the historian is bound to construe his function as demanding him to be vigilant for likenesses between past and present, instead of being vigilant for unlikeness; so that he will find it easy to say that he has seen the present in the past, he will imagine that he has discovered a "root" or an "anticipation" of the twentieth century, when in reality he is in a world of different connotations altogether, and he has merely tumbled upon what could be shown to be a misleading analogy (Butterfield 1931).

Fenoaltea, as a non-whig historian, called into question such a naive reading and the concept of progress it contains (Baffigi and Gabbuti 2020). We cannot study the past with reference to the present. It is on this background that, on page 18, he notes that for a historian the impulse to disaggregate "should be a natural one, a direct consequence of curiosity about the past". But what do we discover if we look at post-Unification production with non-whig, more humble, and curious historian's eyes?

He explained it vividly some years ago:

From Antiquity until comparatively recently – Fenoaltea argues – the typical metal-worker was Hephaestus, a smith, who dealt not with machines but with simple hardware. The new, disaggregated estimates bring to light the extent to which post-Unification Italy was in this sense traditional. Even at the end of the period at hand the fabricated-metal industry consumed more metal than the rest of the engineering industry, including ships and railway rolling stock, combined; half a century earlier this traditional sector naturally loomed even larger, with a metal consumption over nine-tenths the engineering total. To a first approximation, one hundred and fifty years ago Italy’s engineering industry was not a machinery industry but a hardware industry (Fenoaltea 2015: 24).

The importance of such results – the disappearance of a long cycle of investment in industry and the fact that the product of the engineering industry comprised a great amount of traditional tools – cannot be overstated; and we have to keep in mind that they are *The Fruits of Disaggregation* (Fenoaltea 2020a).

Those who read Fenoaltea’s (2011) book, or the original Italian version (2006a), can easily recognise the importance of the newest disaggregated results: in those books he argued that his (then aggregate) time series were consistent not only with his interpretation – based on the Kuznets cycle and on the movement of English capital – but also with that of his “adversaries”, the neo-Gerschenkronians, the advocates of stage-of-growth models. In other terms, the controversy over the interpretation of Italy’s economic performance under Giolitti – can we interpret it as a Rostowian “take-off”? Or, rather, as a strong cyclical episode? – according to Fenoaltea (2006a; 2011), cannot be settled if we just look at GDP movements, at its more or less strong acceleration, at the possible break of its trend at the turn of the Eighteenth century. All models available were consistent with “a sudden acceleration in the rate of growth as well as with cyclical fluctuations” (Fenoaltea 2011, p. 31). Not an encouraging conclusion, indeed: the time series reconstructed over many years of hard work revealed themselves as useless to settle an essential dispute for understanding the history of liberal Italy. The cliometric approach to study post-Unification Italy’s economic history seemed to have run out of steam. A new approach, not a more accurate measurement, were probably needed. I confess that I myself reached such a conclusion. I remember speaking to Stefano about it, in 2014: he replied that, no, the main road to get out of the stalemate was that of disaggregation.

This is the path he trod on in the last six, seven years of his life, when he produced the research which led him to write this book:

we reconstruct the past to understand it, to explain to our satisfaction why things went the way they did; and because we are easily satisfied the literature is full of

interpretations ("hypotheses", but that is just a trope) based on broad evidence that certainly admits them, but as readily admits alternatives. To narrow the field we must look beyond, or more precisely within, the broad aggregates with which we too often rest content, to verify that the story we tell is consistent with finer-grained evidence; and if we are concerned with economic development our focus must be not on aggregate domestic product (which can grow for a spell thanks to no more than favorable weather) but on capital formation, on investment – and by the same token not on aggregate investment (which can be in palaces and amusement parks as well as in means of production), but on its various components (Fenoaltea 2020b: 101-104).

The empirical disaggregated evidence reconstructed by Fenoaltea interestingly moves the debate on Italy's industrialization on a very new and uncharted territory. "The old debate is dead: long live the new one, whithersoever it may take us" (Fenoaltea 2020a: 106).

But where does it take us? It certainly shakes the foundations of all extant interpretative models including Fenoaltea's own one. It is not the first time that his rigorous research on sources has led him to change his mind. But in what way now? With what new interpretative model? It is not easy to say. Fenoaltea's work once again is challenging us with deep questions and important methodological issues. In fact, he regretted that he could not help us this time, as he wrote in the sentence I used in the epigraph (*ibid.*).

However, all this notwithstanding, one thing can be said: the debate on industrialization in Italy – on the strong development that took place during the Giolitti era – has very often been a proxy war in which a deeper political interpretative contrast is hidden: that on Liberal Italy and on Giolitti himself. Such an interpretative conflict has never been resolved and, arguably, it will be difficult to reach a consensus interpretation on it, which, in order to prevail, should overcome the conflicting ideological views underlying the positions of the scholars participating to the debate. Indeed, Fenoaltea participated to such a historical-political debate throughout his career, with passion and ingenuity. He was convinced that the political battle fought for the interpretation of a historical age or of a historical figure might be seen as a battle aimed at providing a successful interpretation of the available empirical evidence. But if empirical evidence itself is basically constrained interpretation, the battle field is open and articulated, with many fronts. Scholars participating to debates cannot limit themselves to interpreting and analysing "data"; they should get involved deeply in interpreting sources to reconstruct "data". Scholars studying Italy's liberal age, and in particular the crucial Giolitti's years, should take it on seriously.



We can regard this as Fenoaltea's "political" legacy: it is grafted onto a methodological lesson we have to keep in mind. If we are to understand Fenoaltea's work, we cannot help grasping its political meaning. In the closing sentence of his 2011 book, he wrote that "Economic history is not mere antiquarianism. It is culture, it is our sense of who we are, of the road we are traveling, of the next step we are to take: it is politics" (Fenoaltea 2011: 246). An unescapable tension between ethics and politics, on the one hand, and empirical evidence, historical sources, on the other, typically marks our social thinking.

Fenoaltea struggled with historical sources because he refused frictionless thought. The truth does not exist, but implausibility does, and our political thought must strive to be linked to the world we want to understand and hopefully change, a world that the historian can only tell, unattainable but necessary. In his view, what is commonly regarded as abstract thinking cannot stem from an isolated and aseptic mind. David Ricardo is a case in point, as Fenoaltea explains in one of the first pages of *Reconstructing the Past*:

Ricardo is now portrayed as "the first abstract economist"; I see him as a thinker fully engaged in the political struggles and economic controversies of his day, and his *Principles* as a tract against the Corn Laws and the landed aristocracy that imposed *them* (Fenoaltea 2020b: 4, footnote 2).

In many ways, politics is the engine of our theoretical thinking. In the field of social sciences, for Fenoaltea there is no pure, detached science. He had explained it plainly in "Spleen. The failures of the cliometric school" (Fenoaltea 2019), where he tackled this very theme in an illuminating footnote dedicated to Copernicus:

The closer a subject is to our hearts, the less we can view it objectively: to an informed mind a "social science" is an oxymoron, a contradiction in terms. The same problem once plagued the natural sciences: we will never know whether Copernicus was the first with the genius to see the explanatory power of the heliocentric model, or merely the first to combine that genius with a misanthropic willingness to demote mankind from its rightful place at the center of God's creation (*ibid.*: 9).

Fenoaltea's political battle is strongly stated in the very final remark of *Reconstructing the Past*:

It would be well to refine the underlying series, to remove military weapons as well as naval ones, to remove from infrastructure fortifications and prestige projects (like the hideous, and hideously expensive, Victor Emmanuel monument in Rome). How far one could actually go in that endeavour is not clear; but the



endeavour itself is here again *ultra vires*, and all one can say is that the share of tools would presumably appear even larger, once the other series were cleaned up and scaled down (Fenoaltea 2020b: 314).

*Reconstructing the Past* is the *summa* of Fenoaltea’s last *grand effort* to understand post-Unification Italy and to propose a general method to study economic history. It is an important book. It offers new empirical material and new accurate thoughts to an old historiographical controversy: Gaetano Salvemini, and all historians who have pointed to a failure of Liberal Italy, would regard the latest Fenoaltea’s reconstructions as grist for their mill. His methodology, however, is broad and far-reaching, not limited to the historical context from which it originated.

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