On Eponymy in Economics

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There is no spiritual copyright in scientific discoveries, unless they should happen to be quite mistaken. Only in making a blunder does a scientist do something which, conceivably, no one else might ever do again.

-Peter Medawar, The Strange Case of the Spotted Mice

It takes an economist to read an economist.

-George J. Stigler, The Economist as Preacher

hough most economists are probably not familiar with the word *eponymy*, the concept to which it relates is a common and well-known practice—namely, "affixing the name of the scientist to all or part of what he has found" (Merton 1973, 298). To be sure, other disciplines are much more eponymy prone than is economics. Medicine, for instance—where someone's name becomes routinely attached to practically every organ, disease, or procedure—seems positively addicted to the practice. Mathematicians, for their part, have turned it into an art form (which is easily verified by examining the table of contents of any recent mathematics journal).¹

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^{1.} In *Annals of Mathematics*, for instance, the titles of most papers carry at least one eponymic expression (and often two or three), and if the title does not, the abstract almost surely will. A typical example—I swear that I am not making it up—is "Feigenbaum-Coullet-Tresser Universality and Milnor's Hairiness Conjecture" (Lyubich 1999).

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Eponymy, of course, is not limited to scientific and scholarly activity, but is a common feature of everyday language—and a very ancient one, too, as attested to by the many rivers, towns, cities, and even countries named after persons (real or mythical). In the case of place names, the role of eponymy is somewhat akin to its role in science because the original intention is usually honorific. In most cases, however, eponymy in everyday life serves an essentially practical purpose, which is to provide a convenient shorthand expression that allows us to refer to objects or actions that would otherwise require cumbersome description or tedious repetition. Though the eponymic expression may have originated with an honorific intention, this original intent often fades from memory through frequent and casual use, and the expression stays in use while its users remain ignorant (and unconcerned) about who its eponym might be. Nor does this lapse matter much; for practical purposes, an effective eponymic expression requires only that most people know what it means, regardless of whether they know for whom who it was named. That Bolivia is named after Simón Bolívar is one of those things that are "nice to know," but who needs that information? And who knows if "Tom Collins" really existed? Who cares? "Bloody Mary" was a real person, but how many people know that fact, and does it matter?

In economics, the Laspeyres price index is a good example of this phenomenon. According to Joseph Schumpeter, "a student can no more go through any complete training in economics without hearing of Laspeyres than he can without hearing of A. Smith" (1954, 1093n.). This statement is true, but also a bit misleading. Any decent economist *must* know who Adam Smith was, whereas very few economists nowadays know anything at all about Etienne Laspeyres (1834–1913) except that a widely used index-number formula happens to carry his name. For better or worse, Laspeyres now belongs to the "Tom Collins" class of eponyms: the concept is remembered, not the person.

In science, though the honorific purpose for eponymy plays a much larger role, the practical purpose is exactly analogous to that in everyday life. As Robert Merton puts it, "Eponymy [in science] is thus at once a mnemonic and a commemorative device" (1973, 273). Moreover, these two purposes need not be compatible, and in fact they may often conflict. Because the practical purpose of eponymy is to communicate ideas efficiently, useful eponymy requires only that the eponymic expression have a commonly accepted meaning. This requirement applies in everyday life just as it does in science. The potential conflict between "practical" and "honorific" eponymy arises from the fact that the former requires only general agreement on what concept corresponds to any given eponymic expression, whereas the latter requires, in addition, historical accuracy: ideally, we should want each concept to be eponymically related to its "true" originator, creator, or discoverer. Unfortunately, although strict "eponymic justice" is much to be desired (for its own sake, if for nothing else), we have it on good authority that such an aspiration is in fact a chimera. According to Stigler's Law of Eponymy, "no scientific discovery is named after its original discoverer" (S. Stigler 1999, 277). Though one might question the empirical basis for this depressing proposition (surely it cannot always be *literally* true), it does appear to have *some* basis in fact. Sadly, it is indeed the case that practical eponymy all too often departs, unfairly, from historical accuracy.²

It is not altogether clear what, if anything, should be done about this disconnect. Though the wounded pride of frustrated potential eponyms is not to be taken lightly, in the grand scheme of things not much damage is done by eponymic inaccuracy, as long as the practical function of eponymy is not impaired. Again, the Laspeyres index is a perfect example. It is a well-defined concept, now and forever linked by common usage to the name of Etienne Laspeyres, and that is that. Whether this gentleman was actually the concept's "true" inventor is a moot question of no consequence. Indeed, even if it happened that someone else actually invented the concept, to start calling it by the name of its "true" inventor at this point would be a pedantic exercise in futility, and anyone who stubbornly insisted on doing so would be considered silly (if not insane). Through time, the eponym that becomes attached to any given scientific concept will be determined by common usage in actual scholarly communication, regardless of historical accuracy and whether we like it or not.³

What *can* impair the practical usefulness of eponymy in science is the sheer proliferation of eponymic expressions. If eponymy's practical purpose is to facilitate communication via the coining of mnemonic expressions, then obviously this communication device will be less efficient the smaller the number of people who know what any given expression means. A mnemonic, if I may be pardoned a tautology, is useful only when we actually *remember* what it means. Uselessness arises, however, when the number of eponymic expressions "out there" grows beyond a certain point.

Which brings me, finally, to the subject of this review. Although, as mentioned previously, economists are still rank amateurs compared to the practitioners of more eponymically sophisticated disciplines, such as medicine and mathematics, we have nonetheless contributed our fair share to the world's stock of scientific concepts, and we have not been shy about labeling many of them eponymously. The proof is the wonderful book *An Eponymous Dictionary of Economics: A Guide to Laws and Theorems Named after Economists* (Cheltenham, U.K.: Edward Elgar, 2004; pp. xxviii, 280; \$150 cloth), edited by Julio Segura and Carlos Rodríguez Braun, which provides detailed definitions

^{2. (}Stephen) Stigler's Law of Eponymy (an interesting case of *autoeponymy*) is at least partly based on an observation made by his father: "If we should ever encounter a case where a theory is named for the correct man, it will be noted" (G. Stigler 1966, 77). With a discreet (if uncharacteristic) bow to political correctness, Stigler later quietly changed this statement to read "correct *person*" in the fourth edition (1987, 69). Such are the times we live in! Preferably, Stigler's Law of Eponymy should be cited in full because otherwise it is apt to be confused with two other extant "Stigler's laws": (1) Stigler's Law of Elasticities, a tongue-in-cheek proposition concerning estimated price elasticities, formulated by Stigler *père* (G. Stigler 1986), and (2) a numerical regularity in the statistical distribution of first-digits, also due to Stigler *père* and first reported by Raimi (1976).

^{3.} This statement sounds callous (and it is), but need we be reminded of Keynes's dictum (which, incidentally, is not included in the book under review)? In the long-run, we *are* all dead, and the sad and sorry fact is that history cares little for ruffled feathers or hurt feelings.

and explanations for more than three hundred eponymic expressions commonly used in economics—surely more than enough to tax anyone's memory.

Some of the expressions are so well known and so much a part of the average economist's working vocabulary that they hardly require explanation. Most, however, pertain to their respective subfields and therefore are much less likely to be widely known, hence the usefulness of a book such as this one.⁴ The entries, written by 234 contributors, are of uniformly high quality and laid out according to a well-conceived editorial format. All of them conveniently include references to the relevant literature (often to the articles or books in which the respective concepts were originally introduced), and most are helpfully cross-referenced to other related articles.

One benefit of having all these expressions collected in one place is the opportunity it provides for investigating certain general questions related to economic eponymy. What, for instance, are economists' eponymic propensities regarding the technical designations (theorem, hypothesis, law, and so forth) they attach to people's names when coining eponymic expressions? By my count, the most popular term is *theorem* (thirty-three entries), closely followed by *model* (twenty-nine entries) and—the hardy perennial of any self-respecting science—*law* (twenty-three entries). Lagging somewhat behind at fifteen entries each are effect and test (the latter drawn mostly from our sister science of statistics). Given our penchant for drawing curves, I was surprised by this term's poor showing (only seven entries). A rather flattering composite picture of our discipline emerges from a closer inspection of the frequencies of some other terms: economists tend to be people of paradox (twelve entries), true enough, but we are also people of *principle* (ten entries), and not much given to dogma (only one entry, "Montaigne's") or to vice and schemes (one each, "Ricardian" and "Ponzi," respectively). Economists, mercifully, have no use at all for *deconstruction*, though the frequency of *decomposition* is disquieting (three entries, to which a fourth might have been added: "Cholesky's"). Many of the terms we use are common in other sciences, and thus we have the full panoply of sundry methods, lemmas, criteria, coefficients, mechanisms, problems, rules, hypotheses, procedures, conditions, and processes. Others terms, such as box ("Edgeworth's"), are perhaps peculiar to our own subject. At first glance, one item seems to have been mistakenly drawn from medical terminology ("Baumol's disease").⁵ Some items are a little puzzling ("Schumpeter's vision"? "Senior's last hour"?). Others are just plain odd ("Hume's fork"?).

^{4.} Though the editors claim in their preface that theirs is the first "eponymous dictionary of economics," they are actually too modest. So far as I can tell, theirs is the first endeavor of its kind in *any* discipline. Indeed, a fairly diligent search in the Library of Congress catalog yielded only one book that even remotely resembles this one (Speert 1958), and it is not a dictionary, but a collection of essays on medical eponymy (see also Brunschwig 1959). A new, expanded edition of Speert's book was published in 1996, but without the subtitle *Essays in Eponymy*. Composing a *dictionary* of medical eponymy is surely a hopeless task—and nowadays an unnecessary one as well given the incredibly large and efficient medical indexes and databases available online.

^{5.} A better label for this phenomenon would have been "Baumol's cost disease."

The word *dictum* is associated with a special class of eponymic expressions that are not infrequent in economics, and I was disappointed to find that in this book they appear hardly at all. In fact, there is only one such item, "Kelvin's dictum," and he wasn't even an economist. (However, there are so many good candidates for inclusion under this rubric that the resulting dictionary might have ended up as just another book of quotations.) Another type of eponymic expression alludes to famous *debates* in economics (as in the "Keynes-Ohlin debate," the "Lester-Machlup debate," the "Koopmans-Vining debate," and so forth). No items of this type appear in this dictionary, and it would have been useful to include a few (economists being a contentious breed, though, a full listing might have required a volume of its own).

Although the dictionary is ostensibly devoted to eponymic expressions that denote scientific concepts (as the subtitle implies), in practice the editors interpret their subject more broadly, which explains the inclusion of two items that would otherwise seem out of place: "Cowles Commission" and "Palgrave's dictionaries."⁶ Two other items that might have been included under this broader interpretation of economic eponymy are "Bonar's catalog" (Bonar 1932), which would have been welcomed by Smithian scholars with an antiquarian bent (though it might have mystified some of our econometric brethren), and the "Summers-Heston database" (Summers and Heston 1991), which had a tremendous impact on applied work and transformed the study of economic growth in recent decades.

In the preface, the editors write, "[W]e fancy that we have listed most of the economic eponyms, and also some non-economic, albeit used in our profession.... We hope that the reader will spot few mistakes in the opposite sense; that is, the exclusion of important and widely used eponyms" (p. xxvii). Spurred by this challenge, I racked my brain for several days trying to think of important items they might have missed. I must confess that I was only marginally successful, and they actually *do* seem to have listed most of the eponymic expressions used in our profession. (I like to think that this finding reflects the editors' thoroughness rather than my own ignorance and parochialism.)⁷ I did come up with a few, however, which I hereby humbly submit.

Friedman test. A statistical test proposed by Milton Friedman to facilitate the analysis of variance under certain conditions (Friedman 1937). It has become so standard in the field of nonparametric statistics that it is often referred to as simply the "Friedman test," without further attribution, and thus most of the people who use it routinely are probably not aware that the creator of this useful test and the

^{6.} Economic lexicography is an interesting subject in its own right, and from this point of view I think it is fair to say that the Segura-Rodríguez dictionary is actually much more "Palgravian" in style than the so-called *New Palgrave* (Eatwell, Milgate, and Newman 1987), which keeps the *name* of the old *Palgrave's Dictionary* (H. Higgs 1923–26), but is really an encyclopedia in the style of the *International Encyclopedia of the Social Sciences* (Sills 1968).

^{7.} As economists, we all know of course that the only really effective way to find out how many important items were left out is to set up a formal contest, with monetary rewards for submissions. Given the proper incentives, hordes of clever and cash-starved graduate students out there would finish the job in no time. The trick is to find a suitably deep-pocketed benefactor willing to fork out the money.

world-famous economist are the same person.⁸ Though it is not much used by economists, it certainly belongs to the category of "laws and theorems named after economists."

F-twist. A term coined by Paul Samuelson (1963; see also Wong 1973) to describe one aspect of Milton Friedman's "methodology of positive economics." The "F" of course is for "Friedman," which is interesting because it is then a case of what we might call *abbreviated eponymy*. The only other case I can think of that is relevant to our subject is the "F distribution" (discussed in *An Eponymous Dictionary* under "Snedecor's F distribution"), named in honor of R.A. Fisher.⁹

Mill's methods of induction. This omission is a surprising one. Though Mill's methods are not strictly economic concepts, they are nonetheless very well known (see, for example, Mackie 1967), and John Stuart Mill, whatever else he may have been, was definitely an economist. Even more surprising, however, is that in this dictionary there are no entries under "Mill" at all. It's not as if he were an unoriginal thinker. Stigler (*père*) famously defended Mill's originality in economics against claims to the contrary (G. Stigler 1965, 6-11), and although it is true that not every original idea in economics ends up with an eponym attached to it, surely there must be *something* with which to honor the great man? Perhaps the "Mill-Marshall condition"?

Inada conditions. This omission, too, is a surprising one, given that these conditions are actually mentioned (cum eponym) in the article on "Solow's growth model and residual."¹⁰ An additional dividend from including this item would be to double the number of entries under the letter "I" (the only one now being "Itô's lemma").

Sturges's rule. A practical rule proposed by Herbert Sturges (1926) for the construction of histograms, learned (and usually quickly forgotten) by every student of introductory statistics, often erroneously identified as "Sturge's rule."¹¹

Goldfeld-Quandt test. I am of two minds about this one. At one time, it was very well known because it was the best available test for heteroskedasticity in linear

^{8.} See, for instance, Gibbons 1976, 310–17, and Kanji 1999, 113. The Friedman test is therefore becoming yet another instance of what, for lack of a better term, I propose to call the *Tom Collins effect:* that the eponymic expressions for commonly used scientific concepts will tend, in time, to become dissociated from the persons for whom they are named. This particular case is all the more remarkable because the Friedman test is not, historically speaking, a very old concept. An even more recent example is the "Ellsberg paradox" (Ellsberg 1961) (included in the dictionary). Probably not many people are aware that this concept was proposed by the same Daniel Ellsberg of the "Pentagon Papers" fame (Ellsberg 1972).

^{9.} In his own work, Fisher always referred to this concept as the "variance ratio"; see, for instance, Fisher and Yates 1949, 35ff.

^{10.} Note that the title for this article refers to two different concepts, which should have been discussed separately: Solow growth model and Solow residual.

^{11.} That this error is quite common can be verified by a quick Google search. Sloppy and careless scholarship can of course be very irritating, but note that in this case it does not have any practical consequence for the expression's effectiveness as a communication device. This particular mistake is understandable given that the two versions are homophonous, though I also think it is at least partly due to the Tom Collins effect: appearances to the contrary (and with apologies to Mr. Sturges), the typical user of this expression does not really care if the correct name is "Sturge" or "Sturges" because the reference is to the concept, not the person.

regressions (Goldfeld and Quandt 1965). But it was a tedious, time-consuming procedure, and it has been completely supplanted in applied work by the "White test" (included in *An Eponymous Dictionary*), which is much easier to use (especially after it was incorporated into the well-known E-Views software package). To paraphrase General Douglas MacArthur, perhaps outdated ideas and concepts should be allowed to fade away.

Tobit model. This item has considerable eponymic interest, for several reasons:

- 1. It exemplifies a special kind of eponymic expression in which the eponym's name (James Tobin in this case) is actually *incorporated* into the technical word for the concept itself. In fact, this incorporation may be the reason it was overlooked; at first glance, it doesn't even look like an eponymic expression. This type of eponymy is rare in economics, though quite common in other fields ("*watt*" and "*volt*" being prime examples).
- 2. It is not often that we can pinpoint the exact moment at which a particular eponymic expression was introduced. Because autoeponymy is rare, eponymic expressions tend to arise through common usage in a more or less Hayekian "spontaneous order" process (not included in the dictionary). Some expressions will "stick," and others will not, but in either case they usually arise long after the introduction of the actual scientific concepts to which they refer. We become aware of a common expression only after it has already gained currency, so it is difficult to identify the original eponymist. In this case, however, we know exactly when the expression "Tobit model" was introduced, and who the eponymist was: "An alternative one-step procedure is the extension of probit analysis developed by Tobin (1958) that we designate the *Tobit model*" (Goldberger 1964, 253).
- 3. Finally, although *tobit* is of course a play on *probit* and *logit*, two related (and noneponymous) concepts, it *might* also be a case of still another type of eponymy, rare in economics but common in other fields and in everyday language: *fictional eponyms* (as in "Oedipus complex," "Pandora's box," and so forth). It so happens that in Herman Wouk's novel *The Caine Mutiny*, a "midshipman Tobit" makes a brief appearance (1951, 46), and we know that this fictional character is based on none other than James Tobin.¹²

^{12.} We might as well hear it from the eponym himself: "My main claim to fame, a discovery enjoyed by generations of my students, is that, thinly disguised as a midshipman named Tobit, I make a fleeting appearance in Herman Wouk's novel *The Caine Mutiny*. Wouk and I attended the same quick Naval Reserve officers' training school at Columbia in spring 1942, and so did Willy [Keith], the hero of the novel" (Tobin 1986, 122). I don't know if Mr. Tobit appears in the Humphrey Bogart movie as well. Somebody should check.

A few additional items come to mind, but because space and reader's patience are in limited supply, I simply list them without detailed commentary:

Adam Smith's Impartial Spectator (Smith [1759] 1976; Coase 1976) Alchian-Allen theorem (Cowen and Tabarrok 1995) Böhm-Bawerkian roundaboutness (Böhm-Bawerk [1921] 1959) Durbin's h test (Durbin 1970) Fisher's ideal index (Fisher 1927) Fisher's consistency tests (Fisher 1927; Ruggles 1967) Higgs's ratchet effect (R. Higgs 1987) Hume's guillotine¹³ (Blaug 1992, 112-13) Gwartney-Lawson Economic Freedom Index (Gwartney and Lawson 2003) Klein-Goldberger model (Adelman and Adelman 1959) Mincer returns (Rosen 1992;¹⁴ Psacharopoulos 1994) Nordhaus-Scherer model (Scherer 1972) Ricardo's point (Takayama 1972, 120 and passim) Studentized range¹⁵ (Tracy and Doane 2005) Sweezy's "kinky demand curve" (Sweezy 1939) Viner-Wong theorem (Silberberg 1999) Waaler curves¹⁶ (Fogel 1994)

Some of these eponyms are important omissions, others perhaps less so. However, even adding them all up (plus a few others that I have mentioned in passing) does not amount to more than a minor dent in what is, in my view, a fine work of scholarship and a major contribution to the literature of economics. The dictionary's quality speaks for itself, and the best way to close this review is to let it do just that. In describing the Eatwell-Newman-Milgate *New Palgrave*, the author of the entry on "Palgrave's dictionaries" writes: "[I]t is an unquestionably authoritative reference work on economic theory and the work of those economists who contributed to its development" (p. 193). Word for word, the same thing may be said about this volume. Julio Segura and Carlos Rodríguez Braun have done economists proud, and they deserve our thanks.

^{13.} For some reason, Hume tends to be associated with very odd eponymic expressions. (Note, in passing, how this one is elegantly constructed by affixing an eponym to *another* eponymic expression.)

^{14.} The title of Rosen's paper is an intriguing variation on standard eponymic technique.

^{15.} This expression is (obviously) derived from "Student's t" (included in An Eponymous Dictionary), which is itself of eponymic interest because it is a rare case in which the *eponym* is also a *pseudonym*.

^{16.} This concept is, strictly speaking, biomedical, although Robert Fogel has used it creatively to help explain certain patterns in economic history.

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