Chapter 1
The Lost Art of Economics*

Economists generally divide economics into two distinct categories - positive and normative - but how applied economics fits within these categories is unclear. This chapter argues that applied economics belongs in neither normative nor positive economics; instead it belongs in a third category - the art of economics. Currently, many economists are trying to use a methodology appropriate for positive economics to guide their applied work, work that properly belongs in the art of economics.

This three-part distinction is not mine, but dates back to a classic book, *The Scope and Method of Political Economy* (1891) by the father of John Maynard Keynes, John Neville Keynes. What is particularly ironic about losing the art of economics is that it was lost while in plain sight. By that I mean that in the United States at least, the entrenchment of the positive/normative distinction dates back to Milton Friedman's (1953) "Methodology of Positive Economics," where Friedman cites J. N. Keynes as his reference for the positive/normative distinction. But Friedman actually quotes J. N. Keynes' discussion of a *three-part* distinction. Friedman writes (p. 3):

> In his admirable book on *The Scope and Method of Political Economy,* John Neville Keynes distinguishes among "a positive science...a body of systematized knowledge concerning what is; a normative or regulative science...a body of systematized knowledge discussing criteria of what ought to be ...; an art...a system of rules for the attainment of a given end;" comments that "confusion between them is common and has been the source of many mischievous errors" ; and urges the importance of recognizing a distinct positive science of political economy."

Friedman's essay (and most post-Friedman economic methodological work) discusses the methodology appropriate for positive economics. But using Keynes' tripartite division, most economists' work does not belong in positive economics. If one accepts Keynes' three-part division, Friedman's and most subsequent methodological discussions are not relevant to a major portion of economists' work. Friedman placed Keynes' tripartite distinction in the open and then he lost it.[1]

In his book, Keynes argued that economists' failure to distinguish the art of economics as a separate branch from positive and normative economics would lead to serious problems. One hundred years later, he has turned out to be clairvoyant.

Science, Art, and Applied Economics

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Keynes placed his discussion of the art of economics under the heading "Applied Economics" (p. 55). According to Keynes, positive economics is the study of what is and the way the economy works; it is pure science, not applied economics. Normative economics is the study of what should be; it is not applied economics. The art of economics is applied economics. It relates the lessons learned in positive economics to the normative goals determined in normative economics.

The methodology Keynes finds appropriate for the art of economics is fundamentally different than the methodology he finds appropriate for normative economics or for positive economics. He wrote:

> [F]ew practical problems admit of complete solution on economic grounds alone... [W]hen we pass, for instance, to problems of taxation, or to problems that concern the relations of the State with trade and industry, or to the general discussion of communistic and socialistic schemes - it is far from being the case that economic considerations hold the field exclusively. Account must also be taken of ethical, social, and political considerations that lie outside the sphere of political economy regarded as a science [p. 34]...
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> We are, accordingly, led to the conclusion ... that a definitive art of political economy, which attempts to lay down absolute rules for the regulation of human conduct, will have vaguely defined limits, and be largely non-economic in character [p. 83] ...
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> The main point to notice is that the endeavor to merge questions of what ought to be with questions of what is tends to confuse, not only economic discussions themselves, but also discussions about economic method. The relative value to be attached to different methods of investigation is very different, according as we take the ethical and practical standpoint, or the purely scientific standpoint. Thus it would be generally agreed that, in dealing with practical questions, an abstract method of treatment avails less and carries us much less far than when we are dealing with theoretical questions. In other words, in dealing with the former class of questions, we are to a greater extent dependent upon history and inductive generalization.
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> Again, while economic uniformities and economic precepts are both, in many cases, relative to particular states of society, the general relativity of the latter may be affirmed with less qualification than that of the former. "Political economy," says Sir James Steuart, and by this he means the art of political economy,"in each country must necessarily be different"; and, so far as practical questions are concerned, this is hardly too strong a statement. On such questions there is nearly always something to be said on both sides, so that practical decisions can be arrived at only by weighing counter-arguments one against another. But the relative force of these argument is almost certain to vary with varying conditions. We are not here denying the relativity of economic theorems, but merely affirming the greater relativity of economic precepts. Unless the

> distinction between theorems and precepts is carefully borne in mind, the relativity of the former is likely to be over-stated [pp. 63-65].

As these quotations show, Keynes saw applied economics as the art of economics and believed that the appropriate methodology for the art of economics is different from the appropriate methodology for positive economics. The profession has not followed Keynes' division and as he warned would happen, the distinction between precepts and theorems has often been overstated, and implications from economic theory have been drawn which do not follow, causing others to overstate the relativity of the theories of economic science. Explicitly recognizing the art of economics would make a major difference in the methodological conventions of economics.

The Art of Economics and Positive Economics

Positive economics suffers from the lack of an art of economics because, if a separate art is not delineated, positive economic inquiry faces pressures to have policy relevance, which is constraining to imaginative scientific inquiry. Positive economics is abstract thinking about abstract problems which might someday have some relevance, but immediate relevance is simply a side issue of no concern to the positive researcher. Imagine, for example, if theoretical physics were required to maintain policy relevance. Einstein's thought experiments would have been seen as a waste of time.

Few observers would deny that most economic inquiry today is abstract thinking about abstract problems. But abstract is not necessarily imaginative. Much of the current abstract thinking is the mundane application of technique to precisely defined problems; such work seldom leads to significant advances in science. If positive economics were freed from policy relevance, imagination would be enhanced.

The Art of Economics and Today's Applied Economics

The current version of applied economics suffers from the lack of an art of economics because it feels compelled to use methodology imported from positive economics. Thus, most current applied work in economics initially employs a formalistic method of argumentation and exposition which leads to exact results.[2] The formalistic results are then modified by political and socio-logical dimensions (or, at least, a sentence at the end of the work states that the results need to be so modified). These dimensions are addenda, made after the formal analysis is complete.

This sequencing loses interconnections between the various dimensions and leads to much work that is needlessly precise. The reason is analogous to the law of significant digits - the results of an analysis can only be as exact as the least precise part of the analysis. Since the sociological and political dimensions are extraordinarily imprecise, making applied economic theory precise adds nothing to the precision of the final conclusion.

For example, economists have analyzed the optimal tariff and the optimal tax and have come up with enormously precise results (usually specified in long equations). These economists agree that before the analysis can be applied to the real world, the imprecise historical, institutional, political, social, and distributional dimensions must be added back to the analysis. But if the final policy recommendation is no more precise than these dimensions, the economic precision has served no purpose. Actually, it may have served a negative purpose since some interconnections among dimensions are likely lost in the process.

Many economists implicitly think of applied work of the type I am suggesting as subjective and normative; they implicitly equate positive economic analysis with objective analysis. That's wrong. All economic analysis - positive, normative and art - should be as objective as possible. Good applied economic work tells people how to achieve the goals they want to achieve as effectively as they can. No normative judgments about those goals need be made, and the analysis should remain objective. Even normative economics should be objective. It should discuss society's goals, and the reasons why these goals should be followed. It may be harder to maintain objectivity in the art of economics, but that simply suggests that one must work harder.

The Art of Economics and Empirical Economics

Applying the methodology of the art of economics to empirical work would also bring about significant changes. Most empirical work done by academic economists is currently very formal, technical, econometric analysis. Often the researchers' knowledge of the institutions they are studying is limited to computer printouts of large data sets. Empirical tests are also formal and results are expected to fall within 95 percent or 99 percent confidence intervals. This might be appropriate for empirical work in positive economics; it is not appropriate to empirical work in the art of economics.

In the art of economics, because of the interconnection of sociological and political dimensions of the problem, precise tests are impossible. Judgment dependent on institutional and historical information is required. This means that in the art of economics a wide range of observation and empirical exploration is appropriate. Often simple statistics, tables, charts, and case studies are the appropriate modes of expression for empirical work in the art of economics.

The purpose of empirical work in the art of economics is not to test theories; it is to apply theories to real-world problems. The appropriate methodology for such applications involves sociological and political observations and, to stay within the confines of precision established by the law of significant digits, is generally not precise.

Empirical work in positive economics should be designed to test whether a theory should be tentatively accepted; such empirical tests may have little or no relevance in applying a theory to a real-world problem. Empirical work in the art of economics should be designed to apply a theory by adding back the contextual reality. The two types of empirical work are fundamentally different. Current practice does not differentiate between the two.

The Art of Economics and Normative Economics

Reintroducing the art of economics would free normative economics from dealing with economic policy and allow a deeper consideration of what policy goals are appropriate. The art of economics would accept some set of goals determined in normative economics, and discuss how to achieve those goals in the real world, given the insights of positive economics.

RESHAPING ECONOMIC EDUCATION

Explicit recognition that most economists' work falls under the classification of the art of economics would change the way economics is taught at both the undergraduate and graduate level. The appropriate methodology for the art of economics is much broader, more inclusive, and far less technical than the methodological approach for positive economics that underlies current teaching practices. The art of economics requires knowledge of institutions, of social, political, and historical phenomena, and the ability to use available data in a reasonable way in discussing real-world economic issues. These aspects of economic knowledge have been purged from the graduate curriculum in economics. Only 3 percent of the graduate students at top universities stated that having a thorough knowledge of the economy is very important to succeeding as an economist, while 68 percent of them said that that knowledge was unimportant (Klamer and Colander, 1990). If economists accepted that the appropriate methodological conventions were those of the art of economics, graduate training would change significantly. Most students would be taught to interpret, use, and apply theory, not to develop it.

The blurring of the distinction between positive and normative economics occurs early in students' careers. Introductory textbooks commonly divide economics into positive and normative, and then conclude that anything involving a value judgement belongs in the normative category (for example, Samuelson and Nordhaus, 1989, pp. 10- 11; McConnell and Brue, 1990, p. 6). Since any statement about what policy should be followed must necessarily involve a normative goal, these definitions place all policy considerations outside of positive economics.

Having so classified economics, these books then proceed to discuss economic policy issues, focusing on economic efficiency and giving the impression that discussions of efficiency belong in positive economics. However, achieving economic efficiency is not an end in itself, but is a debatable, normative goal which often will conflict with other normative goals society might have.

Only if teachers of economics introduce the third division - the art of economics - will the distinction between normative and positive economics become clear. Separating out the art of economics allows one to point out that objectivity in the art of economics is not achieved by avoiding value judgments, but, rather, by making clear what are the value judgments upon which one is basing the policy recommendation.

The Art of Economics and Debates about Policy

Economists raised with the positive/normative distinction tend to argue, as the Samuelson and Nordhaus textbook put it, "The major disagreements among economists, however, lie inn normative areas." However, if economists are being objective, either their own normative views should not enter into their analyses, or they should state what those normative views are, and why those normative views should be used. In either case, it is difficult to see normative areas as the source of disagreement. I believe many or most of the debates about economic policy are not debates about normative issues; they are debates about how best to achieve an agreed-upon normative end.

Friedman (1953) was clearer about the reasons for differences among economists' policy recommendations. He states (p. 4):

> I venture the judgement, however, that currently in the Western world, and especially in the United States, differences about economic policy among disinterested citizens derive predominantly from different predictions about the economic consequences of taking action — differences that in principle can be eliminated by the progress of positive economics - rather than from fundamental differences in basic values, differences about which men can ultimately only fight.

The problem with this statement is the inserted phrase, "differences that in principle can be eliminated by the progress of positive economics." This phrase assumes that policy conclusions flow directly from positive economics. However, as Keynes argued, the art of economics is contextual and as much dependent on non-economic political, social, Institutional, and historical judgements as it is on economics.[3] Thus, advances in positive economics generally will not help settle policy differences among economists because those policy differences result primarily from different judgements about political and social dimensions of policy implementation, not about differences in underlying theory.

Conclusion

Recognizing that what most economists do belongs in the category of the art of economics, and taking seriously the appropriate methodology for that category,would fundamentally change the economics profession. But as a realist, I recognize that few practicing economists will heed this or any other methodological discussion; they do what they do.

However, historians of thought do take methodology seriously and this paper is a criticism of much of the economic methodological literature. That literature has refined the methodology of positive economics ad infinitum, but those refinements are irrelevant to most economists because most economists don't do positive economics. They do applied economics, and the relevant category for applied economics is the art of economics. Keynes had definite views of what the appropriate methodology for the art of economics is; I agree with him. Many in the profession may disagree, but that is where the methodological debate should focus. The economics profession is overdue to begin a serious discussion on the appropriate methodology for the art of economics.

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[1] A likely reason why Keynes' tripartite distinction was not central to Friedman's essay is that the reference to J. N. Keynes was a late addition to the essay. According to Daniel Hammond (March 1991), early

drafts of Friedman's essay did not include any positive/ normative distinction, let alone a tripartite one. In fact, the term "positive economics" did not make it into the title until the final draft.

[2] A majority of graduating Ph.D.s classify themselves as "applied theorists." Applied theory is exactly what the art of economics is, and according to Keynes it is largely non-economic in character. Yet Ph.D. theses are generally required to follow a positivist methodology.

[3] Larry Boland (1991) makes a similar point about this problem with Friedman’s methodology. .