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From Myth to Metaphor: A Semiological Analysis of the Cambridge Capital Controversy

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# **From Myth to Metaphor: A Semiological Analysis of the Cambridge Capital Controversy**

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Of all the major debates in the history of economic theory, probably the one most perplexing to a contemporary observer is the Cambridge capital controversy. While the debate raised passions on both sides to levels seldom witnessed in 'academic' discussions, at the end of it all one was left with the somewhat curious spectacle of both armies clutching their respective flags and claiming victory. Given the obviously unsettled nature of the debate, a natural question has been -- why was there no decision? Why is it that issues perceived as "scientific" by participants on both sides alike were left unresolved? Why couldn't the formal protocols of mathematics, logic and economic theory bring closure to this debate?

In recent years some attempts have been made to answer this question by analyzing the methodological underpinnings of the alternative positions in the debate. Adopting a Kuhnian framework, Sheila Dow (1980) has argued that Cambridge (U.K.) Revolution did not succeed and instead remains the unresolved Cambridge Controversies because of a failure by post Keynesians critics to launch an alternative paradigm defined in terms of models and tools quite distinct from those of the then ruling neoclassical paradigm. Thus, the Cambridge (U.K.) critique of orthodox economic theory failed to become an actual, but has rather remained a potential, "scientific revolution" (in the Kuhnian sense) because the critics allowed their arguments to be translated into the

formal framework specific to the neoclassical paradigm. Avi Cohen (1980) similarly argues that different conceptions of what constitutes an "explanation" accounts for the lack of resolution of the Cambridge controversies. More specifically, while the post Keynesian methodology emphasizes causal mechanisms, the focus of neoclassical theory is on its predictive aspects. This fundamental difference is reflected in different conclusions about the implications of the U.K. critique for the neoclassical framework.

An entirely different approach has been suggested by Deirdre McCloskey (1983, 1994). McCloskey makes the point that the controversy was essentially an argument about metaphors, and therefore amenable to literary analysis. "The very violence of the combat suggests that it was about something beyond mathematics or facts. The combatants hurled mathematical reasoning and institutional facts at each other, but the important questions were those one would ask of a metaphor - is it illuminating, is it satisfying, is it apt? How do you know? How does it compare with other economic poetry? After some tactical retreats by Cambridge, Massachusetts, on points of ultimate metaphysics irrelevant to these important questions, mutual exhaustion set in, without decision. The reason there was no decision was that the important questions were literary, not mathematical or statistical" (1994, 428).

The distinction that McCloskey makes in her rhetorical tetrad between "fact" and "logic" on one hand and "metaphor" and "story" on the other, with the implicit assumption that tools of literary criticism can be profitably applied to the latter but not the former, gets problematic however once one recognizes that facts have to be stated, and logic expressed, within a matrix of meanings, i.e., within a language. Such an admission in turn legitimizes a study of the debate purely and entirely in terms of its language, i.e. a

study of the debate as a series of overlapping texts distinguished by their strategies of meaning creation and persuasion.

This essay attempts such a (re)reading of the Cambridge debate. We develop McCloskey's theme further to argue that the debate was not simply about *metaphors* but also fundamentally about *myths*, and that this distinction is critical in analyzing the debate as a contestation over meanings, i.e. over alternative *significations*. Using tools developed first by Ferdinand de Saussure, and later by Roland Barthes and Stuart Hall, we reinterpret the debate in terms of alternative semiotic strategies.<sup>1</sup> Our primary interest lies in analyzing the ways in which a critique perceived as radically subversive by its champions is absorbed and integrated into a dominant meaning system. In other words, our focus is on strategies of *containment* of semiotic dissonance, i.e., on the *mode of disappearance* of the critique.<sup>2</sup> We attempt to do this by a selected textual analysis of some of the final comments and evaluations of the debate by four protagonists on the

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<sup>1</sup> It might seem inappropriate to deploy a semiotic analysis in a volume dedicated to postmodernism in economics. While we recognize that semiotics, especially in Saussure, can be perceived as a structuralist approach to language, we also feel that semiotic tradition as developed by Barthes and Hall allow for a recognition of postmodern moments such as undecidability and uncertainty. In any case, the use of a semiotic approach in economics pushes the postmodern insight in ways that may be passe in cultural and literary studies. For most economists, the idea the idea that language is symbolic, and a system of arbitrary signs not linked naturally to the economy, is itself a transgressive and unsettling postmodern claim.

<sup>2</sup> Dow also argues that containment exists in a Kuhnian sense as she points out that it is difficult construct an alternative paradigm using the theoretical tools of an existing one. She notes that this "...mode of expression but itself points the way to containment of the critique. By noting the circumstances in which 'anomalies' may arise, the critique indicates the assumptions that must be made to preclude these anomalies. As long as the practitioners of the orthodoxy find these assumptions acceptable, they will not perceive any crisis, no matter how unacceptable the assumptions are to the critics (1980, 376). This is similar to the myth strategy of "innoculation" as we develop later.

neoclassical side of the controversy: Samuelson (1975), Solow (1975), Stiglitz (1975) and Blaug (1975).

The main body of the paper consists of five sections. We start with a brief survey of the major issues raised in the debate, focusing largely on the 'technical' questions. In the subsequent section, we attempt a textual analysis of different responses on the neoclassical side to their critics' evaluation of the neoclassical research program in the light of the issues raised in the earlier, 'technical' part of the controversy. In the third section, we develop the concepts and analytical categories that would allow us to specify the semiological processes at work in the debate. In particular, we develop the distinction between the *myth* and the *metaphor*, identify the metaphorical elements in the debate and situate the interpretative divergence between the two sides within a context of *myth formation*. The fourth section identifies some rhetorical structures utilized in the neoclassical (re)interpretations of Cambridge (UK.) criticisms as *significatory moves*. The last section situates alternative readings of mainstream economic discourse within different structures of reception and reproduction (decoding and encoding) of significations, i.e., within alternative semiological logics

### **So, What was the Cambridge Capital Controversy about? A Potted History**

The theory of capital has played a central role in the history of economics beginning at least with Adam Smith, David Ricardo and Karl Marx. For Smith, Ricardo and Marx, capital played a central role in the distribution, accumulation and growth processes of a capitalist economy. Although each theorized capital differently, capital was seen as a part of the social relations of production and historical process of capitalist development. Workers and capitalists played distinct and asymmetric social roles in their

theories, where capital hires labor but labor does not hire capital. Relative shares of wages and profits were a matter of the historical conditions of social and class struggle and not technologically determined. Power, ideology and persuasion were all important elements of the bargaining between labor and capital.

Beginning most clearly with J.B. Clark, the neoclassical approach to capital and distribution adopted what was known as the marginal productivity theory of income distribution. The marginal productivity theory of income distribution argued that in equilibrium the marginal product of all factors of production (including labor and capital) would be equal to the real value of their factor prices. Thus, in equilibrium the marginal product of labor would equal the real wage and the marginal product of capital would equal the real rate of the price of capital (alternatively referred to as the interest rate or profit). Some have inferred from this equilibrium result that factor prices are determined by their respective marginal productivities. Others have insisted that factor prices are better understood as a measure of marginal productivity. One inference that has often been made from this result is that factors of production receive the payments (whether wages or profits) each “deserves” because each receives a factor payment equal to its contribution (marginal productivity) of their specific factor to the overall value of production. This is of course a problematic ethical inference and requires much more philosophical argument linking the idea of contribution to what one deserves than is often articulated, and certainly most today would not make such a straightforward connection between a claim of an equilibrium result and a claim of justice. Nevertheless, as Samuelson has put it, the capital and distribution theory based on this approach has served well the “...apologist for capital and for thrift” (1966, 577). And, certainly the

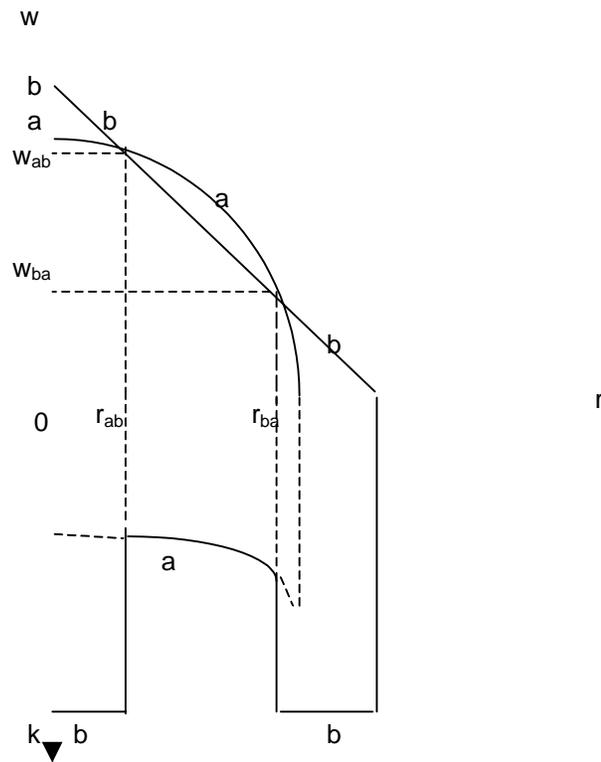
loose theory of justice implied by marginal productivity theory lurks as part of the folklore of economics even today.

It was these two alternative visions of capitalism and the role that capital, accumulation and distribution played in the growth process that became the underlying issue of the Cambridge capital controversy, even though as we show below, the debate quickly became bogged down in technical issues of logic and economic theory. Joan Robinson in her 1953-54 article “The Production Function and the Theory of Capital” began the Cambridge debate by questioning the equilibrium approach used by neoclassical economists when they considered the change over time and growth of an economy. She was critical of an approach to capital and accumulation that was not grounded in real, historical time and the actual social institutions of an economy. Robinson’s also offered a logical critique of the neoclassical aggregate Clarkian version of the production function, what she called the pseudo production function that underlay the neoclassical equilibrium vision of growth. She pointed out that in order to equate the marginal product of capital to the profit rate, as neoclassical theory requires in equilibrium, one needs to have a prior measure of the marginal product of capital. To know the marginal product of capital, however, one must have a measure of the magnitude of capital. But in order to know the magnitude of capital one must know the rate of profit in order to aggregate the heterogeneous bundle of capital goods used in production. Yet, to know the rate of profit requires that one know the marginal of capital. As she put it 1970 “The analysis showed that there is no meaning to be given to a ‘quantity of capital’ apart from the rate of profit, so that the contention that the ‘marginal product of capital’ determines the rate of profit is meaningless” (1970, 309). Thus, according to Robinson, the idea of an aggregate production function falters on the circular

logic underlying the aggregate theory of capital, and so too does the neoclassical theory of growth, accumulation and distribution collapse.

In her analysis of the pseudo-production function Robinson discovered that some techniques of production “...become eligible at a higher rate of profit (with a correspondingly lower real-wage rate) may be less labour-intensive (that is, may have a higher output per man employed) than that chosen at a higher wage rate, contrary to the rule of a ‘well-behaved’ production function’ in which a lower wage rate is always associated with a more labour-intensive technique” (1970, 309). Robinson called this the Ruth Cohen Curiosum. Piero Sraffa found separately later in his *Production of Commodities by Means of Commodities* (1960) that it was perfectly possible that the same technique of production would become eligible at several different rates of profit. It was from this insight that the intense debate over “reswitching” and capital-reversing” took place several years later, roughly from 1965-67. Reswitching refers to the possibility that the same technique of production might be the most profitable one at several different rates of profit, even though another technique of production would be the most profitable one in between. Capital-reversal refers to the possibility that there is a positive relationship between the capital labor ratio and the rate of when the switch from one technique to other is considered.<sup>3</sup> See figure 1 for a graphic depiction of reswitching and capital reversal. The upper quadrant of figure depicts two techniques of production, a and b, in what is often called the factor–price space by neoclassical economists or alternatively, the wage-profit frontier by the Cambridge U.K. economists, a difference in appellation which is telling. Technique b is the one chosen when wage rates and the capital labor ratio is high, then at wage rate  $w_{ab}$  technique a is chosen at a lower capital

labor ratio. Between  $r_{ab}$  and  $r_{ba}$  the capital labor ratio rises as does  $r$ . And, finally, after the wage rate falls to  $w_{ba}$  technique b is chosen again at a higher capital labor ratio. Thus we have both the reswitching of techniques of production, namely one technique, b, is chosen at both high and low wage rates while the other, a, is chosen at wages rates that fall in between, and capital reversal where the capital labor ratio rises as the wage rate falls.



\*\* Figure 1. \*\*

The possibility of reswitching and capital-reversal violate several of the fundamental “parables” of the neoclassical theory of capital and income distribution. Four of the most important parables are: (1) there is an inverse relationship between the rate of profit and the capital labor ratio, (2) there is an inverse relationship between steady state consumption per person and the rate of profit, (3) there is an inverse relationship

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<sup>3</sup> See Harcourt (1972) for more detail on these debates.

between the rate of profit and the capital-output ratio, and (4) in competitive conditions the distribution of income between workers and capital can be determined by equating the marginal products of labor and capital to the wage and profit rates respectively.<sup>4</sup> These four parables can be shown to follow from a well-behaved production function, such as the Cobb-Douglas production function, given competitive conditions, and assuming a one good world with malleable or “jelly” capital and output. The presumption held by many economists was that these parables would also hold true in a world of heterogeneous capital and output. Robinson and Sraffa showed that in general this was not true.

The importance of these parables was that they provided a useful framework for the analysis of capital accumulation, growth and technical progress as Solow had done. Some argued that the aggregate version of the production function was no longer relevant as the general equilibrium approach of Arrow and Debreu had superseded it as the most sophisticated version of neoclassical theory. Nevertheless, the aggregate production function version was important because it provided the basis for empirical and econometric analyses of growth and distribution. Samuelson (1962) proposed the idea of a surrogate production function as a possible way maintaining the neoclassical parables of the jelly world in the face of heterogeneous capital. Samuelson’s surrogate production function was built in essence around labor value prices. He assumed that the capital-labor ratio was uniform across techniques of production thus making the value of capital independent from the rate of profit. This, along with a few other technical assumptions, made the surrogate production function look just like a well-behaved production function

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<sup>4</sup> We should note that the possibility of reswitching between techniques of production is an example of a postmodern moment in an otherwise modernist economic theory. The indeterminacy of the choice of technique runs counter to the theoretical taste of

that obeys the neoclassical parables. But as Garegnani quickly pointed out the surrogate production function was a special case and could not be readily generalized as Samuelson later admitted (1966).

The Cambridge controversy continued on debating these and other issues but the ground had been laid. Cambridge, England had successfully challenged some of the fundamental theoretical proposition of the aggregate version of the neoclassical production function and capital defended by Cambridge, Massachusetts. Yet, perhaps not unsurprisingly, neoclassical theorists seemed nonplussed by the Cambridge, England critique as they increasingly couched their theories in the micro framework of general equilibrium theory thought to be immune from the viruses of the aggregate production function. How and why this happened depends, as we suggest in the rest of this chapter, on the manner in which various semiological strategies of myth building and containment were constructed by the Cambridge, MA school and their fellow travelers.

### **So, What Does It All Mean?**

Trying to explain what the debate was all about, Harcourt insisted that "There are fundamental issues at stake...divergent views concerning the nature of economic analysis and its relationship to the existing stages, classes and institutions of society are still central to the controversies." (1972, 244-5). Further, the Cambridge controversy raised the question whether profits are justified, and not simply how profits are determined (1972, 196). Even more fundamentally, "...it is the general methodology of neoclassical analysis, rather than any particular result, which is basically under attack" (1974, 398).

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neoclassical economists for closure and perhaps explain in part the urgency of this formal debate over capital theory.

On the other side of the theoretical divide, we find a complete disavowal of the possibility of any such radical implication, even with regard to the analysis of distributional issues. Thus, for example, Stiglitz claims that "The appropriateness of the marginal productivity theory as a theory of distribution of income among factors is completely unrelated to any of the controversies concerning double-switching, savings behavior, or the aggregation of capital" (1975, 302). In the same vein, after citing a litany of ills afflicting neoclassical analysis, Solow concludes that "These are important limitations and deficiencies of neoclassical analysis in the general field we are talking about...But the interesting thing about this list of shortcomings is that none of them has anything to do with reswitching" (1975, 51). Samuelson further argues that "one who believes that class power can wrest great gains in absolute and relative income shares within a market system need not reject neoclassical constructs involving smooth marginal productivities and simple capital aggregates" (1975, 46).

As these quotes amply demonstrate, the various forms of the 'technical' questions in the capital controversy connote (signify) startlingly different meanings. For Harcourt, they imply a total critique of neoclassical theory. For Samuelson, Stiglitz and Solow however, they signify only their own irrelevance.

### **Metaphor, Myth and All That**

In its discussion of semiological phenomena, linguistic theory often employs a distinction between 'denotation' and 'connotation'. 'Denotation' may be used to distinguish those aspects of a sign that appear to be taken, in some semiological (language) community as its 'literal' meaning from the more associative meanings for the sign which it is possible to generate, i.e. its 'connotations'. The distinction is an analytic

one, since in actual discourse most signs combine both the denotative and the connotative. The word 'literal' itself is used here in the sense of *naturalized*, i.e. to refer to "those codes or significations that are so widely distributed in a given semiotic community (culture), that they appear not to be constructed - the effect of an articulation between the sign and the referent, but to be 'naturally' given" (Hall, 1993). What these near universally consensualized meanings demonstrate is the degree of habituation produced by an achieved equivalence between the encoding and decoding sides of an exchange of meaning.

The denotative level of the sign is fixed by certain relatively limited, 'closed' codes. But its connotative level, though also bounded, is more open. At its connotative level, therefore, the sign is subject to relatively more active transformations. These transformations take advantage of the potential multiplicity of interpretations that a sign may be open to at its connotative level, i.e. these transformations exploit the polysemic values of a given denotation with respect to its corresponding connotation(s). Any constituted sign is potentially transformable into more than one connotative configuration. Signs appear to acquire their full significative value, i.e. appear to be open to articulation with wider ideological discourses and meanings at the (connotative) level of their *associative* meanings. This happens because here meanings are not apparently fixed in natural perception, and therefore their fluidity of interpretation and association can be more fully appropriated, exploited and transformed. It is thus at the connotative level of the sign that situational ideologies alter and transform signification<sup>5</sup> (i.e. the

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<sup>5</sup> This is not to argue that the denotative or 'literal' meaning is outside ideology. The distinction is rather between the different *levels* at which ideologies and discourses intersect. As Barthes (1974, 9) notes, "Denotation is not the first among meanings, but pretends to be so; under this illusion, it is ultimately no more than the last of the

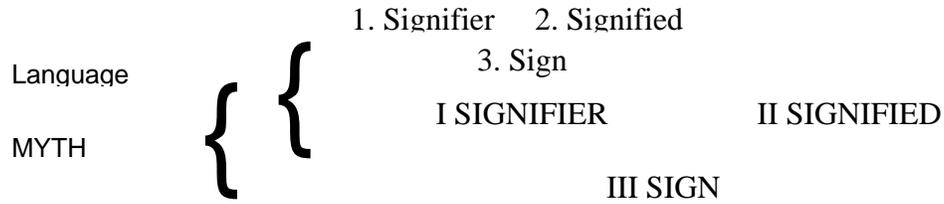
implication of a given denoted sign). At this level we can see more clearly the active intervention of ideologies in and on discourse. "Here, the sign is open to new accentuations and appropriations, thus entering fully into the struggle over meaning" (Hall 1993).

The transference from the denotative to the connotative levels of signification can be interpreted as the contextual transition from the *metaphor* to the *myth*. By 'metaphor' we understand a relatively uncontested meaning as a first-order signification. 'Myth', on the other hand is a higher-order signification, one in which the sign in the first system, that of the metaphor, becomes a mere signifier; "as if myth shifted the formal system of a first signification sideways" (Barthes 1972, 115).<sup>6</sup> Figure 2, as originally presented by Barthes (1972, 115), illustrates well the idea that in myth there are two semiological systems. One, is a linguistic system, or what Barthes called the language object (1972, 115) and other system is myth itself which Barthes calls "...metalanguage, because it is a second language, in which one speaks about the first" (1972, 115).

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connotations (the one that seems both to establish and to close the reading), the superior myth by which the text pretends to return to the nature of language, to language as nature." Denotation distinguishes itself from other significations (connoted) by its singular function of effacing the traces of the ideological process by restoring its universality and "objective" innocence. "Far from being the objective term to which connotation is opposed as an ideological term, denotation is thus (since it naturalizes the very process of ideology) the *most ideological term* - ideological to the second degree." (Baudrillard 1988, 90)

<sup>6</sup> The "sign" here is to be understood formally as the associative total of the signifier and the signified. The formal theory of the sign was first developed by Saussure (1959), who distinguished among the signifier (the word in his case), the signified (i.e. the mental image) and the referent and showed how any particular "value" of the sign is constituted by structural relations with other signs. "Metaphor" in our (and McCloskey's) usage, being defined by its specific signifiatory function, is a much broader term than that implied by the word in classical rhetoric.



\*\* Figure 2.\*\*

The metaphorical is the denotative in the sense that the possibilities of alternative significations embedded in it are relatively less than those in its higher-order mythification. The myth is more than a mere collection or articulatory structure of metaphors since the signification of a myth, having been subjected to selective appropriation/transformation at every individual level of signification, is much more than the sum of the individual significations of its constituting signifiers (i.e., of its constituent metaphors) signified in isolation. The myth thus embodies the connotative. Note that the distinction is analytic-contextual: the metaphor in its turn can usually be analyzed as a lower-order myth, and conversely, the myth can be interpreted as the signifier (hence, the metaphor) in a higher-order semiological chain.

The Cambridge Capital controversy started out as a contestation over metaphors, in particular the metaphor of the aggregate production function. Joan Robinson's original critique was aimed at the denotative signification of the notion/concept of an aggregate capital stock, and challenged in essence the 'literal' meaning of the metaphor within the neoclassical discourse (language community). Subsequent critiques of neoclassical 'parables' involving the aggregate production function and the marginal productivity theory of distribution, with their focus on the possibility of reswitching and capital-

reversal, also involved challenging specific significations within a common semiological system (language community), where the rules of encoding and decoding (or the canons of 'natural logic') were being shared by all parties concerned. The repeated emphasis on the possibility of settling the "purely logical" aspects of the question by both parties appears thus as a consequence of this alignment.<sup>7</sup> It is therefore not surprising that the debate over such questions was settled finally, with Samuelson's acceptance in 1966 of the logical possibility of reswitching and capital-reversal, and that of the illegitimacy of the aggregate production function as an analytical construct, once we remember that the relative closure of the denotative level of the sign by commonly held codes of reading and interpretation (a common structure of formal logic in this case) limit sharply the possibilities of alternative consistent appropriations and transformations within the same discursive community.

The debate itself, however, raged on over what the "settled technical questions" implied. As we have already seen, the opposing sides read diametrically opposite meanings into the implications of the very same issues on which they more or less agreed. In terms of our framework, what occurred was that the same metaphors, (i.e., the formal results agreed upon) acting now as mythical signifiers, were subjected to entirely different (contradictory) appropriations and transformations. In other words, the rules of signification under which meaning was being created were diverging, leading to the gradual development of two distinct language communities (discursive formations) defined by alternative myth-patterns. As the debate gradually changed from a

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<sup>7</sup> Both parties appear to have implicitly maintained a belief in the possibility of perfect logical translation (at least with respect to the formal questions). For an especially lucid discussion of the problems associated with such an epistemological presupposition see Berlin (1981, 56-80).

contestation over metaphor to one over myth (i.e. from the denotative to the connotative) the once common language structure started getting differentiated until finally mutual exclusivity set in. The contestants stopped employing similar processes of decoding and encoding, and situational ideologies dramatically altered the nature of articulation between the sign and the referent, leading to incompatible readings of the 'associative' meanings of the debate.

### **Some Rhetorical Forms**

Any specific strategy of mythification is by definition one of selective transformation and appropriation. The primary choice of one signification over another, perceived as a conscious intervention at the denotative level of the sign(s) has itself to be legitimized. Creation of such legitimacy is an act of persuasion (seduction), requiring *rhetoric*, i.e., tools of persuasion.<sup>8</sup> Faced with a challenge to its internal coherence, a language community might be expected to attempt to expand its own semiotic matrix in a manner that allows the incorporation (co-optation) of dissonance. Stiglitz, Solow, Blaug and Samuelson thus are all concerned with fashioning a rhetoric that can be utilized in the discursive construction of an 'immunizing' mythology.<sup>9</sup> We now turn to the investigation of some common rhetorical forms that they employ for this purpose.

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<sup>8</sup> By rhetoric here we mean a set of relatively fixed, regulated, recurring patterns according to which the different forms of the mythical signifier arrange themselves (Barthes 1972, 150).

<sup>9</sup> Reduction/displacement of cognitive dissonance obviously plays the same role in a global meaning system as that played by 'ad hoc' hypotheses in a Popperian analysis of (scientific) theories. For a discussion of the status of "immunizing stratagems" in the Popperian framework, see Blaug (1992, 17-21).

The typology used in this section is based upon Barthes (1972, 148-55). The list of rhetorical forms discussed here is not meant to be exhaustive, and it might be possible to discern other organizing figures as well. We just confine our attention to the most recurrent ones.

### **The Inoculation**

This is the device whereby one immunizes the contents of a meaning-system by means of a small inoculation of acknowledged dissonance, thus protecting it against generalized loss of coherence (subversion). Consider the following concession by Solow: "...the reswitching phenomenon does show that the extension of neoclassical theory to easy parables can be misleading" (1975, 51). The same device is used by Stiglitz to even greater effect: "Thus, although reswitching has no implications for the validity of neoclassical distribution theory or for qualitative statements concerning the consequences of a given economy's increasing its level of consumption, it does mean that statements such as "the reason that one economy has a lower interest rate than another is that the former economy has a higher capital-labor ratio" may be seriously questioned, for it is possible that a given economy have a lower interest rate than another and a higher interest rate than a third, but that the two comparison economies be identical in all physical respects" (1975, 897). A minimal indeterminacy (incoherence) is acknowledged by this tokenism, allowing one to co-opt, localize and absorb an otherwise potentially generalized dissonance.

## **Neither-Norism**

This consists in stating two opposites and balancing one by the other, reducing both to two binary opposite poles which balance each other only in as much as they are purely formal, relieved of all their specific (differential) weights. The specific reading intervenes between the signifier and the signified by removing precisely any notion of asymmetric importance and implanting a new equivalence. A classic use of this particular rhetorical strategy is by Blaug: "Heterogeneous capital is no more difficult to measure than heterogeneous labour or heterogeneous output" (1975, 80). A somewhat more subtle use of this device is by Stiglitz: "In more general models, there is a simultaneity of the determination of the values of the variables of interest in the short run and long run equilibria" (1975, 895). Coming at the conclusion of a discussion about whether the rate of profit is determined by the rate of growth and the savings rate (Cambridge, U.K.) or by the capital-labor ratio (Cambridge, Mass.), the above assertion is obviously meant to imply that both positions are equally simplistic and should be identically replaced by the one 'true' framework, i.e. a general equilibrium model. The entire debate is thus dismissed by imposing an equivalence of approximation errors by fiat. Another recurrent use of this particular rhetorical device is in equating the capital-reversal phenomenon with the Giffen good paradox, signifying the import of the first as being of no less triviality than that of the second (for example, by Solow 1975, 51).

## **Identification**

By identification, we imply the reduction of any otherness to sameness. If suddenly however the other is revealed as irreducible (i.e., only partially appropriable), there emerges a figure for emergencies: *exoticism*. The Other is perceived as an

innocuous spectacle, a curiosum, a clown (Barthes 1972, 152). Such a rhetorical device is applied, for example, by Stiglitz. "If you accept (as most participants on both sides of the controversy do) the von Neumann (Sraffa - Samuelson - Solow et al.) dual price - interest rate inequalities and the assumption that at any prices the cost-minimizing techniques are chosen, you have accepted the full content of the (microeconomic) neoclassical analysis of steady states. Reswitching says something about what that does/does not imply for comparisons of steady states, but no more" (1975, 898). Thus, the technical conclusions of the debate are first reduced to (minor) theorems of neoclassical economics, and then further deprived of signifiatory content (meaning) to read as mere theoretical curiosum - say, a Giffen good. Differences are stripped of their signifiatory content in the same manner by Samuelson. "I think there may well remain differences of opinion between some in Cambridge, England and some in Cambridge, Mass. over whether non steady-state analysis can be meaningfully formulated and handled" (1975, 45). Surely, just an honest difference of opinion of minor import among reasonable economists?

### **The Privation Of History**

Myth attempts to deprive the object of which it speaks of all history, or better, by positing the 'natural' as its source, removing all trace of origin or choice. Both Blaug and Solow argue that for the Cambridge, UK. critics, any notion of a downward-sloping demand function for capital, implying that the rate of interest or profit is an index of the scarcity of capital, signifies an argument for private property (Blaug), or a 'just' income distribution (Solow). But, they hasten to add, such a signification is illegitimate precisely on the grounds of neoclassical welfare theory and the 'natural' rules of the logic of supply-

demand analysis. What this obfuscates is the historical role of such analysis in promoting scepticism about the possibility of changing income distribution in a competitive private-ownership economy through political action by organised labor, a point that is conceded by Samuelson: "...one who believes technology to be more like my 1966 reswitching example than like its orthodox contrast, will have a more sanguine view about how successful militant power by organized labor can be in causing egalitarian shifts in the distribution of income away from property even in the long run" (1975, 46).

### **The Quantification of Quality**

By reducing quality to quantity, myth economizes cognition: it interprets much more cheaply. The justification for using aggregate neoclassical growth models is that they "may do reasonably well in explaining long-term movements in certain macro variables" (1975, 901), i.e., a quantitative justification; further, the Cambridge critics of orthodoxy are brought to censure for their "remarkable absence of attempts at empirical verification" by both Stiglitz and Blaug. The usefulness of the neoclassical aggregate growth model in a quantitative sense is however posited as a matter of faith, and not because of its empirical robustness. A qualitative question is thus reduced to one of spurious quantitative signification.<sup>10</sup>

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<sup>10</sup> At the same time, it is argued either that the "true" version of neoclassical theory is one without any capital aggregate, i.e. a completely disaggregated general equilibrium framework (Samuelson) or that the theory could be easily generalized to include "perverse" possibilities - just as the consumer's theory embraces Giffen goods (Solow). What emerges from the 1975 statements of Samuelson and Solow is that it is impossible to derive empirical generalizations from "true" neoclassical theory. There are no deductive propositions in the neoclassical theory of distribution as regards the sign of the relationship between factor intensity and relative factor prices that can be submitted to empirical refutation/corroboratorion. This holds because in the Samuelson case we can find

## **In Conclusion: What Lay Behind "That's Not the Point At All"**

Following Hall (1977, 1993), we identify three different positions from which decodings of neoclassical metaphors may be constructed in the context of the Cambridge Capital controversy. We posit that there is no one-to-one correspondence between the two parts of the process of transference of a message (concept); i.e. decodings do not exist as some well-defined *function* (a one-to-one mapping) from the domain of encodings. This helps to deconstruct the common-sense meaning of "misunderstanding" (a perennial complaint of the participants in the debate) in terms of a theory of *correspondence*, i.e. of *systematically distorted communication*.

When the decoder takes the connoted meaning and reads (decodes) the message in terms of the reference code in which it has been written (encoded), we might say that the decoder is operating within the *dominant code*. This is the ideal-typical case of "perfectly transparent communication". Within this we can distinguish the positions produced by the *professional code*. The professional code decodes and then re-encodes a message which has already been signified in a hegemonic code (a dominant meaning system), applying criteria and transformational practices of its own, essentially those of a technico-practical nature.<sup>11</sup> The professional code serves to reproduce the dominant definitions by operating with displaced professional codings which foreground apparently neutral-

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empirical counterparts only at the aggregate level, and in the Solow case the proposed generalization leaves the sign indeterminate (Salanti, 1982).

<sup>11</sup> The definition of a hegemonic viewpoint is (a) that it defines within its terms the mental horizon, the universe, of possible meanings of the relevant semiological system (formal economic theory in our case), and (b) that it carries with it the stamp of legitimacy - it appears coterminous with what is "natural" about a sign system (the rational agent in economic discourse) (see Hall, 1993).

technical questions. The interventions on the neoclassical side of the debate are essentially of this form.

Decoding may be said to be carried out within a *negotiated code* when the version decoded contains a mixture of adaptive and oppositional elements: it accepts the legitimacy of the hegemonic definitions with respect to the grand (abstract) significations while insisting on its right to make a more negotiated application to "local conditions", i.e. on its right to make exceptions to the rule in specific (situated) contexts. Arguably, most 'misunderstandings' in the context of the capital controversy arose from the contradictions and disjunctures between hegemonic-dominant encodings and negotiated-corporate decodings. The Cambridge, U.K. deconstruction of the neoclassical dominant-hegemonic meanings began as a negotiated-corporate decoding. As the debate progressed, however, it progressively turned into what can be termed the *oppositional code*. A subject may be said to be operating within the *oppositional code* when she decodes messages in a globally contrary way. The subject detotalizes the message in the preferred (hegemonic) code to retotalize it within some alternative (self-contained) framework of reference.

By the late sixties and early seventies, for most partisans of Cambridge, U.K., and especially for Garegnani, Harcourt and Robinson, the negotiated-corporate decoding had been displaced by a full-blown oppositional code. Hence the neoclassical cavil that for the Cambridge critics, neoclassical theory is (unfairly) read as (bourgeois) ideology, and in essence a justification for the political status quo. Or so the myth is told.

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