Inflation: Economists and Economic Cultures in Brazil and Argentina

FEDERICO NEIBURG

Social Anthropology, Museu Nacional, Federal University of Rio de Janeiro, Brazil

> . . . never remains the same, but changes from
> day to day [and often]. . . nobody knows what a
> particular coin is worth, and money as to be dealt in,
> bought and sold, or changed from its value.
> A thing which is against its nature.
> ———Nicolas Oresme, De Moneta, c.1360

In the middle of fourteenth century in Western Europe, a turning point occurred in the modern inquiry into the nature of money. While political unification of the states made monetary standardization and centralization key issues (establishing the distinction which still exists today between authentic currency and spurious or quasi-currencies), some of the wisest minds of the period, such as Nicolas Oresme, speculated on the reasons and consequences of the rapid loss in the value of money. The Black Plague, which took lives but not goods, left an accursed legacy: inflation, fed by the excess of wealth in the hands of survivors, dedicated to a 'sumptuous consumption.'

Oresme's theories had a practical purpose: to suggest mechanisms for establishing the price of the monetary units minted by Europe's monarchs and which, at the dawn of modernity, were increasingly present in everyday exchanges between people.[1] Oresme was one of the first examples of a

Acknowledgments: This text is the result of a research project in progress on economists and economic cultures in Brazil and Argentina. This work has been developed with the support of a grant from the John Simon Guggenheim Foundation. Preliminary versions, on which some parts of the present article draw on the fields of economists in Brazil and Argentina, were published as "Commentários a propósito das heterodoxias: Economistas e culturas econômicas no Brasil e na Argentina," which appeared in the journal *Tempo Social* (16:1, 2004) and presented in the seminar "El comparatismo como problema," organized by the Intellectual History Program of the National University of Quilmes (Buenos Aires, December 2003), and the seminar "Redes Intelectuais e História Social da Cultura," organized by the Departments of Sociology and Anthropology of the University of São Paulo (São Paulo, August 2004). My thanks to all the colleagues who kindly discussed my work on these occasions. I also wish to thank the anonymous reviewers of *CSSH*. The article was translated into English by David Rodgers.

[1] Oresme gained notoriety after being designated financial advisor to/for the king Charles V. J. Kaye has suggested connections between the theories of money of Oresme and other scholars, and those of neo-classical economists (1988: 253, 258–60).

figure with which we are highly familiar today: the money doctor—called upon by the ruling classes to eradicate a problem to which their own presence lends the air of a public catastrophe: monetary instability (see Drake 1994). Faced with diagnoses warning of their own dissolution due to the uncontrolled action of the 'virus of inflation,' a disease capable of turning a currency against its own 'nature,' societies subjected to 'emergency treatments' have provided an especially lucrative field for the practice (and theorization) of economists.

In the last decades of the twentieth century, Brazilians and Argentineans experienced repeated monetary crises and therapies. As the value of money became a primary motive of collective concern, key decision-making spheres at state level—and increasingly prominent positions at public level—began to be occupied by economists, these intellectuals rarely identified as such by intellectuals who study intellectuals. The modern money doctors were identified by themselves and others as 'heterodox.' They sought to legitimize their therapies for stabilization by appealing to different principles to those used to justify the formulas implemented in the past, with the aim of avoiding some of their 'negative collateral effects' such as recession and unemployment. In so doing, they put into practice devices that implied radical changes in the economy's 'rules of the game,' establishing, among other measures, price freezing, wholesale revisions of contracts, and new national currencies (in Argentina, the first heterodox plan determined the end of the peso and its replacement by the austral in June 1985; in Brazil, the cruzeiro gave way to the cruzado in February 1986).

The architects of these heterodox plans also manifested a singular combination of social features. First, there was intense participation in local political processes, dominated by the transition of military dictatorships to democratic governments. Second, educational training of economics faculties in their respective countries allowed them an intimate knowledge of the economic theories produced by the previous generation of economists, made up of individuals who had modernized the discipline in the region while also being employed as technical advisors by the state. And third, further training at top universities in the United States gave them a relatively high capital of international relations and the knowledge of how to wield the universal and neutral language of numbers (an aspect which for some people makes economics the only true social science). The latter was a condition for acquiring reputation, transforming their countries and the heterodox experiments into real-life laboratories for theoretical speculation, and practical implementation of economic policies at an international level.[2]

[2] A privilege which these countries have shared not just with other Latin American nations, but also—especially—with Israel during the 1980s and with various Eastern European nations during the 1990s.

The recent literature on economists and the economic history of these countries has focused on describing the transition between the predominance of 'developmentalist' models during the 1960s to the preponderance of 'neo-liberal' paradigms in the 1990s. The turning point of this transition is identified in this literature as the launch of the last generation of stabilization plans: the Convertibility Plan in 1991 in Argentina and the Real Plan in 1994 in Brazil. Perhaps due to the excessively panoramic nature of their surveys, even the best works produced from a comparative viewpoint have tended to ignore the heterodox experiments, or merely subsume them (based on anachronic projections) into "the predecessors of the neoliberal era."[3]

This article examines these experiments much more closely, for three reasons. First, by materializing the heterodox ideas and policies developed by local therapists, these stabilization plans provide an ideal field for studying the transformational dynamic in the relationships between economic knowledge and economic therapies at both national and international levels. This enables a more detailed appraisal of the links between the intellectual and state elites in each country. Second, these stabilization plans crystallized a long history by the end of which not only specialists had converted monetary instability into a central concern: the populations too had learned to live with inflation and the treatments designed to eliminate it. They had constructed ways of coping with the continual price increases, composed interpretations of the devices developed by economic professionals, and conceived ways of both defending themselves and taking advantage of the instability. Finally, at a more strictly theoretical level, the social and cultural history of inflation outlined in this article lends support to my argument concerning the relations between economic theories and economic cultures. Taking a slightly different tack to interpretations that tend to reduce such relations to one of simple causality, where economics determines the economy, or vice-versa, I propose to examine the complex and historically situated relational dynamic that connects economic theorist and their theories to the economic cultures they themselves have helped to generate.

Historical sociology has amply demonstrated the value of comparisons in understanding the processes involved in the circulation of economic ideas, the mechanisms for importing policy models, and their impacts in transforming national states.[4] But, generally speaking, this literature has limited its critical gaze to the specialists in economy and politics, without considering the processes through which 'economic' forms of perceiving and acting in the social world are diffused beyond the narrow universe of these specialists. This article proposes various lines of analysis that will enable us to examine this little explored area. In so doing, my description shifts continually

[3] Such as Dezalay and Garth (2002) on Mexico, Chile, Brazil, and Argentina, and Fourcade-Gourrinchas and Babb (2002) contrasting Mexico and Chile with France and the United Kingdom.

[4] In addition to the works listed in note 3, we can give special mention to Hall (1989) and Weir and Scokpol (1989). In relation to Latin America, see also Sikkink (1991) and Love (1994).

between the economists themselves, the modulations in the national public spheres (and particularly the economic public spheres, which in the period under consideration were fully structured, peopled by journalists, and specialized means of communication), and what—for want of a better term—we can call "economic cultures." The latter refers to social dispositions mobilized by individuals within what specialists conceive as the economic dimension of social life; or, put otherwise, native forms of representing and acting in economic life (see Bourdieu 1977; Gudeman 1986). Rather than becoming embroiled here in a theoretical discussion concerning the concept of economic cultures, I intend to use the term as a heuristic device that enables us, in the tradition of the historical sociology of culture inaugurated by Max Weber, to focus on the interplay between the academic and practical use of categories that serve to think and act in the economic world (or to act and think economically in the social world).

THEORIES AND CULTURES OF INFLATION

Since the end of the Second World War, and especially since the 1950s, a key issue for Latin American economists or others interested in the region has been the nature and origins of inflation (sometimes though not always seen as one dimension of the question of economic development). Debate quickly crystallized into two mutually recognized schools or currents. On one side were the structuralists, who expounded a global view of the interaction between productive sectors. They placed the main responsibility for price rises on 'strangulations,' especially in the farming sector (in other words, they emphasized goods supply). On the other side were the monetarists, much closer to the orthodox or neo-classical approaches, who centered their interpretation of inflationary phenomena on the abundance of money, and stressed the effects of excesses in demand.[5] The dispute also acquired a more tangible form thanks to the involvement of a series of figures who, recognizing and being recognized by the two schools, maintained an equal distance from both, presented themselves as independent, and emphasized other dimensions of inflationary phenomena (for instance, tax structures).[6]

[5] The participation of economists identified with the structuralist tradition in designing stabilization plans such as the Austral during the 1980s can be seen as proof of the "victory of inflation" over these economic theories, which until then had striven to classify monetary instability as an epiphenomenon. This was truer in Argentina than Brazil, as we shall see.

[6] On the structuralist side, one of the first systematic formulations is the text by Sunkel (1958); on the monetarist side, Campos (1986[1961]); among the various 'independent' authors we can mention Olivera (1960; 1967) and Simonsen (1964; 1970). One of the debate's main settings was a conference held in January 1963 by the Getúlio Vargas Foundation in Rio de Janeiro. The works presented there can be found in Baer and Kerstenetzky (1964). The best panoramic survey of the past history of debates on inflation in Latin America (since the mid-nineteenth century) is the work by Hirschman (1963) on the Chilean case. For the history of Brazil, there are useful sections in Rangel (1963) and Simonsen (1970). For Argentina, in the period immediately prior to that discussed here, see Mallon and Sourrouille (1973), Gerchunoff and Llach (1998:

The sheer density of the dispute highlighted the existence of a field of relatively autonomous professional economists in a range of Latin America's countries (such as Argentina, Brazil, Chile and Mexico) with their own institutions for training novices and disseminating theories and policies (indeed various actors in the debate occupied key positions in this field. The discussion bestowed a degree of international prestige on a number of these protagonists, since it made the region fairly attractive to international academic circles as a space 'good to think' the problem of inflation. Nonetheless, despite the considerable attention given to monetary instability, as Albert Hirschman remarked two decades later, inflation in Latin America still became "omnipresent, lasting over an extensive period, so that today [in 1980] it seems to be familiar and almost 'normal' " (Hirschman 1984[1981]: 247).[7]

Reflecting on the causes of this persistence is an obsession for economists and will probably remain so for the foreseeable future. Yet an anthropologist or historian interested in inflation—not as an economic occurrence, but as a social and cultural fact—cannot avoid being drawn to one of the underlying aspects of the phenomenon usually only considered by economists in relation to their internal disputes (that is, as a means of disqualifying adversaries accused of being responsible for the creation of defective models or failures in the implementation of particular policies). I refer to the involvement of the economists themselves in developing a veritable pedagogy of inflationary economics: devices and technologies that enable the populations (or 'economic agents') to learn to live with monetary instability, protecting themselves from its negative effects while exploiting the opportunities it opens up.

Perhaps the most critical period for observing this process of economic cultivation is the 1960s, and perhaps one of the most critical issues in terms of revealing the mechanisms used in the pedagogy of the inflationary economy was the proliferation of price measurement indexes during this period. While discussing the origins and nature of inflation and proclaiming monetary instability to be one of the worst obstacles to economic

195–99, 208–12), and Berrotarán, Gilbert, Rougier, and Tenewicki (2004). More generally, it is worth mentioning the increasingly frequent appearance of the theme of inflation in publications and congresses of economists in Argentina, Brazil, and other countries from the region from the second half of the 1950s and throughout the 1960s. It is beyond the present article's scope to study the relations between this Latin American debate and the preoccupation with monetary instability evident in the United States during the same period. That topic is approached by Sargent (1999), among others.

[7] Since 1960, the yearly inflation indices in Brazil and Argentina have always been in two digits. In Argentina, the annual percentage rates rose above the 100% mark from 1975 onwards, reaching a peak of almost 5000% in 1989. In Brazil, inflation stabilized in three digits after 1982, dropped to two digits in the year the cruzado was introduced and reached more than 1000% in the years in the run up to the launch of the Real. It is worth mentioning the main "standard of normality" used by specialists: in the United States, inflation hit two digits only between 1979 and 1981 (attaining a maximum of 13% in the latter year).

development, specialists formulated hypotheses concerning the limits of tolerable inflation (a topic of interest to both currents in fact).[8] At the same time, countries like Brazil and Argentina witnessed a rapid proliferation of price measurement indexes, impelled by a dynamic still visible today: implementation of each new stabilization plan typically demands "new and better technical resources," while economists and economic think tanks compete in a marketplace of ideas and policies, developing and selling indexes which will be consumed in the public economic sphere—increasingly swamped with bulletins published by companies and associations, high circulation magazines, journals, and specialized informative sections (all of which, in turn, expand the labor market for economic professionals).

Undoubtedly, the history of index numbers extends even further back in time. In Argentina, they were introduced by Alejandro Bunge in the 1920s (see Pantaleón 2004). In Brazil in 1944, the Getúlio Vargas Foundation (FGV) created the oldest index still in use, the IGP-DI: General Price Index—Internal Availability. But the 1960s onwards saw a proliferation of indicators that mirrored the proliferation of institutions populated by economists. On the other hand, some of these institutions, such as FIEL in Argentina or the FGV in Brazil, were pioneers in the implementation of strategies aimed at disseminating indicators that they themselves produced via the press, providing courses in economic training to journalists. Index numbers were transformed into public numbers (Porter 1995) and were increasingly quoted in the broadcasting media, in specialized journals, in the recently created financial information supplements, and in the headlines of national newspapers.

This sudden boom in price measurement indexes—based on this dynamic involving an expansion in the field of specialists, competition between the institutions producing indexes, and their circulation in the public arena—led to changes in perceptions of monetary value. Or perhaps it would be more accurate to say that this boom accentuated forms already present, providing them with distinct modulations. The new price indexing technologies segmented public perceptions of economic space. An apparently infinite number of specific indexes were developed for specific markets, thereby helping perform a phenomenon that index numbers were intended simply to describe: 'market segmentation.' 'Essential' goods, 'seasonal' goods, 'educational' goods, and many other niche markets emerged. Furthermore, variation aggregation units appeared and were published by the press in ever-shorter intervals—weekly or even daily. Hence, the growing sophistication of scientific forms of describing price relations (and of dreaming up theories to explain

[8] As is well known, even in the current debates, those identifying themselves as inheritors of the structuralist currents support the introduction of liquidity in the market to stimulate economic growth. It is more difficult to discover this same type of theory in the political practice of economists identified with monetarism, like Roberto Campos in Brazil or Krieger Vasena in Argentina (both government ministers during the 1960s).

the changes in these relations and ways of conducting or controlling them) was paralleled by an accelerating perception of time in terms of the economic dimension of social life.

At the same time, the rapid proliferation of price indexes was a central factor in the generalization of a highly quantitative and numerical representation of inflation, consistent with the canonization of certain monetary therapies and therapists: the "number wizards," as a Rio de Janeiro paper dubbed them in 1986. In Brazil, the first shoots of this process can be traced back to the eve of the 1964 coup d'état, recognizable in the demands for 'more and better statistics' circulated in the press by some of those calling for the end of João Goulart's government, precisely because of its alleged failure to control prices. From our present perspective, inculcated by a quantitative perception of inflation, the debate back then appears somewhat surreal. Brazil at the time lacked any 'reliable' national price indexes. What deserved more credence, according to some of these backers of the coup d'état, was, for example, the price index for the state of Guanabara, which was produced by the Getúlio Vargas Foundation and had a statewide reach. This accentuated the paradox that those discussing the problem and denouncing the government's failure to contain the 'tiger of inflation,' or the insupportable effects of the 'whiplash of price increases,' based this denunciation on a repertoire of qualitative formulas which itself revealed the government's supposed incapacity to conceptualize the phenomenon. In order to treat an affliction 'vaguely' perceived through these categories (it was said, "every Brazilian citizen can feel the disease in their pocket"), precise diagnostic tools were required which were capable at the same time of providing the cure.

The diffusion of index numbers and their transformation into a new kind of social weather forecasting—along with the diffusion of their own particular forms of perceiving time, increasingly present in the lives of populations integrated into the market—became central to the crystallization of the sense of 'urgency' surrounding the launch of each new 'packet of economic measures' or stabilization plan intended to save countries like Brazil and Argentina yet again from inflationary crises, transformed into full-scale national crises.

But the pedagogy of numbers also found other outlets in the 1960s. This was a time of increased expectations concerning 'social mobility' and a boom in consumption among the swelling urban middle classes. The period was marked in particular by the proliferation of means of payment: credit cards, checks, and savings and loan systems for purchasing houses and apartments, cars and household electrical goods, lifestyle objects central to 1960s paradigms of modernity and comfort.[9] As a way of 'stimulating development,'

[9] In Argentina, the first credit cards were announced in October 1969. In Brazil, the use of checks for ordinary daily purchases (certainly an original practice from a comparative perspective) also began to become widespread toward the end of the 1960s.

governments, business associations, banks and investment agencies also strove to broaden the stock markets. They not only encouraged small and medium sized companies to launch shares, but stimulated individuals who had learned to invest in assets to buy private and public shares as a way of 'beating' inflation.[10]

And yet, while they denounced the calamity of price increases and designed and implemented successive stabilization plans, the specialists employed by the state to manage the economy put into operation devices that disseminated the culture of monetary instability. One example: In a speech transmitted in July 1962 by the National Radio and Television Network in Argentina, the transitory Economic Minister Álvaro Alsogaray declared that "the country faces the worst economic crisis in its recent history." He then announced the launch of the "July 9th National Loan," a public bond whose value "will not be affected by inflation." The minister called on people "in every city, in every village, in every school, in every factory, in a word, in every place where the Argentinean spirit can be found, to organize commissions, discuss, encourage and develop the idea of the loan."[11] He also announced that commerce and business leaders would soon receive and pay debts in these bonds instead of currency. A few weeks later the decision was taken to pay part of the wages of public employees in "July 9th Bonds." Another example is the 1964 Government Economic Action Program (PAEG) launched during the military regime in Brazil under the Government of Marshal Castello Branco, and designed by Otávio Gouveia de Bulhões and Roberto Campos. The PAEG ushered in a process of institutionalized indexation of the economy unparalleled in any other national context. It included the invention of so-called "monetary correction" and the readjustment of contracts and salaries in accordance with the variations of a virtual currency which went on to enjoy a long life in the country: the Re-adjustable Obligations of the National Treasury (ORTN).[12]

That similar devices failed to take root in the same way in Argentina is undoubtedly one pointer to the lower density of the state field in that country in comparison to Brazil. Caution needs to be taken, though, when comparing their respective economic cultures: in terms of constructing mechanisms for interiorizing monetary instability, the implementation of the same policy over a relatively long period may be just as effective as the adoption of a series of heterogeneous and discontinuous policies that force economic

[10] Indeed from the end of the 1950s, the campaigns to attract investors into the stock market expanded: endless leaflets were produced with financial information distributed in the City areas of Buenos Aires and São Paulo, and new manuals were published for non-specialists on how to invest. In more institutional terms, for example, national seminars of the "Program for development of capital markets" were promoted. They were organized by the Latin American Centre of Monetary Studies (CEMLA), set up in 1952 by the region's Central Banks.

[11] *El Cronista Comercial*, 10 July 1962, 1.

[12] For a contemporary analysis of this process, see Gudin (1967).

agents to continuously learn new rules of the game. Moreover, not everything takes place at the level of public policies—as the proliferation in methods of payment clearly shows, the market 'acts' with a relative autonomy. Finally, not everything is restricted to the universe of rules. As we know, sometimes these rules end up incorporating habits developed by agents to skirt round them.

In any case, the aim of this paper is simply to outline the more general lines of a comparative cultural history of inflation. The above account is sufficient, I hope, to advance one of my central hypotheses—that the economists have always contributed decisively to the making of the social and cultural fact of monetary instability through a complex and dynamic interplay between the production of their theories (and the application of the economic policy devices) and the economic cultures of the populations subject to these policies and which they tend to transform.[13] One outcome of the contribution made by economic professionals to the social construction of monetary instability can be seen in the academic, political, and even commercial or financial careers pursued by many of them nationally and internationally. Another can be observed in the transformation of the language of monetary economics into a set of meanings shared by wide cross-sections of the urban populations of the countries where inflation ended up becoming, in the words of Hirschman cited above, "something familiar and almost normal" (1984: 247).

Two further points derive from this observation. The first will have to be explored more fully elsewhere: this concerns the usefulness of reconstructing the slow and lengthy process of economic cultivation as a way of gaining insight into individual and collective behavior during moments of hyperinflationary crisis.[14] These moments undoubtedly form ideal opportunities for exercising economic pedagogy,[15] but only insofar as they are able to mobilize already incorporated dispositions, including those acquired during periods of relative stability and well being.

The second point relates to a topic central to my argument and requires a more lengthy treatment. It concerns the relations between economic science and other areas of social life, a subject which has aroused widespread interest

[13] For the sake of conceptual precision, and to capture the distinctive polyvalence of this specialization in the contemporary world, I prefer to use a Weberian-inspired expression "economic professionals" rather than "economists" to refer to those individuals dedicated to living 'off' and 'for' economics: employees of international agencies and governments, academics, journalists, stockbrokers, and the like.

[14] An undertaking that would allow us to benefit further from the descriptions already available, such as the proposals for the Argentine case by made Spitta (1988) and Sigal and Kessler (1997). For an approach on the intensification of consumption in the Brazilian hyperinflationary conjuncture, see O'Dougherty (2002). For an analysis of the relationship between the perceptions of time and perceptions of economic crisis, see the suggestive essay by Lomnitz (2003) on the Mexican case.

[15] Dixon (1998: 47–60) and Lebaron (2000: 176–81) suggest this apropos Great Britain and France, respectively.

following publication of the volume edited by Michel Callon, *The Laws of the Market*. In the book's introduction, Callon advances the hypothesis that the effects of economic theory perform a crucial role in shaping economic life. By this he means that, in his own formulation, the "economy is embedded not in society but in economics" (Callon 1998: 30). He refers vaguely to John Austin's theory of speech acts (1972) and more immediately, albeit no more explicitly, to Pierre Bourdieu's ideas (1981) concerning the 'effects of theory' on social life.[16] Callon employs these to propose an investigative agenda committed to studying the performative effects of economics on the economy.

This proposal has provoked two main criticisms. The first has questioned the idea that the impact of economics on the economy is to produce a purification (or disentanglement) of transactions, formatting them according to the theory of the self-regulating market, which presumes isolated encounters between abstract agents guided by a pure economic rationality. In what seems to be a new version of the old dispute between partisans of formal or substantive interpretations of the economy (which agitated the so-called economic anthropology of the 1950s and 1960s), authors such as Daniel Miller (2002) have shown that this kind of disentanglement is never really produced, or that, in any case, the economic formatting devices manufactured by economics tend *themselves* to become entangled in transactions, which are always something more and other than purely economic transactions. In this sense, we have to agree with Miller and others taking the same line: Callon does no more than reproduce the optimistic view that the economists themselves have concerning the effects of their theories on social life.

The second line of criticism has been concerned less with the merits of Callon's hypotheses and more with the effectiveness of his demonstrations. As Donald MacKenzie and Yuval Millo argue, the formatting process still awaits fully convincing empirical proof, and this is what they dedicate themselves to accomplishing (2003). Indeed, the main merit of their work is to produce a detailed historical reconstruction of both the role of economics in the organization of the financial derivative market, and the limits imposed on it by other (cultural and moral) dimensions of the social lives of the agents caught up in this history.

However, I think that despite its various productive aspects, this debate fails to touch on some of the central points concerning the relations between economic science and economic practices.[17] I wish to call attention to three of these points, all of which take on a somewhat different aspect in light of the cultural history of inflation in Brazil and Argentina presented in this article.

[16] He does so via an extensive commentary on an earlier work (Garcia 1986) which uses Bourdieu's notion to capture the process through which the ideal of the perfect market is actualized in a concrete case.

[17] Regarding this debate see also Callon 2005, Aspers 2005, and Miyazaki 2003.

The first point requires that we set aside the unified notion of economics shared by Callon and his critics, which attributes both homogeneity and agency to the theory (treated always in the singular), and substitute a more nuanced view of the relations of interdependence and competition between theories and, more importantly, between their producers and disseminators. The discussion of the performativity of economics seems to forget that it is also a concern of professionals, ever attentive to the practical effects of their investigations. Specialists usually measure a theory's excellence by the efficiency with which, for instance (at the micro-economic level), the prices of a particular product converge toward a new index, or (at the macro-economic level) by the drop in inflation rates occasioned by a new stabilization plan. However, it is clear that in the more sophisticated views of some economists the theoretical precision sustaining an index or policy is a necessary but insufficient measure of its success. With this in mind, I argue that the way to transcend the vision which the professionals themselves possess of the relations between their own theories and the social world on which they act then we must undertake a historical and comparative sociology of the relations between economics and the economy. This project must be at once a historical and comparative sociology of economic theories (in the plural) and of the economic professionals who are at the same time policy makers, scientists, and market agents.

The second point relates to the 'undesired effects' of economic theory. Up to now this appears to have received little attention from analysts, although specialists themselves *do* frequently consider such problems when denouncing harmful consequences or errors of a specific policy or technology produced by colleagues. The view proposed in the previous section concerning the role of economic professionals as veritable pedagogues of monetary instability (producing technologies and categories for conceptualizing inflation and for economic agents to be able to deal effectively with the phenomenon) indicates the degree to which the specialists contribute to propagating the disease they themselves, as money doctors, aim to cure (once again).

The last point concerns the very notion of "effect" and the theory of causality underlying the idea of performativity. This should become clearer in the next section when we observe the complex relations between the devices for combating inflation, such as the currency conversion tables and the virtual currencies, and the cultures of inflation. My focus on macro-economic processes is perhaps responsible for shedding light on another dimension ignored until now in the discussions on the relations between economics and economy, which, generally speaking, deals with micro-economic topics. The double nature of the inflation indexes contains a magic abundantly present in similar devices elsewhere: at the same time as looking to describe the empirical behavior of economic agents in the past, they also claim to shape future behavior. As extreme examples of instruments that simultaneously describe and prescribe, index numbers encapsulate the entire dynamics and circularity of relations between economic theory and economic cultures that the theory of performativity fails to observe. It fails due to its simplistic notion of causality, which always places economics over economy. As we shall see, produced by the dynamic intrinsic to the relations of interdependence and competition within the field of professionals, the indexes (like the virtual currencies or the conversion tables between currencies and indices) look to interpret and track pre-existing cultural mechanisms at the same time as they themselves transform into cultural devices, possessing wider and different effects to those originally foreseen by their creators. Furthermore, they impact on economics itself. With all of this in mind, let us turn to examine this complex world a bit more closely, focusing on a number of episodes from the recent history of inflation in Brazil and Argentina.

NATIONAL CRISES AND THE TIME OF THE HETERODOXIES

On Monday, 22 April 1985, the daily papers in Buenos Aires headlined the start of the trial of the Military Juntas that had governed the country between March 1976 and December 1983. With an exceptional intensity, Argentineans were exposed to their recent past, marked by mass killings, torture, exiles, and proscriptions. On the same day, President Raúl Alfonsín publicly declared that the fledgling democracy was already under threat and called on the country's citizens to gather that Friday in the Plaza de Mayo, Argentina's main political and symbolic center. More than 200,000 people responded to the call. However, in an unexpected turn to the speech given from the balconies of the Casa Rosada, and broadcast throughout the country via radio and television, the head of state scarcely referred to the supposed military coup. Instead, he proclaimed that the main national threat was inflation—more precisely, the fact that "Argentina's currency has vanished." Alfonsín warned that restoring its value would demand imposing a "war economy," and added, "We should all start to come to terms with what this means."

As we have seen, Argentineans had lived with very high inflation rates for a long time. Although annual figures had always been in three digits over the previous decade, democracy seemed to accentuate the instabilities, and a number of voices had warned for months about the potential political consequences of the exponential price rises over the short term. Inflation reached 343 percent in 1983, and hit 688 percent in 1984, the first year of Alfonsín's mandate. This provoked the replacement of the government's first economic cabinet by February the following year. As a result, although the crowd had dispersed from Plaza de Mayo fairly stunned by the way events had unfolded, everybody had—as the president himself suggested in his speech—sufficient inkling to understand what he was talking about. From that point the "Argentinean crisis" became a synonym for monetary instability. Emergency treatment would be necessary to pull the nation from the brink of disaster.

A little less than three months later, on 14 July, Alfonsín once again addressed the Argentine people, announcing a far-reaching plan to "put an end to inflation and save democracy." When the political system is at stake, he stated, "it is no longer possible to think in gradualisms"; instead, a "shock policy" is called for. The president was followed by the Minister Juan Sourrouille, who explained the details of the key elements of the plan, which would be put into action immediately: a general price freeze to end the economy's indexation, substitution of the peso with a new national currency, the austral, and revision of all futures market contracts, applying a rule of conversion or '*deságio*.'

The austral took almost six months to reach the streets and several weeks went by before the old peso notes began to circulate stamped with the new sign. While the public had to apply a mental conversion rate, excluding three zeros from the nominal values (1 austral was equivalent to 1,000 pesos), the government and the principal economic agents—banks and companies—bombarded the public with the new plan via the media. Some of the publicity was pure hype, such as a marketing blurb issued by the Banco Español which celebrated, "The strong currency. Putting an end to the *peso* of uncertainty."[18] The government itself announced: "The austral is a strong and robust currency, free from the burden *peso* of inflation." But the country's citizens were also presented with the plan's sophisticated monetary devices, such as those found in the simulations of the daily conversion table between old and new currencies, which was to be used to calculate salaries, rents, quotes, and so on for the foreseeable future. For example, in a vignette broadcasted and published in newspapers, a teacher explained the following formula on a blackboard using a cane:

HOW TO PAY A DEBT CONTRACTED BEFORE JUNE 15th
TODAY, JUNE 19th, IN AUSTRALS

If you are due to pay $10,000, applying the conversion scale for June 19th of 0.966618, you should now pay:

$$\frac{10{,}000 \times 0.966618}{1{,}000} = 9.666$$

In other words, you should pay: **A** 9.666

This complexity provoked a wide range of responses. Some stressed the difficulties this mechanism for converting between currencies for future contracts would probably cause among non-specialists. As a columnist from the newspaper *Clarín* noted with a touch of irony, the term used for the conversion

[18] A play on words: here the term *peso* implies both the supplanted currency and the idea of "weight" or "burden."

between currencies, *deságio*, a neologism used by the "authors of the ingenious plan," "derives from the Latin *aggio*, the profit produced in exchange, but it is open to confusion and is worth clarifying" (17 June 1985, p. 22). On the other hand, many people could look back to not-so-distant past experiences for help in navigating their way through the present, such as the 1970 substitution of the national currency (with the conversion of 100 old pesos to one peso lei), or the peso/dollar conversion table (*tablita*) implemented by the minister Martínez de Hoz between 1978 and 1980. (The latter, conceived as a form of combating inflation, was a first attempt to dollarize current transactions, establishing the future quotations of the U.S. dollar.)[19]

Who were the austral's ingenious therapists? All were professional economists, in stark contrast to those who had previously run the governing party's economic policies (like Alfonsín's chief economic minister, Bernardo Grinspun, an accountant). After graduating from the University of Buenos Aires, many had gone on to obtain doctorates in the United States—José Luis Machinea in Minnesota, Daniel Heymann in California, Mario Brodersohn in Harvard, and Adolfo Canitrot in Stanford. They produced theses that dealt more or less directly with inflation from non-monetarist perspectives, and thereby enriched the work of various relatively celebrated professors in the United States who studied monetary instability and economic growth in underdeveloped countries.[20] Only the minister Sourrouille had previously held high posts in the state field, as the first director of the National Institute of Statistics and Censuses, INDEC, founded in 1968.[21] Sourrouille had also lived for a time in the United States working at Harvard alongside the Latin Americanist Richard Mallon. The two had met at the Economic Commission for Latin America and the Caribbean (ECLAC) in Chile.[22] This raises another

[19] Changes in national currency, with the implementation of equivalences between old and new denominations, have been especially important processes for spreading and interiorizing cultures of monetary instability: in Argentina, since 1969, pesos moeda nacional, pesos lei, pesos convertíveis and pesos; in Brazil, since 1967, cruzeiro, cruzeiro novo, cruzeiro, cruzado, cruzado novo, cruzeiro, cruzeiro real and real.

[20] This was the case of the youngest member of the team, Heymann, who produced his thesis at the UCLA under the supervision of Axel Leijonhufvud, at the time a renowned professor but, as a Neo-Keynesian, also an outsider (Snowdon 2003). His interest in understanding contexts of extreme monetary instability beyond the scope of the theory of general equilibrium made him (in the words of Heymann, in an interview with F. Neiburg, Buenos Aires, 11 Nov. 2003) especially attractive to students coming from countries with a tradition of inflation and who, for theoretical and ideological reasons, preferred not to undertake their doctorates in economics departments identified with the monetarist mainstream. That is, they looked for ways of combating inflation without implementing regressive policies in terms of income and employment. The collaboration between professor and student produced a number of fertile results, as can be seen in Heymann and Leijonhufvud (1995), in which they review the experiences of Argentina, Bolivia, Brazil, Israel, Mexico, and Peru during the 1980s.

[21] Although almost all of them had worked as experts in state institutions (such as INDEC itself, or the National Development Council, CONADE) before or after their stays in the United States.

[22] Interviews given by J. Sourrouille to F. Neiburg, Buenos Aires, 7 Oct. and 6 Nov. 2003.

structuring factor of the group: their participation in the Latin American circuit that moved between ECLAC (in Santiago and its branch offices) and other international agencies and academic centers with head offices in the United States.[23] In Argentina, two institutions played a central role in these connections, and raised the profile of their members in the local political and academic scene: the Centre of Economic Investigations of the Torcuato Di Tella Institute, and the Institute for Economic and Social Development (IDES), created in 1958 and 1960, respectively (see Neiburg and Plotkin 2004). During the military dictatorship that preceded the arrival of these young economists into the highest positions in the state administration of the economy, IDES, in particular, converted itself into a think tank that included many of the Austral Plan's future designers and managers. For most of this period IDES was under Sourrouille's direction.

Looking back, it is easy to imagine the intellectual excitement felt by these money doctors when political tides swept them into a position where they could apply their knowledge to saving the country and democracy.[24] In fact, they comprised a handful of individuals who met for hours and hours, day and night, virtually in secret since much of the plan's success depended on reaching 'D day' without the details leaking out to the markets.[25] They were passionate about their task, and developed a highly original laboratory experiment, working out the minutiae of devices which would "totally re-design people's lives" and which—as a central factor for their success—had to be announced at just the right moment:

> It was all quite remarkable... A program that began in February 1985 as a seminar ... with the idea of thinking about what could be done, shock tactics, a gradual approach, the tax issue, inflationary inertia. ... Things came together bit by bit in a logical form: if we stop the inertia, what do we do with the indexed contracts and credits? The idea of messing with all the economy's contracts induced in us a degree of panic. The only thing tranquillizing us was neutrality. We were guided by the idea that contracts should continue to respect the conditions agreed by the parties at the time of signing, although we, via an economic policy initiative, were disrupting their relationships in a way unforeseen by them. But, in real terms, it did not alter the effective result of the contract but only at a nominal level. Most people understood this ... Argentineans understood perfectly well that a Peso wouldn't have the same value in thirty days as it had today. Luckily, the rate of 30% was already in people's heads, it helped in the calculations.[26]

[23] An experience shared by another of its members, Roberto Frenkel.

[24] Besides the interviews with Heymann and Sourrouille cited above, this account is based on interviews conducted in Buenos Aires by F. Neiburg with Roberto Frenkel (19 Nov. 2003), and Adolfo Canitrot (27 Nov. 2003); and F. Neiburg and M. Plotkin with Pablo Gerchunoff (14 Sept. 2003).

[25] Bresser Pereira and Nakano (1986) discuss the question of 'D day' for applying heterodox plans like the austral and cruzado.

[26] Interview with Heymann, as cited above. A detailed description of the plan's preparations in macroeconomic terms can be found in Heymann (1986 and 1987).

In the months running up to the launch of the austral, inflation approached 30 percent per month, without actually reaching this level. 'D day' would involve realizing (in the literal sense of making real) this magic number of 1 percent per day. When 'specialists' judged that this figure had finally transferred from people's minds to actual practices, and when the loss in the currency's value seemed to have stabilized at this new percentage, the Plan was effectively announced.[27]

This remarkable fact demonstrates clearly the dynamism and complexity of the relations between economics and economic cultures: in this case, the economic theory and the devices put into practice by the specialists, rather than performing economic practices, accompany the economic cultures of the populations that are supposed to be subject to their interventions.

A few weeks earlier, some members of the unusual 'laboratory' in which the austral was worked out had travelled to Washington, D.C. to present details of the project to the top echelon of the International Monetary Fund, the World Bank, and the Federal Reserve (almost clandestinely, some recalled, journeying on different days by different routes). Although tense, the meeting was wrapped in an air of familiarity, typical to an encounter between old acquaintances possessing the same academic and economic culture. Each side reproduced a relationship in which everyone already knew their roles: Latin American students displaying a self-assured command of English and, through their gestures, matching their fame as brilliant young minds—this in order to sell their heterodox projects, which would be put into practice for the first time.

The professors gave their approval. In reality, it was not the first time they had heard such ideas. As mentioned, these theses had been circulating in international agencies, think tanks, and the economics departments of various North American universities for some time. Indeed, at the start of December 1984, a conference sponsored by the Institute for International Economics had taken place in Washington, D.C. which included discussions on ways of ending 'inertial inflation,' particularly in Argentina, Brazil, and Israel.[28] One month after the austral was announced, a similar plan was to be launched in Israel. Seven months later, Brazil would enter the era of the cruzado. Among those taking part in this conference were two individuals who would make up the team responsible for designing Brazil's stabilization plan: Pérsio Arida and André Lara Resende.

[27] It is interesting to note the symbolic character of these numbers since, strictly speaking, 1% per day actually results in a monthly accumulated inflation rate of over 30%.

[28] The works were published in March 1985 by the MIT (Williamson 1985).

TESTING AND LEGITIMIZING THE THEORY: SOME CONTRASTS

Although the various reconstructions of the debate leading to implementation of the Cruzado Plan tend to trace different genealogies,[29] all authors recognize the pioneering nature of the Mario Henrique Simonsen's 1970 book *Inflação: Gradualismo X tratamento de choque* [Inflation: gradualism versus shock treatment]. The reason for this unanimity is perhaps due less to the work's content (given the author searches for a middle ground between the two positions) and more to the fact that Simonsen was one of the heroes in modernizing Brazilian economics. Among other things, he had been one of the founders and the first director of the Postgraduate School in Economics (Escola de Pós-Graduação em Economia—EPGE, Getúlio Vargas Foundation, Rio de Janeiro). Created in the 1970s, this institution had become central in the field of economists and since the 1980s a number of the heterodox economists had trained there.[30]

Two of them, André Lara-Resende and Francisco Lopes, had completed their master's degrees at the EPGE before traveling to the United States to obtain their doctorates at MIT and Harvard, respectively. On their return to Brazil, they joined the recently formed Department of Economics at the Catholic University of Rio de Janeiro (PUC). Its founders, Pedro Malan and Dionísio Dias Carneiro, had headed a split among the group surrounding Simonsen at the EPGE when Simonsen joined General Geisel's military government as minister of planning. As pro-democracy militants who were simultaneously strong in mathematical economics, with a many relations both at the international level and with Brazilian social elites, PUC's young economists embodied an exceptional group. They were soon joined by others who assumed key roles in the Cruzado Plan—people like Pérsio Arida, who, trained at the Faculty of Economics and Administration at the University of São Paulo (FEA-USP), had spent a time at Princeton and later coincided with Lara-Resende at MIT.[31]

At the start of the 1980s, PUC transformed into a think tank for developing and publicizing new stabilization theories and plans—the first being the Cruzado Plan. The PUC department trained various renowned economists and several young Latin Americans, among them one of the future architects

[29] For example, Arida (1986), Bresser Pereira (1986; 1989) and Rego (1986).

[30] Simonsen also collaborated with Roberto Campos in implementing the PAEG, as well as being a minister in General Geisel's government and a member of the executive board of various companies and banks (see the interview with Simonsen, in Biderman, Cozac, and Rego 1996: 189–211).

[31] Arida only obtained his doctorate from MIT in 1992. However this failed to dent his reputation as a "brilliant young mind." Edmar Bacha, who received his doctorate from Yale and was for a time a professor at the EPGE, was another PUC recruit who would later take part in the Cruzado. On the social and intellectual careers of the Department of Economics at PUC (founded in 1977), see Loureiro (1997: 65–95) and Dezalay and Garth (2002: 100–3).

of the austral, the above-mentioned Roberto Frenkel.[32] From 1984 onwards, coinciding with the final years of the military government, two works gained notoriety. Both argued the need to put an end to "inertial inflation"—in other words, the mechanism through which the rise in prices transformed into an autonomous process, driven by economic agents who acted with the aim of reproducing the past rate of inflation and its past real gains. The proposed solutions had different emphases. One text argued in favor of a period of price freezing (Lopes 1984). The other set out a sophisticated mechanism for transforming into actual currency the indexes with which Brazilians had already lived for two decades (providing another example of economic culture invading economics, and through the latter aiming to turn and orientate the economy. This was the paper presented to the Washington, D.C. conference by Arida and Lara Resende (1985), known as the "Larida Proposal." It achieved wide circulation in Brazil thanks to Simonsen himself, who sponsored the project of these young economists despite the theoretical and political differences he had held with them a decade earlier.[33]

Some of the sharp differences between the processes of legitimizing the heterodox plans in Brazil and Argentina are highly indicative. The contrasts allow us to comprehend something of the social conditions that underlie the distinct national images, which, despite their similarities, were attributed to the monetary stabilization plans implemented in the two countries during the period: Brazilian gradualism versus Argentinean shock treatment. First of all, in Argentina the relations between generations of professionals were much more heavily marked by ruptures. Brazilians were able to cite an eclectic constellation of professors in their papers (e.g., Simonsen, Rangel, Furtado, or Delfim Netto), something almost unthinkable among their Argentinean colleagues.[34] This, in turn, indicates different patterns among these segments of the intellectual and political elites: unlike their Brazilian friends, none of the young democratic Argentinean economists would admit sponsorship from (or even intellectual merit in) any employee of the previous military government. Finally, although the social biographies of both groups show various parallels, such as careers marked by social ascension through professionalization and research in the United States, Brazilian economists were typically much

[32] An article by Frenkel (dedicated to analyzing price decision mechanisms in contexts of high uncertainty or "hyperstagflation"), published in 1979 in IDES's journal, was included in the Brazilian group's system of contemporary references.

[33] The background to the development of the Cruzado Plan is well known, reconstructed by journalists (especially Sardenberg 1987 and Sola 1991) and related by many of the protagonists themselves. For example, see the interviews given by Bacha, Gonzaga Belluzo, Lara-Resende and Arida to Biderman, Cozac, and Rego (1996); and by Cardoso de Mello, Sayad, and Lopes to Mantega and Rego (1999).

[34] Perhaps the only exception was Julio Oliveira, a widely recognized academic who was never employed in a high position by the state and never had a prominent role in a private company. Even Raúl Prebisch, creator of Argentina's Central Bank in 1935, and CECLAC, in 1948, was never unanimously favored in his country.

closer to the country's fairly cohesive ruling elites. This was undoubtedly characteristic of a society more differentiated and less plebeian than Argentina's.[35]

Adding to all of the above is the fact that the heterodox theories had many focal centers of production in Brazil (not just PUC), which enjoyed intellectual prestige and good connections within the political and economic fields. The second of these centers was the School of Business Administration of the São Paulo Getúlio Vargas Foundation (EAESP) and the *Revista de Economia Política*, launched in 1981 by Luis Carlos Bresser Pereira. He was a professor at EAESP and the University of São Paulo's Faculty of Economics and Administration (FEA), where he obtained his doctorate (after an M.A. at Michigan State University). Bresser Pereira was a student of another modernizing hero of the Brazilian economy: Antonio Delfim Netto, a member of the military regime's list of strong men. Bresser Pereira's journal was one of the more dynamic outlets for "inertialist theses," of which, according to various commentators, he had a certain amount of reason in proclaiming himself as a precursor.[36] We find here another Brazilian scenario unthinkable for the Argentineans: maintaining a fairly close relationship with Delfim Netto while, at the same time, founding a journal which had (and still has) as its patrons figures whose theories, identified with progressivism, received unanimous respect among Brazilian economists of various tendencies: Caio Prado Jr., Celso Furtado, and Ignácio Rangel.

Another feature shared by the heterodox figures of São Paulo and Rio de Janeiro was also relatively less common among the Argentineans: an unbroken career path from company and financial milieus to the government bureaucracy, even during the period of military government to which they were opposed.[37] Hence, the Brazilians could add to their inter-generational academic and political connections a high capital of credibility, based on their proximity to the market and the state.[38]

[35] It is worth recalling that, among the "ingenious fathers of the Cruzado," there were some real-life heirs, such as Francisco Lopes, son of Lucas Lopes, among other things President of the National Development Bank and Treasury Minister. Also, something rare among the Argentineans, several of them were married to daughters of the Brazilian elite's "grand families" (an important element in this overwhelmingly male universe of economic policy managers).

[36] See, for instance, Bresser Pereira and Nakano (1984) and Rego (1986). Bresser Pereira would not have to wait long to have the chance to put his ideas into practice. In July 1987 he replaced Dilson Funaro at the head of the Treasury Department (launching the "second phase" of the Cruzado Plan, known as the "Bresser Plan").

[37] Some worked for the Economic Research Foundation Institute (FIPE), created in 1973 at FEA-USP, which provided a perfect example of the new economics professionals' close connections with modernization of the economic field at the time of the "Brazilian miracle." Others published regularly in the important journal *Pesquisa e Planejamento Econômico* issued by the Institute of Applied Economic Research (IPEA), part of the Ministry of Planning.

[38] Among the creators of the Austral, only Brodersohn had a similar track record. Loureiro (1997: 90–94) calls attention to a shared feature among the Brazilian economists who reached

Yet another contrast deserves mention: on the Argentine side, as we have seen, we find memories of a semi-clandestine academic seminar or laboratory; on the Brazilian side, an intense participation in public discussions. True enough, chronology needs to be taken into account here—the Argentinean and Israeli plans were launched before the Cruzado. It is also true that this contrast should be perceived more in terms of degree and emphasis: the details of the Brazilian plan, too, were worked out in secret (recall the importance of 'D day'), and in Argentina there was also a sense of imminent changes in the run up to the public announcements (although the word 'heterodox' was almost entirely absent in the press during the run up to the austral's launch). That said, the contrast nonetheless reveals important peculiarities in the public economic spheres of each country.[39]

In the period between the launch of the austral and announcement of the Cruzado Plan, their neighbor's experience (which was already showing signs of failing) was widely debated in Brazil in academic publications,[40] journalistic material (such as *ISTOÉ*, *Exame* or *Gazeta Mercantil*),[41] and business circles. This reflected not just the scale, institutionalization, and continuity of the field of economists in Brazil, but also a rare certainty: even before its announcement, the Brazilian heterodox plan appeared to be accepted as a fact, even by the economists more closely identified with orthodox or monetarist approaches. Furthermore, there was no tone of resigned fatality in this acceptance. Figures such as Delfim Netto and even Simonsen admitted that it was time for the younger generation, and recognized merits in their heterodox ideas (albeit while expressing differences or demanding revisions, mainly in relation to price freezing).[42]

On the other hand, other big names from the previous generation, linked to structuralism and developmentalism, like Celso Furtado, maintained very close relations with other Cruzado Plan administrators, including Luiz Gonzaga Belluzo, João Manuel Cardoso de Mello, and Maria da Conceição

adulthood at the start of the 1980s: they used their work as consultants for large companies as a steppingstone to political management.

[39] The greater dynamism of the public economic sphere in Brazil during this period, compared to Argentina, contrasts with the discipline's history in each country: in Argentina, the first Faculty of Economic Sciences was founded in 1913 and by the end of this decade there were already two high profile academic journals (the *Revista de Ciencias Económicas* and the *Revista de Economía Argentina*). In Brazil, the first economics faculty was created in 1946, followed a year later by the launch of the *Revista Brasileira de Economia*, the first publication of its type in the country.

[40] For example, Bresser Pereira (1985) and Modiano (1986).

[41] In fact, as early as December 1984, well before the Austral, Lara-Resende (1984b) had published a series of articles in the *Gazeta Mercantil*, proposing an "indexed currency" to "break the frustrating immobilism to which the anti-inflationary policy has been relegated." Taking a similar line, Arida published another text in the same daily newspaper in October (1984b), and an article in English through the Woodrow Wilson International Center for Scholars (1984a).

[42] Despite expressing reservations, Delfim had no doubts about calling its authors "brilliant" (*ISTOÉ*, 5 Mar. 1996: 20–21. See also Delfim Netto 1985; and Lara-Resende 1984a.

Tavares. This group was linked to academic institutions that occupied positions openly distinct from those of PUC, EPGE, and EAESP, such as the Department of Economics at Campinas University (UNICAMP) and the Institute of Economics of the Federal University of Rio de Janeiro (UFRJ).[43] Given such diversity, the Cruzado could not fail to appear to Argentinean eyes as the end product of a rare confluence between individuals with diverse career backgrounds and contrasting political and academic legitimacies. This view was well-founded, bearing in mind the differential configurations of the relations between intellectuals (economists) and state elites in each country.[44]

On 28 February 1986, President José Sarney and his Treasury Minister Dílson Funaro announced the "fundamental changes in the economy" to take effect immediately, and went on to elucidate the conceptual bases of the reforms to "Brazilian men and women." After explaining, "the measures are not a copy of any program instituted by any other country" (a clear reference to the measures implemented by the austral plan), Sarney stated, "We are knocking down the walls of the inflationary fortress. We still face the force of habits ingrained over a long period. Suffice to recall that inflation and monetary correction are part of the life and habits of our younger generations, who are unfamiliar with any economy aside from this." Funaro added: "Brazilian inflation deviated from the factors that originally drove it. It began to acquire its own momentum. The existence of monetary indexation, applied in a generalized form to values, contaminated the psychology of all economic agents and marginalized the cruzeiro in its monetary functions. Everyone began to calculate their income and assets in ORTN."[45]

All the elements that apparently govern the two-way relation between economic theories and practices are present here: a stabilization plan intended to operate on the cultural forms arising from economic policy devices implemented by other plans in the past (in this case: the ORTN mechanism invented in the 1960s). Here we also encounter the rare magic possessed by economic science, which succeeds in producing remarkably similar terms in announcements directed to very different audiences: in one case the population of a country, in the other a select group of specialists. Undoubtedly, the approximation between both types of public reflects a slow process by the end of which the minds responsible for the theory of inertial inflation had turned into public intellectuals. Indeed, while monetary reform was being announced, well-informed Brazilians could almost simultaneously read the works in which its underlying theory was laid out. So, for example,

43 Another of the plan's architects, João Sayad, had pursued a career at FEA-SP.

44 This claim about the perceptions of the contrasts between both national universes is obviously not intended to hide the sharp differences between the various architects of the Cruzado Plan (especially between the UNICAMP/UFRJ group and the PUC-RJ group).

45 The speeches have been taken from "Plano de estabilização (documentos)," *Revista de Economia e Política* (1986) 6, 3: 112–15.

just two months after the plan's launch, and under the title "Guarantee included in the packaging," the magazine *ISTOÉ* (25 Aug. 1986) published a review of two books released during the period: *Choque heterodoxo* (Lopes and Arida) and *Inflação Zero* (Arida 1986). It also reported in passing the decision of their authors to ask the publishers to print the cost of the books on the cover, as "a guarantee of stability," something rare at the time, given the constant rise in prices.

CONCLUSION: THE MAGIC OF 'ORLOFF' AND OTHER EFFECTS

Anthropology has developed a rich set of conceptual instruments for analyzing the dramatic and performative dimensions of the state's rituals.[46] During the last two decades of the twentieth century, the implementation of successive monetary stabilization plans in countries such as Brazil and Argentina likewise acquired a ritual dimension. I have already mentioned the dramatic content of President Alfonsín's announcement concerning first the "war economy" and a short while later the Austral Plan, calling the population to rise in defense of the political system and invoking the specter of modern Argentina's worst authoritarian experiences. In comparison, the terms used by Sarney were much less emotive, yet the dramatic dimension was implicit in each of his acts. It was revealed, for example, in a part of his speech for the launch of the Cruzado in which he re-affirmed his close ties to the Democratic Alliance, a coalition responsible for holding up his government and to which he had been bound after the death of Tancredo Neves. Neves had been designated president by the Electoral College at the end of the military regime, but never got to govern. In Brazil too, then, this was a period when politics was clearly impregnated with a sense of tragedy.[47]

Anyone who lived in these countries at that time will have little difficulty in recalling the endless announcements broadcasted on radio and television of price freezes, forced savings, and changes in currency denominations, followed by bank holidays in which not only economic professionals, but also employees, indebted people, tenants—the majority of citizens—were exposed to the new measures designed to save the public once and for all from the plague of monetary instability.

Undoubtedly, part of the pedagogical effectiveness of the announcements derived from the rhetoric employed and, in particular, to the sense of drama provoked by the rhetoric of 'crisis,' which each stabilization plan promised to overcome. In Argentina, the central themes of a narrative reaching back more than half-a-century could be easily recognized. These focused on

[46] For a recent review of this literature, see Peirano 2001.

[47] Tancredo Neves was hospitalized for an abdominal operation on 4 March 1985, on the eve of assuming the presidency; he died thirty-eight days later from a generalized infection. The story seemed to deepen the sense of national tragedy: it was the 21 April, Tiradentes Day, celebrating Brazil's "martyr for independence."

a national decline, which with each passing day dragged the Argentine nation further away from its splendid past, plunging the country towards the almost fatal prospect of its own dissolution.[48] In Brazil, the economic crisis meant not national dissolution, nor the demise of a glorious past, but a veering off the path towards greatness. This was the main motif used by Funaro in his ministerial speech launching the Cruzado: to recover "the path promising Brazilian growth," the need was to "awaken the nation and stir its powerful forces into action."[49] The involvement of professionals of the economy in the production and dissemination of new modulations of master narratives concerning the nation and its history has tended to consolidate these specialists as high-profile public figures, capable of explicating the deepest national dilemmas through the scientific use of instruments from the 'most authentic social science,' the science of numbers: modern economics.

Just as during the life of Nicolas Oresme, invoked at the start of this article, we have seen that the interplay between academic economic narratives and the cultures of economics, spread throughout the public sphere and incorporated by individuals in the form of dispositions, operates to a large extent by means of images and metaphors related to nature—imagery central to representations of the crises which served to justify the application of monetary stabilization plans. The other side of this process in contemporary societies like those of Brazil or Argentina is the transformation of technical "index numbers" into "public numbers," which serves to produce social representations and orient people's actions, and finally, completing the circle of relations between economics and economy, the transformation of these public numbers into data for the production of new theories and policies by specialists.[50]

On the other hand, the relationship between, for example, quantitative forms of conceptualizing inflation (whose main instruments are, as we have seen, the indexes) and monetary technologies and therapies (such as the indexation and *desagio* mechanisms, or the tables for substituting old for new national currencies), still depends on one element: these therapies must be credible in the eyes of 'economic agents.' And to be credible, they must among other things be comprehensible. This is why the communication specialists responsible for translating each new stabilization plan into ordinary language at the plan's launch have been just as important as the technicians

[48] In another work, I propose an analysis of the narrative of the Argentinean crisis constructed after 1930 (Neiburg 1997: ch. 3). The debates provoked by the latest large monetary destabilization in Argentina (Dec. 2001) demonstrate the extent to which these motifs associated with national dissolution continue to be evoked by the country's economists and other public intellectuals. Although notably ignoring economists, Sigal and Kessler (1997) put forward a suggestive analysis of the intellectual narratives of the 1989 hyperinflationary crisis.

[49] Also see Funaro's text "À guisa de prefácio," in Rego (1986: i–iii).

[50] For a general consideration of the role of natural images in legitimizing economic theories, see Mirowski 1994. For an analysis of the making of the public trust in numbers, see Porter 1995.

who created them. Lay people, for their part, build up a memory bank (see Hart 2001) that allows them not only to decode the therapeutic technologies, but also to defend themselves from them, exploiting the possibilities generated by periods of crisis. This long-term monetary cultivation, which allows individuals to conceptualize and steer through crises, has also benefited from the boom periods of economic expansion associated with expressions such as "miracle" (*milagre*, in Brazil) or "soft money" (*plata dulce*, in Argentina). These have also been crucial experiences in terms of learning how to manipulate the indices, the possibilities opened up by switching from one form of credit to another, counting (very often before the event) on the loss in value of the currencies, or on the conversion between currencies, indexes and contracts—exercises so sophisticated that they caught the attention of more than one foreign visitor, struck by the highly sophisticated monetary culture of their Brazilian hosts and especially, perhaps, their Argentinean ones during the final decades of the twentieth century.

The movement between science and culture, mediated by natural metaphors and images, also served to represent the similarities between the experiences of Brazil and Argentina at the time of the heterodoxies. Appeals to the mysteries of national character had from the start had been used to describe the common destiny of Argentineans and Brazilians, as well as the contrasts and coincidences between the plans applied in each country. These did not take long to acquire the status of theory, with the enunciation of the so-called "Orloff effect": the name coined in Brazil for the law according to which "Argentina today is Brazil tomorrow"—an adaptation of the slogan used in a contemporary publicity campaign for the vodka brand Orloff, in which the protagonist referred to the liquor's positive collateral effects (as a cure against hangovers) and warned (before drinking): "I'm you tomorrow." This theory reached its peak when the Cruzado and Austral plans went through adjustments baptized on both sides of the frontier with the names of seasons: the 'Spring' (August 1988) and 'Summer' (January 1989) plans, respectively, first in Argentina and then in Brazil. This was just as established by the "Orloff effect", which was apparently now well accepted not only by wide sections of the population of both countries and the media, but also by the architects of the economic policies.

As I mentioned earlier, this is not the place to deepen the comparison of the two economic cultures. I have also already referred to a number of factors obliging us to develop a more complex appraisal of the power of economic science in performing the social world according to its own way of representing it. We can now add another element that emerges from the material just presented: despite their demands for universality (systemized in the abstract language of equations and numbers), different kinds of economic knowledge are heirs to national intellectual traditions. Their transformation into policies, essential for their performative efficiency, depends on both national and international conditions of legitimacy and implementation.[51] It depends on singular dialogues with specific national economic cultures, and on the fact that the devices invented by economists (e.g., currencies themselves) are subject to social elaborations, invested with meanings, and used in contexts that are not always those imagined by economists.[52] This panorama allows us an insight, then, into the affinities between specific economic cultures and the application of "gradualist" and "shock" policies, between different forms of economic cultivation, that are associated with the implementation of the same policy over a period of time or with a series of discontinuous policies that stimulate economic agents to learn new 'rules of the game' over and over again. But let us leave this dimension of the argument for another occasion, since it demands examining, for example, the meanings associated in ethnographic and national contexts with the conversion tables between currencies, indexes, bonuses, and other quasi-currencies. Instead let us return one last time to the economists and their heterodoxies.

Unlike the routine of economists, it is not the sociologist's task to imagine future scenarios. Seen from today's viewpoint, the cycle of stabilization plans initiated in the middle of the 1980s with the Austral and the Cruzado came to an end in the last years of the following decade. A look at the last generation of these plans allows us to complete these comparative notes by reflecting on the social conditions responsible for favoring the contrasts between the two national contexts: on the Brazilian side, 'gradualism'; on the Argentine side, 'rupture.' This representation was widely present during the period, in response to the different rhythms and modalities acquired in each country during the transition from military to civil governments, and quickly generalized to other dimensions of social life, especially economic policies. And this despite the exceptions that, as so often occurs with stereotypes, end up proving the rule: as was the case, for example, with the so-called "Collor Plan" (1991) and its failure.[53]

In Argentina, the last and perhaps most heterodox policy was the Convertibility Plan (1991), whose aim, in line with inertialist theory, was to eliminate inflation by transforming the economy's main indicator (in this case, the dollar) into a currency—instituting a rigid currency board system which

[51] On the dimension of national traditions in the social history of the economy, see, for instance, Fourcade-Gourrinchas (2001). For an analysis of the production of different kinds of knowledge on society, which considers at the same time the national and international conditions of their legitimization and implementation from a comparative perspective, see De L'Estoile, Neiburg, and Sigaud (2005).

[52] Here the works of Viviana Zelizer (e.g., 1994) are especially insightful.

[53] A note published in the Buenos Aires newspaper *Clarín* on 12 July 1985, titled "Gradualismo brasilero y shock argentino" (Brazilian gradualism and Argentinean shock) expresses this contrast between economic policies. Among other things, the Collor Plan involved a mechanism typical of the heterodoxies: a violent state intervention in the name of a free market. This was exemplified in this case by the "savings confiscation" applied by Minister Zélia Cardoso de Mello. Collor was dismissed soon after, at the end of a process of impeachment.

legally established the free convertibility between the peso and the foreign currency.[54] In Brazil, the last stabilization plan to be pursued (the Real Plan, 1994) was based on a sophisticated model of transition between two currencies (the old cruzeiro and the new real) via a third virtual currency (the URV, Unidade Real de Valor), which allowed contracts to be reprogrammed. From then on, the contrasts only deepened. On one side, the explosion of the most recent "Argentinean crisis" over the space of a few weeks in 2001 led to the demise of the Convertibility Plan, taking four presidents in its wake. The first of them, Fernando de la Rúa, was accompanied by his Minister of the Economy Domingo Cavallo, "father" of the monetary regime instituted ten years earlier. On the other side, the real continued in force, outliving the government of President Fernando Henrique Cardoso, which ended in 2002, having introduced the real policy eight years before.

Finally, in Argentina we find a group of economic professionals—Cavallo and his colleagues from the Mediterranean Foundation—followed later by Roque Fernández and his colleagues from CEMA (Center of Argentinean Macroeconomic Studies), who built their theoretical and political identity in opposition to the designers of the Austral Plan. In the case of CEMA, they identify themselves as local representatives of the "Chicago School," and deny any dialogue with any national tradition of economic thought.[55] In Brazil, by contrast, the Real Plan can be and indeed was seen as a successful re-run by a section of the Cruzado team, the theorists of inertial inflation who were gathered at PUC by Pedro Malan, minister throughout both terms of Fernando Henrique Cardoso. The above analysis of the relations between intellectuals and the bureaucratic fields, as well as the differential degrees of cohesion between sectors of the Brazilian and Argentinean elites (and of generations of specialists), allow us, I believe, some insights into the social conditions in which are based the contrasts between the two countries.

[54] Despite the points separating Cavallo from the heterodox economists of the 1980s—especially, his political career (proximity to the military governments) and his regional base (Córdoba, rather than Buenos Aires)—at least two elements allow us to associate the Conversibility Plan with heterodoxy. One is state intervention in redefining the 'totality' of economic relations. The other is the implementation of therapies not recognized as legitimate by the mainstream and which were based, from Cavallo's own viewpoint, on an interpretation of the economic culture of Argentineans: the "dollarized minds" of his compatriots. This interpretation—and the economic policy designs derived from it—was the central point separating Cavallo from the economists considered 'orthodox' at the time, for example the future minister Roque Fernández. It must also be remembered that the Currency Board regime adopted by Argentina had until then only existed in tax havens such as the Bahamas, nations which had recently gained independence, such as Lithuania, and countries whose independence was open to question, such as Hong Kong. The first World Bank conference for discussing the implementation of Currency Board regimes in underdeveloped countries only took place in 1993 (see World Bank 1993).

[55] In thinking about the differential density of the universe of economists in both countries, it is significant that in Brazil, despite the existence of economists identified with monetarism, there is no academic center identifying itself as a local branch of the Chicago school.

Economists dedicate themselves to assessing the causes behind the successes and failures of economic plans in terms of their 'internal consistency.' Political scientists look to solve the same mysterious processes, and usually speculate on the 'consensus building' mechanisms between parties and social sectors that enable stabilization programs to succeed. Meanwhile, the 'other' social sciences—anthropology, sociology, and history—pursue different lines of inquiry. Their aim, by contrast, should be to describe the social construction of economic theories and the complex mechanisms that lend them social legitimacy and allow them to disseminate beyond narrow circles of specialists. Further, they should strive to comprehend the processes through which these theories converge with other dimensions of culture and other ways of conceptualizing the relations between people and social life. These are the questions that I have begun to explore in this paper.

REFERENCES

Arida, P. 1984a. "Economic Stabilization in Brazil." *Working Paper* no. 149. Washington, D.C.: Woodrow Wilson International Center for Scholars.

———. 1984b. "A ORTN serve apenas para zerar a inflação inercial." *Gazeta Mercantil*, 19 de outubro.

———. 1986. *Inflação Zero. Brasil, Argentina, Israel*. Rio de Janeiro: Paz e Terra.

Arida, P. and A. Lara-Resende. 1985. "Inertial Inflation and Monetary Reform in Brazil." In, J. Williamson, ed., *Inflation and Indexation: Argentina, Brazil and Israel*. Cambridge, Mass.: MIT Press.

Aspers, Patrik. 2005. "Performativity, Neoclassical Theory and Economic Sociology." *Economic Sociology. European Electronic Newsletter* 6, 2: 33–39.

Austin, John L. 1972. *How to Do Things with Words*. Oxford: Oxford University Press.

Baer, W. and I. Kerstenetzky. 1964. *Inflation and Growth in Latin America*. Homewood: Irwin.

Berrotarán, P., J. Gilbert, M. Rougier, and M. Tenewicki. 2004. "La construcción de un problema: los debates en torno a la inflación. Argentina (1940–1952)." In, *Intelectuales, crisis y cuestión de estado, Argentina 1930–2000*. Buenos Aires: Ediciones Al Margen.

Biderman, C., L. F. Cozac, and J. M. Rego, eds. 1996. *Conversas com Economistas Brasileiros*. São Paulo: Editora 34.

Bourdieu, P. 1977. *Algérie 60. Structures économiques et structures temporelles.* Paris: Minuit.

———. 1981. "Décrire et prescrire. Note sur les conditions de possibilité et les limites de l'efficacité politique." *Actes de la recherche en sciences sociales* 38: 69–73.

Bresser Pereira, L. C. 1985. "Como a Argentina acabou com sua inflação inercial." *Gazeta Mercantil*, 17 de julho: 4.

———. 1986. "Inflação inercial e Plano Cruzado." *Revista de Economia Política* 6, 3: 9–24.

———. 1989. "A teoria da inflação inercial reexaminada." In, J. M. Rego, ed., *Aceleração Recente da Inflação*. São Paulo: Bienal.

Bresser Pereira, L. C. and Y. Nakano. 1984. "Fatores aceleradores, mantenedores e sancionadores da inflação." *Revista de Economia Política* 4, 1: 5–21.

———. 1986. “Inflação inercial e choque heterodoxo no Brasil.” In, J. M. Rego, ed., *Inflação inercial, teorias sobre inflação e Plano Cruzado*. Rio de Janeiro: Paz e Terra.

Callon, M. 1998. “Introduction: The Embeddedness of Economic Markets in Economics.” In, M. Callon, ed., *The Laws of the Markets*. Oxford: Blackwell.

———. 2005. “Why Virtualism Paves the Way to Political Impotence. Callon Replies to Miller.” *Economic Sociology. European Electronic Newsletter* 6, 2: 3–21.

Campos, R. 1986[1961]. “Two Views of Inflation.” In, A. Hirschman, ed., *A economia como ciência moral e política*. São Paulo: Brasiliense.

De L’Estoile, B., F. Neiburg, and L. Sigaud. 2005. “Anthropology and the Government of ‘Natives’: A Comparative Approach.” In, B. F. De L’Estoile, F. Neiburg, and L. Sigaud, eds., *Empires, Nations and Natives. Anthropology and State-Making*. Durham: Duke University Press.

Delfim Netto, Antonio. 1985. “Alfonsin substitui demagogia por coerência.” *Revista de Economia e Política* 5, 4: 116–19.

Dezalay, Y. and B. Garth. 2002. *The Internationalization of Palace Wars: Lawyers, Economists, and the Contest to Transform Latin American States*. Chicago: University of Chicago Press.

Dixon, K. 1998. *Les évangélistes du marché*. Paris: Raison d’Agir.

Drake, P. W. 1994. *Money Doctors, Foreign Debts, and Economic Reforms in Latin America from the 1890s to the Present*. Wilmington: SR Books.

Fourcade-Gourinchas, M. 2001. “Politics, Institutional Structures and the Rise of Economics: A Comparative Study.” *Theory and Society* 30: 397–447.

Fourcade-Gourinchas, M. and S. Babb. 2002. “The Rebirth of the Liberal Creed: Paths to Neoliberalism in Four Countries.” *American Journal of Sociology* 108, 3: 533–79.

Frenkel, R. 1979. “Decisiones de precios en alta inflación.” *Desarrollo Económico* 19, 75: 291–330.

Garcia, Marie-France. 1986. “La construction sociale d’une marché parfait: Le marché au cadran de Fontaines-en-Sologne.” *Actes de la recherche en sciences sociales* 65: 2–13.

Gerchunoff, P. and L. Llach. 1998. *El ciclo de la ilusión y el desencanto. Un siglo de políticas económicas argentinas*. Buenos Aires: Ariel.

Gudeman, S. 1986. *Economics as Culture*. London: Routledge and Kegan Paul.

Gudin, E. 1967. “A institucionalização da inflação.” *Digesto econômico* 163: 256–89.

Hall, P., ed. 1989. *The Political Power of Economic Ideas. Keynesianism across Nations*. Cambridge: Harvard University Press.

Hart, Keith. 2001. *Money in an Unequal World*. New York: Texere.

Heymann, D. 1986. *Tres ensayos sobre inflación y políticas de estabilización*. Buenos Aires: CEPAL.

———. 1987. “The Austral Plan.” *The American Economic Review* 77, 2: 284–87.

Heymann, D. and A. Leijonhufvud. 1995. *High Inflation*. Oxford and New York: Oxford University Press.

Hirschman, A. 1963. “Inflation in Chile.” In, A. Hirschman, ed., *Journeys toward Progress: Studies of Economic Policy-Making in Latin America*. New York: Norton.

———. 1984[1981]. “La matriz social y política de la inflación: elaboración sobre la experiencia latinoamericana.” In, A. Hirschman, ed., *De la economía a la política y más allá*. México: Fondo de Cultura Económica.

Kaye, J. 1988. “The Impact of Money on the Development of Fourteenth-Century Scientific Thought.” *Journal of Medieval Studies* 14: 251–70.

Lara-Resende, A. 1984a. “A moeda indexada: uma proposta para eliminar a inflação inercial.” *Texto para discussão*, no. 5, Depto de Economia, PUC-Rio de Janeiro.

———. 1984b. "A moeda indexada nem mágica nem panacéia." *Gazeta Mercantil*, 26, 27 e 28 de setembro.
Lebaron, F. 2000. *La croyence économique. Les économistes entre science et politique*. Paris: Seuil.
Lomnitz, Claudio. 2003. "Times of Crisis: Historicity, Sacrifice, and the Spectacle of Debacle in Mexico City." *Public Culture* 15, 1: 127–47.
Lopes, F. 1984. *Choque heterodoxo. Combate à inflação e reforma monetária*. Rio de Janeiro: Campus.
Loureiro, M. R. 1997. *Os Economistas no Governo*. Rio de Janeiro: Fundação Getulio Vargas.
Love, J. 1994. "Economic Ideas and Ideologies in Latin America since 1930." In, L. Bethell, ed., *Ideas and Ideologies in Twentieth-Century Latin America*. New York: Cambridge University Press.
Mackenzie, D. and Y. Millo. 2003. "Negotiating a Market, Performing Theory: The Historical Sociology of a Financial Derivatives Exchange." *American Journal of Sociology* 109, 1: 107–46.
Mallon, R. and J. V. Sourrouille. 1973. *La política económica en una sociedad conflictiva. El caso argentino*. Buenos Aires: Amorrortu.
Mantega, G. and M. Rego. 1999. *Conversas com economistas brasileiros II*. São Paulo: Editora 34.
Miller, D. 2002. "Turning Callon the Right Way Up." *Economy and Society* 31, 2: 218–32.
Mirowski, P., ed. 1994. *Natural Images in Economic Thought.* Cambridge and New York: Cambridge University Press.
Miyazaki, H. 2003. "The Temporalities of the Market." *American Anthropologist* 105, 2: 255–65.
Modiano, E. 1986. "O choque argentino e o dilema brasileiro." *Revista de Economia Política* 6, 2: 77–90.
Neiburg, F. 1997. *Os intelectuais e a invenção do peronismo*. São Paulo: Edusp.
Neiburg, F. and M. Plotkin. 2004. "Internationalisation et développement. 'Les Di Tella' et la nouvelle économie en Argentine." *Actes de la recherche en sciences sociales*, 151/52: 57–67.
O'Dougherty, Maureen. 2002. *Consumption Intensified. The Politics of Middle-Class Daily Life in Brazil*. Durham: Duke University Press.
Olivera, J. G. 1960. "Teoría no monetaria de la inflación." *Trimestre Económico* 37: 616–29.
———. 1967. "Aspectos dinámicos de la inflación estructural." *Desarrollo Económico* 7, 27: 260–67.
Pantaleón, J. 2004. "El surgimiento de la nueva economía argentina: el caso Bunge." In, F. Neiburg and M. Plotkin, eds., *Intelectuales y Expertos. La construcción del conocimiento social en la Argentina*. Buenos Aires: Paidós, Cap. 6.
Peirano, M., ed. 2001. *O dito e o feito: ensaios de antropologia dos rituais*. Rio de Janeiro: Relume Dumará/NuAP.
Porter, T. 1995. *Trust in Numbers. The Search for Objectivity in Science and Public Life*. Princeton: Princeton University Press.
Rangel, I. 1963. *A inflação brasileira*. São Paulo: Brasiliense.
Rego, J. M., ed. 1986. *Inflação inercial, teorias sobre inflação e o Plano Cruzado*. Rio de Janeiro: Paz and Terra.
Sardenberg, C. A. 1987. *Aventura e agonia: nos bastidores do cruzado*. São Paulo: Companhia das Letras.

Sargent, T. 1999. *The Conquest of American Inflation*. Princeton: Princeton University Press.

Sigal, S. and G. Kessler. 1997. “La hiperinflación en Argentina: comportamientos y representaciones sociales.” In, D. Canton and J. R. Jorrat, eds., *La investigación social hoy*. Buenos Aires: CBC/UBA.

Sikkink, K. 1991. *Ideas and Institutions. Developmentalism in Brazil and Argentina*. Ithaca: Cornell University Press.

Simonsen, M. H. 1964. *A experiência inflacionária do Brasil*. Rio de Janeiro: APEC.

———. 1970. *Inflação: gradualismo X tratamento de choque*. Rio de Janeiro: APEC.

Snowdon, B. 2003. “Outside the Mainstream: An Interview with Axel Leijonhufvud.” *Macroeconomic Dynamics* 8, 1: 117–45.

Sola, L. 1991. “Heterodox Shock in Brazil: Técnicos, Politicians and Democracy.” *Journal of Latin American Studies* 20: 163–95.

Spitta, A. 1988. “La cultura de la inflación en la Argentina. Observaciones cotidianas de un extranjero.” In, N. Botana and P. Waldmann, eds., *El impacto de la inflación en la sociedad y la política.* Buenos Aires: Tesis, ITDT.

Sunkel, O. 1958. “La inflación chilena: un enfoque heterodoxo.” *El Trimestre Económico* 25, 4: 570–99.

Weir, M. and T. Scokpol. 1989. “State Structures and the Possibilities for ‘Keynesian’ Responses to Great Depression in Sweden, Britain and the United States.” In, P. Evans, D. Rueschemeyer, and T. Skocpol, eds., *Bringing the State Back In*. Cambridge: Cambridge University Press.

Williamson, John. 1985. *Inflation and Indexation: Argentina, Brazil and Israel*. Cambridge: MIT Press.

World Bank. 1993. *Proceedings of a Conference on Substitution and Currency Board*. Washington, D.C.: The World Bank.

Zelizer, V. 1994. *The Social Meaning of Money. Pin Money, Paychecks, Poor Relief and other Currencies*. New York: Basic Books.