Readers may wonder at finding a discussion of economic dysfunctions in a theological journal. The traditional division of specializations into water-tight compartments has generally been taken for granted.

Such division may, in the past, have been helpful as a methodological procedure, for theology and economics are distinct and relatively autonomous undertakings. However, Pope John Paul II, in his encyclical letter on Social Concerns of December 1987, while discussing "structures of sin" including economic structures, points out the urgent need for economic mechanisms "to be subjected to a careful analysis under the ethico-moral aspect." While admitting that "the church does not have technical solutions," he also repeats the statement of his predecessor Pope Paul VI that the church is "an expert in humanity." Obviously, such expertise does not consider human development as a mechanical process that can be divided into water-tight compartments. On the contrary, the encyclical treats human society as a living and growing organism wherein the categories of "interdependence" and "solidarity" are given much higher priority by the church than by the technical solutions in existence. Anything that kills this organism is therefore a matter of ultimate concern. God says: thou shalt not kill; thou shalt not steal.

TWO TECHNICAL SOLUTIONS

The central issue is that the technical solutions being offered by

1. Encyclical on Social Concerns (Sollicitudo Rei Socialis) of Pope John Paul II, Dec. 30, 1987, no. 16.
2. Ibid. no. 41.
two rival schools of economics are now seen by the church to be increasingly counter-productive. One school offers a system inspired by the principles of "liberal capitalism." The other school offers a system inspired by "Marxist collectivism." Each offers antithetical forms of labor and ownership. Their mutual antagonism has evolved into a military confrontation of planetary proportions. This is leading to the fragmentation of society into duelling blocs confronting each other in a no-win situation. By their actions, both blocs are heard to be commanding: thou shalt kill; thou shalt steal.

Nor are these commandments limited to military operations. Economic blocs make decisions that starve communities, rob and kill them as effectively as armaments. In fact, economic warfare is becoming the historical continuation of the military warfare of the past world wars, with nuclear threat as merely one of the many tools of financiers. Japan has discovered that there was no need to bomb Pearl Harbor: Japanese banks now own 39.7% of the assets of the banking world; the U.S. owns only 12%, but is also working on blueprints of retaliation. And of course, the Marxist bloc, despite glasnost, is not about to give up its position that 100% of all that bank "ownership" is sheer robbery and demands a blueprint of restitution to "labor" (represented of course by an elitist politburo). At the brink of global recession, all these blueprints can only mean more poverty for the Third and Fourth Worlds. These economic dysfunctions are a matter of ultimate concern for all and particularly for the church.

M A N I P U L A T I V E  M E C H A N I S M S

The encyclical calls attention to mechanisms of manipulation:

Moreover, one must denounce the existence of economic, financial and social mechanisms which, although they are manipulated by people, often function almost automatically, thus accentuating the situation of wealth for some and poverty for the rest. These mechanisms, which are maneuvered directly or indirectly by the more developed countries, by their very functioning favor the interests of the people manipulating them. But in the end they suffocate or condition the economies of the less-developed countries. Later on these mechanisms will have to be subjected to a careful analysis under the ethico-moral aspect. 3

3. Ibid. no. 16.
Any such analysis cannot be sufficiently "careful" unless it is also technically specific. For example, one sixteenth of one percent "spread over Libor rates" can make all the difference between life and death for marginal communities. The ethico-moral response, to be technically specific, will require some grasp of economic processes.

Hence, it behooves researchers and educators who share the church's social concern to propose solutions that are "technical" in the fullest sense of the word. One such proposal has been made by Bernard Lonergan in a 1980-83 lecture series given in the theology department of Boston College entitled "Macroeconomics and the Dialectic of History." (This has been summarily discussed in a previous article to which this present article is a sequel. 4)

CRITERION: EMERGENT STANDARD OF LIVING

Lonergan's proposal can be seen as an application of the Ignatian "first principle and foundation" to the science of economics by focussing on a criterion according to which economic decisions can be judged to be functional or dysfunctional: the criterion is named "emergent standard of living." Is this theological interference? Does it violate the autonomy of economics as an empirical science?

Some economists may think so. Others may welcome it as an answer to a question that they are asking themselves. To ask such a question is to examine the hidden presuppositions in their traditional method of distinguishing between "exogenous" or external variables and "endogenous" or internal variables, and of basing their mathematical calculations only on the endogenous variables, and finally of making decisions only on this basis.

The Pope's present emphasis about "interdependence" and "solidarity" may be taken as an invitation precisely to reexamine such concepts and distinctions. (For example, would the income level of untitled farmers or the buying and selling of election votes be "exogenous" to the landowners' investments in private armies, in election campaigns and in media propaganda? Or would vested interest arbitrarily decide its own "endogenous" variables and limit its public accounting to such calculations?)

Even the phrase “standard of living” may have economic parameters different from those of a “standard of living-by-bread-alone” and there have certainly been changes from one to the other at different times, at different socio-cultural levels of growth, and at different population scales. Hence Lonergan found it necessary to modify this phrase with the quantifier “emergent” to suggest some lines of technical investigation needed to maintain dynamic equilibrium.

Having made these and other re-examinations, and assuming the choice of an “emergent standard of living” as topmost criterion, Lonergan would now apply the Ignatian “tantum-quantum” in relation to economic decisions. According to the “tantum-quantum” principle, an economic decision must be within the limits strictly proportional to the demands of the emergent standard of living of the entire community. Such quantification becomes the basis for calculating the optimum measure of, say, farmer’s income levels, pricing of redistributed agrarian lands, interest rates of foreign loans, scheduling of debt payments, and above all, investment in public education.

PUBLIC EDUCATION: COMPUTER LITERACY

Public education is crucial:

However, the picture just given would be incomplete if one failed to add to the “economic and social indexes” of underdevelopment other indexes which are equally negative and indeed even more disturbing, beginning with the cultural level. These are illiteracy, the difficulty or impossibility of obtaining higher education, the inability to share in the building of one’s own nation, the various forms of exploitation and of economic, social, political and even religious oppression of the individual . . . 5

Public education begins with general literacy and from there proceeds to develop in every member of the community the ability to share in the meanings and values that ennoble society with true human dignity. Neglecting this and taking the short cut into mere technology, some elements of society have become technological geniuses with barbarian souls. Thus we see highly trained demagogues cleverly obtaining control over the lives of their illiterate

5. Social Concerns, no. 15.
brothers and sisters, especially in rural areas, and eventually binding them with chains of economic slavery. Confiscatory practices of legally robbing farmers of the land tilled by their ancestors include systematic uses of gambling, bribery, usury, dirty politics, deceptive documentation and armed terrorism. Ironically, any legislation aimed at stemming the tide of legalistic confiscation is being called "confiscatory." This is facilitated by the illiteracy of the victims. The neglect of public education is the main cause of the present maldistribution of agrarian lands.

Belatedly, farmers are discovering this and are working themselves to the bone in order to give their children the education that they themselves missed. In turn, their children are developing their talents in every field of human endeavor, including mathematics and computer science. This is fortunate, for in the context of economics, a good training in mathematical skills and computer science is a very important area in public education. For how else can economic equilibrium be optimized with so many interdependent parameters? And how else can all these parameters be intelligently analyzed by so many decision-makers, from the heads of agrarian households to the directors of banking syndicates? To this educational problem, the solution commonly prescribed by the left and right extremists is for a small elite to monopolize decision-making, for these totalitarian minds see democracy as an impossible dream.

Dreamers see a sign of hope in computer science and especially in the enthusiasm and initiative with which young people, both rich and poor, develop computer literacy in ways that amaze our aging technocrats. This may be a sign that intellectual creativity is now at a critical threshold of growth. If so, this is providential, for computer literacy will certainly be needed in the complex task of constructing and applying Lonergan's set of fourteen simultaneous differential equations with which to analyze economic circulation.

**TWO ANTAGONISTIC DOGMAS**

This solution is highly technical. It differs from the technical solution preferred by liberal capitalism in that it subordinates private ownership to stewardship that is at the service of an emer-
gent standard of living for entire populations; thus it rejects the biased dogma that absolutizes property rights. It also differs from the solution preferred by Marxist collectivism in that it rejects the biased dogma that property is robbery. In these differences, we see the main reason why these two rival schools of economics are the real causes of the dysfunctions in modern macroeconomy: logically and historically, they lead to dogmatic commandments to kill and to steal, and thus to contradict their professed commitment to the standard of living; they are irrational.

Of course, Lonergan, like the church, subscribes to the dogma that it is wrong to kill and steal. But it can be shown that, even from a purely empirical viewpoint independent of dogma, Lonergan’s explicit focus on the emergent standard of living as topmost criterion is the only focus that can free an economy from contradiction. Unlike the solutions of left and right extremes, Lonergan’s is rational. It reduces economic dysfunctions by eliminating systematic ambiguity.

DYSFUNCTIONS

The number of dysfunctions is legion. With the aid of Lonergan’s circulation analysis, Patrick M. Byrne of Boston College has identified some of these dysfunctions. Of these, he describes one wherein the foreign policies of industrialized nations coerce their foreign markets to consume increasingly larger number of goods in order to avert depression in the home economy. “In other words,” says Byrne, “the depression was shifted from one’s own nation to someone else’s.”

Filipinos have long been intuitively aware of this. But intuition is not enough at the negotiating table. Moral precepts mean nothing to technocrats unless clear linkages can be shown convincingly and quantified accurately in dollars and cents, in percentages and graphs, in reliable forecasts of booms and slumps, with mathematical precision about endogenous variables.

This is where Lonergan’s circulation analysis can be of great help to negotiators. It can reduce the disgusting gunboat diplomacy that characterizes many mindless negotiations. Such disgust

surely must have killed Jaime Ongpin. It may yet kill many more negotiators of debtor countries unless they persuade the other negotiators to agree on technical solutions as empirical and rational as that of Lonergan, and so in accord with the social concerns emphasized in the encyclical.

CIRCULATION ANALYSIS

Lonergan’s circulation analysis evokes images that can be likened to the circulation of blood in a living organism, particularly one in a process of rapid growth. Blood circulation is measured by parameters like volume, pressure, pulse rate, etc. that greatly facilitate technical diagnosis of malfunctions. Such parameters interdependently constitute the conditions for or against optimum growth of an organism.

Global economy is like an organism in process of very rapid growth. Its parameters include those of export and import flows rapidly accelerating within the arteries, veins and capillaries of the organism. Any imbalance here can mean death for some nations. A sustained imbalance will eventually mean death for all democratic civilization.

Indeed, as a result of a sort of internal dynamic and under the impulse of mechanisms which can only be called perverse, this interdependence triggers effects even in rich countries. . . . Thus it should be obvious that development either becomes shared in common by every part of the world or it undergoes a process of regression even in zones marked by constant progress. This tells us a great deal about the nature of authentic development: Either all the nations of the world participate or it will not be true development. 8

That word “perverse” unequivocally describes the present structure of global economy: it systematically generates dysfunctions.

SOURCE OF DYSFUNCTIONS

Hence the need to remedy a dysfunction at the source, namely, at its “first principle and foundation” and in its tantum-quantified

7. Mr. Jaime Ongpin was Minister of Finance in the Aquino government until shortly before his untimely death on Dec. 7, 1987.
8. Social Concerns, no. 17.
measure. Negotiators who reject this remedy are announcing their readiness to kill, not only their economic rivals, but democratic civilization as well. They reduce negotiation to an uncivilized show of nuclear capability.

Such a show of nuclear capability is the implicit justification for the huge investments in foreign military bases. The policy of silence about the presence of nuclear weapons confirms this. These control the trading routes of the world and are therefore endogenous to the macroeconomy.

It was inevitable that by developing antagonistic systems and centers of power, each with its own forms of propaganda and indoctrination, the ideological opposition should evolve into a growing military opposition and give rise to two blocs of armed forces, each suspicious and fearful of the other's domination. 9

In turn, military domination leads to internal fragmentation in the developing countries inside the sphere of influence of either economic bloc:

Countries which have recently achieved independence, and which are trying to establish a cultural and political identity of their own and need effective and impartial aid from all the richer and more developed countries, find themselves involved in and sometimes overwhelmed by ideological conflicts which inevitably create internal divisions, to the extent in some cases of provoking full civil war. 10

For example, civil war between the proponents and opponents of Philippine agrarian redistribution would turn ploughshares into swords, import more sophisticated weaponry, substitute imported food for the rice, corn and sugar that would no longer be home-grown, and generate more economic dysfunctions. As a result, "investments and aid for development . . . are used to sustain conflicts" and not to solve the problems of indebtedness. On the contrary, these are aggravated. This is a bleak scenario.

SIGNS OF CONCERN

Fortunately, conscientious economists are showing signs of

9. Ibid. no. 20.
10. Ibid. no. 21.
increasing concern. They are beginning to convince creditor nations that it is simply impossible for debtor nations, no matter how willing, to pay such huge debts. They are now suggesting that debts be written off, at least partially.

Some creditors speak of a "debt-equity swap." This can conceal a danger to the sovereignty of a debtor nation: national sovereignty is non-negotiable. But the abstract concept also acknowledges the mathematical idea, by no means new, that the zero-point between positive and negative numbers is a mental fiction and can be given different operational meanings by human consensus. Likewise, "payments" can be given different operational meanings by human consensus. Happily, consensus among the civilized majority is open to innovations about the man-made concept of "payment."

If such economic re-thinking is becoming possible, even total write-offs can be rationalized with the innovative hypothesis that what is important is not the balance of "payments" but the balance of *accelerations of payments*. Income is generated not by quantities recorded by bookkeeping fraternities but by positive accelerations of goods and services. This means that even if the quantities of recorded payments show deficits, even if these deficits fluctuate at ranges of trillions of dollars, the economy remains healthy if the flows of goods and services maintain a positive acceleration as they enter into the emergent standard of living of entire populations.

No doubt this will mean systematically subordinating to this criterion the myriads of re-calculation of interest rates, pricing, fiscal and monetary redistribution, trends of inflation and deflation, volumes of international trade, etc., that would be extremely difficult to carry out in an age without high-speed computers. No doubt it will mean a radical re-thinking of concepts like "borrower," "owner" and "steward," and a realization that every single individual is steward, owner and borrower in varying proportions. No doubt it will mean a social grasp of the interdependence and solidarity of our global organism. Is this such an impossible dream?

**ALTERNATIVE**

For those who think so, what is the alternative? Only the nightmare of a new Dark Age: a barbaric technocracy programmed by
a totalitarian elite. This is not a nightmare for the small elite whose financial and nuclear capabilities enable them to write totalitarian programs, and who are not scrupulous about killing and stealing. It is a nightmare for the rest of us.

All we can do now is to educate ourselves to understand the present economic dysfunctions and how to remedy them at their first principle and foundation. We must also consider upgrading our computer literacy and thus collaborate in the tantum-quantum calculations needed by technocracy. This upgrading will earn the respect of negotiators. Our mastery of tools must measure up to all the moral demands of democratic civilization.

Thus we can vastly broaden our democratic space by educating and upgrading ourselves to full responsibility for a government of moral people, for moral people, and above all, by moral people.