LONERGAN'S 'CIRCULATION ANALYSIS' : A DISCUSSION*.

Eric O'Connor: Michael what was it you wrote on for the Mitchel prize?

Michael Gibbons: The object of the exercise was to try to stimulate academics and others to turn to the problems of low economic growth. George Mitchel, who is an American oil multi-millionaire—three to four hundred million is what he is worth—felt the controversey in the United States surrounding 'the limits to growth' debate was rather too much concerned with whether growth was desirable or not desirable. He didn't want to wrestle with the ideology of that position. He said, well let's assume, let everyone assume for a moment that growth will be slower—and it has been—what difference would it make? And he has, over the last ten years, offered a million dollars in prize money, of which I have only got five thousand, to get scholars interested in this. Because most economists, indeed there wasn't a single economist who won any of the prizes this time, are not interested in this problem; it is not very interesting to them at all. He has offered five series of competitions over ten years for people who want to think around this problem.

Eric O'Connor: How to live with slow economic growth.

Michael Gibbons: Yes. That's right. One of my beliefs is that a lot of the anxiety that we are getting into at the moment is because we don't know how to manage in a low-growth situation, where waste is not contemplated. Anyway we will get on to that later.

Eric O'Connor: The first thing I want to get on the tape is a statement about the two circuits,mentioned by Lonergan, and their relationship. How is this to be understood by people who are not economists?

Michael Gibbons: I should say, for those who are willing to make the effort to bury themselves into the middle pages of the economic manuscript, you will find one of Lonergan's typically crisp remarks about the total absence of ideas about pure surplus income. Well, if you want to see the incarnation of pure surplus income, it is George Mitchel. Three or four hundred million is what he is worth. His standard of living is looked after with about one hundredth of that. And what does he do with the rest?! He builds cities at the moment.

I have wrestled long and hard with this business of the circulations and I should probably try to say what we think we did?

* This is a typescript from a tape made at the Thomas More Institute, Montreal, Sunday, November 4, 1979. Transcription by Nicholas Graham. Taking part in the discussion were: Eric O'Connor, Michael Gibbons, Philip McShane and Eileen de Neeve.

Eric O'Connor: Just so that one can have an idea of what Lonergan is talking about.

Michael Gibbons: I'll make a start and if I get it wrong you can jump up and down. I saw it this way. The two sets of variables that need to be incorporated into every economic theory. One has to do with what I think Lonergan calls the real flow, which is the flow of goods and services. In his terms, the translation of resources—natural or human—into standard of living. And there is in the middle an enormous nexus where all kinds of activies go on. But the point of the matter is that you want to transform nature into something that we can call the standard of living. And how can you describe what goes on in there without getting yourself in a lot of detail that obscures the basic point. And Lonergan's insight was that you could imagine it as a kind of quantum system where there are various levels of activity going on which he describes as his point to point, point to line, point to surface, point to volume activities.

Now the important thing about this, the reason I mention it, is that right from the very beginning in the definition of point to point, point to line, point to surface, point to volume, already enters the notion of the functional; which he is not going to let go of and which is going to cause you all your anxiety as you read on. Because in taking that first step he is moving you out of the common sense and you end up in the world of theory. And if you are not prepared to make the struggle then you are just lost; it all becomes words running on, sentence after sentence logically grinding out and you lose sight of where you began.

But the point of dealing with these multiple relationships of point to point, etc. is to cut through the proprietary basis of describing the economy. Most books are full of descriptions about buyers and sellers, retailers and manufacturers, banks, landowners, agriculturalists, and so on. Lonergan says that's all very well but in a sense that doesn't help you very much. What you want to ask is: are there any functional divisions that we can identify in relation to the production process which cut through the way in fact property is divided or who owns what; that we look at people in relation to what function they perform in the process of moving from resources to standard of living. And in there, I think, the important thing to try to get into your head is that Lonergan is not necessarily talking about firms as buildings with the name of a company. And I think he says somewhere in the manuscript that a single firm or company may be operating on several functional levels at once; and the economists working with us at Manchester with whom we had the seminar on Lonergan found it very difficult to deal with that. Professionals in the game find this hard.

Eric O'Connor: You mean they take their image from this company or that company.

Michael Gibbons: And it is easy to think that Lonergan is doing the same because he harps on the same examples which economists take: dresses, shoes, automobiles, trains, etc. But that first step into the functional, I think, is crucial; and it helps him to set up a flow. Now, that is the second key image, I think, that you have to deal with; and it is very difficult again to imagine. It is the notion of flow. Most of the economic books that I've read deal with flow; and Lonergan is dealing with changes in flow. It is similar to the problem that faced Galileo when he was trying to work over Aristotle's theory of motion. Because when velocity was changing that to Aristotle was a contingent situation; it couldn't have a law about it. After all, if a thing is stable or in a steady velocity situation that was like the planets that was all right. Well, it was Newton I guess eventually who said, well actually it is just as important to have acceleration a constant, and you can do all sorts of exciting things, all sorts of patterns fall out. Well, Lonergan is in the same boat, I think. He is trying to say, well look now we are not interested here in flows of goods but in the relationships which govern the changes of flow. In other words, accelerations of goods. I think I've got that right. Most of the books I've seen are concerned with stocks and velocities; and Lonergan is saying: no, no, stocks, velocities, and <u>changes</u> of velocities, that's what I want to correlate; what are the things that govern changes. Now, one more step on that. And I'll see if I'm getting where you want me to get.

The next thing that needs to be cleared up is...well in the paper I've written for the <u>Festschrift</u>* I've said that the central question of the economic manuscript is: Is it theoretically possible to have a uniform acceleration of an exchange economy? And I think that all those words are important. Because first of all he is not trying to actually do it but to show what the theoretical preconditions are. He is trying to get away from the idea that cycles of various kinds arise from mismanagement only and points you ever more firmly in the direction of the inherent, what he calls the inherent cycle of production. So with the idea of functional relationships between different kinds of production; with the notion of changes in the velocity of flow, he then has the physical elements together to raise the question about what would be the possibility of a continuous uniform expansion. Now we know the answer that he says is that an expansion is possible but not a uniform one; because the distinction between the basic and the surplus stages of the economy entail a certain very very closely understood and regulated process of change. And he has this idea of a wave—he calls it a cycle but it is more like phases of a wave—where at one time you have an expansion in consumer demand and you have to stop it to have an expansion of the surplus demand, and go back and forth this way. Well, after he has done all that he's really got a real system set up and you are quite at home with it; you can have images to deal with it and you can work through shoes and sealing wax and ships and try to get a picture of what he is talking about.

* A Festschrift in honour of Bernard Lonergan in celebration of his 75th Brithday, edited by Matthew Lamb, Milwaukee: Marquette University Press, 1980.

Eric O'Connor: Just for my own clarification. I was trying to get clear the difference between the surplus and and the basic. The basic is everything that is point to point i.e. you deal with the materials as they are going to be sold. So think of the manufacturing of a cigarette. Everything from the man who buys the machines who makes the cigarettes, from his point on it is all basic, even though there is the advertising, because he is doing this in huge amounts, it is still basic. It is cigarette to cigarette, cigarettes that finally get sold. And that only ends when they are bought by the person called the consumer. And the previous one ends with the machinery that is not consumed, that is going to be used in the making of cigarettes. I have that correct?

Michael Gibbons: Yes. And the thing that's often difficult to keep in mind in that is that each of the functional levels that he works out involve a transformation of resources into something. In the basic stage, the point to point relationship is pounds of tobacco to numbers of cigarettes, that's the relationship. Similarly, at the next stage up it is pounds of steel to numbers of machines, or pounds of iron to numbers of machines. In both cases it is a resource to something that is going to be consumed, and you go up the various stages in that way.

Eric O'Connor: I was thinking of wholesalers and so forth as in the next stage; and then I realized that they are just dealing with the same material.

Philip McShane: Yes. But the point that Michael made was the complexity that gets in there which boggles the economist. That in fact, as I told you last week, you look down on the street, Drummond street, and you see six vehicles passing. And this is an important point to note. Lonergan's thinking in 1944, it is in the context of the 1943 writing or publication on marriage which has concrete heuristics in it, emergent probability. The approach is non-abstractive in the best sense. And this is something economists can't get used to. That apparently, if you are reading it from that background, it is getting more and more remote; but if you are thinking heuristically, you can think at any stage of Drummond street and six vehicles going down. One of them is a man driving his corporate car and he sells airoplanes. And another guy has a rented truck from another company and he is delivering bread. And there is another guy with a lorry delivering pigiron which is not going to one particular basic or surplus zone, it is going to several of them. And for the statistical economist to face up to that now is much worse than the physicist facing up to the quantum mechanics. To actually go back and see that. Like take Kondratieff's paper. He talks about the statistics of pigiron, etc., move back in and see that you've got to redo all of that and revamp the whole national bureau work so that you are saying just what is the density of flow in the first surplus level. So it is just as huge a task as the mistaken statistics of the last hundred years.

Eric O'Connor: In other words, some of that pigiron is going to get me a fireiron for a camp in the country.

Philip McShane: Yes. And somebody else is getting a shoelast out of it.

Eric O'Connor: Yes. And he is going to use that for making something.

Philip McShane: And the thing is, you can examine the pennies in a man's pocket as he goes down the street.

Eric O'Connor: But you can't tell what he's going to do with them.

Philip McShane: Yes. But at least you can get a functional perspective on the street. Just as the good zoologist has a very sound perspective on a crop of bugs. And the perspective as Michael says, it has nothing to do with the description of the factory, it is in the remote world of Plato's kingdom as far as most economists are concerned. And yet it is the key. And it is the one that you find people like Marx hitting on, or Schumpeter hitting on, or Adolph Lowe, but not being able to pull right through to that normative dynamic. Then you have the normative question. As well as the functional distinction, you have the normative issue which you find absent. Like Keynes starts with profit, and the norm for Lonergan is the end. Finus est principium, the end is the principle.

Michael Gibbons: The standard of living.

Philip McShane: Yes. And so you take the end and you consider the efficient running of the machine. Now that is all very much out of the present economic ballgame. And your problem, and I suppose all our problem, is how do you communicate that. And the answer is: you got to get your economists not further on than second year economics.

Michael Gibbons: That's right. And we did this seminar at Manchester among six of us. It took us ten weeks to do forty pages. Because everytime we thought we understood, and everytime we turned to the economist to say where does this fit into his thinking; well, he was at as much of a loss as we were. And we had to sit down and try to work through this using our typical example of British (Leyland?), using British Leyland as the example because that is so spread out; and try to get the imagination going on what is involved here. But even that. If we could talk around this it would be very useful for us because the question about whether sustained growth is a possibility, even theoretically, I think comes out of or you can imagine it in terms of what we have been already talking about. To deal with it analytically we have to make the change to monetary circulation. But we can do that later on.

Eric O'Connor: Have you anything to bring into this at this stage for the moment, Eileen?

Eileen de Neeve: No. I was just going to ask a question, at some point. What starts the cycle? If it is innovation how does it become generalized? This is related to the question, is it theoretically possible to have uniform acceleration?

Why couldn't it occur randomly and therefore in one industry at one point, and in another industry at another point, and then the whole thing result in a uniform acceleration?

Eric O'Connor: It would random out to uniform acceleration, that is what you are saying.

Philip McShane: I have one sort of type of answer to that which is if you like, pedagogical. And that is that your question is equivalent to the problem of can you still have wave motion when there is an aggregate of channels to the beach? And the answer is yes. And it is very complex. But, I think, that we profitably approach this problem by getting the perspective of the physicist faced with the two body problem. Unless you get the economist to envisage the two body problem equivalent you will never get to a serious discussion of the many body problem equivalent, plus the massive set of errors built into present economic discussion. Like say the bank rate as an aggregate of aggregate of oversights. So that is one approach I have. It is a legitimate complex question and the answer comes out of things like Kondratieff analysis and whether the shift from macro-computers to micro-computers meshed with certain paralleled shifts in chemistry,etc., constitute something like the beginning of another Kondratieff. But you can see it is a very complex issue.

And there is the prior issue of say the illustration that I take of the island where the farmers have a hoe culture. And some chaps in the local inn one night get the notion that if you are a horse trainer and I make leather, it bubbles up out of the group that there is possibly a shift to ploughs. And I think you could write a colossal book on this, a novel. The talk to the local moneyman, the gradual tightening of the belt, the increase of employment on a level that doesn't produce any bread for about two or three years. All you get after about three years is a flow of ten ploughs per annum. And if they are working properly they will have a one year period with Autumn or Spring ploughs until you reach a position where everyone has ploughs, and now you start having bread.

To follow up Mike's suggestion that we get on to the monetary eventually I think that unless you get clarity on the monetary flow that would meet that normative intelligent flow of goods; moving into the other zone is very much like saying that we have nine planets around the sun, what are we going to do about it? And I find this very frustrating even among philosophers and theologians who don't know anything about empirical work, or even about the planets. And in fact you have got to take the thing piece meal; and one of the great strategies in Lonergan's manuscript and I think Eric Kierans kept noting it in your discussion was that Lonergan pushes aside political interference. Get straight the economic circulations and then ask how the monetary flows are to operate. And Lonergan's answer is: a massive shift in education in the third stage of meaning. And modern governments' answer is, of course, a sort of hydrostatics of bank rates. But do you share my concern about setting up the priorities; that in fact the complexity of the modern economy is a colossally complex set of wave motions, but Fourier analysis will be relevant when we can convince the economists that there are sign waves.

Eric O'Connor: In other words, you say that the analysis that you are asking here about is the analysis of the two body problem. Is that what is involved?

Philip McShane: Yes. And the thing with economists—and I'd like to hear Mike talk about his seminar—is to accept it in stages. Are your going to accept that a normative analysis is worthwhile, and if the fellow says no then you'll say, bye,bye. If he accepts the normative analysis you have to say, well can you make any sense out of the functional distinctions? In other words, there's a series of principia to be accepted.

Eric O'Connor: Now, by normative you are not saying what should be; you are saying is there something in the process itself which determines something.

Philip McShane: Yes. In other words, there is something about the economic process that would rhythmically; and, again, I'm thinking now of the new economic history and contrafactual history that would rhythmically have put us in a far better position at the end of the twentieth century had Adam Smith not led us astray at the end of the 18th. I think a lot of economists don't appreciate how we have frustrated the cycles in the last two hundred years.

Michael Gibbons: I'll deal with Eileen's question again because I think I have an approach to the problem which is slightly different from Phil's and you may find it helpful. You see I found, that when I was dealing with the early pages of this manuscript, a good deal of help from a clue that Lonergan has given. And, as you know, he only gives you the clue once and if you choose not to follow it up then you wrestle and wrestle and wrestle and you end up after five years going back and finding it again. The clue he gives—it helped me a lot—was the reference to Rostow's stages of economic growth. Because what that did for me was that it put the timescale right. That I think is one of the problems with your notion of innovations, you are working on much too short a timescale. Or you could be. It is possible that you could be thinking of something which in fact would figure in the circulation analysis simply under the optimum use of existing technology, which he has got under one of his summation signs.

Now, if we look at Rostow's thesis of the beginning stages that give rise to sustained growth and through to maturity. I mean that takes place over seventy five to a hundred and fifty years. And if you look at the kinds of problems he is facing there I think you can see why it is that a single innovation would not even produce a single sign wave. Lonergan is very clear on this. If you take Phil's idea of the plough and ask yourself or imagine a community sitting in England in seventeen hundred, the industrial revolution is just fifty years down the road and they are thinking about ploughs, if you can imagine at any time that the resources of the community are more or less fully engaged; in other words, everyone has something to do and most of the time is concerned with providing enough to eat, enough to wear, enough to put a roof over your head. And imagine these chaps in a pub saying, let's talk about ploughs a little bit. Well, the first thing that does is that it takes people away from providing food,heat and clothing; and the second thing it does is it makes, it starts to look for other types of activities which may not exist, like maybe a new type of metal forming to make the plough. Now, to come back to your question again, no single innovation can in that context start the process of sustained growth. I mean a man with a bright idea for a plough—da Vinci must have had it, he had everything else two hundred years before—but the conditions that would have put that possibility with enough surplus wealth in the community to allow people to come away from breadmaking for a few years in order to build what we now realize is the capital goods industry, to get that started would have taken not one innovation but,as Lonergan says in the manuscript, a whole series of interconnected innovations. Now the thrust is, his argument is, that unless you realize that you have a whole network of inter-related innovations which are necessary to start the expansion of a cycle you are going to try always to smooth out the pure cycle. And I find myself always trying to smooth out the pure cycle; and I realize that everytime I try to smooth it out it is because I haven't understood what's going on. Because I imagine that somehow you can get around the problem of having to create the surplus sector. You have it in your mind without realizing that it can be created only over a ~~long~~ short period. It was Rostow that brought home to me that it cannot be done in a short period, it is a long period of gestation of not one innovation but hundreds of them, which make it simply possible to produce an efficient plough. And you will know from you development economics that where the third world falls regularly is as it draws people out of the basic stage and puts them into the surplus stage to make ploughs. Starvation falls in on them because they have no other infrastructure there to divert resources to plough making. And you see this in the third world time after time; they start on a process of industrialization and the first drought or heavy rain or something like that reduces them not just back to where we are with a bad harvest, they are undermined altogether; the whole process collapses.

Eric O'Connor: Or the first time a machine breaks down.

Michael Gibbons: Yes. For nuts and bolts or something and the whole thing comes to a grinding halt. So I found that working with Rostow's idea of the stages of growth at least—though you wouldn't agree with Rostow a hundred percent—puts you in the right timeframe.

Philip McShane: And he is good; and there is a good following of Rostow in history. Trying to spell out pro and con but it is the sort of thing that is necessary but again, as you say, the functional distinction has to be put into the historical scene.

Michael Gibbons: He doesn't do that, does he?

Philip McShane: No. He thinks of dividing up sectors alright, but the functional distinction is a very big job. Heilbroner in one of his last books has a footnote on it. And that was it.

Michael Gibbons: Does that help at all?

Eileen de Neeve: Yes. I guess I can't quote the reference but I understood Lonergan. I know that the Kondratieff cycle is smooth statistically so that it doesn't show ten year waves, eh? I can't find the page in Lonergan but he does mention a ten year cycle.

Philip McShane: He mentions a ten and a three.

Eileen de Neeve: Yes. But he suggests that his cycle of the productive cycle is a ten year.

Philip McShane: It is closer to the ten. And that is why I took the plough culture, in fact; rather than the railway.

Eileen de Neeve: But is the pattern the same? It is the same but quantitatively different.

Philip McShane: No. The reasons for the different cycles are different. If you take the Kitchin or Crumb cycle, that's the three year cycle and the reasons for it are the oscillation of the basic pricespread which occur three times in Lonergan's cycle; and that makes Lonergan's cycle nearer to the Juglar. The Juglar is the ten year one. And then he says that there are the longer rhythms where such is the massive innovation that there are sets of innovations. There are transport innovations; but there are a whole set of other innovations.

Eileen de Neeve: So you could use Lonergan's analysis to describe either the ten year, roughly speaking, or the Kondratieff.

Philip McShane: Or the Kitchen, that's the little one.

Eileen de Neeve: But the Kitchin is a price cycle. But not a cycle of real production.

Philip McShane: Well, the cycles are very much tied in with the monetary flow. As Mike says, you have really to get that in to see what is going on. Lonergan's Juglar, if you like, is much more clearly focused on an aggregate of innovations that are significant, that gradually move into realization, that give rise to a flow of bread and cheese; and that itself steadies up so that that rise is a constant thing. And this is another thing. I had difficulty imagining this and I think maybe we all have: that most people think of the cycle as your coming down. There is no notion in Lonergan that somehow there is a collapse. Like say the plough culture in an intelligent island moves gradually to the stage of providing ten ploughs a year. And they find out that that is all they need because roughly only one plough breaks down every year in the hundred farms. And it is simply a matter of intelligence not to overproduce, not to do the Lenin thing, look for the next island. Or if there is another island you do the intelligent thing and start relating.

So that is a very natural rhythm that Lonergan would in that case work out a ten year cycle. But it is not sacred in that if the speed of inovation changes in changes in technology the cycle periods can change.

Michael Gibbons: That's right, certainly.

Philip McShane: So that say the question of producing the plough which means like in my illustration the racecourse owner has to spend months training the horse not to go round the field in a circle but to go up and down, and so on. Whereas the shift from macro to micro computers might be a major contribution to a new set up and it mightn't take that long.

Michael Gibbons: I think the point with all this is that if you start imagining the pure cycle in the sense of a Kondratieff, a Juglar or a Kitchin cycle you are in trouble because those latter three have pluses and minuses in terms of acceleration as cycles. And you know the data you see in the paper and it is all there; what is the image that the mind is trying to get round? it is something doing the(sinusoidal?) pattern and it is very difficult, as you say Phil, to get out of looking for that sort of repetitive periodic.

Philip McShane: You have to diagram it so that in fact your growth is sort of like that, and then like that, and then it is steady, it doesn't come down at all; and then you have more of this and more of this and then the two going together. But there is no state in which you come down, a oscillation up and down.

Eileen de Neeve: So that GNP would accelerate uniformly. Would it?

Michael Gibbons: No. GNP cannot because in the working out of the dynamics of this process you reach a period of time where the continual pressure for more goods flowing into or the increase of the rate of the flow into the standard of living requires that for a period of time you take a breather. You have to redeploy more resources to your capital goods sector and in the anti-egalitarian shift you take money off you and me as consumers and you spin it off into the surplus stage; and for a while the expansion sort of slows down.

Philip McShane: You can have a steady state.

Eileen de Neeve: What you are saying is that the rate of growth would be cyclic.

Michael Gibbons: The rate of growth would probably slow down. It is the rate of growth that is slowing down but the output is still expanding.

Eileen de Neeve: The GNP could expand constantly.

Michael Gibbons: Yes. But most of the time people are not talking about GNP, they are talking about DGNP by DT. That is what the two and a half percent growth rate is.

Philip McShane: And secondly, there is no functional distinction in GNP as presently discussed.

Michael Gibbons: And you are in a muddle then because all the GNP is doing then, although we worship this figure, the GNP is simply recording all turnover, all bills of sale going back and forth. So when I buy a house it is part of the GNP but if I buy a house and then sell it to you and you sell it; then it registers twice, because it is a double turnover but in fact it wouldn't fit into the Lonergan system at all.

Philip McShane: That's why it is such a marvellous invitation to the statistical economist to revamp his whole ballgame. Like the construction business and the house selling business, you move them into different zones.

Eric O'Connor: What you said to me on the phone one day was that even to get statistics that are anyway useful for this, in a precise way, people have to distinguish much more and take out repetitions of counting the same goods.

Philip McShane: And finding out where the pigiron goes. Nowadays the notion that it is far too complex is dated in the sense that we have all these facilities: computers, etc. So the block is not facilities or possibilities but mind-sets I suppose.

Michael Gibbons: Well, how do you start thinking functionally. It is not in the Academy at the moment at all.

Philip McShane: We both had the same experience reading the manuscript. I estimated today that I had spent twenty hours on each page of the manuscript, over a period of about five years. But as Michael says, you get to page forty and you realize that you are in the wilderness.

Michael Gibbons: You are swimming. You're swimming round.

Philip McShane: And I had the advantage, and this may help other people in doing it, you mentioned the problem that you hadn't done the other economists. I had a short stab at the economics in the mid-sixties, the standard stuff. It made no sense to me. And then I got the manuscript in sixty-eight and I started working on it say in seventy-three in a serious sense. And in a sense I luckily did not know anything about the macro statics that derives from Hicks or Walras. So that when I got back into the other economics I had to sort of say, what are these guys doing? Then I went back to Schumpeter and the history and found out ...

Eric O'Connor: That they had the questions, at least, about it, eh?

Philip McShane: Oh, well now some of the early guys had the questions. Ricardo and people like that. But the fact that the <u>priora quo ad nos</u>, what is obvious to everybody, is prices and then you settle on prices as what you are analysing. And Lonergan's master stroke is that, and really I should have brought his other manuscripts, there are three or four other sets, he laboured around the notion of prices: marginal, comparative evaluations on the side of the sellers and on the side of the buyers and moved around this long enough to realize that it is almost empirically residual and certainly it is not central to the economy; and, moreover, that politics has no place in economics. And these all come out at the tail end of the manuscript. But you have those difficulties at the beginning where he throws you into what you might call another world.

Eric O'Connor: What do you think is the advantage of getting people to think about his thing who are not professional economists? I'm thinking of the longrange education. What is the good of that?

Philip McShane: Well, I suppose if you run seminars, and you are running a seminar at the moment on economics, and you make people aware of the fact that say human error on this scale is possible, on the scale of the influence of Scotus and Machiavelli and you make people note that perhaps there is a way which allows creative intelligence to everybody which is at the basis of all their complaints. I was talking to people out in Westmount today about the decay of say the policing of Westmount and the shift to the municipal police and larger and larger structures where you don't have any of the Jane Jacob's phenomenon of insights here and insights there.

Eric O'Connor: Like this is a dull corner and this is where you get hold ups.

Philip McShane: And, for instance, you get people to realize that O.K. let's get back out of the mystique of numbers called 14 and 15% bankrate and ask ourselves, what do you think would be intelligent? And the answer can come from common sense. Wouldn't it be terrific if when I had a bright idea and I had a bit of money and I could talk to my bank manager and together we would discuss in a mood of trust? Heilbroner says, that money is the promise by which men live. But there is no analysis of promise or trust. The person in the street appreciates sensitively that that would be very intelligent. That you would go in and he says, this is a great idea, you can have my money at eight percent. I mean, granted that we are in the center of a surplus expansion,etc., and presuming now the bankmanger is intelligent and educated, and the person coming in knows that and therefore you get out of this whole notion of a planning body playing big daddy and mistakenly. In other words, the thing is a mistake anyway, saying 14% bankrate.

Now you can get ordinary people to sit round, like the faculty does at the university when they are not teaching, bitching about the status quo and what Lonergan is bitching about in a highly general emergent probability way is the status quo of little people. So you have got to get the people to realize that life is a soccer match, in other words, you don't plan a soccer match. There is a goal, which is the standard of living; everyone is supposed to have as much understanding of the team as possible, and then play on. But that is a massive shift in perspective.

Michael Gibbons: That image of the soccer match reminds me of the work of (Van Hayek?) with his notion of catalaxis. The idea of catalaxis is that there are certain human aggregates of human activity which like the soccer game can't function if they are planned. And catalaxis is the Greek word, he must be able to work out what the Greek origin of that is, is concerned with the dynamics of that sort of phenomenon and, of course, Van Hayek is writing deliberately against the planners who would with a single swoop get the whole set of rules straight and then just plug all of us into the game to be played.

Now, to go back to the question about the longer term. I take my point of departure from Adolph Lowe, I think he was the one who brought this home to me. A few years ago I heard Phil raise the very simple question which fits the problem we've got here and that is the realization, the faint dawning awareness that things could be otherwise. The definition of enlightenment almost. Just possibly, in the remote distance, things could be different. Well, if you join that up with the reading I got out of Lowe which I have spent a lot of time with, worked very hard on his thought to try and get it straight. He made me more aware than I had been before that the free market economy, or as free a market economy as we have here is itself a product of an enormous amount of education. Because if you think that the law of supply and demand will work just because that is the way God made it you are in error. It doesn't. It requires that you and I, I think I've said this before at several of our meetings, it requires that you and I behave in certain ways to changing supply and demand. And if we don't behave that way you get your business cycles.

Eric O'Connor: Could you give an example of how this relates to supply and demand.

Michael Gibbons: Yes. I was going to try and avoid that; it gets us into a slight problem. But here I think is a good example. Let's imagine—it has to do with second derivatives— that you are in the business of buying shoes, in the business of making shoes, you are in the surplus stage. So all of a sudden, for some reason which you don't understand, there is a demand for more shoes. That is all that is registered to you, people want more shoes. Well, that means that there is an increase in demand for shoes and according to the law of supply and demand that should be followed by an increase in price. Because you have the same number of shoes there and people want more of them and so you can afford to raise your prices till they stop wanting more. But Lowe is the one who brought out to me the fact whether or not you do raise your price depends on what you think is going to happen next. Whether you think the demand is going to continue, whether it is going to fluctuate or whether it is going to collapse overnight. And you can see, I think, from that example that if you were in the business of supplying shoes; if you thought, Ah, that is just because the Queen has come to town, everybody is going to buy shoes but tomorrow there is going to be no demand at all, you wouldn't bother, you would just raise your prices. If you felt it was going to collapse overnight you might indeed lower your prices. I raise this for a very good reason because it is also one of the main problems with Lowe; that you introduce right into the fundamental classical law of economics a human behaviour factor. Now, Lowe argues at great length that we have all appropriated this with our mother's milk, that businessmen know how to behave. But if you move to the functional distinctions those laws of behaviour we know, one thing we do know is that those laws of behaviour as soon as you get into the functional frame of mind produce the business cycles, and all the social chaos that goes with it: the agony, the suffering and the deprivation and God knows what. And I think that the longtern thrust of Lonergan's work is that it drives home what he refers to in his notes as the enormous propaganda that it is going to require of us to change how we think about our economic process. I think this is where I am at Phil's point.

Philip McShane: Yes. And it is dead on, and it is very difficult to communicate this to a short term thinking person. I've tried, say, with the plough notion. An illustration I've often thought of working out is a scene in Steinbeck's East of Eden where the old farmer buys a motor car and he doesn't know anything about the motorcar. Now the motorcar came into culture and if today you saw a guy in the street,say in England, where they still have the gear shift stick driving around for weeks on end in first gear as fast as he can; well, you'd say this guy isn't really in the culture. Now, the problem is that there is a tremendously complex psychological presence in a driver of a gear shift car; you adjust to all the rhythms required by the vehicle. The problem is: can you make it psychologically present in the culture in various ways from the Academy down shall we say to the government and to the people so that manifestly you are stupid if you are not in the rhythms of the economy. That is why when I wrote that chapter it was the second million years that I was talking about. We can dodge the rhythms of the economy, maybe for another thousand years, but there is even a limit on human stupidity. But it is a huge educational task. And it is great,like you have picked out the fact that it has happened in this second stage of meaning with the presence of what's-in-it-for-me philosophy, etc. Could it not move to this third stage of meaning where people would understand themselves and understand the end and understand, and this is a very important point, that the notion of success that Lonergan mentions around pages eighty and ninety will have to be transformed so that the successful business man is the man who can flow with the rhythems of nature and not the guy who is making 33% profit, like the Quebec Liquor Board.

Michael Gibbons: But our current definition of man is precisely that sort of man, isn't it?

Eric O'Connor: It is the bottom line.

Philip McShane: And that is in the text books too.

Michael Gibbons: As I said the last time we had this meeting that we have had now nearly fifty years of the total ingestion of Paul Samuelson, and why do we think that it has had no effect? It has had a marvellous effect. We all know how to behave in this system and how to survive; and it is not going to be changed easily.

Philip McShane: There is a further difficulty here now. And here I'm recalling conversations with Eric Kierans and that is that for somebody that can't fantasise, and I mean that in a strict sense that I use in The Shaping of the Foundations, we can't fantasise concretely an enlightened people, people who understand understanding somewhat, it is impossible to see how you could possibly mesh this macro-economics with the micro-economics of firms and efficiency, and profits and survival. And my first point in discussing it with the standard economist is that yes it is impossible to envisage unless you get to the stage of having the perspective. And it is a colossal perspective in history. That in fact there is a dynamics in history that enlightenment—Voegelin brings it out very nicely—so that history's orientation is towards the epiphany of both understanding and its absence. And to say for a Christian economist to take a stand radically on the impossibility of meshing this macro-economics with the realities of living is to take a very odd stand on Christian hope, and on the creation. That is a theological point, without even getting to the eschaton.

Eileen de Neeve: Going back to people's behaviour and saying that it is in the second stage of meaning of where, of what's-in-it-for-me?

Philip McShane: That is an element in the second stage that comes from misrepresenting the Platonic and Socratic and Aristotelian tradition of ethics.

Eileen de Neeve: I wondered if it was related to Adam Smith's notion that I think we still do operate on: that if you operate in your own interest to the best of your ability you will achieve the common interest. But aren't people becoming more and more aware in their books certainly to that effect? That it is not working and it is time to take up another perspective.

Philip McShane: But notice how you can take Adam Smith's perspective and transform it entirely. And again you are back to the soccer match. Insofar as the guy knows exactly what he is doing in his own interest he understands the rest of the team. In other words, if you think of micro-autonomy as the person sharing a view of history. It is not easily done, of course, twenty years maybe; so that they in fact are asking what is in it for progress, chapter two of Method in Theology. You take your stand authentically on the aggregate of human beings in history, and that means the millions down the line. This is one of my arguments against the activists: they want to help a few people while there are an awful lot of people down the line. That's the shift of Adam Smith.

Eileen de Neeve: Well we are moving out of that, hopefully.

Philip McShane: I think so.

Michael Gibbons: We are moving out of it in the sense that there is a dissatisfaction with the results of it. But I'm not sure that we are moving out of it in the sense that anybody, except Lonergan who has put his finger on what has gone wrong. It is alright to be dissatisfied...

Eric O'Connor: This is what Phil is calling the perspective, the perspective of history that needs to come in, even this matter of the man on the team.

Philip McShane: Yes. And there is that initial thing that Michael brought up about the simple suggestion I made of thinking that things could be different. Heilbroner ends up most of his present books more or less saying, well its all over; or throwing out some fancy notion about religion. If you have this view of empirical and generalized empirical method you know that this shift is leaving Galileo's elementary shift to measurement way in the shade. And again it is the perspective of history. But I agree with Mike that there is a dissatisfaction at the moment; you can't go into a faculty lounge without everyone bitching about everything, committees are a waste of life, etc. But I find it say in my seminar. We've got sixteen professors and not too many of them can note that yes we could do something about it, say, the corruption of the academy, a total sellout to decay.

Eric O'Connor: Precisely because of not thinking that there is anything that can be done.

Philip McShane: And there are all kinds of other reasons. Like you can go through each department and find out what's wrong and there is a lot wrong all the way. And one of the big things say is adult growth. Until we restore a notion of the elder in the community, growing and sharing a perspective on history and life, an Iliad and an Odyssey, the Academy will still remain in that dissatisfied state: well, at least I'm getting my cheque at the end of the month. I'm sure you have the same experience with academics in England.

Michael Gibbons: It is exactly the same. Except we've got a great climate to discuss it in.

Philip McShane: Can you push that point Eric about the education because I think it is central. I don't think we have a problem here about this being relevant but we all have the problem that there is a terrible gap. There are only two M.A.'s that mention Lonergan's thesis: Eileen's is one and there is a guy in Halifax that has just finished an M.A. comparing Lonergan and Hicks. But otherwise... I don't know the end story of your seminar with the economists you will have to tell us a little more about that, but otherwise economists that take this seriously are not around.

Michael Gibbons: They are not around; And I realized as a result of doing this seminar, the seminar in Manchester. This ended, in the words of T.S. Eliot, not so much with a bang as with a whimper. And what happened was a case of academic indigestion, that we just had to go away and let it digest. So after we got to page sixty eight we just put it down and we are going to meet again, starting in September. But we realized that the insights that we had at the start of the discussions were probably wrong and that we were in a sea of words.

Philip McShane: That's progress.

Michael Gibbons: But it will take us probably five years—we are only a group of six—to work our way through these manuscripts. And what is the great temptation? To leave it aside and to press on to something else, to keep the interest of the economist.

Philip McShane: The problem is what I call the Stephen McKenna psychology. Stephen McKenna, a bankclerk in Ireland, and he discovers Plotinus and in his notebook on his 30th birthday he writes down, 'this is worth a life.' And he spent twenty years in poverty, translating Plotinus. And he produced a terrific translation.

Michael Gibbons: I wonder Father how many people will pause, as I did, on the first page of the economic manuscript where he gives us eleven points and after fourteen years I had a manuscript. Most of us look at a fourteen year problem with dismay. You are not going to get many papers written if it takes you fourteen years to get the problem straight, is it?

Philip McShane: And the dynamics of the interest through those summers is colossal. But you can see my problem here of adult growth. Or indeed my problem at the moment is I'm trying to write an article for the Festschrift on generalized empirical method and the problem is in dealing with younger students who got interested in Lonergan and who are living in a culture where after a Ph.D. you have an essential view of the world.

Michael Gibbons: That's right.

Philip McShane: And not knowing that an essential view of the world is part of the Beatific vision. That all we ever get here is a heuristic.

Michael Gibbons: I'm with you.

Philip McShane: And that's another aspect of this change in the weltthanschauung. That getting to a perspective of, and seeing the world in that progressive fashion: that means the first, second and third world, has to upturn our views of what happens in the twenties, what happens when you are thirty and forty and so on.

Eirc O'Connor: That is why you are emphasizing the next million years.

Philip McShane: In other words, there is a shift from compact consciousness in the early Hebrew and the early Greek tradition and the Chinese, etc., towards the differentiation of consciousness that manifests itself in Euripides' skepticism in the Greek tradition; differentiations that emerge over the medieval period and the modern period, in the absence of an understanding of them, leading to post systematic meaning as a dominant thing in Western civilization; and post systematic*meaning is the bread and butter of theology at the moment; and one has to move out of that

*commonsense

in the next thousand years i.e. the second stage of meaning with all its dialectic absurdities. And the problem is to move towards the emergence of the human sciences and towards the possibility of a mediated integral consciousness that would restore elements in the primitive compact consciousness such as eldership and stages of life, which we have paralleled in the Christian sacraments. A different view of what it is to grow in a section of history. Now that's a colossal job. Like the textbooks you take on psychology. I love to quote one by Rappaport. If I might give you a two minute rundown on this book by Rappaport called Personality Development. He's got four chapters: the first on method, four chapters on ages zero to eighteen; chapter five is eighteen to twenty five—roughly, it is making it, you get the wigwam, the canoe and the squaw and the kids. Chapter six is twenty five to fifty, and this is called the age of attrition which is another fancy word for rot and that is all that the chapter talks about. But it is the jump to chapter seven I like; chapter six is twenty five to fifty,chapter seven is sixty to the end. So there is a decade about which he has nothing to say and the last decade is like fadeout. As Maslow's disciple, Aresteh,says you won't get any literature on adult growth from psychologists until they grow.

Eileen de Neeve: Won't there be any feedback. We say that behaviour isn't suitable and that people becoming aware of that, why won't they, and especially when it is concerned with their pocketbook and the nation's pocketbook and various other pressures, why wouldn't there be an incentive to simply change behaviour?

Eric O'Connor: It seems there you have this other problem of in order to work on the two body problem you've got to work in a closed economy. You've got to think in term of a closed economy.

Philip McShane: You've got to have a perspective as Mike says of backing off and getting at the essentials.

Eric O'Connor: Now then, there comes this awful mess at the moment with this flood of dollars, with the inflation, which you have to have this first because you can't get it from the data of the present time. You can't say it is not working.

Philip McShane: But the problem is that what is working are the sectors badly. Like Mike said at the beginning it is a realistic heuristic analysis, and it really is going on despite the fact that we are neglecting those flows and producing inflation, bankrate fungames, the mess of Eurodollars, and that sort of thing.

Eric O'Connor: His analysis doesn't handle Eurodollars, for instance.

Philip McShane & Michael Gibbons: It does but we haven't got to it yet.

Philip McShane: When you get to the end of the manuscript on government intervention, taxation and all that sort of stuff, it is all right there.

Eric O'Connor: Can you give me any sketch for a perspective.

Michael Gibbons: I'll try. I'm suitably chastened by the opportunity to do this. We need some images in order to play with this and the image we have at the moment is one of transformation, that's what I started with. The idea is straight out of Heidegger. Nature as a resource and the standard of living as the end product of human activity and in the middle is the economic system. Well when Lonergan got to page 38 or so and posited the inherent cycle and then was really faced with the fact that he did not have an analytical theory; he had a very sophisticated description of the process of production in an exchange economy in an advanced capitalist society. The advanced capitalist society is necessary in order to have the surplus sector and it is the exchange economy which is the insight we have to explore now. Because the exchange economy is one that says that people want things and pay money for them; the medium is exchange and there will be buying and selling across the counter.

Now two things are going to happen. Two insights need to come. One is very easy to slide over. The ideas is now that if we have surplus stages and a basic stage and the standard of living. The basic stage is consumer to the surplus stage and the standard of living is consumer to the basic stage. And that immediately provokes the idea of a payment. And a payment gives rise to a link with standard economic theory, the notion of money in circulation. The idea is,very simple, that the amount of money in any economy is constant and what is a payment for me is a receipt for you and so on eternally.

Well, Lonergan hit on that idea or borrowed it or saw it somewhere, I don't know where he got it from and realized that having got that far he was nowhere. He needed two other ideas that he worked on. One was that to follow the logic of my model I guess I'll have to talk about the flow of payments or the rates of payments that gets you back into the notion of flow again. And then he had to have the idea of circulation of money. And I think this is easily overlooked. I've wrestled with it for quite a while and I think maybe I've got it straight now. Although he illustrates it perfectly clearly, but as so often happens you slide by till it hits you. We are living in a time now when people are always talking about the need to expand or curtail money. They say that money is tight. And he observes that there is a difference between a flow of payments which do no work at all and a flow of payments that do work in the economy. And the one that he is interested in playing with is the movement of payments from the basic to the surplus sector where a unit of work is done in the process. In other words, as a result of sending payments around in a loop a ship is produced. I think this is the model he uses. That is a velocity. So a whole circuit of payments from you to me and back again takes place in a year and one ship is produced. There is a correlation there. And that is where he begins to turn his analytical screws on. That there is a ship produced there and in the process of production of the ship a certain sequence of payments has gone on, moving through the stages. And he asks the question now: what's the relationship between speeding that up and the increase in the number of ships. And he says, look a lot of monetary economics is about speeding it up but people are just paying their bills quicker, that's no help to you. What you want it to do is to go round the loop so that each time it goes round there is another ship. The velocity of circulation for him is speeding up money, the flow of money, so that the number of ships or the number of shoes can increase.

Now what he has to do at this point now is a mapping. You know like you use to teach me in the lazy hazy days, a conformal mapping. He's got a process here going on in the physical world and he has got a process where money is changing hands. And notice that there is no idea of competition yet or anything like that. Nothing has entered in in this way. How can he correlate the two? And the diagram on page 40 is the answer to that. That is the answer to that; and it is interesting to note, and this is where I got the diagram that we have here on page 121 is the answer to the conformal mapping of the flow of goods in a monetary system.

Now it is interesting here, from here in fact in terms of image it is quite simple. He identifies three flows. A flow of money which is concerned with payments made and received entirely in the basic sector. A flow of money made and received entirely in the surplus sector and the one that links the two together. In other words, what he calls the cross-over frequency. And it is the cross-over, think of it in terms of water going around in two tubes, and you want to increase. Say there is a demand for more shoes well you can meet that by increasing the flow of payments in the basic stage up to a point. And he says, let's make it a bit more complicated. Let's imagine that a little bit of the water from the surplus stage can drip into the basic trough and vice versa. So you have a kind of figure eight now of money flowing around; and there are three densities There is the density in the first stream, density in the surplus stream and a change in density in both the streams by the cross-over. And really that's all it is. Just manipulating those three flows. But this is where the image gets difficult because it is accelerations again and its functional. It is functional and accelerations and it is very hard to imagine.

Eric O'Connor: So you have to have those as firm ideas.

Michael Gibbons: Yes. Otherwise you are buried.

Philip McShane: You have to have it at gut level. I remember when I lectured in Boston on this. It had never been taught before actually and it was a real experiment. I think it was the summer of '76. But to get the people to realize that the flow to the basic demand is not wages and the flow to the surplus is not profits. That division happens out of the pocket of the man who gets wages once a week. In other words, functionally his money goes different places, his own money. So we are back to Mike's difficulty that you put Lonergan's difficulty right into the diagram. And those crossovers: the economists will ask, well what are they? And they are functional setups. You have to find out how much is he putting in the pension plan, how much is he investing in somebody's education, etc.

Michael Gibbons: That's right. And it is up to this point that doesn't dare introduce the idea of saving. Because that is usually talked about non-functionally. And it is just a number, it is fourteen percent of our salary or whatever. But he is arguing there, well he says all the way through, well I know that you're pushing me to define saving but I'm not going to because we need to get this functional flow straight. And then you'll see what saving does because what is important in saving is not the amount of money but the change in the rate at which people save. And that is hard for a lot of people. That is why you need Phil's long perspective. Because ask yourself over your lifetime what's your change of rate of saving? It is something we don't think about; and countries don't think about changes of rates of saving in the population. They know about the aggregates of money that are involved; but in order to fuel the expansion of the basic and surplus stages with extra money. I think you may see the point now. If we have in mind two circuits with money floating around; and the money that is flowing around in the basic circuit is going from expenditures through receipts and back to expenditures again and producing shoes. In the surplus stage is a man who makes machines and he is circulating expenses and receipts and he is producing a certain number of machines, just enough to produce the number of shoes people what to buy. Now what Lonergan is asking you to think about is to imagine that the demand for shoes goes up a little bit, well what happens? Well, first of all, in the basic stage money can circulate a little bit more efficiently but nothing really very much happens. You might get a little bit of improvement, but not much. But eventually you are going to have to ask the man in the surplus stage to produce one more extra machine per week for a year. He will want to but he will state that his rate of expenditure and receipts is determined by how fast people are buying in the standard of living; and really he is not free to adjust things completely at will. And this is where the cross-over comes in. And Lonergan is arguing that if you want to now meet the demand in the basic stage you are going to have to deflect money, functionally now, from consumption to the surplus stage. In other words, you have got to say this is where your long perspective comes in. You've got to say to people like me and you, do you mind doing without shoes for just a year while we get this machinery built and the money which you don't spend will be functionally used in the surplus stage to build those machines and you can have all the shoes you can handle, more than you can handle.

Think what happens. Somebody says that we are going to destimulate our demand and allow the crossover rate of money to increase into the surplus sector. Then you can build up your surplus stage again and as soon as you get your extra machine per week, or whatever it is that you need, you reach a sort of leveling off point and then you can increase... the money flows back again by increasing wages which increases buying power and around you go. Of course, what happens—I can give you Britain as a standard example here—when the British industry says to you and me would you just mind doing without shoes for a minute while we build up our capital stock the answer is a resounding no!' We will import from Italy. And there is the cycle immediately shot now.

Because it goes out of the country. This is the last section of Lonergan's manuscript. What do you do in an autonomous economy when they say bugger you, we've got German, Italian, American shoes, why should we wait. You are paralyzed, you see. And to mediate between those two cross-overs you need the functional redistribution of the banks which are in R.

Philip McShane: And the education thing is or reminds me of the old story of Ireland being an island of saints and scholars over a period. Well, the thing was that it wasn't that they were all saints but when they sinned they knew they were sinning. The first stage is they keep saying no we will buy Italian shoes but gradually at least they should understand that that is sinning.

Eileen de Neeve: But then really don't want to say that we should consider the economy as narrowly national.

Eric O'Connor: No. But for illustration.

Philip McShane: And when you go into the analysis and see the long term effects of national debt, of colonialism, etc., you can see that it is an all round damaging structure. The problem eventually is a global economy that is a network and very likely as I suggested somewhere, cycles will be global. If communication moves up.

Eileen de Neeve: I think they are.

Philip McShane: If you take development as occuring in the third world and the second world then one could envisage that the global rhythms in four or five thousand years time would be much more manifest.

Eric O'Connor: My question was that one of difficulties at the present moment is because we are so flooded with Eurodollars that even the governments, even if they had Lonergan's thing in their mind, I say it wouldn't tell them what to do. Because of this ability of a people to borrow for a profit motive and not for the good of the economy.

Michael Gibbons: That's right. But in that case this diagram has to be taken out of the context of a closed economy which is how it is developed in the manuscript. But then you have to ask the question about the implications of borrowing the Eurodollar, its impact upon a whole string of economies. And at the moment we are only asking about the impact upon the wealthy ones and leaving the others at the mercy of the profit motive. I'm not sure that I can answer your question, can you Phil?

Philip McShane: Well there is the thing, and I think I would come back on you for that Eric, that if they understood Lonergan's anlaysis they would know how far down an erroneous road they were.

Eric O'Connor: Say, I'm a person who has had lots of money and I don't see any complication in getting Eurodollars. I see a loss to our economy but hell our economy has been so silly with me that I don't mind. So that has blocked my thinking on the basis of a closed economy, it has blocked my thinking on that because of the ability to get money from this other market.

Eileen de Neeve: Is it the simple problem of just more money going after fewer goods and therefore inflation occuring, price goes up? And in the case of Eurodollars national governments can't control the flow of this money; and they like to think they can control national credit, and maybe they can in a rough way sometimes. But the Eurodollars can't be controlled. Is that the case?

Michael Gibbons: No. I don't think it is. I think you have given a very standard definition of inflation but it is not functional. Because what we want to know about these Eurodollars is what their function is—now we are in a world economy. But what are these dollars doing? Are they available for surplus expansion, are they available for basic expansion? In one case it goes to one social group or one functional aspect of the economy and in another case it goes into your pocket and mine for consumption. So when you invoke the economic answer to inflation, that it is too much money chasing too few goods; well, what kinds of goods? Basic goods or surplus goods? And what type of money are you talking about? Is it that people want to invest in machinery, in the upper functional stages of the surplus sector and it is that sector that won't respond? Or is it the fact that people like you and me just want more shoes than the economy can at all produce and therefore the price of shoes just goes up? Which is it?

Philip McShane: Or is the guy just playing arbitrage,and making a fortune on buying and selling Canadian and American dollars?

Eric O'Connor: Since I can't see any reason why not making money is going to help.

Philip McShane: Well, the thing is the person who is in Wall Street or is in arbitrage merely, they go ahead using their intelligence and it is a criticism of the system. In other words the money market itself is a zone within the redistributional function which spells out the failed promises within the various subsystems.

Michael Gibbons: There is the question of time scale here. What is it that you are doing when you trade on the Eurodollar market. I mean if you are raising here what Lonergan calls windfall profits which come from trading on the ups and downs of the system and it is not in the circuits. Now systematic profits are made by borrowing money to put into the circuits and I think what he is arguing is that for you to behave with regard to your money to maximize your own profits entirely has the effect of draining money out of the surplus function. And eventually it brings the whole thing down..

Philip McShane: And it also has the effect of balancing, or making manifest the inefficiency or the stupidity in various semi-closed economies. In other words, if the dollar is oscillating incredibly against the mark there is something very fishy about the American economy. In other words, the move to the global scene shows this. It was Lonergan who gave me this clue in our seminar in Boston about the significance of the money market, that again it is intelligence pushing the real promise in various zones and the yen is really not going to make it, etc. And that therefore has an effect of making manifest stupidities in various economies. So it has a function then. Lonergan puts this in as another functional zone and he spells out the flows. When you diagram out what he says in the last ten pages here they are incredibly complex circuits that are going in other directions entirely; and insofar as intelligence is pushing all the time it is a set of balanced correctives. So in other words, money is in fact nothing other than promise. You can make it a sacred cow or you can start buying gold. I mean mythology hasn't gone out despite what August Compte says; but that's sort of stepping outside any of these functions. So the chap who is making a fortune on Eurodollar is de facto criticising the weaknesses of the way the system is working in the States, in Japan, etc.

Michael Gibbons: I think that Lonergan would argue that the man who is making money out of the Eurodollar business has no need for any more money necessary for his own standard of living; and therefore he is going to dispose of it some other way and the argument is whether he should be induced to dispose that in terms of more money for you and me through some sort of tax scheme or to invest it in the next stage of the whole system, expansion of the whole.

Philip McShane: But one has to notice, and this goes against Friedman. As Robinson says, his notion of money is mystical. To say you invest money in the next stage, you have to think in terms of possibilities, resources, opportunities. In other words, pushing money out from redistributive function or government inventing money. Friedman says that if you just push in a few more percent each year that's how you get out of this trouble. You have got to have this innovation, this creativity, the nerve in the business world.

Eileen de Neeve: Would Lonergan say that money can jam this real system by coming in too large quantities, the way Eurodollars are now floating about and are creating excess. That there is such a thing as too much money in the system and that inflation has a role.

Philip McShane: There is such a thing as bogus money. Insofar as you don't have the two flows flowing ...

Michael Gibbons: It is not doing a circuit of work*and insofar as you have money flowing in without any actual people promising production then you have bogus money. And therefore the money flows in and you have to increase prices.

*Philip McShane.

Philip McShane: So not only then in the rhythms of the circuits do you have to watch that you meet the oscillation of the three year cycles but you have to watch this zone so that people are not back in the mythology of money, of mercantilism; and it is not totally a mythology then. But we all do ask, what is money? And the full answer to the question, what is money, cannot be had without moving into the third stage of meaning. When you ask what is money, you ask what is promise. Now, what is a promise? Well, it is a set of operations within intentional consciousness. I'm like talking now seriously and theoretically about that question. One of the reasons why I wrote the little book, Wealth of Self and Wealth of Nations was that the basic elements in economics are: trust, promise, etc.,etc.,deals; and these are all just as the Greeks felt the discomfort of Socrates so we should now begin to feel the discomfort of having a set of undefined elements within economics.

Eric O'Connor: I see. That's what you are saying.

Philip McShane: So to really pin down what exactly what a Eurodollar it is a big job. It is a big jump from the already-out-there-now of piles of things in a bank ...

Michael Gibbons: Is it ever!

Eric O'Connor: None of you are saying that you know what those Eurodollars ought to be doing. You are not saying that.

Philip McShane: No. What we are doing is setting up a heuristic context so that the notion of money would be transformed. Money is the promise of a nation; and that is what makes the dollars and the yens, etc., go up and down. But it is surprising how few economists can hang on to that basic notion of money.

Michael Gibbons: Indeed, we let go of it during the conversations. We let go of the functional idea.

Philip McShane: You have to go back to the minds of the bankers.

Eric O'Connor: I'm traying to make some connection, if there is some connection.

Michael Gibbons: Yes there is. And I think it lies in the notion of promise. Because after all ...

Philip McShane: Like I've got a friend in arbitrising in New York

Eric O'Connor: What is arbitrising?

Michael Gibbons: Just speculation.

Philip McShane: In other words, this guy actually buys and sells Canadian dollars. And I asked him one year, how did you do this year? And he said, I had a very bad year, I lost a quarter of a million. So my heart didn't bleed. Anyone who can lose a quarter of a million is all right. But that is all he did. He bought and sold Canadian dollars, but he had this sensitivity to where the Canadian economy was at the moment. In other words, he knew when the evaluation was such that the setup was bogus so that these people have a function in the economy, of really pinning down if the promise is serious.

Michael Gibbons: I've just been reading something about this. I'm worried very much about the business of money creation. This is a little book by Robert (Lickelman?) who is one of the biographers of Keynes and he is trying to diagnose inflation here; and he is asking how on earth does the federal reserve system in the United States create money. And he says, well it use to be that they just printed it; but that has now gone out of fashion. But listen to the story now. Where did the money come from? He says, some flowed to the treasury for more or less voluntary purchases of warbonds out of military and civilian savings, that is a movement from there to there. And particularly in the armed services, pressures to enrole in payroll deduction bond purchase schemes were severe enough to constitute an informal variant of compulsory saving. In other words, you were forced to part with your money. However, that has all been done away with now. In more primitive times governments which urgently required cash simply printed it, a mark of sovernignty is the ability to do this. Now, he is touching on your business here of the long term. In our day, central bankers have devised more sophisticated modes of money creation. The process is neat. Needing money to pay its bills the treasury sells new bonds on attractively engraved paper to the federal reserve, this country's version of the central bank; the federal reserve pays for the bonds by increasing the treasury's deposit account and on this account even as you and I, the treasury writes cheques to pay its bills. Moral: Responsible governments don't print money directly, they print bonds first.

But you see what's happening? You have to ask about the meaning of this money. What on earth is it doing?

Philip McShane: Lonergan's quip about this is that if you keep building this up, you are building up a national debt and you have the nations as creditors so that there will eventually arise a stage where everyone has an income from their government bonds but nothing is going on.

Michael Gibbons: That is what is happening in Britain at the moment. Nothing is coming out of the surplus stage and into the basic stage and into the standard of living. There is no productive activity.

Philip McShane: In other words, your national debt is growing up; you are paying the interest on it every year to people who don't have to work, so to speak, for a living. And therefore there is a large income flowing out of this printing and nice paper.

Michael Gibbons: And then you have a bottle neck in the process then that takes you from the surplus to the basic stage, at least as I see it anyway. Because people with this money are all consuming but none of that money is being used to produce. So we are buying from other people and living off other people's earnings.

Eileen de Neeve: But doesn't our demand increase because we are getting more money from pensions and things;the government prints this money,as you suggest,and it gets into the economy to consumers to buy more shoes. But the price of shoes goes up, in the short term, and then because the shoe producer is making more profits,and if he does think that it is going to continue,then he orders more lasts or whatever. Isn't that the way Lonergan's system is working? That money is needed just for the ~~mechanical~~ mercantilist reason. But in order to get growth you need it.

Michael Gibbons: But not only do you need it but you need it at a certain rate—that's the rub I think.

Philip McShane: And it is not like Friedman says, two percent or so.

Eileen de Neeve: Oh, and the rate is too quick with Eurodollars; there is too much money floating around.

Philip McShane: In the sense that you want this conformal mapping of the flow of production and promise. Add that one in now.

Eileen de Neeve: One way of priming the pump is to have more money. Lonergan speaks of inflation as forced savings.

Philip McShane: But the thing is when you say one way of having it is more money. Unless you stay in this context you are joining Friedman. Friedman's notion is—like he has done the whole history America on this basis—that more money goes in and there is more output; and more money goes in and there is more output. As Robinson says, you can turn it around the other way and show that there is more promise therefore you need more money, there is more promise therefore you need more money. So that you can't separate the acceleration or velocity of money from the acceleration and velocity of production and promise. In other words, you've got to keep the question of money within intentional consciousness, and that is very difficult. In other words, money meets promise. You go into the bank and you say, give me a hundred thousand, I'm thinking of doing something; but I'm not sure yet what it is, it is a business or something, I haven't defined it yet. Well, the bank manager will say, are you kidding. But if you go in and say this is my notion and this is what I need and that is the general need for initiating; and he will say O.K. Now, the trouble with the government printing more money or increasing the amount of money, etc. is that it is very much like a bankmanger saying: well, I would really like to see more activity in my community so to him I give five talents, and to him I give four talents, etc. O.K. you may call forth promise but it is not really a conformal mapping of ...

Eric O'Connor: My first objection was that with the complication of Eurodollars it is very hard, even though one can get a person to see this as an abstract thing in a closed economy and even though then on a small export and import balances you could see how it happened. Because of this flood of Eurodollars it almost makes analysis hopeless; that's what I'm saying.

Philip McShane: But the thing then is... Yes, you are right. It almost does but it doesn't in fact, in that as Mike says the analysis does cover all the other types of cycles, decay, etc.

Eric O'Connor: You don't mean to say that you can analyse them immediately. First you have to explore.

Michael Gibbons: As Lonergan does at the end of the manuscript, all the various ways in which this money can move around.

Philip McShane: Secondly, one can notice when one works through the analysis of international economics the suggestion, and indeed it is one he has made occassionally in other interviews that there can be mistakes that have gone on for thirty, forty, fifty years in an economy, building up say a debt like by foregin lending, etc., and there may come a stage where you more or less say that's all an increasing mistake.

I remember once somebody asking Lonergan in an interview about the needs of the South Americans. Well, you give them help. In other words, if you are in a situation where there is a mistake that has grown over centuries or an injustice that has been disguised as lending money to the Third World, etc.; there maybe an occassion for cancelling the debt. You wipe out a block of Eurodollars, etc. In other words, the transition to this sort of operation may not be a smooth reversal of a shift in thermodynamics to an impossible let us back off. It may be saying, we have bled the Third World for a hundred years, halt. You don't owe us nothing, to certain African states.

Michael Gibbons: That's right. That happens quite frequently.

Philip McShane: And what Lonergan spells out is the damage the apparent good of having debtors can do to you as a nation.

Eric O'Connor: A point I'd like to bring up for a moment is what do you see as the relevance of the Kondratieff cycle. The possible relavance, or the realevance of it to this analysis.

Michael Gibbons: Well, this is complicated. Because I have not got clear as well as I could have the four types of cycles that we are dealing with. There is the Kitchin, Juglar, Kondratieff and the Pure cycle of the pro~~ductive~~cess cycle. The Kondratieff cycle is concerned with major changes in the level of technical development. So all of this analysis which he is discussing here is concerned with working out the possibilities, the schemes of recurrence, if you will, of a given level of technological, economic and political development. I think there were three. They are all important because the next change involves those three. Now what I think is happening there is you have a process of learning which has got its standard S shape, you know, a logarithmic curve that I could draw for you some time. And what we see here in Lonergan's analysis is a working out in a functional way what's going on as one moves along some kind of aggregate learning curve. All the technical possibilities which we have within our grasp at the moment, given our level of civilizational attainment and the amount of suffering that you are willing to undergo, conspire to launch us into some sort of growth process. And he is working out how to handle that. What is going on in that process?

Kondratieff looked out upon the world and he thought he saw a series of changed experienced curves, or changed learning curves, which were marked by periods of deep depression. And the one interesting thing about the depression is that you came out of the other side of it with a different range of technologies than when you went in. That was what it was manifesting for him: the exhaustion of the possibilities of a set of schemes of recurrence. Schumpeter put his finger on this and he hit the nail right on the head as well by saying that what we are seeing in a long wave is what Lonergan draws attention to, not the possibility of emergence but the probability of survival coming to an end. Certain schemes of recurrence are proving themselves unable to survive. And in the Kondratieff cycle what happens is that those social organizations are wasted. (Like in the the American sense of I'm going to shoot you down; waste that cop!) The organization pays the price, it is destroyed. And on the other side of the cycle new types of organizations, based upon new types of entrepreneurs comes into being. And so what the longwaves in economic life look like are a succession of complexes of schemes of recurrence, as you move down...

Eric O'Connor: And one of the first glimmers that one has as to what would be the source of that would be a basic kind of innovation. Not just a single innovation. Like the electronic innovation.

Michael Gibbons: Yes. Or if you were in the stagecoach business and somebody thought about trains. Like the people that owned the stage coaches must have looked at the American West and said, we are secure, a big country like this, people need communications, they can't be beat. But within ten years they were rolling on rails ~~wheels~~. Two things to note: the stage coach companies disappeared as the trains came in and the people who launched the innovation were never ever stage coach operators. The people who built stage coaches didn't build trains, the people who built trains did not build motorcars, the people who built motorcars never built an airoplane. And that is the social dynamics of Schumpeter's model. There is a cycle of creative destruction inherent in capitalism; and it is bringing new people to the surface all the time. And not just putting the others aside but wiping them out. The argument now is that the Marxist economists like Mandel are putting to us is that we are at the end of the fourth wave since the industrial revolution or the beginning of the fifth. And that a whole string of technological possibilities are becoming exhausted and we are undergoing the travail of trying to find which new ones are going to be selected. This is where

Lonergan's analysis is so useful because he has no determinism. There is a selection process, a giving and a taking, which he would probably say you may make a wrong choice at this point, it is possible. You know he has in factors of production the category of entrepreneurship, which is rare for anybody writing on anyone writing on economics to include that. You know, now we start juggling around for new productive possibilities and all the social dislocation that that requires. And where this bears on Lonergan's analysis, it does involve an enormous breath by you and me while the surplus sector is rebuilt. Now whether you and I have Phil's perspective: the patience or the charity to breathe in while the surplus sector is rebuilt is of course a very good question. Because if we don't ...

Eric O'Connor: We talked about this some time ago and the notion of electronic industries came up and how they are first building up in highly educated cultures and then moving off to Taiwan and Japan, and the sense that perhaps that was coming to an end. So it is not just the exhaustion in one country.

Michael Gibbons: No. Not any more. It is spreading over the whole world. And the point I was suggesting or was coming to was that what seems to be happening is that the capital formation of the surplus stage, the surplus stage is based essentially still on mechanical technology and that implies a certain type and quantity of labour. The next generation is sure as hell going to be built on electronic robots. This is not science fiction, but implies whole new capital reformation. One surplus stage is going to be wiped out and replaced by another; and you can see it in selected pockets around the world. For example, if you take a look in Birmingham, England, you will find in the making of a British car, where the car is dorpped down on the chassis and there are fifteen men making the welds. If you go to Fiat in Italy the same frame dropped on the same chassis is attacked by a robot with fifteen arms;and that robot is controlled entirely by electronic means and the difference between the two is the enormously different technologies and the absence of fifteen men.

Philip McShane: Could I add on a footnote because there is another perspective here, if you keep thinking of the long term. And that is if you go back now to Galileo and the emergence of physics around 16 hundred, chemistry wasn't respectable until about 1770, etc., and Lorentz got the Nobel prize for discovering that zoölogy was about animals about 1973. Now what I want to get at here is that as a science develops. Reality involves six levels of science: physics, chemistry, botany, zoology, psychology and religion. As a science develops it gives rise to a technology. We have a fair development of physics and a fair development of chemistry giving rise to fairly elaborate technologies of mechanical and the beginnings of electronic and a lot of the electronic is related to chemistry. So you have a fair technology of physics and chemistry. Now Mike makes the point that we could make a mistake. The problem we have is that botany is beginning to emerge and there is a technology of botany that is beyond present fantasy and similarly with the world of animals and the human subject and there is a manner in which we talk in the

20th century about technology with the mindset that focuses on physics and chemistry and will only be forced into thinking of the higher technologies of botany and zoology and human studies and aesthetics and religion only when we have produced far too many robots.

Michael Gibbons: That's right.

Philip McShane: So that in fact the next Kondratieff in serious terms might be a mighty effort, and as Mike says, it is not going to come out of the physics labs that are making a buck, it is going to come out of somebody who suddenly realizes that the world of plants is a world in which technology, lifestyle, etc., different subways—can you imagine a subway focusing on plants instead of advertising—and so on. So this is my point always. That we haven't even begun yet, so that the scientific revolution hasn't got off the ground yet. So that later Kondratieffs will be concerned with a discovery of the level of sensitivity of animals who are not disoriented. The disorientation that goes on in animal breeding,and not to speak of McGill's animal experiments, it is colossal; and it will take us generations to mediate the integration that was present when we first took over this land, the integral living style of the Indian people who were close to their orchards and their animals. And that will be a technological revolution. I just wanted to throw in that point to broaden the discussion.

Michael Gibbons: There is an interesting comment on page 111 of the manuscript here. He is talking about the three cycles. He says, that"it maybe noted that the triple crisis per cycle may perhaps correspond to Prof. Schumpeter's combination of three small cycles named Kitchens in one larger cycle named a Juglar which has tenyear period. The pattern of six Juglars in one sixty-year Kondratieff would seem to result from the quasi-logical connection between successive long-term accelerations. A fundamental transformation of the capital equipment of an economy needs preparatory long-term accelerations that open the way for it; and once the fundamental transformation is achieved, there are other subsidiary transformations that for the first time become concrete possibilities." And that is where I think we join up. It isn't a once for all decision that you make here; you have a system on the move here. Certain schemes make possible others. And what he is trying to get at here I think is that when he says, when Lonergan says, that we have more or less got control of the management of the basic stage, consumer demand, we know how to make people buy and sell, but we haven't even begun to touch the problem of the management of surplus. And this is his worry. It is the long wait, the stimulation of the appropriate, creating the concrete possibility of a choice, you know, that is going to take a long time to gestate.

Philip McShane: But there is a fundamental analysis required here again it is the question not of concrete possibility for the serious thinker; insofar as what he is thinking is concretely possible he is not thinking at all. One has to think of demand within intentionality analysis. What are the demands on the mysterious dynamism which is the human subject with a physical, chemical, botanical, zoological, aesthetic, a dynamism towards understanding, that's the central element in the economy. And the demand is beyond fantasy. And all our thinking at the moment, as I say, is practically defined by the trivial advance of the last two hundred years in mechanics,plastics, etc.

Eric O'Connor: Ah, I see! That's why you like going up the scale through botany, etc. It is towards a possibility.

Philip McShane: Well, the business of the flower people in the sixties and the people who now talk to their plants. It is not merely that the plant need carbonmonoxide, it is because people are botanical.

Eileen de Neeve: We can't immediately apply the Lonergan cycle to any of these or is it more immediately applicable to the Kondratieff, Juglar, etc.

Michael Gibbons: No I don't think you can. Now there is something we have to deal with in this problem Eileen and that is that for many economists the existence of the cyclical is a non-existent problem. I can't remember the German phrase that describes it but the argument is that the data are throwing up these things in an apparent regularity, it is purely a data collection problem. Now I think we hit on a point earlier which is worthwhile stressing and that is that we can't really roll the Lonergan analysis into the debate about waves in economic history unless all that data is worked over again in terms of the functional distinctions.

Eric O'Connor: Oh, yes, yes, yes.

Michael Gibbons: You see the data which is being produced talks about—first of all never about rates—increases and falls and declines in stocks. If you take a look at the Kondratieff paper I've sent from Britain, his notes, the original and we must be charitable about it because of that. But he's got the production of pigiron. It does in fact go up and down. But it doesn't tell us whether that pigiron flows into the surplus or the basic stage. Now to redo all that data in an environment where the problem is not regarded as significant is very difficult.

Philip McShane: There are little bits of hope like. The thing is to plan the attack intelligently. One of the things I find with groups of Lonergan students that get together is that they are not wiser than the children of darkness in the sense of working out strategies is part of praxis. For instance the business of exploiting the solid dissatisfaction of people about modern life and pinning down the zones. Like say the person who goes to the bankmanger. Bringing up the "wouldn't it be nice if?" question; so that you begin to realize that yes why have we this and why have we that? And for instance a solid discussion of the the significance and inadequacy of planning in relation to human subjectivity. The immense amount of planning that goes on that is not relavant. I read about Levesque's paper and the number of committees and cross-committees, etc. So we are living in a mythology of mind derived from Scotus and we can identify in particular instances. I remember somebody asking Lonergan about schools and education and he ran through a list like the board of education, etc., etc., get them out of the classroom and let the teacher teach. So similarly the economic analysis focuses on the possibility of the creative intelligence of everybody being drawn out. And the dissatisfaction we all feel is that we are under an unbrella of bureaucracies, it is the Kafka situation.

Eric O'Connor: So the problem is how does one bring questions into this situation.

Philip McShane: Yes. Like your Question as Commitment, how can you bring up the question so that people realize that yes there is something fishy. Like the question of demand: we have been so cultured that demand means going down to Steinberg's or A&P to see how much will I get for my twenty dollars. And to stop and say, I've got a colossal demand for opera or statues. In other words, Lonergan says about the importance of art and the theories which have made life unlivable and destroying civilizations. You bring up the fact that the GNP, we don't have the analysis as Mike says, but you can note that an across the board bank rate determination is a denial of the obvious fact that there are two levels. Now you can get this across even to an non-economist. But as Mike can tell us, it is a slower job when you are dealing with somebody who is trained.

Eileen de Neeve: In deference to the little bit of training that I've had perhaps you can explain this about across the board.

Philip McShane: Well, in other words, the bank rate is not set up so that you are borrowing to complete a certain phase of a surplus development and the bank manager knows what you are at; and he knows that in four years time you are really going to hit it, you've got a technology of, say, plant distribution. The rate at which you are going to be charged should relate to the promise. So that now we have a hydrostatics of money. Mike do you share my frustration with this lunacy?

Michael Gibbons: Yes I do. You know one is using a sledge hammer to crush an egg in a sense.

Philip McShane: Like Lonergan's critique of interest rates around page 84 is just tremendous: that it is beside the point and it misses the size of the problem.

Eric O'Connor: Actually when I spoke with him last night the point he made was that what was lacking was the distinction between the basic and the surplus.

Michael Gibbons: Yes. That's right and then you are lost from that point.

Philip McShane: And you know you can have a six-hundred page textbook, but his mistake is on page one. Like when you think about Kuhn's analysis or you think of the phlogiston problem and that. It is not in the same ballgame at all.

Michael Gibbons: Your right.

Eric O'Connor: Well, thank you very, very much.

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