

Martí Olivella i Solé

THE POWER OF MONEY
MONETICS,
FACTOR OF POLITICAL CHANGE



PREMI JOAQUIM XIRAU 1991



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62

THE POWER OF MONEY. MONETICS, FACTOR OF POLITICAL CHANGE.

Martí Olivella.

Preface By Johan Galtung

Joaquim Xirau Award 1991.

A jury composed by Mr. Heribert Barrera Costa, president, J. Gonzalez Casanova, Luis Izquierdo Salvador, Francesc Martorell Santacana, Josep Termes Ardèvol, Jordi Wagensberg Lubinski, Francesc Gomà Musté, secretary, gave the prize to this work Joaquim test Xirau 1991, convened by the Ateneo Barcelonès, Caja de Ahorros y Pensiones de Barcelona

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Preface. *By Johan Galtung*¹.



Martí Olivella has written an important book. He has entered a territory economists normally do not dare enter, and not because they are angels, as the saying goes. Money, money as such. He has given his analysis, his forecasts and proposals for remedies. They are radical social innovations, and will not easily be accepted, as he points out himself. But the very least that should happen is a social debate on one of the most important phenomena of our time, the **massive transition from paper and coin money to plastic money**.

Every day the media brings us news about the power of money in the world economy. On the one hand we have the creation of value, of goods and services, even if there are always some aspects of bads and disservices hidden in their production, distribution or consumption, in addition to hidden positive side-effects. The externalities, in other words. Let us call the real economy, **R**. And then there is another economy, **F**, the finance economy, consisting of all kinds of finance instruments, among them money. There are stocks and flows in **R** and in **F**, with **F** flowing in the opposite direction or **R**, supposedly paying for **R** goods and services. Watch the counter in any shop and you watch the **R** flow from the shelves to the customer and the **F** flow from customer to the cashier. Of course, the customer can also pay in **R**, no absolute need to go via money. Barter, after all, is still very important, perhaps more in services than goods. «I do something for you, you do something for me».

And then there is the third possibility: intra-**F** exchanges; a finance economy, buying and selling finance instruments, detached from the real economy. It is easily seen that if **R** is in bad shape because little is produced in terms of goods and services or what is produced is of bad quality, then a dynamic finance economy may help: some credit here and there, money on consumer hands to facilitate buying and selling that in turn may yield profits that may be invested in more and better production.

But a highly dynamic finance economy carries a great temptation in its wake: making money by buying and selling finance instruments, driving up their prices, including the price of money over time (interest rates) and across space (exchange rates), and the price of stocks and bonds (rates, in general). Speculation, in other words. If **R** follows suite and is equally dynamic there may be no problem. If **R** lags hopelessly behind then **F** no longer mirrors **R**. And the result may be a crash in the stock exchange or at least a very uneasy economy, with inflation and other phenomena difficult to control.

This is problematic enough. But Olivella brings up another aspect: anonymous versus identifiable finance instruments. Look at coins or bank notes: what a story they can tell, particularly in societies with rapid money circulation. But there they are, leaving no footprints behind, nor are there footprints on them. Well, sometimes fingerprints are useful for detectives, and the numbers, particularly when consecutive, carry some information. Hence the need to «launder» money to wash away the few traces. But in principle money carries no history having no memory, starting each deal fresh as if used for the first time.

Not so with plastic money. Not only the **who** and **to whom** and for **what** can be registered with the clarity of the monthly accounting sheet from Diner's Club, Eurocard, American Express and Visa, but also the **when** and the **where**. The only item missing is the **why**, in other words the motivation behind the deal. But this can usually be inferred relatively well from all the other data, making it possible to develop consumer profiles (I

left some of these companies when it was discovered that they sold consumer profiles to others for their marketing efforts!).

And this is where the terrifying ambiguity of plastic money enters. The deal becomes historic. The evidence of the transaction is there; after all, what is needed is to make the buyer pay, whether the plastic is a bank card or a credit card. In principle this should heighten the sense of responsibility when a deal is made, if for no other reason for fear of being found out (like paying for illicit sexual services with credit cards). On the other hand the historicity of the deal also increases the control over the holder of the card. Not only will Capital have its ways of getting paid, the State has ways of supervising all transactions. For good (detecting frauds), and for bad (steering and manipulating the general **R** and **F** flow in society without any dialogue). In other words, the transition to plastic money should stimulate more Self-control, but also more Other-control.

This is the problem Olivella is analyzing. His remedies are interesting, and certainly worth discussing as one way out of Max Webers' iron cage. Barter is another: direct, personal relations and responsibilities. Like the «deal» between Olivella and the reader, hereby very much recommended. Go ahead, learn, discuss!.

For this book is also a fascinating piece of macro-history. The reader will learn to see history through the transformations in the money system: clay-based, metal-based, paper-based, electronic-based (the plastic is only there to get access to the electronic circuits). Each phase ushers in new opportunities and new problems. But money is somehow taken for granted, and there is far from enough debate going on.

In this there is a message to social movements. Most of them, almost all, are focused on **R**, the real economy. What should be the priorities? (like production for the satisfaction of the basic needs of those most in need). And externalities, including an equitable, socially just, perhaps more egalitarian distribution and consumption? Money is then used as something to be taxed and redistributed; as a means rather than an end, for accumulation. This is good, but the social functions of different types of money systems are not incorporated in the debates, nor in the agendas of the social movements.

Olivella's highly constructive efforts, coming out of his empirical guides to the reader and his criticism should also inspire others to look at money. Sooner or later we are going to get a (Western) European unitary currency. There are advantages, such as reduced (or partly eliminated) exchange costs. There are disadvantages: liquid, non earmarked money will flow to the center, increasing the power of the center to send earmarked money with decisions clipped onto them back to the periphery. People may react by printing local credit-vouchers, etc. In short, a very dynamic period where money is concerned. And we can be grateful to Olivella for being one of our guides.

Versonnex, July 27th 1993.

Note:

¹Johan Galtung, Professor of Peace Studies, University of Witten-Herdecke, University of Hawai'i.

Foreword.

The purpose of this book is to present a set of new approaches and views on the importance of the type of currency in social relations, and on the role which can be attributed to the monetary instruments not only, as facilitators of trade, but also as agents of social change.

Throughout this book, the historic and present day features of the monetary instruments are reviewed and proposals made on the alternatives uses of monetics (electronic money) in a coherent and democratic manner.

The topic is rather intricate but not complicated. Although dealing with such an apparently dry issue as money, the reading is generally amiable and within reach of any reader interested in the search for new routes of social change. It is not a technical book, nor one for economists, who may miss explicit references to classify it under any school of economic thought.

Material has been collected to support the bold hypothesis that forms the basis of a reflection shared with other people who attempt to go beyond the prevalent world model.

The book is an introduction to the over fifty years of research of Agustí Chalaux, a French-Catalan industrialist. As defined by the Law of Felson: «to steal ideas from one person is plagiarism; to steal them from many persons is research». He has «stolen» what he has found of interest here and there, without taking undue notice of forms or of sources. The result is an original analysis and debatable proposals, full of undoubtedly stimulating ideas.

Martí Olivella submits, in a short, reduced scope and systematized manner, the voluminous -but largely unwritten- work of Chalaux. This free version is the result of many hours of talks, draftings, and corrections which the author has spent with him and with other collaborators within the framework of the Centre d'Estudis Joan Bardina during six years. The book includes also references of research carried out, among others, by Joan Parés, Magdalena Grau and Lluís Maria Xirinacs.

Because of the extent of this topic, the author has left for a future book, the reflections and proposals based on monetics relating to the more complex view of the exploitation systems, new paths for social change and a new social frame which will lead to a reduction of the political, economic and ecological malfunctions of the present system.

EcoConcern, which brings together persons *concerned* with social innovation (*ecology, economy and ecumene/intercultural relations*), wants to co-operate to *echo* the critical analyses and the constructive proposals which may bring about an integral and coherent social change. *EcoConcern* would like this book to be the first of a series of other new models, helping to initiate a debate and research among those who believe that we do not live in the best possible world.

In the environment of transformations and crises that we are enduring, free from the weight of dogma, it seems important to find and work out new solutions which take into account other variants that have been up to now underrated. We can not ignore any new proposals that may assist us in testing new policies in this period of historic opportunities in a changing world scene.

EcoConcern, Social Innovation Association.

Introduction.

In the next few years in Europe and all other industrial countries, most citizens will be carrying several electronic cards -credit, debit, identification... cards- and will have to learn by heart their corresponding security codes. Plastic money will reduce costs for the banks, and activate some public and private services. But, will the citizens' privacy be protected? Will monetics (electronic money) contribute in any way to improve the economic, political or judicial system?

If things stay as they are, many citizens will not have money cards because they will not be solvent. Others still will refuse to carry them, for fear of being controlled. However, besides having money cards anybody will still be able to obtain «bank notes» and will be able to use them, to carry out all sorts of legal and illegal operations (reserved funds; traffic of influences, drugs, arms; fiscal fraud and currency evasion,...).

In Europe we will live under the impression of greater control of population, but subtle and hidden fraud will still prevail and there will be no benefits, to hardly anyone except those derived from the cost reduction in the operations of the companies applying monetics.

In the coming years, however, another situation may develop. Every citizen will have only one, unfalsifiable, personal card, linked to the code of a current account where electronic payments and receipts will be noted; incomes will be paid; tax will be automatically carried out...

A system of a single card and personal current account may finally impose itself because of its functional consistency. But if there are no other modifications of the political and judicial institutions, what would be the advantages for the citizens? Would it go beyond mere convenience? Would it imply a loss of privacy?

Monetics is being introduced without any social debate to show its dangers or possibilities. On the other hand, many present problems appear to be insoluble in the framework within which they are being raised. Could we try to design new rules of the social game to favour not only a consistent and democratic application of monetics, but at the same time help to solve some of the main problems we are facing today? With a suitable application of monetics, could the following matters be solved?:

- avoid the impunity of factual powers working with anonymous money?.
- provide an economic science to work with actual data and be able to analyse with precision the causes of the crises, the systems of appropriation and redistribution?.
- ensure the privacy of citizens without, at the same time, hindering the necessary transparency of a lawful State?.
- increase social solidarity and redistribution, ensuring a vital minimum for everybody, but simplifying and reducing taxes?.
- help decentralize decisions, offering at the same time an overall view of the framework where they are taken and of their repercussions?.

During many centuries replies have been sought to these questions. Failures repeated again and again have made us accept life together with the impunity of foul play and with destitution: «there will always be poor people, there will always be foul play...».

Possibly there will «always» be people who, for many reasons, will not know how, or will not be able to, produce the wealth they need to live, possibly there will «always» be people who will try to jump over law and to buy other people and consciences to conquer or hold power. We are not denying these facts. But we are trying to put the bases so that, in the first case, this does not mean to live in poverty and, in the second, as these corruptions leave a trace, they can be punished. Not to look for all possible means to overcome poverty and foul play would only suggest, either instrumental incapacity, or complicity in the perpetuation of these realities.

The set of reflections and proposals which will be presented in this book try to offer the elements to break up complicity and fatalism. If these proposals do not appear to be sufficient in our social setting, it will be necessary to find alternative ways.

It must be kept in mind that the issue of currency as an instrument of change, not only commercial but also social, is not born only of its present technological possibilities -monetics-, but is related to the very concept of currency (as we shall see in the first chapters), and of the hypothesis that the type of currency (anonymous or personalized, disinformative or documenting, scarce/plentiful or balanced) favours one or another type of society and of market. It favours irresponsible power or liable freedom.

Technology can be used to create a currency with either liberating or repressive features. Even if monetics is not essential to produce a change in society, it may be necessary to find an alternative use to the present one in the complex societies which are adopting it for trade and social relations.

The conditions under which of monetics are applied must be very clear. We run the risk otherwise that the power may want to legitimate it for the control of people without the people controlling those who are controlling it.

To choose to establish a system of guarantees for the democratic and consistent use of electronic currency is certainly risky but necessary.

The content of this book is vertebrated in **twenty theses** relating to capacity the type of monetary instrument has to hamper or improve respect for the law, economic information, responsibility of freedom, and applicability of economic models,... The last chapters study the dangers and the possibilities of the various applications of monetics, and submit a draft of new rules of a social framework to allow a correct application to take full advantage of its transforming potentiality of monetics.

If readers want to have a synthesized idea of its contents, they may read *The twenty theses* which are submitted at the end of the book. If anyone wants to deepen any of the theses, the corresponding chapter may be read.

We have not included an extensive proposal of a hypothetic new social model -one of the many which might be submitted- to avoid judgement of the central theses, presented in this book, in terms of the shortcomings and simplifications to be usually found in a global model. This new social model will be submitted in another writing. Some of its elements however are shown in chapter 19. We would not like to submit a monetary change without indicating what we consider to be some of its potentially liberating characteristics.

These lines have been written from the point of view of a Western society, that is, developed, industrialized, complex, pro-scientific, monetized... This is not the only sort of existing society, and possibly not even the best one. One cannot disregard the conditionings exerted by the society in which you live. As Westerners, who are at the same time aware of the other cultures, we may consider that the best way to respect them is to find the means to stop the turbulent Western civilization, which is destroying them and us. The best cooperation with the other cultures lies in our ability to decipher the key elements which keep the West from modifying its predatory behaviour. We focus the problem from a Western standpoint, but it is also addressed to all the cultures which have adopted, to a lesser or larger extent, the market and currency mechanisms.

Regarding to social models, it must be acknowledged that there are not valid, single, solutions for everybody. What is good for a scale level, is not for a larger or smaller one. The size or complexity of each culture and each society will demand the adaptation of suitable replies. But this is a task which corresponds to each culture and society, and which evidently exceeds the possibilities of this book.

Even if we limit ourselves to a formulation of the problems and proposals within the Western framework, their perception is fragmented according to the different areas of population. Every-body's «spectacles», whether a manager or a worker, a politician or a citizen, an economist or an ecologist, poor or rich, man or woman..., contribute to differing priorities and sensitiveness. In this context the more general or common arguments are submitted in this book, while the most specific ones of each social area are left out for the time

being. General argumentations are bound to interest even those who appear to have more to lose. As in every synthetic and synergic proposal, everybody has something to gain and something to lose. Money is very important, but it is not all. And the prevailing social relations established to obtain it, may not be the best even for their most unconditional lovers.

We shall feel satisfied if, through these pages, the reader comes to consider problematic a reality that he previously did not see as such, and that this consciousness may give birth to a new outlook on other problems and on their possible solutions.

To change reality is not the task of books, even if, often, books have been an effective instrument to do so. Future and politics are two vital, exciting features, because the will of man cannot be foretold. If the paths suggested are not right, it will be necessary to look for different ones.

The *how* of change, its practical fulfilment, is the trial by fire and the great unknown, but it is an open field which goes beyond the author's responsibility, because it is a collective responsibility of those who critically share our suggestions. Their feasibility will only be demonstrated, then, through social testing as a consequence of political will.

The fundamental ideas submitted are a part of the research carried out all along his life by Agustí Chalaux de Subirà. Any wisdom which may be found in them belongs certainly to him.

Without the reflection and support of a group of friends who, first at the Centre d'Estudis Joan Bardina, and now at EcoConcern, have been studying these matters in common, the following pages would have never seen the light. I wish also to thank my friends of Mas Blanc for the quiet time which has allowed me to finish this work, after years of interrupted drafts, and also my friend Stefano Puddu Crespellani for sharing this venture with me. The help of Fundació Jaume Bofill has also been influential to make me materialize my ideas on paper. The suggestive talks at Tevertet have offered me the opportunity to put together the theses of this book.

While this book matured, and during the year which lasted the realization of its edition, some Italian, French and Spanish judges became popular because of the prosecutions started against known politicians and managers for supposed crimes of corruption. I have not updated the information because, in spite of its impressiveness it is unfortunately redundant¹. Names, places and techniques change, but foul play is always the same. In these countries deep political changes are taking place because of the action of Justice, even in spite of the fact that it cannot always reach the bottom of problems because of lack of documentation or because of the excessive pressure of the powerful under accusation.

In the presentation day of the original edition of «The Power of Money», in January 1992, I announced some features of an Anticorruption Plan which might instrumentally forbid most of the crimes which undermine the credibility of the democratic system. Shortly after that I prepared it and sent it to several communication media. In the year which has gone, more problems have been added to corruption, which appear to be insoluble under the present rules of the game. The mistrust of citizens towards a far-away Europe, with no possibility of effective control of the new macro-institutions, has caused the process of European unity to stagger. But it has been the monetary storms produced by speculation which have given knowledge of the radical impossibility of developing communal policies as long as currencies can be moved electronically all over the world completely free of any productive or trade purpose.

Because of the significance of all these facts, I have included an increased version of the «Anticorruption Plan» as an annex to this English edition. It is a plan with operative proposals to introduce a «transparency regime» which may be introduced slowly and adapted to different political frameworks: from one single State to the European Community and to international relations. The «Plan» allows to foresee the feasibility of the book's theses and at the same time, it contributes some more elaborated arguments to some features of the «Plan» which, because of the shortness of their exposition, may not appear to be clear enough.

Note:

¹Full information may be found in the papers, and many books have been published on the cases of corruption. Unfortunately, suggestions to overcome them are not plentiful.

Plutarchy and other tales.

In 1925 I was 14 years old and lived in Toulon. One day, while I was out for a walk, I saw an ad of a talk on «The role of bankers in society». The conference hall was full of gentlemen with long beards. The lecturer was Horace Finaly, the chairman of the Banque de Paris et des Pays Bas. During the discussion which followed I asked to speak. To the surprise of everybody, Finaly said he would meet me personally at the end of the meeting.



As a result of this chance we established a special friendship. During 14 years we regularly met in his Paris home. He was a highly cultivated person and influential. He was of Jewish descent and had been born in Budapest in 1871. He had succeeded his father, Hugo, at the head of the Banque de Paris et des Pays Bas, one of the most important banks of the time.

In one of the meetings something of primary importance took place, which occurred in my restless and daring 18 years of age. The meeting was in his office at half past eight in the evening. On arrival a kindly manservant told me that Mr. Finaly could not see me immediately because he had an important meeting, but he asked me to wait for him in his library.

At first I kept busy going through some books. Then I sat at his table and casually found that some drawers were open. The remorse which I felt at the bottom of my soul did not stop me from going through the drawers. It was all very orderly, in well-marked folders, all of them extremely interesting. Being a cunning teenager, I cautiously kept the order of the folders. At the bottom of the very last drawer I found a folder with the word «Confidential» on it. Drawn by my curiosity, I read its contents without really understanding much of it. It was the report of an important meeting held in Paris in 1919. I remember that the exclusive participants at the meeting had been J.J. Morgan (Morgan Bank), Sir H. Deterding (Royal Dutch/Shell), and Finaly as the host. They had been alone in the meeting, but they had repeatedly sent for different experts to have their explanations. What I found most interesting was the final abstract. It contained two points and one conclusion:

First point. According to the experts, but also according to the general opinion of the great economists of before and during the 1914 war, the gold reserves were only allowed to cover the war expenses during three months. To overcome this difficulty, international bankers -such as they were- had suggested to the governments at war to forsake the convertibility to gold of their respective paper money, at least inside each State.

Second point. If paper money, cut off from gold, which had been proclaimed and carried out during the war, was «rationalized» at the end of it, it would allow international bankers and the heads of the leading classes -according to the experts- to earn more money than with the uninformative and anonymous currency which had been the dominant one up until then (and up until today).

Conclusion. The decision was that they were not interested in rationalizing the more common irrational paper money because they already had enough money, and the irrational paper money allowed the (foul) play of the world plutarchy.

While I was thinking, engrossed in the document I had just read in my hands, I received a terrible blow which sent me to the floor. For a moment I did not know what had happened, then Finaly, changing his attitude, kindly helped me to get up and begged my pardon. He showed me I had been tactless by knowing that he trusted me by leaving me alone in his library while his drawers were open. He told me that not even one of his servants would have dared do what I had done (I doubt it, but surely he had more spies in other peoples' houses than the other way round).

After this accident we had dinner. Nobody knew of Finaly's sharp reaction. During dinner he asked me what I had understood of the report. I told him that almost nothing.

-«The word which most attracted my attention is 'plutarchy'».

-«Little by little I shall explain it to you,»- he said.

That day he did not explain anything. Afterwards he yielded to the temptation to open his mind to me on these intoxicating matters. He took pleasure in opening up his most hidden mind to a thirsty teenager who, with a dark intuition, had guessed the importance of a knowledge which was being kept secret by this «superior caste» of great bankers.

Together with the bank secrets, he transmitted to me elements of Plato's unwritten tradition. One of them concerned Plato's attempts at Siracusa to re-establish a personalized-documented currency, and how he had failed because of the shortage of enough slaves-scribes to take note of all the operations. According to Finaly, in his travels through the Mediterranean Plato had discovered the existence of a Golden Age, where the currency was not gold or silver and where there was peace and a responsible market.

All these revelations perplexed me. Was it possible and feasible to have a rationalized currency, to be the accounting mirror of every sale-purchase? Before gold and silver appeared on the stage, had there been some other sort of non-anonymous and informative currency? Could the type of currency help or avoid wars to happen? Was it true that a few influential men - international bankers and business men-decided the fate of millions of peoples beyond what politicians could do?.

With these questions in my mind, only partially expressed, years went by. One day, in 1939, I was late at our meeting and Finaly could not see me. I never saw him again. The war took him to the U.S.A. Some years later I learned that he died in New York in 1945.

Some of these questions became dramatically important with those years' events. In September 1936, in Barcelona, just one month after the military revolt, Abad de Santillán, a CNT leader, told me: «We have already lost the war and revolution because we were unable, from the very beginning, to control currency and bank as instruments at the service of the people: we thought that weapons and violence were everything!» These words confirmed those of another important CNT leader, Mariano Vazquez, who admitted: «During twenty years we have been preparing to get the moon, and now that we have it we do not know what to do. We have studied and practiced all the paths of revolution, but not the paths to know what to do with the unfettered control revolution has given us.» Strangely enough, these conversations led me to the same conclusions which had sprung from the long conversations with banker Finaly.

With these keys to interpretation and with these doubts, research became both thrilling and arduous. Forty years went until new data helped me to guess that the bold affirmations made by Finaly on a different sort of currency, personalized and informative, were not only technically feasible, but that a monetary system of this sort had already existed before the use of anonymous gold and silver currencies.

In August 1978 in the magazine «**Investigación y Ciencia**» there appeared an article on «El primer antecedente de la escritura» (The earliest precursor of writing) showing a new outlook on the working of the towns of Western Asia in the period going from the ninth to the second millennium before the Christian era. It discussed the discovery of a complex system of tokens and clay records which allowed markets to work in an area which went from the Caspian Sea to Khartum and from the Indus to the Mediterranean. This surprising study apparently confirmed Plato's hypotheses on a Golden Age without wars and with a type of liable exchange instruments without an intrinsic value.

Strangely enough, this discovery allowed to work out a bold hypothesis on the origin of «history» and of imperialisms. History started officially with the introduction of writing, that is just when the Sumerian tablets were introduced. According to the researcher, the tablets were an evolution of the previous system of records and tokens. Evolution ended with this system. All the above happened approximately when Sargon I, king of Akkad, became in a few years the head of the first historic imperialism, conquering -we do not know how- many of the small walled towns which, along 7,000 years, had been independent. And exactly at that moment started to appear the use of precious metals as an accepted currency thanks to the invention of precision scales, the toughstone and aqua regia, which allowed to measure quantities and qualities.

Couldn't all this information suggest that there was a direct relationship between peace-empire-responsible currency (which lasted 7,000 years) and between war-imperialism-anonymous currency (for the last 4,500 years)?.

The other fact, with views to the future, was the quick expansion of electronic and telematic systems in the field of money. In 1920 it was not technically feasible to substitute banknotes and coins for rational currency (cheque-invoices). But through the introduction of electronic payment systems, not only did feasibility became total, but monetics (electronic money) meant a progressive reduction in the use of paper money and in the conception of currency as a «third commodity».

Historic research and technical research started to back up the intuitions which had been held for many years.

The Spanish political transition confirmed the importance of having available very precise and powerful tools, able to supply the ideals of social transformation with something more than free manifestations or elections. The disillusionment produced by politics is the price we are paying for not having learnt from most revolutions and social changes that those who really have power allow «everything to change so that everything carries on as always».

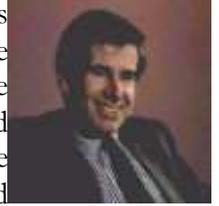
Agustí Chalaux de Subirà.

Chapter 1. Human monetization.

In many contemporary cultures currency has become, freely or compulsorily, a key piece in human relations.

It is difficult to imagine the world without currency. The utopias proposing it, for the time being are unsuccessful. But, at the same time, there is an intuition that currency not always improves human relations, that it may also complicate them. We live in this ambiguity.

In the last few years -as in certain periods of history of monetized societies- «money has stopped being a taboo and has become the king». This sentence belongs to Alain Minc, the right hand of financier Carlo De Benedetti. In his last book, *L'argent fou*, he says that he «believes in market economy, in capitalism and its ability to move about and renew itself, and therefore he accepts 'the price which must be paid: the weight of money in our society'. The main problem lies in the fact that «our capitalism has no countermodel, it has been discovered that there is only one way of making market economy, and now, within the system itself, a counterpower must be found», without which «class conflicts will again appear» and the legitimacy of the present economic system will be put in doubt. «The time has come to say stop, we are on the verge of slipping». The market which only identifies itself with money has become «totalitarian». Today we have «minimum wages» for the rich because the interest ratios are much higher than inflation. «No salary grows in the same proportion¹».



After this surprising accusation, A. Minc stuns us with the solution: «He recommends the introduction of ethics and the resurrection of virtue and morality. Economic and life rules which consist of 'neither selling nor buying shares' and of putting savings in a credit account».

As far as what we know about our economic system, excess production or subconsumption crises, inflation or deflation, poverty and wealth... are difficult-to-solve malfunctions. They appear to belong to the very dynamics of actual capitalism. It is said that they are the unavoidable price of a system which favours progress, development and modernization. Actual socialism does not appear to have overcome these problems, and has even given birth to new ones.

Theoreticians of both systems have considered the monetary problem as a secondary subject in economics. As long as currency was linked to scarce precious metals, it caused problems, but its emission was submitted to some sort of discipline. When currency has freed itself from any actual correlation, and the only discipline is the one imposed by the needs of the states and by the interests of the banks, we come to live a radically new situation, of which we do not know much about. «The position of economists with respect to currency may appear strange. During the 18th century when the banks producing notes multiplied themselves, thanks to which it is possible to carry on a policy to create an autonomous currency, free from the limitations imposed by the production of precious metals, economists launched the idea that currency is a secondary phenomenon which may be ignored when the fundamental economic laws must be studied. This viewpoint, that has existed since then, does not stop them from regularly denouncing the monetary disorders which, according to them, are the cause of the instability of economies. This paradoxal attitude, in any case, is the evidence of the complexity of the role of currency in modern societies²».

While theoreticians discuss, currency runs all over the world, by means of computers, looking for immediate profits, taking advantage of the high interest rates in some countries, buying and selling shares which have no relationship with the value of the companies which emitted them, speculating with real estate, with raw materials or with scarce natural resources... Easy and plentiful money for speculation destroys actual production; worsens the ecologic depredation; dooms millions of people to destitution; increases the traffic of influences, tax evasion, drugs and weapons traffic... Here and there voices are heard which warn against the dangers of speculative economy, made easier by electronic transactions, for actual economy and for the lawful State.



Lorenzo Dionis, a professor at the graduate business school, IESE, explains how serious the situation is. «I remember the warning given in May 1989 by the 1988 Nobel Prize winner in Economics, Maurice Allais, through the paper 'Le Monde', when he said that the volume of dollars which change hands daily reaches 420,000 million, while the actual needs do not go beyond the 12,400

million... No doubt the handling of unexisting money, which makes 'sharks' or 'yuppies' rich in one day with disregard for the difficulties produced to the real company, the one which gives service and produces economic value, cannot be easily accepted. These fictitious businesses have given us 'Black Monday' in 1987, the 'Sad Friday' in 1989, and the next crack which may come in the '90s. In the decade of the '90s, either the real European and world economy become stronger, or capitalism... will crack again³».

On the other hand, a professor of economic policy in the Keita University in Tokio, «compares financial markets with a great casino occupied by speculators with their attention on any possible move», and says that «it becomes more and more difficult to control these financial games [...] because financial markets all over the world are now synchronized and operations are controlled globally, not nationally. We may foresee that the information of the international networks will convert world markets into casinos in the '90s, which will cause the appearance of several 'balloons' and will increase the number of operations that are not based on economic factors⁴».

These recent calls for attention, given by people who know quite well the present system, are to be added up to those of other people who during many years have been warning about the dangers of a currency separated from the actual goods and services market. In 1974, Pierre Mendès-France already set forth these problems, but the way to solve them has not yet been found. «For a long time I have been thinking that it is urgent to protect commercial operations and current transactions from the accidents produced by the wild migrations of capitals. These migrations must be controlled and certain panic or speculation agitations must be prevented. Some sort of police for capital movements should be created. The trend to inflation can be controlled only if a clear and irresistible law brings together the monetary mechanism with the controllable needs of the economic life and exchanges⁵».

Simultaneously with these processes of divorce between real economy and the movement of quick money, basically electronic money, the flow of black money goes on. «As an average, over one ton of bank notes from all over the world arrives in Switzerland every day⁶». Most of this money may be whitened from fiscal fraud, traffic of influences or drugs. «The three great Swiss banks [...] have reacted vigorously against the implications concerning their participation in the Lebanese connection», but the Minister of Interior of the country has demonstrated that the couriers who transferred the money from Turkey to Zürich, via Sophia, did so with the banks bags⁷».

Some of the present problems are so perilous, that institutions themselves, which usually have financial control over the States, have started to realize the absurdity and danger of the situation. «The director of the International Monetary Fund has addressed the indebted governments asking them to resist the «extravagant claims» of the creditor banks when claiming their astronomical debt. Should they carry out these payments, they would have to give up essential imports and to condemn their countries to starvation. [This] escape of information has provided the greatest anxiety to the private sectors of the bank of the rich countries, which now face the consequences of over a decade lending money imprudently to unstable or weak governments⁸».

In order to attempt political changes, currency appears to be a key instrument. President Fujimori promised to change «the currency of Peru as a step to oppose the crisis». The outgoing president, Alan García, accepted that «In my government perhaps many errors have been committed [...] but the emotional burden was too heavy, there was too much hate, because at a given time we tried to control the instruments in the handling of money⁹». Months have passed, the change of currency has not been introduced and the situation does not appear to be improving. When, because of an inflationary situation (as in Argentina) a change of currency takes place (the peso for the austral, or the comparison of the austral with the dollar), the name or the value is changed, but the uninformative and corrupting features are not modified. The results usually are not those which were expected.

The present sort of currency is also a good tool to confuse matters. «The direct cause of the fall of the federal direction of the party (The Greens) was the financial irregularities in the purchase and management of the party's headquarters in Bonn. After having been, for many years, the great accuser of the corruption in the other parliamentary parties for the Flick scandal and others, the «greens» have come to be dispossessed of their aureole of integrity and Spartan simplicity. «Fundamentalists» accused «realists» of taking advantage in a

«despicable» way of the errors which had taken place and rejected all the accusations of misappropriation and fiscal irregularities. According to one of the deposed radical leaders, the scandal was «a move prepared a long time before in order to integrate the party in the current system, and to remove its revolutionary and anticapitalistic character¹⁰».

Before the 1929 crack, some social sectors earned a lot of money. When everything burst, only a few won. Almost everybody lost, and the crisis spread all over the world, and with it the war too. It is always like that. An infernal cycle: quick profits separated from the real market, crisis, and a war to overcome the crisis. In 1929 monetary authorities refused to interfere on time. Now, even if they did interfere in the States they would not know how to control international speculation. The lefts and the alternative parties do not say nor do much with respect to this. Perhaps the dream prevails that the crisis will lead to the end of capitalism, which will bring about the birth of a new society...

In face of monetary and economic problems, the ordinary citizen feels overwhelmed. He does not understand much, hides in his nest and hopes that after all it will only be an alarmism. He cannot accept the fact that he is in a steerless vessel. This frightens him. He exculpates himself by saying «economists and politicians should solve this, that's what they study for and that's why they collect our taxes!»

But citizens who do not want to be irresponsible must perforce try to understand some more about the power of currency, if they are to know in which vessel they are sailing and how they can co-operate to avoid shipwrecking.

A «not very clear» origin.

We must admit that the origin of currency is not clear. And perhaps it is not because no agreement has yet been reached as to what is currency. What we know is that in different cultures and times a wide range of tools and objects is found, of which there are indications that they have had «monetary» functions. But these indications from the past are under the risk of being interpreted by historians according to conceptions and realities of the present. Currency is one of the items in this dangerous position, at least if we consider the poor results obtained while trying to find its origins.

Generally speaking, as we shall see, we may say that currency is an old invention which appears under different shapes («token-goods», clay, tools, metals, paper, cards,...), may show different features (personalization, anonymity, intrinsic value, abstract equivalence,...) and can fulfil several functions (account unit, exchange means, value deposit,...). This ancient and peculiar invention has improved the exchange of all sorts of «goods and services» between and within the cultures which have developed a greater or lesser degree of productive specialization.

Communal cultures, inside which the reciprocity of presents prevails, have also accepted in many cases one form of currency or other in their relations with other communities or with the societies in which they are immersed.

Popular literature on this subject, on which citizens and economists have built up their idea of currency, is full of affirmations like this:

«The most primitive evidence of the use of money is to be found in the exchange of metal bars made at the Babylonian temples around 3000 b.C. The most ancient known currency belongs to the 7th century b.C.»
«The primitive forms of money varied all over the world. Usually they were items which could be used clearly and easily, not too large and on which everybody agreed they were desirable. Cocoa beans, feathers, olive oil and skins had been used as currency. Shells were one of the most usual forms of primitive currency. Shell necklaces were used mainly in the Pacific islands. Different metal rings were some of the most important common currencies in prehistoric times: they were used in wide areas of Europe and of the Middle East. In Tibet and China tea tablets were among the first forms of currency¹¹».

«They understood that instead of exchanging objects it was better to use valuable pieces, that were small and handy, to exchange them for goods. Everything would be exchanged for one, two, three or more gold straws, according to their value¹²». «Homer heroes stated in oxen the value of their weapons. Also the Egyptians, Germans and old Romans calculated with oxen¹³».

All the above information, given out without any chronology nor connection, is a conglomeration of data which reinforces the idea that currency was created with an intrinsic value, as a third commodity, to improve the exchange of goods, and that all these «primitive» forms are only useful to help the birth of the monetary perfection: the coined metal pieces. To these, books dedicate half their pages, and the others are used to explain the modern evolution of currency (from paper to electronics), an evolution which, paradoxically, contradicts most of the theoretical advantages of metal currencies.

Mercy, market, money.

It is not our task in this essay to develop a complete historic study on these matters, but we will try to demythicize an imposed view of currency, generally accepted but mostly unreal. We shall try to briefly set out a hypothetical approach to the various expressions of the monetary fact. All history is a hypothesis.

In the diversity of human cultures which have thrived and still thrive on our planet, many have felt the need to exchange objects, usually held in excess, for others, of which they normally have a shortage, either outside their community (with other communities or societies) or inside their own culture (among groups or individuals).

For many centuries and in many places, this need has worked out in a sort of market which is based on the reciprocal gift, a gift whose measure of value is the subjective satisfaction of those carrying out the exchange. It is a market for the exchange of gifts, gracious (mercy), qualitative, ritual. At present, in spite of the destruction they are suffering, there are still cultures which consider this sort of market as the most dignifiedly human. The *reciprocity market* produces human values (prestige, fame, personal responsibility...) and social values (to maintain peace, to acknowledge the relationship bonds, to strengthen collective alliances...) which are considered as important as the value of the exchanged «material» object, or even more.

In the reciprocity market, thanks to the stimulus of these human and social values, it is also usual to cause some sort of productive rivalry and, therefore, overproduction and abundancy. An abundancy that is relative, of course, and in proportion to their desires, which are not usually too sophisticated nor numerous. The maintenance of these forms of the reciprocity market is not only a problem of protection of the «values» of «primitive» communities, but it has also much to do with the problem of «famine», which attains 2/3 of the present day human population: In the West we have considered these forms of reciprocity and production market for consumption old-fashioned and to be the cause of the problems of lack of development suffered by these cultures (as seen from our standpoint, which considers the Western model as the summit of human evolution!).

Both the capitalistic and socialist strategies of the Western states, companies and non-governmental organizations for help to development, have been calamitous: many attempts have been made to «substitute the indigenous reciprocity process by a 'profitable' production process (profitable in terms of change)», that is «to develop... private or collective forms of production to direct the indigenous production towards exchange and the creation of exchange currency»; «this I suggest should be called an economicide¹⁴».

But other cultures, especially those in which the market has become so complex and far-reaching that the trust and the ethnic bonds needed by reciprocity have been lost, have felt the need to carry out exchange more satisfactorily than the subjective-qualitative market¹⁵».

These cultures use what we might call *monetary units*, completely abstract realities, which allow to make a «rule of three», an equivalence of value between two objects to be exchanged. In the same way we measure definite distances by using conventional and abstract length units (for example, the metre), to measure the exchange value of actual goods we use monetary units: these are conventional measuring units, abstract and

homogenizing. They are an abstract accounting the common denominator, and allow to compare all the heterogeneous goods existing in a given market. Thanks to the fact that to every heterogeneous good is ascribed a number of abstract, homogenizing units, it becomes very easy to calculate numerical equivalences among different goods.

The immediate consequence of the introduction of monetary units in a market is the verification of *trade values*. These trade values are the result of the homogenizing comparison between *concrete goods* and *abstract monetary units*. This means that they are mixed values (concrete-abstract).

Prices (for example: 1 kg potatoes is equal to 60 monetary units) and *salaries* (for example: 1 labour day is equal to 4,000 monetary units) are the *direct trade values*.

On the other hand, what we call *currency* is the buying power of a *monetary unit* to buy some given commodities (for example: with a monetary unit I can buy 1/60th kg potatoes or 1/4,000th labour day). We can say that *currency* is an *inverse trade value*.

The possibility that in many cultures an *abstract monetary unit* may have been used, has not even been considered as a key to the interpretation of many objects which were considered «currency». They were not easily adaptable to the commodity-currency (such as gold), considered as the only «true» currency.

It is possible that many of these «monetary» items may be either signs of wealth and prestige, or standards for value measurement. In the first instance they are offered or exchanged at given moments or for given events with the social function of creation and maintenance of bonds of friendship and relation. While being standards for value measurement, these objects are almost never exchanged but are used as an abstract reference, or a tool for counting and calculating, which is used to establish equivalences among commodities.

This hypothesis would allow us to set the use of «oxen» (in Greece, Egypt, Germany and the archaic Rome) as an abstract monetary unit, as a reference unit which allows to establish «rules of three» between two items being exchanged. This hypothesis appears to be much more consistent than that of the use of «oxen» as currency-commodity which must be divided, exchanged and transported for each exchange! If this were so, we would discover a great misunderstanding which has been complicating things up until now.

Most of the time, available documents are not sufficient to reliably confirm this interpretation. This difficulty mainly, comes from the fact that the studies carried out are usually guided by the «currency-commodity» view and not by the «abstract monetary unit» hypothesis. In spite of these difficulties, we have chosen a couple of examples which appear to be going in the indicated direction.

The inhabitants of the Admiralty Islands (Malaysia) can estimate all their belongings in shells and dog's teeth. In their current exchanges, however, the shells and dog's teeth are almost never used, but their use is compulsory in ritual exchanges.

Among the Lele of Kasai (Congo), the raffia fabric is the wedding assets that every man who wants to marry must possess. But, at the same time, the commodities which do not belong to the ritual exchanges can be assessed in units of raffia fabric. Therefore, the raffia fabric isn't an actual commodity in these exchanges, but a value standard.

The most significant case is told by a 19th century French explorer, L.G. Binger, who explains a business operation being carried out between two traders from north Ghana (where, as in many other parts of Africa, cauris -shells- were used as currency): «The salt calabash is worth 2,000 cauris, 100 *kola* are worth 1,000 cauris. I shall therefore give you 200 *kola* for one salt calabash¹⁶».

Up to now we have seen two different ways of solving the exchange problems: the *reciprocity market* (without currency) and the *exchange market* (with an abstract monetary unit to count equivalences). Because of the growing complexity and the fluctuation of trade values, prices, salaries and therefore, currency of some cultures today, they have considered it necessary to find new forms of exchange. These cultures found

instruments that allow transactions to be quicker, more comfortable, more agile, exact, sure., than those offered by the exchange market (only with an abstract monetary unit).

These cultures invented the *monetary instruments*. With these, the direct exchange of goods can be substituted by a system of change delayed in space and time. Using the monetary instruments it becomes possible to obtain the desired commodity without giving any other commodity in exchange.

The monetary instruments are, therefore, a «debt acknowledgement» which, in the end, can be stated in two very different ways:

- either as a document registered in a system of personal current accounts, which allows to compensate the monetary units of every sale-purchase operation.
- or as a commodity currency with enough value to be accepted as a pledge of the same value as that of the commodity sold, a pledge which allows buying another commodity at another time.

We shall define and distinguish these two types of monetary instruments in most of the following chapters. As we shall see, it is possible that the monetary instrument based on a sort of «personalized current accounts» came before that based on the «metal currency». But it is also very probable that, in a constantly expanding market, sooner or later the system of notations in current accounts became a nuisance, slow and insufficient and therefore, there appeared the monetary instruments which we historically know in the West as the metal currency (or any other form of commodity-currency with intrinsic value).

For the time being, it is only necessary to remember that, generally speaking, there are different sorts of markets with respect to the use or non-use of one type of «currency».

- *Reciprocity market* without any currency.
- *Exchange market* with an abstract monetary unit.
- *Exchange market* with an abstract monetary unit and with a monetary instrument («accounting» or «metal» instrument).

The exchange market, based on the use of monetary instruments, is the one which has prevailed in most civilizations, i.e. where the city culture, with or without a State, has substituted the other cultural organizations, mainly communal ones. Monetary instruments have invaded most of contemporary human relations, even in communal cultures (with more or less incidence), so that the most accurate study of the functions of the different types of currency (with their dangers and possibilities) becomes a key item for the understanding of and the attempt to solving an important part of human conflicts.

Following the purest tradition, we may say that currency has mainly three functions:

1. Unit of account (improves equivalence).
2. Means of payment (improves exchange).
3. Value deposit (improves savings and investments).

The first two functions, as we shall see, are quite independent from the type of monetary instrument used. This means, they might be carried out with gold coins or with a system of cheques and notations in current accounts. Their social and economic results are different in each case.

The third function actually does depend on the type of monetary instrument because, as long as this accomplishes the reserve function in the wrong way, people will be compelled to get rid of it and go back to bartering -typical of high inflation moments. If the instrument carries out its reserve function well, then people will try to treasure it as a source of wealth. Its circulation will be reduced, and it will be difficult for the currency to carry out its function as intermediary change.

It will be necessary to add a fourth function to those three functions of the monetary instruments which has, up until now, been ignored, but which is fundamental in order to take advantage of the possibilities of the electronic money:

4. Information system (improves macroeconomy and the lawful State).

Notes:

¹«Alain Minc propone un cambio radical en el sistema capitalista», *El Periodico*, 11.11.1990.

²«El Correu de la Unesco», February 1990.

³«Economía real y economía especulativa», *Actualidad Económica*, 25.12.1989.

⁴«Una rápida globalización económica», *El Periódico*, 14.1.1990.

⁵«El nuevo camino de la economía mundial», *Actualidad Económica*, 25.5.1974.

⁶«La banca suiza teme que el escándalo del blanqueo de dinero del narcotráfico afecte a su prestigio», *La Vanguardia*, 8.11.1988.

⁷«Los socialistas exigen que se confisque el dinero sucio!», *Cinco Días*, 21.11.1988.

⁸«La deuda del Tercer Mundo devora los beneficios de los bancos privados», *La Vanguardia*, 1.3.1990.

⁹«Fujimori ofrece un gobierno de unidad nacional», *El País*, 11.6.1990.

¹⁰«Los 'verdes' de la RFA ante el cisma», *El País*, 6.12.1988.

¹¹Redden, Richard (1976), «Els Diners», Plaza & Janés, Barcelona, 1978, pp. 3-4

¹²Ibáñez, Francisco, «La història dels diners», La Caixa, Barcelona, 1989, p.6.

¹³Roland Nitsche, (1970), «El dinero», Editorial Noguer, S.A., Barcelona, 1971, p. 11.

¹⁴Dominique Temple, «Alternative au Développement», Centre Interculturel Monchanin, Montreal, 1989, p.97.

¹⁵Magdalena Grau, «Moneda telemàtica i estratègia de mercat», Centre d'Estudis Joan Bardina, Barcelona, 1985, chapter 2. In this work are submitted the bases of criticism to present currency and the foundations of a rational currency. It is the first essay submitting Agustí Chalaux's contributions on these matter.

¹⁶«El Correu de la Unesco», February 1990.

Chapter 2. Subtle weapon.

Relationships among individuals, nations and societies grow or dwindle, are balanced or unbalanced, become just or are perverted with, in, and for currency.

The traitor and the murderer is paid *with* a coin, and with the same coin we buy food and pay the labourer. We try to win the elections with some banknotes and with the same banknotes the winner is subtly subdued. We work, steal, invest, destroy, wars are made and peace is signed, we love and we hate, all *for* money.

It is no big news that everything is done *with* and *for* currency. Every day our experience and most of the media-news are impregnated with «economic interests» and «profit motives» which function more or less legally or rightly.

But there is another aspect of which generally little is known: *in* itself currency works miracles or disasters. Its abundance or shortage cause inflation or deflation, growth of production and consumption, or the shutdown of factories.

How is currency invented? That is an important question. How is currency created or destroyed? What relationship is there between currency and inflation? These subjects are full of mystery. Everybody knows that in every state there is a body which issues currency (coins and notes). But also everybody experiences being able to move lots of money by means of cheques, credit cards and current accounts, without ever seeing the corresponding banknotes.

The whole matter is very complex, and in order not to get confused we shall leave it for a later chapter (chapter 7). At present, we only need to remember that when banks grant a credit, they are «inventing money». And that in our Western societies paper money does not represent over a 10 per cent of the money which is moved every year. It only increases when black money enters the scene. «The hoarding of cash in Spain by those who want to evade tax paying, and the expansion of hidden economy, with a greater number of cash operations, are the cause for the increase of the amount of banknotes and coins in the hands of individuals and companies [...] from 2.300 billion pesetas in 1987 to 4.400 billion in 1991¹».

What we should do, is be aware that the mysteries concerning currency come from afar, and that those who know them, use them as a subtle weapon, wrapped in rites, incense and marble. It is a very powerful weapon and, at the same time, completely unknown to the people, who suffer the consequences without knowing it.

We suffer a number of problems that are difficult to understand and, therefore, even more difficult to solve.. For example, how is it possible for monetary inflation to be so difficult to control? How is it possible that without an apparent benefit for anybody, there is a crisis of overproduction -surpluses- and at the same time there are millions condemned to destitution and subconsumption?

Reading the Bible may bring us comfort in times of despair. The following choice of texts from the Bible and most of the comments are by Lluís M. Xirinacs (1983)². Let us take chapter 41 of the Book of Genesis.

Versicle 44. «Pharaoh told Joseph: I am the pharaoh, but without your permission nobody shall lift a hand or a foot in the whole country of Egypt».

This is probably the most authentic nucleus, dated about 1700 before the Christian era, around which a late writer wove the story of Joseph and his brothers. The story makes reference to the time when Egypt was invaded by the shepherd peoples, the Hyksos, who were mainly semitic. We know that in this period there was a pharaoh named Joseph-el and another one Jacob-el. The writer feigns that Joseph is a lieutenant of the Pharaoh, because Egypt, for the Jews, was a place of debauchery. It was not edifying that a Pharaoh of Egypt was a Jew. But it is necessary to praise Joseph's «wisdom» as a statesman. The story shows clearly that the State is not the servant of the «common good», but defends superprivate goods: those of the dominating lineage or group. Joseph, apparently the lieutenant of the Pharaoh, is actually a real «central banker» who, while promoting the growth of the «central bank», will collect his commissions behind the Pharaoh's back.

Versicle 46. «After that, Joseph went out of the presence of Pharaoh and travelled through the whole country of Egypt».

Joseph, who is intelligent, does not let himself be carried away by presumptions or idealisms, which is frequently the result of the intoxication of power. His head is clear. He looks for information, probably poorly quantified because the anonymous metal currency was already in force, but intuitively he discovers the spectacular increase of production. Or, he maliciously generates excess production and restrains the circulation of the new currency (he creates subconsumption).

Versicle 47. «During the seven years of plenty the land produced profusely».

The situation of spontaneous overproduction or of provoked incapacity of purchase describes a clear deflationary situation: there is more production than consumption.

Versicle 48. «And he put together all the foodstuffs of the seven years of plenty which were in the country of Egypt, and he put the foodstuffs away in the towns, depositing in each one the food coming from the surrounding countryside».

We see here the picture of the pharaoh's imperialism over all the *polis* (in Egypt they were called *nomos*). We observe also that every *polis* controlled a farming «district» that was the centre of the *polis*. The temple in every *polis* was the storage place for all the produce from the countryside. A good example of this function is, among others, the magnificent warehouse-temple of Cnossos, the centre of the island of Creta.

Versicle 49: «Joseph stored wheat as if it were sand from the sea, in such quantities that they gave up counting it, as it was beyond all measure».

It is possible that he did not collect wheat compulsively. He simply bought it with invented money (the State is strong) by noting down a figure (acknowledgement of debt) in the current accounts that each temple opened in the name of the farmers of the land of the corresponding *polis*. It must be pointed out that purchase was done, at a very low price because of the outrageous deflation which «was being undergone». Therefore, in each current account small amounts were noted, while wheat, on the contrary, could not even be counted!

Genesis, chapter 47 (following previous chapter in the original).

Versicle 13: «There was no bread to be found in the whole country, so extreme was the hunger. The country of Egypt and that of Canaan were weakened by hunger».

The imperialism of Mesopotamic Semites appeared again in all its subtlety. For the first time Canaan depended on Egypt. In this imperialist economic area there appeared an inversion of the crisis, which was another crisis: from deflation come a terrible inflation. The relationship between production and purchasing power was reversed. Now there was no wheat and money was useless. As a result, people died of starvation.

Versicle 14: «Joseph in the meantime collected all the money available in the country of Egypt and in that of Canaan, in exchange for the wheat which was being bought, and carried this money to the pharaoh's house».

Now the «central bank» effected the opposite operation: to withdraw money from circulation on the pretence that it produced inflation. He sold wheat at rising prices, at an over-high price because of the outrageous inflation which «was being born». In the current accounts of people money had been noted on falling prices, and now it was being withdrawn at rising prices: soon the available money was finished, and the people had to give out the cash hidden «under the bed». However, up to this point the whole operation perhaps was justified in order to neutralize the runaway inflation!

Versicle 15: «When all the money of the country of Egypt and of that of Canaan was finished, the whole of Egypt went to Joseph and said: «Give us bread. Should we die in front of you because we have no money left?»».

Versicle 16: «Joseph said: 'Since you have no money left, bring your cattle and I shall give you bread in exchange for your cattle'».

Versicle 17: «They therefore brought their cattle to Joseph and he gave them bread in exchange for their horses, for their large and small cattle, and for their donkeys. This is how, in exchange for all their cattle he gave them bread that year».

This is how the State got hold of all the cattle of Egypt just giving out bread, crumb by crumb. And this just by the sheer invention of money!

Versicle 18: «When that year was over, they met him again the next year and they told him: 'We cannot conceal from our Lord that money is gone and our cattle belongs to our Lord. Only our bodies and our lands remain now at the disposal of our Lord'».

Versicle 19: «Should we die in your presence, together with our land? Take us then, ourselves and our lands in exchange for bread: we shall be slaves to the pharaoh, ourselves and our lands. But give us seeds for sowing, so that we may live and we do not die, and our lands do not become waste».

Versicle 20: «Therefore Joseph obtained for the pharaoh all the lands of Egypt, as each of the Egyptians sold his field, so extreme was hunger. And the lands became the property of the pharaoh».

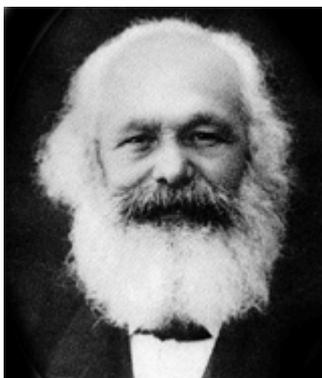
Now the imperialist Egyptian State, thanks to its Minister of Economy, takes hold of all the land. It is not a socialization of the land. The land becomes the private property of the State, and, this time, not through a right of conquest but through a legal purchase with invented money.

From elementary change to elementary change, from year to year, from crisis to crisis, the people do not realize that everything is being taken from them in a sort of infernal roulette. It is the same mechanism of «foreign debt» which holds most of the impoverished countries of the world through the process of expropriation.

Versicle 21: «And he submitted the people into slavery from one end of Egypt to the other».

Finally the appropriation is consumed by reducing the whole people to slavery. Slavery is one of the unmistakable signs of historic imperialisms. At first they were war slaves, conquered slaves. Then came slavery for an economic cause: those who cannot pay their debts. Finally appeared the plain hunt of man by man in order to obtain plentiful labour.

Versicle 22: «The only land he did not get was that of the priests, because they held an income from the pharaoh and they lived on the income they received from the pharaoh. Therefore they did not sell their lands».



At the bottom of it all we discover the crux of the matter! How naïve the Jewish chronicler is. The priests poor pensioners, live like retired persons! Would they have died poor, had they sold their lands to live like everybody else? Marx used to say that the State is not a public institution at the service of the common good, but a private institution, apparently public, at the service of the ruling class. Heads of State, ministers, Administration, Army... they are all «poor» people at the service of the ruling class, which is rarely seen. Things must be faced up by the «poor» people «in command». Here, for a short time, we have seen the bright, golden sun: the priest-bankers caste which stands behind the great operation of Joseph and the pharaoh. They do not sell their lands simply because they should have to sell them to themselves. That's ridiculous! And their incomes were the «prudent percentages» of the great appropriation which was taking place. What more do they want! It is not accidental that Joseph's father-in-law was the priest of Heliopolis, the centre of the sun cult which had a capital political role in Egypt.

Versicle 23: «Afterwards Joseph said to the people: 'Look, as from today I take you together with your lands for the pharaoh. Here are the seeds, go on and sow your lands'».

Versicle 24: «'At harvest time you will give a fifth of it to the pharaoh, while the other four parts will be for sowing the fields and for feeding yourselves, your families and your children'».

Versicle 25: «They replied: 'You saved our lives. Let us just find favour in the eyes of our Lord and we shall be slaves to the pharaoh'».

For the State to give the impressions of a public imperial institution at the service of the common good, the pharaoh is portrayed as a kind protector of the people against starvation. The people, subjected to a tremendous brainwashing, willingly accept slavery. It is the unfortunate complicity of the oppressed with their oppressor.

Joseph maintains men and land together, because the land without men or men without land are nothing.

An income of 20% yearly is a good income in those times of productive slowness, as compared with our feverish times. The rest is used for the seeds, irrigation works, feeding the oxen, the workers, the women producers of workers, the future workers and the future women producers of workers (sustenance economy). Present day tenant farmers in large areas of Catalonia still pay a fifth to civil and ecclesiastic masters.

Versicle 26: «Joseph made a law, which is still in force in our days, according to which a fifth of the land of Egypt belonged to the pharaoh. Only the priests' lands did not belong to the pharaoh».

Plunder is legalized. In imperialism, law, like religion, always plays the role of the concealer of pillage under the cloak of justice and stabilizer of oppression with the force of law.

Only the priests were free, who were, as we know in the case of Ammon, the ones who ruled over the pharaoh. They were extremely powerful and rich, and nothing could be done without them. It was so extreme that they even appointed the pharaohs.

Those distinguished banker-priests worked therefore with anonymous official currency as far as the common people were concerned, and with the control of the current accounts for the utilization of the invented accounting currency. With their methods they jeopardized the wealth of the conquered nations and of their people. They varied and alternated the inflationary and deflationary crises through the simple recourse of inventing more or less money. Through inflation they would devalue, and through deflation they would revalue the official currency without even touching the citizens' wallets. The banker-priests would pay for the lavish ceremonies, bribed the legislators, judges, rulers and soldiers. They entered into their chests the money which had been earned with great effort and saved with sacrifice, as a payment of credits made with invented currency.

If they had managed the production's plusvalue without appropriating it, and devoting it to productive credits and communal financing, they would have played a good historic role. But if this tale is more than a «sacred text» or a «story» it is because it reveals to us a very subtle oppressing class, able to create imbalances, not because of the invention of money, nor because of the administration of invented money, but because of the appropriation of surpluses, which become a sort of «communal plusvalue», different from and possibly more important than the «plusvalue» produced by work. Communal plusvalue should revert to the whole of society. This hypothesis is very difficult to demonstrate in a regime of anonymous and uninformative currency, both with respect to reporting it and with respect to the practical possibility of setting up a distribution system of the communal plusvalue. It is all too dark.

We have seen that in the *exchange market the abstract monetary units* allow the exchange to take place face to face, at that particular moment and in a balanced position. With the introduction of the *monetary instrument* the market is modified: it becomes deferred in space and time. And this happens whether it is a debt acknowledgement entered in a current account, or if it is done taking gold pieces from a purse.

Human reality has been deeply altered with, in, or through monetary instruments. Monetary instruments have become a subtle weapon. Henry Ford had clear ideas about this: «whoever manages to solve the problem of money, will have done more for humanity than the greatest strategists through the ages³».

Notes:

¹«El miedo al fisco dispara el acaparamiento de billetes», La Vanguardia, 20.3.1991.

²Lluís Maria Xirinacs. «Tercera Via». 1983. This unpublished work was the first overall compilation of Agustí Chalaux's contributions. It has been the basis for the later development carried out in the collection of file cards «Disseny de Civisme».

³Roland Nitsche (1970), «El dinero», Editorial Noguer S.A., Barcelona, 1971, p. 7.

Chapter 3. The two faces of currency.

This ambivalence of currency is caused by its application: instrument of domination, of power, of corruption... or instrument of exchange, of responsibility, of shared information.

The ambivalence of currency is caused by the use made by its owner and, especially, by those owning it so plentifully as to be able to direct its prevailing application. In Greek mythology, Pluto, who was at the same time god of the lower world and of wealth, had two faces: a terrifying face and a kind face. This is the tragic nature of human instruments. This divine ambivalence becomes, all through history, «plutarchy»: the persons and government institutions which have *power* because they have *wealth*, which is the factual power of money. This terrible ambiguity of currency, however, partially conceals the kind face of Pluto: shared responsibility and information. The word money comes from the Latin *moneta*, the name of the mint in Rome. From the possible Greek origins of the name we can derive several functions: *monas* (the measuring unit for the exchange); *monitor* (informer-adviser of an exchange that is being carried out).

The difficulty in facing the «goodness» of currency is that both its faces must be confronted simultaneously. In the cultures where it is considered essential for the exchanges, it is at the same time blamed for being the cause of many ills. But this ambivalence is not taken into account when a remedy must be found. It is considered that there is only one possible type of currency which, intrinsically, allows a double use: good and bad. With this reasoning it all depends on personal responsibility, on the morals of politicians, bankers and businessmen. These morals are always affirmed and are never doubted of in spite of the scandals which are reported every week by the newspapers in one country or another and which attain some members of the ruling classes, who ordinarily are just there to renounce. But these scandals are most certainly the tip of a giant iceberg which practically attains all the people who deal with currency. And not because most of the human race lack morals or ethics, but because the type of ruling currency in itself, is a perfect instrument to encourage the most saintly person to do something «small» or «large» which he should not do. In the lawful State, in the domain of law, almost everything is directly or indirectly corrupted by this sort of running currency, which leaves no trace.

To ask for morals and responsibility with this sort of currency is like asking for it from prisoners in a concentration camp, with little food, and where prisoners had daggers (insufficient tools to run away, but vitally useful for survival). In order to survive, each of us in his own social level, we use currency by any means. There is no other way. However, some use it not only to survive but also to ensure their own level of wellbeing and power. In the concentration camp guardians ensure their authority by making daggers and introducing them among prisoners. Permanent fights among prisoners is the best guarantee for the camp guardians. The distribution of daggers to some given groups and under given conditions sets up a system of control inside the camp more brutal than that carried out by the nice and decent guardians, the keepers of public order.

Some persons, very few, have much to do with the great speculative exchange transactions, the great companies for the tapping of natural resources, the great concerns for the manufacture and sale of arms or for the production and distribution of drugs, the great networks for the production of information... They have much to do with them either because they are the ones who take decisions or because they are the owners. But in both cases the goal is to obtain money and power, or power and money, both items being inseparable. Money gives power, and power is obtained, increased and maintained with money. These few persons (more or less anonymous, more or less antagonistic, more or less fostering organizations and companies) are, in fact, a government under cover, which determines most of the important decisions. They are the actual factual power which, directly or indirectly, bears pressure on governments or places men of straw in parliaments and institutions. It is a great maffia -whether accepted or persecuted- which is omnipresent in key places. Its coarsest forms are the Sicilian maffia and the Colombian cartels. Its most refined forms are as large and subtle as allowed by each social system (they usually are the «business» of honorable bankers, businessmen and politicians).

Most of us are very much responsible for the fact that this situation is as it is. Our small-scale participation, our small complicity (untrue income tax declaration, little jobs of hidden economy, tips in order to obtain

favours...) make us fearful of transparency. In order for each of us to maintain our own little dark game, we conceal the foul play which converts the thin profits we may obtain from our tricks into nothing.

The other face of currency must still be discovered, because up to now it was very difficult even to imagine it technically and socially. And what we do not see or what we cannot imagine is if it did not exist. How can a piece of metal or a bank note help to leave a track of that for which they were used? How can those, who take advantage of the situation, be interested in changing things?

It appears clearly that the plutarchy, the power of money, does not have a great interest in creative imagination, and it has summoned no «convocation» to study and submit alternatives to this type of currency which allows foul play to take place without leaving any trace. But it is also possible that the complexity of the present world, and the intrinsic inability of the present type of currency to face it, may have started to jeopardize its survival.

In the mysterious meeting of the three great «bankers», Deterding, Morgan and Finaly, the experts assured them that, if they rationalized currency they would earn even more money. Strange paradox! Fair play is healthy not only for the social body, but, according to the experts, it would also allow to take greater advantage of the creation of wealth. Most of the uncertainties of finances and investments, of the present day compulsory and risky speculative operations would be modified by a powerful and exact information system, which would avoid, with full knowledge of the facts, the great crises and ups and downs, and would improve a more rational exploitation of spoiled resources.



It usually happens that, if somebody does a foul play in a given system, it is because if he does not, he will be left out. This means that not everybody wishes to do foul play. In this case there is usually a wish to change the rules of the game and, above all, to establish a mutual trust which will ensure that the new rules of fair play will be duly protected. But usually this will and this hope is thwarted if no new effective rules of the game are submitted and accepted with a guarantee system for their application, or at least a penalty for those transgressing them.

We must therefore discover a face of currency to foster simultaneously the free creation of wealth (within an ecological and solidary framework) and to ensure that to act in this way it is not necessary to sully one's hands, because everybody knows «that everybody knows» that it is no longer necessary to do so.

These sort of problems are rather common. The most apparent ones are shown in children's games:

- When a game is started, all are informed of the rules. Those who do not comply are rejected by the others.
- When, because of some accident, a foul play is introduced, they may stop and say «enough!». They start their game again and, if necessary, they appoint an umpire.

But in adult life there are also delicate situations which are to no one's advantage and whose solution can be provided only by a new framework and new rules. But the change must be the same for everybody, otherwise nobody will accept it. It also happens that it is difficult to imagine the new framework because the present one makes a clear introduction of the new one impossible. Let us see the problem of traffic in the great cities. The two options, private car or public transport, have great drawbacks, while the idea is to maintain both, simultaneously and consistently. The steps taken to foster one system usually are prejudicial to the other, and in the end both are harmed. Surface public transport cannot be efficient while private transport hinders it. And therefore the supporters of private transport, in spite of the daily torture, will not make up their minds to live the torture of public transport. The result is the permanent collapse of the transport system (with all the suffering, expenses and impairment of the situation for everybody; as far as quality of transport is concerned, nobody profits from it, neither the rich nor the poor). There must be somebody to take some advantage indirectly (car manufacturers, oil companies, traffic controllers, repair shops). But even they, who at the beginning of a change seem to be assigned for loss, must have a place to live.

How shall we respect those who wish, or need, to go alone, quietly, in their vehicle, from door to door, without jeopardizing the whole transport system? How shall we offer, simultaneously, an efficient, quick, cheap collective transport, which does not interfere with personalized transport?

There are a number of technical solutions which allow the substitution of private vehicles for taxicabs and underground and surface public transport, which is efficient, non-polluting and very cheap. Let us imagine that the million cars to be found in a town are substituted for an adequate fleet of non-polluting taxis (electric, hydrogen...), standing at stops at every corner, which can circulate together with collective transport through uncluttered streets, without any private car circulating or parked. These taxis can carry large parcels, a wheel-chair, a child pram. These taxis may, depending on the customer, make daily individual or collective routes to and from work. All the advantages of the private car and very few of the disadvantages. Besides, for those who do not want a driver there are electric autotaxis which work with an intelligent monetary card that can be obtained and dropped off later at several parking places. At the end of the month you pay the transport cost registered in the autotaxi's cash register and in your own card (its system is explained in chapter 17).

This is one example. There are many technical solutions available, waiting for the political decision that will allow manufacturers to start solving the problems of congestion within the towns and to reduce the unavoidable crisis in the market of classic automobiles. None of these solutions will be efficient if it must contend with present day traffic jams. These are the least competitive and economical of all, but they are maintained through inertia, through the weight of vested interests and the inability of the democratic system, by the way it is organized, to take decisions to go beyond the four years of the term of office. Curiously enough this happens when most of the great problems can only be solved by changing the framework, which usually takes a period of longer than four years.

This is therefore the contradiction among a system of decision-making which has become anachronistic and which goes beyond the framework, terms of office and the ability of the system itself to make a decision.

Within this policy we should now analyze the effectivity of the economic and political systems of our century. The evaluation of most of the political bosses is similar to that made for town traffic: it is not so bad! There are problems, but they are being solved through ring-roads, new parking places, more computerization, automatic tolls...

Now that many consider socialism a failure, it would be advisable to introduce some sort of indicator to measure the degree of success or failure of the economic and political systems, in order to find out if the democratic capitalism is a success or not, and whether it is the least evil path.

Are the gross interior product and the per-capita income good economic indicators? The answer is no. In the first place, for their calculation, we add as production what should really be deducted (decontamination, destruction of non-renewable resources, health expenses, armament, hyper-exploitation and poverty of the inhabitants of the countries supplying raw materials...). In the second place, the per-capita income conceals in its distribution the great differences among social classes. In the case of Europe, official figures allow us to count at least 90 million people living in poverty, which are distributed more or less evenly between the East (socialist) and the West (capitalist). In the USSR, «according to Soviet sources, 20 per cent of the population - 43 million people-live below the level which is considered the «minimum material security¹». In 1985, only in the EEC, «the poverty level was at 44 million citizens -14 per cent of total population²». We should add to these figures countries which do not belong to the EEC nor to the USSR. Forced poverty, destitution, famine, starvation, are good indicators of the effectivity degree of a system, and in this sense neither real capitalism nor socialism, neither the north and even less the south, can pass the examination.

Therefore, we cannot say that real socialism is a failure without acknowledging at the same time that real capitalism in the mother countries and, mainly, in dependent countries, must solve the same problems or even more of them (both in the «economic» and in the «democratic» aspects). At this time of human history there are two key questions:

Is it possible to have a free market (only of marketable goods) which fosters the creation and distribution of wealth, and is it possible that this wealth will not cause of the destruction of nature, nor the consequence of poverty and famine among the population?

Is it possible to have a political system where foul play does not go unpunished, where the lawful State is not thwarted by factual powers, and where decisions are taken keeping in mind both the will of the population and the effectivity of the results?

When we ask if it is possible, we do not mean a Utopian possibility, but a real ability -human, technical, instrumental, organizational- meeting a real need. Why have the two systems of this century not been able to, or have not wanted to reconcile the market and solidarity, a lawful State and freedom?

It is very difficult to answer these questions, especially when they are so complicated. However, we can try to state hypotheses of «things» which have been lacking, in order to see in the present-future if this shortage was something decisive to solve the contradictions.

The two systems have produced within themselves a great contradiction between the spectacular growth of complexity and the upkeep of mechanisms of information, selfcontrol and decision-making which is unfamiliar to less sophisticated societies. This means that, both in the political and in the economic field, the setting up of great over-sates, great economies, great markets, great plannings... has been done with the mentality and the structures of societies of one or two centuries ago.

At the turn of the 21st century we know that in complex systems there is a very high degree of chance, of unpredictability. We know that the climate can be foreseen, but the weather cannot be forecast beyond a few hours. This complexity can only be possibly reduced with a suitable, agile, permanent and exact system of information (with photographs of meteorologic satellites allow a greater approach to reality). Without the right information we cannot try to control or regulate any complex system.

With respect to the importance of a correct information system, we can take foot-ball as an example. There is a regulation which, generally speaking, is not questioned. Whether the players are white or black, Russian or American, their goals are the same. The problem in this case, does not lie in the rules of the game, but in the umpire's interpretation. Foot-ball games have taken a great social importance; the umpire has a heavy responsibility and cannot do to the task well even if he wanted to. In both cases the umpire has a system of «technical arbitration» which, even if it does not yet have a legal force, it has an actual force. This competing system is television and, mainly, the moviola: the slow-motion repetition of the conflicting moves. The «foot-ball institutions» do not want to introduce the moviola in the umpires' job. One of the results is the violence and discontent of the public. The loss of credibility. Why not use an available technical means, that is more exact, that can improve decision-making and which the public accepts as more precise?

Similarly, we should ask why the judges do not use the new technical means (to support their sentences), the economists (to stop lucubrating far from reality with uncontrastable theories and indices) and politicians (to avoid foul play and lack of responsibility).

Notes:

¹Carlos Taibo, «La Unión Soviética de Gorbachov», Editorial Fundamentos, Madrid, 1989, p. 59.

²«El País», 13.4.1989.

Chapter 4. The good use of instruments.

Another «responsibilizing-informative» use of currency does not depend, however, only from the good will and the morality of the people, but it depends also on the type of currency, that is from the features of the monetary instrument.

We are easily tempted to consider that the good or bad use of an instrument depends almost exclusively on the good or ill-will of the user. We will not deny the importance of this good or ill-will, but it must be acknowledged that the design itself of an instrument can lead to its good or ill use.

The information the user has on the dangers and possibilities, the sanction or impunity for its misuse, the type of built-in security mechanism, its success among population, the myths surrounding it... are a number of variables which help and bring about a given use of any instrument. The hunting and/or war instruments, from the dagger, the spear and the bow to the shotgun, include, in each culture and historical moment, this compound of «precautions» and «forethoughts» which become more complex as the instrument does.

Nowadays, when we speak of technology, not only must we keep in mind the hardware (the instrument, the device...) and the software (the rules which allow the use of the hardware), but also what is called «brainware» or «knoware» (why, how, when, where... the hardware and the software must be used⁴).

«To play with fire» is an expression which indicates the danger in the use of some given instruments: Every instrument has its context, which is either useless and/or dangerous (a knife thrown on a beach, a car for sailing). The use of any instrument requires a minimum training and/or ability (you do not give a knife to a child, nor a car to somebody who can't drive). The more dangerous an instrument, the more precautions there are to be taken (the sheath of a dagger, the safety belt). There are control instruments which are used for «measuring, documenting, recording... the use of other instruments (meters, recorders...) in order to know the limitations, consumptions or responsibilities (speedometers, tachymeters...).

Among these instrumental changes some are especially significant: the self-control instruments of any system, being apparently unimportant, have nonetheless a great importance to reach a balance of the system, whether with respect to its effectivity or to the responsibility of its users. In the first case we have, for example, all the self-regulating cybernetic instruments (thermostat, gyropilot...). In the second case we have the self-documentation systems (coach tachymeters, which give documentary evidence of the driver's imprudence, the black boxes of airplanes, which record any mechanical or human failures). Nobody is surprised that these self-regulating and self-documenting instruments are introduced in complex or high strategic value systems. On the contrary, we seem to feel some sort of anguish to use these systems for the self-regulation and self-documentation of such delicate, complex and important instruments as economy, politics, justice and information.

We acknowledge the right of the monetary authorities to put limitations to the invention of money by the banks, but the instruments they have available are generally ineffective and insufficient. We accept that Justice must support the lawful State and the equality of everybody in face of the law, but the instruments are insufficient and ineffective, both with respect to documentation and to their actual independence in face of the State and in face of factual powers.

What features should an information system have, to allow the improvement and responsabilization in decision taking at all levels (territorial, district, State) and fields (politics, market, justice...)? Let us itemize some of them:

- it should not be bureaucratic, it should not need endless officials, inspectors or police.
- it should be as automatized as possible, it should not need complicated declarations or documentations.
- it should not be under the Ministry of Finance, or the police, or the executive, or private companies, i.e. it should not be in the hands of anybody having the ability to act against the citizens beyond or below law.

- it should respect and protect everybody's privacy, but this should not be an excuse to conceal irresponsibility and crime, either public or private.
- in matters of general interest -not personal- it should be transparent and accessible, that is within reach of the different levels of understanding.
- it should bring about a better production and distribution of goods within an ecological framework.
- it should bring about a better participation and responsibility in political decision-making.

We should therefore find which of the present informative instruments or systems could offer these features, after the necessary modifications.

It is possible that in this search we find that the monetary system can be adapted in a conscious way, so that it offers these features in a consistent and democratic framework.

Therefore, in the case of currency (hardware) we must study in depth, to what extent its features (software) are favourable to some given antidemocratic and antieconomic uses (brainware), and to what extent it is possible, socially and technically, to modify these features in order to improve their positive functions, with a minimum of negative malfunctions, as it is done with any instrumental or technological problem.

Note:

¹Milan Zeleny (1985), «La sfida della complessità», Feltrinelli, p. 403.

Chapter 5. Aristotle against Plato.

An biased viewpoint of the history of currency has made the Aristotelian vision of currency (third merchandise with intrinsic value) predominant over the Platonic vision (abstract monetary sign with which to make a rule of three).

Inevitably, we must refer to a little history in order to try to understand where the muddle comes from. The books on the history of economic thought usually put Aristotle and Plato as the beginning of the polemic on currency.

Plato suggested that currency should be an arbitrary «symbol» to help exchanges. He was against using gold and silver because, in his opinion, the value of currency should be independent from the material with which money was made.

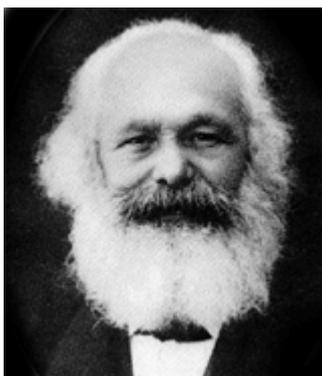
Aristotle, consciously opposing Plato's theory, gave birth to the following reasoning: the existence of a non-communal society implies the exchange of goods and services; this exchange at the beginning takes the shape of a barter; but the person who wants what another has, perhaps does not possess what this other person wants; it will then be necessary to accept in exchange something we do not want, in order to obtain what we want by means of another barter; this fact will then induce people to choose a merchandise as a means of exchange; metals are usually chosen because of their features of homogeneity, divisibility, transportability and relative stability of value. This metallist vision has been predominant until recently, in spite of the serious contradictions to which reality has submitted to it.

In short, in the West these are the two positions with which many variations have been tried without reaching an understanding. Some times the theories have complemented each other, and some times they have been in contradiction with the monetary practice. The history of currency and its theories is full of confusion and crises.



Schumpeter himself, in his impressive work on the history of economic analysis¹, admits that «whatever may be its shortcomings, this theory (Aristotle's), though never unchallenged, prevailed substantially to the end of the nineteenth century and even beyond. It is the basis of the bulk of all analytic work in the field of money.» It has had such a strong influence that, nowadays, ordinary citizens still think that the paper money being issued corresponds to an amount of gold which is kept in the vaults of the central bank, and in general they ignore the creation of money by the banks.

Present-day monetary theories acknowledge and accept the changes which have taken place in the progressive abstraction of currency, but in spite of the fact that many of them describe a monetary theory completely detached from the metallist theory, generally speaking they are still blocked as far as the imagination of a different monetary system is concerned. The monetary system becomes then the result of the agreements reached by the economic powers, and the result of the failures of the world monetary authorities. These authorities always tempted to drag the weight of metals in face of the «magic» of a currency which is detached from everything, which the bank system has created and which they cannot control.



Therefore, the result is the theoretical and practical predominance of the Aristotelian vision -metallism- which has been effective until quite recently. «Theoretical metallism, usually though not always associated with practical metallism, held its own throughout the 17th and 18th centuries, and prevailed victoriously in the «classical situation» that emerged in the last quarter of the latter. Adam Smith substantially ratified it. And for more than a century to come it was almost universally accepted (by nobody more implicitly than by Marx) so much so, in fact, that the majority of economists came to suspect not only unsoundness of reasoning but something very like obliquity of purpose behind every expression of antimetallist views²».

«There was also, however, an antimetallist tradition, weaker no doubt but equally ancient, at least if we choose to trace it to Plato³».

One of the most daring attempts both in the theoretical and in the practical field, was the one carried out by



John Law in France in the first years of the 18th century. «He worked out the economics of his project with a brilliance and, yes, profundity, which places him in the front rank of monetary theorists of all times. And this is all that matters for us. Since it is plain, however, that his analysis has been condemned, for about two centuries, on the strength of the failure of his Banque Royale (...) and the Compagnie des Indes, which it absorbed, failed because the colonial ventures combined in the latter did not, for the time being, prove to be the source of anything but losses. If these ventures had been successful, Law's grandiose attempt to control and reform the economic life of a great nation from the financial angle -for this is what his plan eventually amounted to- would have looked very different to his contemporaries and to historians⁴». Law underlines that the virtues of paper money consist of the fact that its amount can be reduced to a *rational administration*.

«Silver that serves as money no other use than to buy goods, it might just as well be replaced by a cheaper material, in the limit, by one that has no commodity value at all, such as printed paper, for 'Money is not the Value *for* which Goods are exchanged, but the Value *by* which they are exchanged.» «This, then, seems to have been the work that gave birth to the idea of Managed Currency (which implies the administration of currency and of credit as a means of directing the economic process), which was subsequently lost to the large majority of economists until it forced itself upon them after 1919.» «A great plan was behind all this, in fact well advanced on the road to success: the plan of controlling, reforming, and leading on to new levels the whole of the national economy of France⁵».

This is an example of the weight of the inertia of the paradigms which make up, lead and control our vision of reality. When in 1919 paper money started to be accepted, and the need for its convertibility into gold was overcome, it was already late. The extension of current accounts and of cheques, with the corresponding expansion of credit and the invention of bank money, started to make the use of paper money inadequate, as it was no longer able «to reduce its amount to a rational administration», according to Law. Today, with the massive introduction of credit cards, the cash in the hands of the public is further reduced and therefore the ability to create bank deposits is increased, so that bank-notes and coins are used less and less.

Notes:

¹Joseph A. Schumpeter (1954), «History of Economic Analysis», Oxford University Press, New York, 1963, p. 63.

²Ib., p. 289-290

³Ib., p. 293.

⁴Ib., p. 295.

⁵Ib., p.322.

Chapter 6. The unstoppable abstraction.

Monetary transformations have shown that the «metallist» Aristotelian vision is not in a position to allow a balance between growing merchandises and a limiting material currency. The «nominalist» Platonic vision becomes stronger through the practice of the growing abstraction of today's monetary systems.

Drafts, banknotes convertible into metal, and today's totally inconvertible paper money, have been practical essays to get free from the gold bond. Hand or electronic notations in current accounts have finally laid down the total abstraction of currency as a debt acknowledgement and a unit of account.

The inertia which hinders the change of institutions is caused by many factors. Some are technical -a given instrumental inability to carry out a new proposal-; some belong to the human dynamics, where all changes are always difficult. But there are also «inertias» held more or less knowingly and defended by the social groups which take profit from them. It certainly would be odd to see Aristotle formulating his theory while Alexander the Great is spreading Greek imperialism and, therefore, allowing metallism to be put into practice with all its possibilities: purchase of treason, monetary transformation of plentiful plundering and of «metallic» tributes, extension-penetration of trade in foreign countries... Evidently metal currency is a good weapon of, cultural and commercial penetration, because it easily breaks any economic and traditional exchange structure in the invaded populations, thanks to the easy use and to the enchanting magic of precious metals.

Only after 1914, when the war had to be finished in three months due to the exhaustion of the gold reserves, was the decision taken to seize the opportunity to introduce paper-money instead of gold. A new path was therefore opened for the penetration and subtle exploitation through the use of the official paper-money, as a legal support of the over-utilization of bank money. World War II was used to end the use of gold on an international level. The Bretton Woods agreements, signed in 1944, accepted that the US dollar would be convertible into gold. But in 1971 president Nixon gave a unilateral notice of their termination. Since then, paper-money has nothing to do with gold nor with any merchandise, it does not represent any amount of gold and it cannot be converted into it, neither inside each State nor in the international relationships.



Paper-money is based on the social convention which has made it the necessary instrument for the acts of trading, and for the trust put in it as an instrument suitably carrying out its function. It is an auxiliary and abstract value. The monetary system has recovered Plato's nominalist theory. And the subsequent facts -cheques and cards- have further increased its abstraction.

When a change takes place in the monetary system, it is necessary to protect the social practice with a number of myths and signs which perpetuate the trust of the old system in the new one. It is very odd that still three years ago the Banco de España (Spanish national bank) would «pay to the bearer the amount of pesetas in notes», in gold, even though this had been impossible to carry out for many years. We can also see a similar case in the convex shape of the Sumerian tablets, which are a trace of the previous spherical system (see chapter 10: «A trip through Eden»). It is also odd to see that after 18 years from the death of Franco, the coins proclaiming him «leader of Spain by the grace of God» are still in use.

The difficulties to control the monetary inflation and to get free from the dangers of recession; the very serious problems derived from the hegemony of the dollar in international trade and, especially, the unpayable foreign debt; the dictatorship of the International Monetary Fund and of the World Bank, carried out on behalf of the strong countries controlling them; the divorce between financial speculation and actual economy; the destructive oblivion of the ecological system by the economic system... are the most important facts for the life of people and of the planet. These facts appear to be serious enough to try to find, through a new monetary system, a more accurate instrument that would deal with them more effectively.

Peter Drucker, a famous North American economist, hardly suspicious of subversive positions, has clear ideas about it: «We need a new simplifying synthesis of reality to enfold the present economic reality. If this doesn't happen, we may find ourselves at the end of the economic theory; that means that there will be no

bases for the action of the Government which runs the cycle of business and of economic conditions¹. «Transnational economy is shaped and controlled by the financial flows which have their own dynamics». «'Real' economy of goods and services does no longer control transnational economy. This, on the contrary, is done by the symbolic economy of money and credit. Every day, the inter-bank market in London runs 10 to 15 times the amount of transnational currencies [...] beyond what is necessary to finance the world exchanges of goods and services». «90 per cent or more of the financial transactions of transnational economy have no use for what economists consider an economic function. They are only used for financial functions». «It is the symbolic economy which widely controls the real economy²».

When in May 1990 Professor Drucker was appointed doctor *honoris causa* by the Universitat Politècnica de Catalunya, he surprised everybody with the beginning of his lecture «We are all aware that we live in an age in which technology changes very rapidly. Many think that this happens in «high technology». At present, technological changes take place more in fields which have been considered as «low technology» or «non technology» than in high technology fields. The largest technological changes of the last years have not taken place in the field of computers, nor in that of biotechnology, but in the field of bank and finance. As a matter of fact, the banking business is rapidly going from being something related to money to be something related to information³».

Notes:

¹Peter F. Drucker, «La nuevas realidades» Edhasa, Barcelona, 1989, pp. 230-231.

²Ib., pp. 188-189.

³Peter F. Drucker, «Gestió de la tecnologia», a lecture given in Barcelona, 1990.

Chapter 7. The kingdom of darkness.

The features of the different forms of historic (metallist) currency are: anonymity, uniformity and mobility.

The *anonymity* of metal-money or of paper-money (it does *not* inform on *who* is buying or selling) allows all sorts of monetary activities to be carried out without leaving any personalized and responsabilized trace. The *uniformity* of these monetary instruments is almost complete (except for the of monetary units represented by each), as they do not provide any information on the details of the transactions. They do not inform on *what*, *how*, *when*, or *where* a sale-purchase has been carried out. They therefore prevent any attempt of exact analysis of the complex and flowing trade reality. The *mobility* of this sort of currency (that can be used indefinitely in lots of exchanges) prevents the identification of each sale-purchase operation and, therefore, prevents the partial or total accumulation of their values.

It would be interesting, as a literary recourse to describe a given society, to tell the story of a bank note. Let us suppose that it carried recorded on it the places where it has been, who has used it, and what for. This would be an exciting story which each of us can try to build up, using imagination, a story full of surprises. But if instead of being somebody who tries to have a good time making recourse to fiction, the interested party were an economist, he would like to know not only what one bank note has been doing, but all the bank notes. It would be fantastic! He could know the monetary flow of real economy, of financial economy and of underground economy! All in a direct way, without creating indexes nor trusting declarations, all of them biased and manipulated. If it were a judge, instead of an economist, he might go mad, because he could compare the declarations of the defendant with the actual story recorded on, or told by, the bank notes which have taken part in the murder, in the bribery or in the robbery.

This is then one of the disappointments in our civilization: that bank-notes do not record anything and do not speak. They leave no trace and are dumb. The economist and the judge will have to play the novelists, whether they like it or not. They must construe real stories with partial or false documents. The lack of evidence therefore acquits both the defendants and those judging them, and leaves those who have been wronged in the greatest defenselessness. All immersed in the kingdom of darkness, of shadows, of the lack of transparency. Everybody becomes responsible before «God and History». The politicians promise and don't honour their promises; the economists forecast again and again, and almost never get it right; the judges must acquit convicts for lack of formal evidence...

We are so used to cohabiting with money, to love it and to hate it, that possibly we have seldom looked at a bank note long enough to see its features beyond its practical function of paying or saving. Let us do it, then, at least once. Let us take one, for its value does not matter.

We have a special kind paper. Some faces or drawings are to be seen, while others, invisible, can only be looked at against the light. And finally we see figures, several figures.

All the notes of the same value are practically the same. To be the owner depends on the actual physical possession. If we lose them, or they are stolen from us, we lose all rights to them. They are anonymous.

When I pay, the bank-note does not say anything. It is always silent. It does not leave any trace. It is always running. It constantly goes from hand to hand. Or it remains forgotten during centuries under a tile or in a safe.

Monetary circulation is, by definition, the kingdom of darkness. Nobody knows nor can know anything, neither for good nor for evil. Neither to balance economy nor to pursue a murderer: And who ever says the opposite, whether he is a minister, a banker or governor of the national bank, is cheating and lying. And in the kingdom of darkness, of gloom, all is possible, all goes unpunished.

The wizards of money.

«Let me tell you a story of when one thousand pesetas still had some value».

«A civil engineer arrives at a small village, to study the project of a road. He goes to the only inn and has lunch. He then calls the innkeeper and gives him one thousand pesetas»:

«I'll possibly stay a couple of days. Please book a room for me. When I come back this evening I'll confirm it to you. In the meantime please take these thousand pesetas and we shall settle matters later».

«The innkeeper went to the kitchen to talk to his wife. With those thousand pesetas they could pay the butcher, to whom they owed the same amount. When the butcher got the money he quickly settled a debt he had with the carpenter; this did the same with the blacksmith; since the blacksmith's wife owed one thousand pesetas to the chemist for the medicine she bought for her children when they got scarlet fever, and for her husband when he had an abscess, she thought it was an opportunity to pay him off».

«When the chemist got the money, he closed his shop for a while and went to the inn to pay a debt he still had from the banquet when his daughter got married».

«In the meantime the day had gone and the engineer came back»:

«Look, since the road will not cross the village, as we have agreed with the local authorities, I have decided to go back to town to-day. Therefore, please take the price of my lunch from those thousand pesetas, and forgive any inconvenience».

«When the engineer went away, the innkeeper told his wife»:

«It was good luck that the chemist paid his debt, because otherwise I don't know how I could have settled things¹».

This story leads us into the matter of the creation of money, which we have already mentioned. This is a very important matter, and quite unknown.

Almost everybody accepts that, at present, the bank system is, in fact, the actual creator of our means of payment, which is currency. We can find many explanations of the systems to create money in almost all the economy handbooks². Through a careful reading we may deduce the following conclusions:

«Creation of money» has two phases:

At first the national bank *emits* coins and banknotes, which are the legal means of payment, and, at the same time, produces resources granting *credits* to the banking system.

In a second phase the banks create deposits (current accounts = monetary units) as a result of the *credit expansion* (through granting credits on *other people's resources*).

Let us explain it more clearly. After a long process in which the gold reserves are no longer related to the emitted currency, at present legal currency has two instruments: the banknotes and the metal coins produced by each State, and which are accepted through the public trust and the official support they receive. Oddly enough, however, the whole of the banknotes and coins in many States represent only about 10 per cent of the currency used. The remaining currency is created by the banks (banking system) and works by means of cheques and notations in current accounts. We shall give an easy example.

Let us suppose that somebody deposits in his current account a quantity of pesetas in banknotes.

The bank knows, through its own experience, that this amount is not usually cashed all at once and, therefore, it can put a part of this amount at the disposal of a customer who has applied for a credit.

The credit is granted as an accounting deposit (entering a certain amount) in a current account. The credit beneficiary will use it to pay his debts or to meet some expenses.

The people receiving money from the beneficiary will possibly deposit some of the money in the bank. (For the time being it is not important whether it is the same bank or another one). What we must see is that a new deposit has been created through a new down-payment.

This second deposit will allow the granting of a new credit. In this way the procedure can to a certain extent be repeated, i.e.. a down-payment in a current account (at sight) is the origin of a credit which generates at the same time a new down-payment, and all without stopping the first credit from being available to the customer. In this way the expansion of the credit increases the amount of currency available to consumers and to companies.

On the contrary, the long term accounts (money left in the bank for some months or years) do not allow the expansion of credit. The holders of these accounts commit themselves not to use the deposited amount for a given time. During this time the bank will lend the amount to whoever applies for a loan. In this case the bank acts as a middleman: it collects savings and converts them into capital-investment. This is, according to the banks, their task, and what most people think they do: the business of banks is the difference between the interests they collect and the interests they pay.

The creation of means of payment cannot be arbitrary without producing serious market problems, since the imbalance between the real sector (production and consumption) and the monetary sector of economy produces monetary inflation or deflation.

In a growing market there are evidently new, necessary means of payment to meet new investments, new production and new consumption. The problem is to guess the right amount of money which must be invented. But at present it is very difficult to know which is the right amount, because every State and every bank look for their own advantage, and the controls of the monetary authorities cannot be completely effective without really knowing the exact data that must be balanced, which is the value of production and active money for its purchase. Therefore, what can happen is that «nobody knows exactly how many millions of banknotes -dollars- are printed by the Federal Reserve, because their number is an esoteric figure which only some priests of the Bank know³».

The banking system. Judge and party in its own case.

We have tried to approach one of the nuclei of the economic system, looking for clues on how money is created. But the following is also a key question: who takes the invented money?

Apparently the invented money is distributed among customers. But we must point out that the bank charges high interest rates and in practice does not pay any, as it is granting credits with invented money. Some time ago (and even now, in many cases) the initial deposit and the balances of current accounts used to get a premium, but at a very low level (for example: 1 per cent) with respect to the interests produced by credits (for example: 17 per cent).

However, the bank has an important working hoard -which does not belong to it- and of which it takes advantage at a very little cost. In short, the important thing about money is to be able to use it, rather than to have it. Banks and bankers can obtain selfcredit in very good conditions; they can foster or hinder financial, speculative, exchange, investment, political, electoral, cultural... operations. As far as credits are usually granted to those having assets, they help owners and victimize those who have good projects but nothing to mortgage. Another beneficiary of the credit increase is the national bank. This compels the banks to lodge in it a percentage of the deposits with almost no compensation. When the States appeal to the national bank to cover the public deficit, they cause money to be invented which, as long as it does not correspond to an actual increase of production, will benefit some citizens -those receiving this money from the State- to the detriment of the others, who will be prejudiced by inflation.

Most books on economy explain these processes in greater or lesser detail. What is surprising in all of them is that they make no comments on the effectivity and legitimacy of this bank system for the creation of money.

As far as effectiveness is concerned, the creation of bank money has a serious inner contradiction. On the one hand, the banks try to create as many deposits as possible, because on every new credit they charge high interest rates. Let us remember that, banks almost never reward current accounts at sight, which are the origin of credits. We have here a very important phenomenon because of its economic and social implications. It is impossible for the banks to look for the highest benefits for themselves and for the global economic balance. The monetary authorities have a number of means by which they to restrain the growth of the monetary offer when it creates inflation. But since they are indirect means (increase of the amount of compulsory reserves, increase of the basic interest rates, and emission of Treasury bonds), the effects are unpredictable and, besides, they involve other important economic variables (investments, unemployment...) which not always give sufficient freedom of action.

As far as the legitimacy of the bank's creation of money is concerned, this problem is usually not raised. Why should society consider it a positive asset, that companies should invent and use money without a proportional retribution to all of the current account holders on the basis of the common savings of the whole population? Why should a task, with very important «economic» common effects, that is not always balanced, be left in the hands of private interests? We have here a very subtle phenomenon of hyperexploitation which does not concern only one class (capital) taking advantage of another one (labour), but bears very few persons taking advantage of the whole of society. (This matter has already been shown in chapter 2).

This subtle exploitation gives power. In this case it is a special power which is stated in many ways, are being a strategical power for society: the banking system is responsible for most of the financing of the electoral system, that is for supplying funds to parties and candidates to elections with no other standard than the «trust». Oddly enough, the explanation and discussion of the legitimacy of these means of creation and taking of money by the banking system do not appear in the economy books or, even less so, in the electoral programmes.

As a matter of fact it is very difficult to throw light on the incidence of these means of reality. In the absence of a clear monetary system, most positions are opposed through different opinions and suggestions. Here are some of them:

«At present, bankers, absolutely all bankers, are the actual creators of money».

«They know it, but in an abstract form: in the last thirty years most economists have explained this reality; but in the experiences the matter is shifted to often that bankers do not see it clearly. They are like the uncunning magician getting rabbits out of his hat and not remembering having put them in...».

«Banks create money in the same way humans think: it is not necessary to will it».

«When a banker examines his balance sheet, he finds that there is an equilibrium between deposits and credits. But he knows perfectly well that these deposits do not belong to him. With the exception of the bank's own resources [...] he will see on the one hand some credits to his debtors and, on the other hand, some debts to his deposit holders. If he compares two successive balance sheets he will find that deposits and credits have increased to a certain extent. Nothing more. The money that he may have created cannot be singled out in his balance sheet. The newly created money is not different from the old, which goes on circulating. Deposits mix among themselves indissolubly. The rabbit does not come out from the hat until all the balances of all the banks come together to produce the complete statistics: then it can be clearly seen that the amount of money in circulation has increased... Where is the secret?».

«The secret is that the money circulating at present is a circulating debt [...] contracted by special concerns⁴».

«If we tell any banker of the chain that he has «created» money, he will protest forcefully. He will sustain the credits he granted, that were backed by an excess of reserves as big as the credit itself⁵».

«Bankers are right when they say that they never lend one cent beyond what they have. The money is not created in the process of lending because a bank gives more money than it has. Money is created because in general you and I pay each other with cheques which give us rights to the banks of the others. There would be no creation of money if we cashed all the cheques we receive. But we don't. We deposit our cheques in our current accounts and, in doing so, we give our banks more reserves than they need to ensure the deposits they have. These new excesses of reserves put our bank in a position to lend or to invest and, therefore, make it possible for somebody else to open current accounts which again produce new excesses of reserves».

«This may cause some fear. Does this mean that the new monetary offer spreads indefinitely from only one new deposit? Wouldn't that be extremely dangerous?».

«Of course this would be very dangerous, but it is impossible for it to happen. After having well understood how an original increase of deposits increases the offer of money, we must also understand what causes expansion to stay within its limits».

All this complex reasoning is brutally casuistical. How can such an important, strategic and powerful tool be so scarcely clear, and so little exact, and how can it be left in the hands of the short-term interests of the banks?

The complication does not finish here because, even if «theoretically» the national bank says that it has control mechanisms, in practice they are not always effective. On top of that it must be noted that today there are a great number of other forms of «currency», besides paper-money and bank-money, which can no longer be controlled by the national bank. «There is no clear cut separation line, within the whole of cash-flow, between what is currency and what is not. Whichever the definition chosen for currency, this definition will be surrounded by a number of instruments, more or less flowing, which can be used as substitutes⁶...».

To try to lay down the bases of the monetary policy not only shall the bank-notes and coins, the deposits at sight, the savings deposits, the long-term deposits... be kept in mind, but also the Assets in the Hands of the Public (ALP), which cover a large amount of uncontrollable quasi-currency, of paper being used as if it were currency: public debt, premiums, temporary cessions, companies' promissory notes... In Spain these ALP, in 15 years, have increased in number by in about 1400 per cent!

«It is easy to deduct, from all the previous considerations, that there cannot be an effective control on the invention of money».

«The immediate result of this situation is that every bank, within the more or less strict conditions set out by the national bank, behaves according to its own convenience. And there is no effective law on the whole to allow to set out global strategies for the whole market. Needs are met empirically and partially not in terms of the overall needs but almost always on behalf of the privileged sectors of society⁷».

Underground in the vaults.

Up to now we have been considering the legal process of creation of money, as a consequence of the interaction among emission of the national bank, expansion of the banks' credits, and utilization of cheques and current accounts by customers.

Wouldn't we be naïve, if we thought that this legal process is the only actual process for the invention of money? There is apparently a growing trust that fraud becomes more and more difficult, law is becoming

harder and harder, inspectors are incorruptible. But if this were true, how is it that the Spanish government itself admits that in 1989 there were about 9.000 billions of black money (which represented almost one third of the gross national product⁸)? There is no need to go that far. How many companies do not have a double, or treble, accounting? and, in this general environment, are the banks an exception?

We may say that this happens only within our latitudes through the lack of effectiveness of bureaucrats, but that, in the USA for example, all this is impossible. For those who have no doubts, it is advisable to read the last survey-book by Vance Packard (1989) on the ultra-rich Americans. «As a matter of fact, the wealthiest people fix the amount of their taxes themselves. As it is explained by a financial adviser of the Washington area, specialized in established fortunes: «My clients decide the amount they wish to pay to the government, and we do whatever is necessary to make it so.» «We do not pay taxes. Only the small ones pay them.» -says multimillionaire Leona Hemley. «I know people five times wealthier than I am, who swank they have never paid a tax» -confirms Mr. Sol Price, with a fortune valued 200 million dollars⁹.



Likewise, on a macroeconomic level we do not find any clear recording showing the yearly creation of money by the banks, nor any indicator of their relationship with the cash deposits which have been effected. Everything becomes complicated and difficult to calculate for any citizen, and also for any economist that isn't a specialist. One of the few economists which give a capital importance to the creation of money is Maurice Allais, Nobel Prize winner of Economics in 1988. He suggests to «give back to the State, that is to the collectivity, the income related to the monetary creation». «The revenue from the creation of money would go directly to the State, which could then reduce taxes. Most, if not all, of the progressive income taxes could be suppressed¹⁰».

Besides, the bank system is a patron of foul play: black money (from hidden economy), red money (from drugs), dirty money (from criminal circles), are whitewashed by the banks. Many things are hidden by the bank. The clearest case, but not the only one, is the whitewashing of red money, produced by the drugs trade.



«All the great banks in the United States have accepted they had infringed the Federal Reserve Law as a system to *whitewash* the money from the mafia, collected in the areas where great amount of cash are deposited every day.» «The Government representative for the National Programme against Drugs acknowledges that up to now it is a mystery how the money from drugs moves around in Spain. It is also not exactly known what financial props are used by those dealing drugs. However, we know that the profits obtained in Spain and in other countries, after their *whitewashing*, are transferred to the network of tax paradises of the international banking system.» Mitterrand himself has said that «the banks which have recirculated money from the drugs trade deserve radical punishments, because in this field we must act mercilessly. This matter justifies that the necessary researches be authorized on the origin of bank money all over the world¹¹».

«The «naughty» ones are the tax paradises. What nobody says is that most of the international banks have offices in them¹²». «Unfortunately, we know of no study in which the percentage of credits is stated, which were squandered by the élites of the Third World countries, and which in most cases, found a discrete shelter in the banks of the industrial countries through their tax paradises.» «Industrialized countries usually do not remember that their banks are the first to take advantage of these flights of capital, the same as with the «whitewashing» of the black money from drug trafficking¹³».

In short, a subtle weapon is hidden behind the brilliance of marble, the security of steel, the impeccable accounting, the undiscussed uprightness of people... which only a small minority of very well located persons know of, and who, since they only care for their own interests, not only jeopardize the general balance and may endanger the whole, but, sooner or later, as with a boomerang, may endanger themselves.

Notes:

¹Esteve Busquets, «Només seixanta duros», El 9 Nou, 27.10.1989.

²Josep Ma. Bricall (1979), «Introducció a l'Economia», Editorial Ariel, Barcelona, 1980; Richard G. Lipsey (1983), «Introducción a la Economía Positiva», Vicens Universidad, Barcelona, 1985; Miguel A. Lorente, «Banca y Mercado Monetario», Banco de Vizcaya, Bilbao, 1978.

³«La crisis que viene», Más Allá, No. 19.

⁴Jacques Lavrillère, «La industria de los banqueros», A. Redondo Editor, Barcelona, 1969, pp. 87-89.

⁵Robert L. Heilbroner and Lester C. Thurow (1982), «Introducció a l'economia», Editorial Empúries, Barcelona, 1985, p. 298.

⁶Magdalena Grau, «Moneda telemàtica i estratègia de mercat», Centre d'Estudis Joan Bardina, Barcelona, 1985, (mentioning Lord Kaldor).

⁷Ib., p. 69

⁸«Dinero negro: lo único que sobra en España», La Mañana, 7.5.1988.

⁹Vance Packard, «Les ultra riches», Acropole, Paris, 1990.

¹⁰«Hay que acabar con los impuestos sobre la renta», La Vanguardia-Dominical, 20.8.1989, pp. 16-22.

¹¹«El Narcotráfico y la Banca», La Gaceta, 29.12.1989.

¹²«Miedo e hipocresía», La Vanguardia, 9/1989.

¹³«El problema de la deuda», La Vanguardia, 9/1989.

Chapter 8. Impunity and disorder.

The instrumental features (anonymity, uniformity, mobility) of this sort of historic currency bring about all sorts of crimes with, in or for it; they make a metric and informative system (multicaptor) of all the significant facts of each sale-purchase operation impossible; and therefore, they prevent the experimental verification of any of the economic theories and policies.

«Qui paga, mana» (a Catalan expression meaning 'money makes dependence') and «Laws are made to be broken» are aphorisms born of a fatalistic history, where these kind of anonymous currencies have left most crimes and offences unpunished (for lack of evidence or through well-paid «pressures») such as: treasons, trafficking of weapons, persons or drugs, wars, attacks, abductions, forgeries, fiscal fraud, double accounting, perjuries, prevarications, briberies, misappropriation of public money, murders, slander, robberies, embezzlements, swindles, speculations... On the other hand, the economic theories and policies are permanently in crisis, lacking an experimental system of verification to prove them according to facts and not to the interests of the power groups or of the «prestige» of the economists defending them.

The best way to explain the three malfunctions of the present monetary system is to resort to facts and evidence. Facts which speak for themselves. Facts which take place as a constant historic fatality with which we must live, while we hope that the morality or good-will of people will prevent them from spreading. We attack on the effects, but we do not discuss the instrumental facilities that help them to spread. Why should we do anything at all if the cause is transcendent, if wickedness is consubstantial to humans?

With the first malfunction, some facts were presented which appeared in the newspapers in these last years, among which we repeatedly find a significant example of the instrumental inability to put an end to the impunity of the trafficking drugs. We will avoid comments. The *italics* indicate some of the features that should be taken into account. The information given must be considered simply as an orientation. By definition, nobody can know anything accurately on these matters.

Part one.

Anonymous currency (metal or paper) prevents from anticipating, discovering and condemning most of the criminal and punishable actions.

Some figures for 1985 in Italy are terrifying: the company Crimen S.A. invoiced 15.000 billion pesetas in one year, one fourth of the gross national product. «Under its different forms (Maffia, Camorra, etc.), and in several activities which go from prostitution to the stealing of works of art, going through the traffic of drugs and extortion, organized crime entails a business of about 15.000 billion pesetas per year and gives «work» to almost one million people.» «It is the most important company in Italy.» «People consider less serious and with less responsibility to report them, the «most common» crimes, to which little by little it *we get accustomed to.*» «The trafficking of narcotics occupies the first place in the economic ranking of the Italian crime industry.» «1. Drugs: three to six thousand billion. 2. Prostitution: one thousand and a half billion. 3. Arms: 400,000 million. 4. Blackmail: two thousand billion. 5. Stealing and holdups: two thousand billion. 6. Smuggling: 300,000 million. 7. Smuggling of works of art: 200,000 million. 8. Games of chance: 700,000 millions. 9. Currency traffic: a balance of 5.000 billion and yearly movement of 500,000 millions. 10. Several illegal activities: one thousand and a half billion.» «However, the difficulty to fight this great economic underground factory is enormous. In the first place the lack of jobs [...] urges many young people to resort to the crime enterprise. In the second place, there are easy profits in this underground job, even if it entails greater risks¹».

«Every day italian politicians, illegally pocket 900 million pesetas whether for personal ends or for their parties. Messrs. Corrupció S.A.'s turnover occupies the twelfth place among the Italian companies, after Olivetti and before Alitalia, If we sum up all the sorts of economic corruption with the political corruption in Italy, we come to the incredible figure of one thousand and a half billion pesetas per year²».

«Spaniards think that law only assists the wealthy. Of the 61 per cent who think that laws benefit some groups more than others, 84 per cent think that it is the «rich», the «powerful» or the «high classes» who are benefited, and only a 10 per cent think that it is the «government people», the «politicians» or the «socialists». 75 per cent think that when the time comes to apply the law, it is done in a different way depending on who is concerned³».

«Hidden economy will move 10.000 billion pesetas in 1989. Prostitution, procuring, resale, trafficking of drugs, capital flight, even the simple work done at home, are today in Spain a suitable ground for the generation and diffusion of hidden operations. Over three million Spaniards, according to the last study carried out by the Ministry of Economy, carry out some of these activities which are generally kept secret with the intention of evading taxes.» «This population, irregularly employed, produces between 15 and 25 per cent of the GNP, foreseen in about 42 billion pesetas in 1989.» «Every month spaniards spend 72,000 million pesetas in prostitution, which means about 900,000 million black money spent every year. With this amount, all the expenses presently accruing to the Instituto Nacional de Empleo (training and enterprises systems) could be met for government grants⁴».

«The seven great Western States, with USA in the head, show a strong opposition to the setting up of a system for the control of international bank transfers of the black money obtained from the illegal drug trade [...]. *They have shown opposition for the negative repercussions that this might have on the international financial system.*» (!) «The results are evident: as long as drug dealers have the possibility to move around 300,000 million dollars every year, through the channels of the international bank system, not only will it be impossible for the production to drop and the demand of illegal drugs to decline, but, *the risk of this enormous potential of corruption finally, completely rooting banks, police and governments, becomes increasingly greater.* «It is possible that the shyness shown by the seven great states in taking actions against the economic Achilles' heel of the drug trade is partially conditioned by the weight of drugs in international trade (9 per cent of the total, that is double than the oil industry operations), but then there is no justification in having the main repression always falling on the small dealers and consumers⁵».

«We are not only worried by the damage to the consumers' health, but also by the participation of gigantic criminal bands which ruin the lives of individuals and of groups, and, not the least serious, have taken possession of five or six countries in Latin America.» «A small number of criminals handles every year about 100,000 million dollars, *more than the GNP of 150 of the 170 countries of the world*⁶».

«Just in the USA the drug trade produces a gross income of about 100,000 million dollars. A study by WEFA, concerning the year 1986, reckoned 65,700 million dollars as the gross income of organized crime. These huge figures represent at least 50 per cent of the enormous and destabilizing ball of *black* money which drifts over the planet looking for a legal image. The simple fiscal fraud gives origin to the other half of this ball, which is achieved with the funds coming from other forms of crime and smuggling, from trafficking of arms, to illegal commissions and briberies. It is apparent that the ball *cannot roll without finding a way in the international banking system*⁷».

«Complaints lodged in the USA uncovered an operation coordinated by the CIA, with a contribution of 10 million dollars made by the Colombian «Medellín cartel», earmarked for the Nicaraguan «contra». «Drugs are outlawed», discloses a USA anti-drugs agent, «but its money is appreciatively received⁸»».

«The Banca d'Italia asks the European bankers to join together to avoid recirculation of dirty money. Cosa Nostra will try to take advantage of the single European market coming into force for its criminal purposes. The Governor of the Banca d'Italia has said that it is necessary to carry out a *study of the tools and methods of action «in order to render more effective the research activity» of those fighting against Cosa Nostra* and to protect the banks from «being taken advantage of by organized crime. [...] One of the most frequent actions is to introduce the requirement to record the important financial import operations and those taking part in them, in order to allow the researching authorities to recreate the financial flows of unlawful origin⁹»».

«With the huge amounts coming from the drugs trade, the *maffiosi* try to get into the board of directors of the great banks and of financial companies «as honourable men.»» «To avoid these incomes to be whitewashed

and the Maffia getting into the banking system, the governor of the Banca d'Italia has set up, among others, the following rules for the Italian banks: cash deliveries of over 20 million lire must be recorded, and *all the documents* concerning several operations must be kept¹⁰».

«The Maffia is today in a position to jeopardize the autonomy of the companies, distorts free competition and destabilizes the field of financial intermediation. The financial power of the Maffia is *a bomb with delayed fuse for the international financial system*. With over 600 companies specialized in the financial leasing, personal loans or real estate credits, Sicily has a density of companies derived from the bank of the highest in Italy, while its industrial or trade activity does not justify it. Oddly enough these societies are concentrated in areas where the influence of Cosa Nostra is higher¹¹».

The Government representative for the Plan on Drugs thinks that «it is relatively easy to conceal the origin of deposits coming from the traffic of drugs by means of a number of financial operations. In face of this, the hardening of the rules on financial movements «has had, as a consequence, a deterioration in the political image of legislators rather than an impairment the movement of black money¹²».

Second part.

Anonymous currency makes impossible the creation of a trustworthy measuring system, exact and thorough, to avoid forgery and manipulation of facts.

Professor Santos M. Ruesga (1988) thinks that the effects of the expansion of hidden economy may be located on three levels:

- a. Perturbation in the calculation of economic indicators, some undervalued and others overvalued.
- b. Deviations between objectives and results of the economic policy. If the indicators are wrong, the unbalances we want to correct become greater.
- c. Alterations in the working of the economic system caused by schemes of economic policy biased in their vigour or direction.

The results obtained must be handled with caution, and it must be pointed out that the methods of direct evaluation, as much as the indirect ones, show important deficiencies in capturing the complex reality of the unobserved area of economy.«It becomes more and more evident that there is a need to round off and improve the statistic systems which are used as a basis for the national accounting, in order to fill the voids which can be found in them, and therefore cover the fields of activity not entered in the books¹³». After all these precautions, in spite of long lists of varied and contradictory evaluations for every State, it shows a table from where it can be deduced that the average of hidden economy in the OCDE countries in 1978 might have been 9 per cent of the GNP, and that in two years (from 1978 to 1980) it had increased about 5 per cent.

«From my position as a statistics expert I have observed that in our country the lack of rigour is common, and goes from the inadequacy and the *poor quality of the basic information*, to the treatment and the patterns which are built on them, sometimes as pretentious as ineffective. The low statistical and mathematical training of the economists educated in the Spanish universities leads sometimes to an indiscriminate appreciation for complex and unintelligible applications of these methods. Many of the basic facts (of the input-output tables, of national, regional and even provincial, quarterly... accounting) used for the models are already the result of subjective evaluations; the objective feature of the statistical tests appears then to be trimmed from the beginning, which happens markedly in our country. But to give up the practice of complicated econometric applications because the poorness and low quality of the basic information does not justify it, is a very difficult decision for those who enjoy the delight of such applications. Moreover, there is always the excuse that the models may put in evidence the inconsistency of the basic information and may even correct it¹⁴».

«Also in the social engineering of the economic policy it is useful to have these equation cushions among which the responsibility of action can be concealed. This is the reason why politicians, consultants and engineers sometimes prefer more complex and unintelligible models, without knowing for sure that they will

supply better forecasting results than other easier and handier ways. In any case the ambivalence of these techniques must be pointed out, since, on the one hand, they are greatly helpful to study the behaviour and evolution of some given variables which allow to compare and improve the original formulae, by means of completely lawful soundings, but which, on the other hand, offer a wide field of operations to justify, with supposedly scientific arguments and preconceived ideas.

«This is the direction of Harrod's interpretations, who shows in the most realistic manner the possibility that «macroeconomic engineering *tries to maximize the electoral possibilities of the political party in the government* at any time, but is not as a result of a rational calculation of what is best for the national wellbeing¹⁵».

Third part.

Present day currency hampers the experimental comparison of the economic theories for lack of a complete and consistent measuring system.

«Whichever its interest, wheter it has a powerful or static logical structure, whether it is expressed in a mathematical way, *any theory which cannot be compared with empirical information, or in disagreement with the observed facts, has no scientific value*¹⁶». These affirmations may seem commonplace, and to a certain extent they are, but *if they were rigourously applied, considerable portions of standard economy would sink*¹⁷».

«In the so-called «hard» sciences, the most daring speculations must sooner or later face experiments and observations which carry out a permanent selective pressure; in economy, on the contrary, we have the picturesque situation that there is no commonly accepted standard to reject proposals, except that of formal inaccuracy. The concern to systematically compare theoretical propositions and factual statements, is often absent in «top» research. This is, in my opinion, *a regrettable situation which must be overcome*. Our work tries to move the opposition of rival approaches to the ground of empirical verifications, in order to improve the objective evaluation of merits and discredits¹⁸».

«Taking integral economies for a model in a meticulous way, needs the setting out and resolution of thousands or millions of simultaneous equations. The result is that these models can never be verified, because there is no way to know all the structural parameters presumed or postulated, *and for the time being there are no tools able to process all the potential information with a view to provide a forecast to be compared with the effective information*. As long as this situation is not overcome, while connections are not found (whether partial and indirect) with the plane of reality, it should appear evident that the risk that theoretical speculations in economy are no more than theological entelechies, empty of factual contents, is high. It is not a figurative warning; as a matter of fact, most of what is published as a peak research in economic theory shows this feature. Under a formal, some times overpowering, façade, substantial results are conspicuously absent; lemmas and theorems are demonstrated according to rigourous, mathematical procedures and rules, but the factual truth of the propositions remains always in the most absolute darkness, as if it had no importance¹⁹».

«Often the standard economic theory appears in the eyes of literary people as a truly scientific and mature knowledge. This is just an illusion. The profuse utilization of mathematical techniques of intermediate and even higher level, some times disguises and conceals enormous weaknesses of the layouts and the categories commonly used which, often dull restlessness and block other progress lines²⁰».

Conclusion.

All the facts which have been weaved together in the three parts are explosive. So much so, that it is preferred no to accept them. If we did, we would be caught by a terrible panic. The situation is chaotic, in spite of the appearance set «in order» by a society of «image». Of these matters we know very little, and the little we know is frightening. There is no theoretical guide, and the little there is cannot be compared.

Certainly, all this is very complicated. Not everything is, nor will be, accountable or documentable. Evidently, not all is an instrumental problem. But as far as it can be, why shouldn't we try to solve it? Couldn't this help to reduce some of its unembraceable complexity? How can we document crime? How can we obtain reliable

information? How can we work out theories to be compared with facts? Here are some of the unsolved questions.

Notes:

¹«Crimen S.A.», El País, 29.9.1985.

²«La corrupció política mou a Itàlia mil milions diaris de pessetes», Diari de Barcelona, 29.11.1987.

³La Vanguardia, 11.5.1988.

⁴La Gaceta, 7.4.1989.

⁵«Drogas y finanzas», El País, 24.9.1989.

⁶«El semanario *The Economist* pide la legalización del consumo y distribución de las drogas», El País, 4.2.1989.

⁷«La gran bola negra», El País, 18.12.1989.

⁸«Bancos de blanqueo», El País, 22.9.1988.

⁹«El Banco de Italia pide a los banqueros europeos que se unan para impedir el reciclaje del dinero sucio», La Vanguardia, 8.4.1989.

¹⁰«Campaña del Banco de Italia para prevenir el 'blanqueo' de dinero negro de la Mafia», El País, 9.4.1989.

¹¹«El dinero de la Mafia amenaza los circuitos financieros de la CE», Cinco Días, 29.5.1989.

¹²«Diez maneras de 'blanquear' el dinero del narcotráfico», Expansión, 29.11.1989.

¹³Santos M. Ruesga, «Al otro lado de la economía. Cómo funciona la economía sumergida en España», Editorial Pirámide, Madrid, 1988, pp. 57-58.

¹⁴José Manuel Naredo, «La economía en evolución. Historia y perspectivas de las categorías básicas del pensamiento económico», Siglo XXI, Madrid, 1987, p. 392.

¹⁵Ib., p. 349.

¹⁶Ib., p. 349.

¹⁷Alfons Barceló, «Elogi de Maurice Allais», Diari de Barcelona, 19.10.1988.

¹⁸Alfons Barceló, «Teoría Económica de los Bienes Autorreproducibles», Oikos-Tau, Barcelona, 1988, p. 8.

¹⁹Ib., p. 199.

²⁰Ib., p. 199.

Chapter 9. The subtle bondage of culture.

The features of anonymous currency foster also monetization, mercantilization and prostitution of many human features, even of the most immaterial ones (training, information, research, health, law, politics, art, sex, spirit...), while, paradoxically, they do not help to solve satisfactorily the most basic functions of currency which would be to foster the exchange of goods (not evils) and services (not disservices) and to allow the equilibrium between production and consumption-investment in complex societies which cannot use bartering.

One of the fundamental problems of a change of orientation of western civilization towards a respect for the other cultures on the planet and towards nature, is the lack of critical and creative capacity of the «culture creators», submitted to more or less confessable dependences either from the States (public) or from companies (private), which establish and favour projects in support of the system.

The failure in the development of the so-called «backward countries» shows not only an exterminating cultural and economic neocolonialism, but also the poorness of western culture, which identifies «good life» and «standard of living» with the production and possession of things. Not all commercial goods (which increase the GNP), are objective goods for persons, for society and for nature, but in many cases they partake of an evil or are one (detriment to health, exhaustion of resources, control systems...). The same can be said of «services». Freedom cannot confine itself to *choosing* among some given options, but, mainly, it must allow to *create new options*.

The economic area which is mostly gaining importance in «developed» countries, above the secondary sector (industry) and primary sector (raw materials), is the so-called tertiary sector (services). This is a compound of very heterogeneous activities which go from bureaucracy to liberal professions; from transport and communications to politics; from the cleaning to the data processing services...

Another important classification of economics is the one separating «public» from «private» activities. So with respect to the tertiary sector we will have «public services» and «private services».

A last distinction, not so usual but not less important to try to sort out this complex sector, is the one separating profitmaking activities from non-profit activities.

The lack of theoretical and practical clearness of these different statutes has, as everybody knows and suffers, great social, political and economical repercussions.

In the discussions on public services and private services it would be necessary to establish, if we can, similar actions (supported by the same market dynamics) such as the production of potatoes and the assistance to the sick, building houses and becoming a mayor, producing cars and becoming a judge, printing books and being teacher...

It is usually considered that public services depend on some institution of the State, which, as a theoretical representative of the common good, takes up the service because it is of public utility, away from market laws (free or with political prices); and which is operated by public officials.

Private services on the other hand are commercialized, that is, the user pays what the market, made up by professionals or the owners of the services, says.

The result is that the user, in some cases, for example the health services, must pay every month an important amount to the Social Security, where he receives a poor service, because of bureaucracy and massification, and must also pay for private medicine -sometimes, the same doctor who sees him off in three minutes in the Social Security's surgery room. This is the same, with its peculiar forms, between public and private schools, public and private communications means, private and public police (security services), insurance and private and public pensions, private and public transports, private and public research...

Apparently these are a sort of services that need freedom to operate well, both for those carrying them out and, in some cases, for those using them. These services can easily degenerate, for several reasons, both when they become state operated and bureaucratic and when they become commercialized and exclusive.

Can we look for statutes different from the present ones to bring about gratuity -available to everybody without discrimination- and at the same time quality and freedom, both for the professional and for the user? How can we apply such a model in practice, not to fall into impositions or privileges, nor in new ineffective bureaucracies?

All these activities have another very important problem: decisions are taken by those having money, who take decisions in the field of «knowledge», and in one way or the other take decisions in the consciences of people. The discussion between public (common good) and private (private profits) is wrong. The State has become a private good, a corporation defending its privileges (and those of the great individuals dominating it), and having all the coercive means (laws, police, armies, judges...) that small individuals don't have. A struggle has started, or a market row, between two «individuals», sometimes with common interests, sometimes with opposed interests, exercising the control of «knowledge» on the population. The actual freedom of users lies only in the possibility of choosing between private and public medicine, between private and public schools, between private and public information... Each one of them shows advantages and drawbacks, but both are terribly jealous of free medicine, free schools, free radios..., which do not show dominating or subjugating approaches. The user has no possibility to choose another type of service and, in some cases, he can even be penalized or go to prison for trying. Why are these irrational structures maintained, presented under the name of «Welfare State»?

And here is the latest device: the vested interests. What is «public» is paid by all those who are compelled to pay taxes, but the main systems for deciding how public money is to be spent, how public services must be organized, are usually prostituted by legal and illegal, but real, situations. And any prostitution implies paying a price which increases with the increase of the power of the prostituted person. As far as law is concerned, the prostitution of democracy starts with the electoral system and with the incredible financing system which compels all parties to sell themselves to whoever has enough money to pay for the huge amounts of the electoral campaigns. Industrialists and bankers are the ones legally financing parties! If they win, there is a generous appreciation, if they lose there is the enslavement of the debtor. Legally, almost nothing can be proved, but everybody thinks and «knows». Bribery and corruption are the most pathetic reality of power. They only become public when there is an interest in ruining a competitor by creating a scandal.

Justice, the third independent branch, designed to protect right and to defend citizens from oppression and power, is bound by similar pitfalls, subjected to the «public» (by the executive power) and to the «private» (by bribery and by social classes to which many of its officials belong).

Numerus clausus excludes thousands of professionals prepared to improve these services in quantity and quality, and competitive examinations for the posts of officials not always allow the access of the best prepared persons for their specific human relations, but that of those able to pass retention tests which show nothing of the ability to practice a profession.

Besides public and private services, the tertiary sector assembles a number of cultural, apparently free, activities: artists (writers, poets, painters, sculptors, architects, graphic engineers, publicists, actors, audiovisual directors...). All these cultural creators are very difficult to evaluate with respect to their productivity and usually depend on the difficult world of «editors» and «producers», of promotions and speculation. They have a great social influence, both to justify and maintain society, or to subvert it. Both their bureaucratization and their mercantilization ensure the death of transforming culture.

To complete this review it is necessary to position also what we call non-profit bodies and activities. The aim of these bodies is to benefit their associates or a given social sector, without distributing monetary benefits in the activity being carried out. Non-profit bodies, without profit motives, move money (such as sports societies or savings banks), but benefits must be reinvested. There are no shareholders, only associates. These bodies cannot be called public, (even if they carry out a public role but they are not state-controlled) nor

private (even if they are managed by individuals, but they are non-profit bodies). Some of them are even considered «public law (private) corporations». Many of these bodies live partly on the associates' fees, partly on public grants, and partly on private sponsors. Therefore, they can not always maintain their supposed independence.

There is another type of «services», half legal, half illegal, which some consider free, and others «compulsory», which are related to sex and love. For those considering prostitution as a free and natural phenomenon, this must become a public service or a «secure» and «dignified» private service. This is possibly one of the most representative cases among the ones we have mentioned. One thing is to accept that to make a living we must sell our labour force, and a different matter is that we must sell ourselves (or to objectify a part of ourselves). Love, sex, like spirit and conscience, are too special to put a price on them, to commercialize them without destroying the individual and his/her self-respect. And this is not usually done only to survive. If everybody had the means to live with dignity, it would not be so easy for children, teenagers and adults to let a price be put on their intimacy.

And spirit and sex go side by side. Prostitution of spirit, with the purchase of religions, is to be affixed to the prostitution of politics, of culture, of art. Dark money causes everything to decay in these areas, in the great churches and in sects. All this «superstructure» has the ability to stir up and to lead the deepest yearnings for freedom, or the ability to «alienate» individuals and peoples. This is its power, and those «paying» for it know perfectly well the profitability of their sunk money investment!

After all these years of experiments with State planning we have no other option than to accept that the market, under given conditions and places, can be a good mechanism for the production and distribution of wealth. But we must state very clearly what these conditions are. And, still more, we must separate what can be and what cannot be commercialized, because it produces secondary effects opposed to what our aims are.

Competitiveness, if it is not unfair, appears to be a good system to develop «competition», the ability of a responsible effectiveness in any «economic» field. But we must acknowledge that its basic condition, loyalty, is not usually fulfilled. Besides, competitiveness is not always motive for profit, nor the throwing out of the losers, nor the commercialization of all natural realities and all human activities. There may be «professional competitiveness» without «trade competitiveness» when there are other inducements beyond profit making. Therefore we must put limits to the market, beyond which its effectiveness function becomes perturbing and hostile.

In the same way, communization may be very appropriate to protect and improve natural and human spaces, where the non-productivist side of life may develop. But communization is not a synonymous with State control, and when this is stressed and goes out of its own field of action it also creates very important malfunctions.

Which are, then, the particular and complementary areas of the market and of the «community»? of freedom and solidarity? of private and of public? of profit-making and of non-profit? And after we have defined them, how can we help the particular dynamics of every area without factual interferences or dependences of one on the other?

The market manages well the needs of a quantified exchange within a framework of abundance, of growth, of lack of limits. But reality has limits, more or less evident, more or less immediate, but they are there. We do not want to be exhaustive, and keeping in mind the set out problem and the possibilities of a practical solution, there may be three great areas which, at present, we perceive as spaces which either must be de-commercialized or must be protected against a possible commercialization.

Nature, natural resources, especially the fixed ones (such as the land), the non-renewable ones (such as fossil minerals) and the non-recycleable ones, are difficult to commercialize without jeopardizing the survival of life on our planet.

Human beings, their interpersonal relationships, their cultural and communal bodies, are also difficult to commercialize because they are difficult to measure (much more qualitative than quantitative) and because the power of money can convert them into very dangerous power weapons against people through the manipulation and alienation of their intimacy.

Money in itself, being the main instrument of the commercialization of reality, becomes a deadly weapon when it is commercialized, when it is allowed to become autonomous from the market reality (and, in some aspects, from the community) because it upsets and knocks the real market and society off balance (monetary inflation and deflation; speculation of securities and currencies).

But who, and how, must watch over this de-commercialization of nature, people and currency? Which are the limits of the «community», and, above all, of the one which historically aspires to being the representative?

If the market must have limitations, so must the State. With all its government institutions, at all levels and in all areas, this one should not interfere in the market dynamics in an unfair competition: the services offered should be free and supplied by the State, it should not have trade companies, neither for production nor for services.

For the management of natural resources it would be necessary to find a way to add to the cost of communal raw materials a «green tax» for the protection of resources, for the research of substitutes, to foster the recycling of waste, and to avoid pollution. The land should become communal property (not state-owned) and should be offered for long term hire for very definite uses. This would improve the protection of resources and also a rational and ecological development of the land.

A suitable currency could play a very important role to avoid its own malfunctions and to make this decommercialization plan of some areas workable. It is quite possible that without a monetary instrument other than the present one, any of these areas could be condemned to failure if there was any attempt to change them. Money will go on flowing freely and darkly from one area to the other, to bribe officials, to help political options to win, to manipulate information, to stop inventions and research, to appease consciences, to pervert culture, to speculate on land and on money itself.

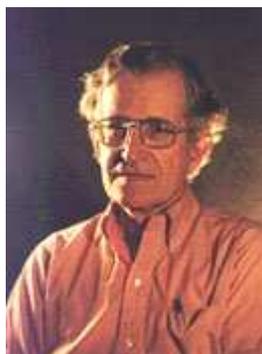
If we want to separate commercial and non-commercial areas, we need tools to help make the distinction. To this effect we must see if it is possible to introduce a monetary system which, besides being personalized (i.e.: leaving traces and appointing liabilities) it is also adjustable to each area, field and activity, and that does not allow to break each one's limits with impunity. As we shall see in the following chapters, we may imagine a system with some sort of specialized «currencies»: one «currency» to be used only to finance what cannot be commercialized and another one for that which belongs to trade; one «currency» to prove the lawfulness of the exchange; another one to help, beyond bureaucracy, the communalization of the land and the application of green taxes on the extraction of raw materials and on pollution...

To underline the importance of this subject, we shall end up with some impressive affirmations which, from inside each profession -mass communicators and jurists-, crudely show the weight of commercialization and of officialization.

At the beginning of the century, Joan Puig i Ferrer (1926) very clearly conveyed the state of bondage of culture. «The journalists who are payed by an industrial company are in a worse position than servants. Our bondage is more revolting. I would happily sell my body's services. I would like to know a trade: bookbinding, to make cardboard boxes...-to give eight hours work to earn a living. I think it would make me happy. But I cannot bear without resentment, sadness and bitterness, the bondage of the soul and of intelligence¹».

«The waterwheel donkey gets water to irrigate the fields. What do we irrigate? We irrigate foolishness, ignorance, lies and bewilderment. We help other people's businesses, we act as stepping stones for all the daredevils and crooks that are in the world; we bow to everybody else's needs, we praise the idiots and the

brass idols. On top of us, on top of our stupid servitude, grows wealth, glory, vanity, authority, oppression and crime; and we waste away with destitution, oblivion and resentment. And we dare to call ourselves intellectuals!... And we are bought off with tickets for the bullfights [...], charity performances, bricklayers' wages and aristocratic dinners²».



Even if many things have changed, still today there is a subtle bondage of culture which comes out in different ways, not less corrosive, both in the «private» and in the «public» domain. The known linguist Noam Chomsky (1988) is straightforward in his analysis of the system of mass communication in the USA, a country which is considered a model keeper of freedom.

«The means for mass communication in the USA [...] allow -and even foster- strong debates, criticism and disagreements, as long as they keep loyal to the system of assumptions and principles which make up the consensus of the elites, a system so powerful that it can be interiorized to a large extent, without even being aware of it³».

«Public opinion is exposed to powerful and convincing messages from above, and is unable to communicate significantly through the means of communication in reply to these messages [...]. The leaders have usurped an enormous amount of political power, and have reduced the people's control on the political system using the means of communication to produce support, consent and an evident confusion in public opinion -mentioning W. Lance Bennett⁴-».

He goes on: «In the means of communication, as in other large institutions, those not showing the exact values and viewpoints will be considered «irresponsible», «ideologists», or, in some way, aberrant, and will show a tendency to be laid aside. [...] Those who accommodate themselves, perhaps honestly, will be free to express themselves with little control from the leaders, and will be able to assert truly that they are not being constrained to adapt themselves⁵». «A journalist not wishing to work hard may survive, and even gain respectability, by publishing information (official or confidential) coming from the usual sources; these opportunities may be denied to those not content with transmitting the interpretations of the State propaganda as if this were reality⁶».

«In short, the means of mass communication in the USA are effective and powerful ideologic bodies, which carry out a propagandist job of support to the system through their independence from the market forces, the interiorized assumptions and the self-criticism, and without a significant open coercion⁷».

The decisive world of communication suffers these evils, but it is not alone. The Department of Justice, at least in Spain, is a good example of what we are talking about. Joan Roig Plans (1991⁸), a lawyer, ends a recent study saying that «without a shock solution, it is difficult to get out of the present hole we are in».

«The lack of quality of the professional work is very much related to a scarce or nonexistent vocation, as a consequence of the fact that the profession was chosen for its possibility of offering a job with the stability of a public official or, in the case of free professionals, by commercializing the offices. In any case, we are causing the main work-motivation to be the obtention of an income, rather than a consciousness of service or, even a taste for a well-done job».

He also considers that «to litigate is for the wealthy or for the desperate who are in limited situations». «The high cost of litigating causes citizens (mainly those with a limited income) to waive the defence of their rights in court. Evidently this benefits illicit interests. On the other hand, this also implies that, with money at hand, through the threat of a litigation, concessions may be illegally and paradoxically obtained from those having difficulty in meeting the expenses». «The system of fees to pay the work of free professionals participating in the Administration of Justice, is not fair, because it rewards mainly according to the importance of the matter».

He considers that «an ineffective Administration of Justice fosters the defence of interests and the realization of rights out of the legal ways and, therefore, with a high risk of arbitrariness. Besides, it produces in the

citizens a sense of impunity of unlawful behaviours, disappointment and scepticism, and, in short, the loss of collective illusions, which are essential for a solid wellbeing».

The courage of some of the suggested options, is surprisingly positive: «fostering the creation of mixed deontologic courts, with members from different judicial professions and with disciplinary jurisdiction on the professionals of all of them, ensures that the impunity which may be produced by corporative reactions is avoided» and «that the work of barristers and procurators be paid by the State, with the absolute prohibition to receive any sort of private payment for jobs of judicial defence».

Notes:

¹Joan Puig i Ferrater (1926), «Servitud», Edicions 62, Barcelona, 1985, p. 66.

²Ib., p. 91.

³Noam Chomsky and Edward S, Herman (1988), «Los guardianes de la libertad», Crítica, Barcelona, 1990, p. 348.

⁴Ib., p. 349.

⁵Ib., p. 350.

⁶Ib., p. 352.

⁷Ib., p. 353.

⁸Joan Roig i Plans, «Alternatives per a un funcionament més eficaç de L'Administració de Justícia», a paper submitted in «Aula Provença», Barcelona, 14.2.1991.

Chapter 10. A trip through Eden.

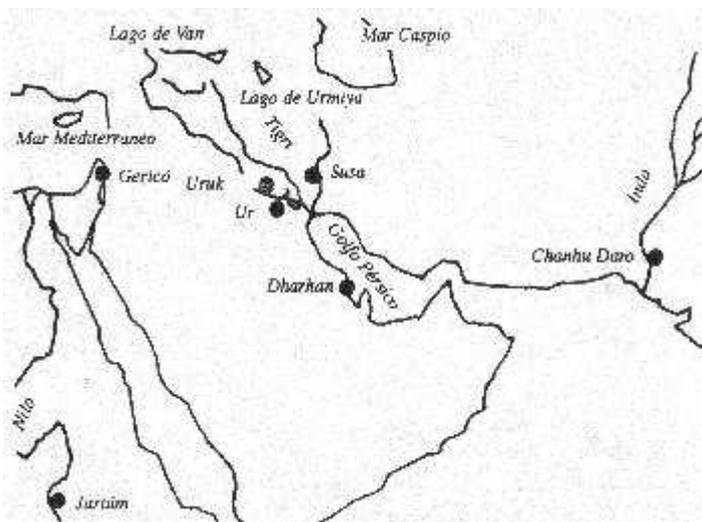
But currency can be, and probably has been during 7,000 years, at the dawn of the civilizations of Western Asia- an instrument with radically different features: personalization, diversification and immobility.

In recent researches on the origin of writing and the use of clay, a complex and extensive system of accountancy has been found, based on clay cards which probably allowed the recording of the different operations and exchanges carried out with the products of harvest and herds. This system was the embryo of the first monetary instruments (clay bullae) which gave information on the features and on the agents of every operation and, possibly, were the basic instrument of a system of accounting compensation.

The discoveries carried out by Denise Schmandt-Besserat (1978¹), of Texas University when she was doing research on the use of clay, not only help us to work out interesting hypotheses on the origin of writing, but also on the origin of accounting and of currency. But we shall let her explain it herself.

«In 1969 I began a research project, with the final objective of discovering when and in what ways clay first came to be used in the Near East.» «I visited museums [...] that had collections of clay artifacts dating back to the seventh, eighth and ninth millenniums B.C. This interval of time, beginning around 11,000 years ago and ending a little more than 8,000 years ago, saw the firm establishment of the first farming settlements in Western Asia.»

«In the museums collections [...] I encountered what was to me an unforeseen type of objects: small clay artifacts of various forms.» «As I reviewed the museums collections and the related site reports I became increasingly puzzled by the apparent omnipresence of the tokens. They had been found in sites from as far West as Beldibi in what is now south-western Turkey to as far East as Chandhu Daro in what is now Pakistan. Tokens had even been unearthed at an eighth-millennium-B.C. site on the Nile, near Khartoum.»



The same tokens system is found in a period of 7,000 thousand years in the area which goes from Khartoum (south) to the Caspian Sea (north) and from the Indus (east) to the eastern Mediterranean coast (west).

As I extended my investigations to include later clay artifacts, dating from the seventh millennium B.C. to the fourth millennium and later, I found to my surprise that similar clay tokens had been found... Evidently a system of accounting... was widely used throughout western Asia from as long ago as the ninth millennium B.C. to as recently as the second millennium».

Tokens	Sumerian Pictographs	Tokens	Sumerian Pictographs	Tokens	Sumerian Pictographs
	 Numeral 1		 Bread		 Seat
	 Numeral 10		 Wool		 Place
	 Numeral 600		 Sheep		 Legal Decision
	 Numeral 36000		 Metal		 Cloth

Example of comparison of tokens and deciphered Sumerian characters.

«Considered overall, the system had some 15 major classes of tokens, further divided into some 200 subclasses on the basis of size, marking or fractional variation... Evidently, each particular shape had a meaning of its own; a few appear to represent numerical values and others specific objects, commodities in particular».

«It is not necessary to theorize about some of these meanings; a number of ideographs on the Uruk (considered up to now as the origin of writing) tablets almost exactly reproduce in two dimensions many of the tokens».

«Why did such a repertory of three-dimensional symbols come into existence? It cannot simply be a coincidence that the first tokens appear early in the Neolithic period, a time of profound change in human society... The new agricultural economy, although it undoubtedly increased the production of food, would have been accompanied by new problems».

«Perhaps the most crucial would have been food storage. Some portion of each annual yield had to be allocated for the farm family's own subsistence and some portion had to be set aside as seed for the next year's crop. Still another portion could have been reserved for barter with those who were ready to provide exotic products and raw materials in exchange for foodstuffs. It seems possible that the need to keep track of such allocations and transactions was enough to stimulate development of a recording system».

«Perhaps it was during the Chalcolithic period that the agricultural surpluses of individual community members came to be pooled by means of taxes in kind, with the supervision of the surplus put into the hands of public officials such as temple attendants. If that is the case, the need to keep track of individual contributions evidently failed to bring any significant modification in the recording system».

«Early in the Bronze Age, between 3500 and 3100 B.C., there were significant changes in the recording system. This period saw an economic advance quite as remarkable in its own way as the rise of the farming economy that laid the foundation for it. The new development was the emergence of the cities. Surveys of the ancient sites in western Asia indicate a drastic increase in the population of Iraq and Iran; urban centers with many inhabitants begin to appear close to the earlier village settlements.

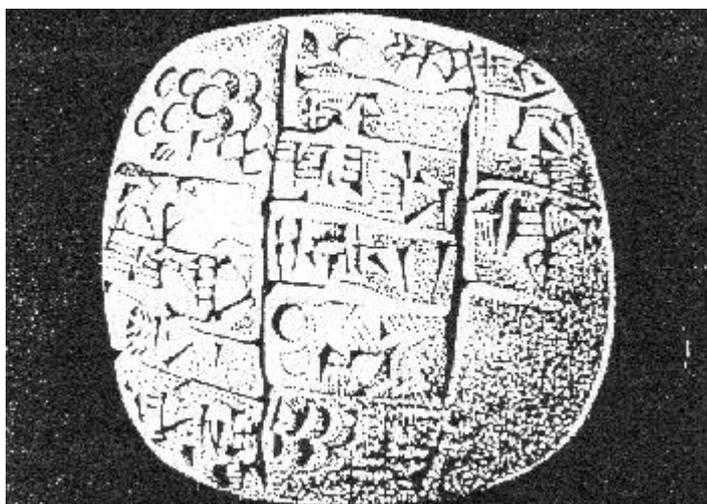
«The development of an urban economy, rooted in trade, must have multiplied the demands on the traditional recording system. Not only production but also inventories, shipments, and wage payments had to be noted, and merchants needed to preserve records of their transactions. By the last century of the fourth millennium B.C. the pressure of complex business accountancy on the token system becomes apparent both in the symbols and in how the tokens were used».

«As for changes in how tokens were used, it is significant that... 30 percent of the total are perforated... The perforations are so small that only a thin string could have passed through them» which might indicate that «some tokens representative of a specific transaction were strung together as a record. It seems at least plausible that the complexity of record keeping in an urban economy might have given rise to duplicate tokens suitable for stringing».

«A much more significant change is the first appearance at this time of clay *bullae*» with tokens inside them. «The existence of a *bullae* is clear-cut direct evidence of the user's desire to segregate the tokens representing one or another transaction».

«There is no doubt in my mind that such *bullae* were invented to provide the parties to a transaction with the kind of smooth clay surface that according to Sumerian custom could be marked by the personal seals of the individuals concerned as a validation of the event».

«A rural producer of, say, textiles would consign a shipment of goods to an urban middleman, sending along with the shipment a *bullae* that contained a number of tokens descriptive of the kind and quantity of merchandise shipped. By breaking the *bullae* the recipient of the shipment could verify the makeup of the shipment; moreover, the need to deliver an intact *bullae* would inhibit the carrier from tampering with the merchandise in transit. This sealed transfer of tokens between trade partners represents an entirely new way of using the ancient recording system».

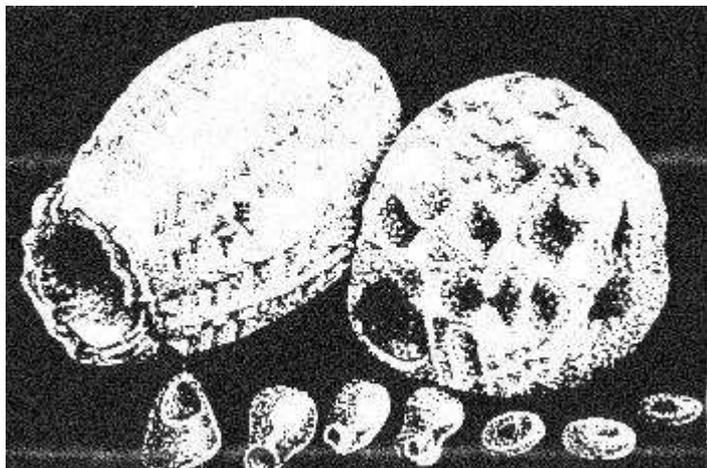


Tablet from the 3rd millennium B.C. from a Syrian settlement. It shows the convex surface which might reflect its evolution from the hollow bullae.

«The innovation had one serious drawback. The seals impressed on the smooth exterior of the *bullae* served to validate each transmission, but if the seal impressions were to be preserved, the *bullae* had to remain intact. How, then, could one determine what tokens were enclosed and how many? A solution to the problem was soon found. The surface of the *bullae* was marked so that in addition to the validating seal impressions, it bore images of all the enclosed tokens».

«The *bullae* markings were clearly not invented to take the place of /the token system of record keeping. Nevertheless, that is what happened... The hollow *bullae* with their enclosed tokens would have been replaced by inscribed solid clay objects: tablets. The strings, baskets and shelf loads of tokens in the archives would have given way to representative signs inscribed on tablets, that is, to written records».

«The convex profile of the early Uruk tablets may well be a morphological feature inherited from the spherical *bullae*... The appearance of writing in Mesopotamia represents a logical step in the evolution of a system of record keeping that originated some 11,000 years ago... With the rise of cities and the development of large-scale trade the system was pushed onto a new track. Images of the tokens soon supplanted the tokens themselves, and the evolution of symbolic objects into ideographs led to the rapid adoption of writing all across western Asia».



Hollow clay bullae, marked by pressing the tokens on them which were later put inside them, or bullae with incised representations of the tokens.

We can draw some clues from this suggestive description.

With the birth of the agricultural production quite an elaborate accounting system was started. As the markets and towns grew, the accounting system became more complicated, and accounting became a fundamental tool in exchanges. That is, an enormous number of commercial operations were carried out, without any intrinsic value currency, thanks to a complex, personalized system of operations.

Did the tokens system, and mainly that of the *bullae*, work as a currency or not? It all depends on what we consider currency. The author herself, in an exchange of letters, epitomized for us her own point of view: «Tokens were a system of notations comparable to our modern abacus. As far as we can see, they were used to count and to record, but they had no intrinsic value and they were not a currency.» (letter of 14th April 1987). She says that they were not a currency because «they had no intrinsic value». But, on the other hand, she cannot reduce their function to that of a calculating machine without belying the functions, which, as she has seen, were fulfilling: they brought about the sale of goods between trade associates, in a quantified, accounting, personalized, recorded... way; an abacus evidently does not have these qualities.

We must therefore acknowledge that, once again, the belief that currency has an intrinsic value is so strong that it blurs the interpretation of the most evident facts.

This is also the pitfall which Schumpeter himself falls into when he discusses Aristotle's theory: «The Aristotelian theory of the logical origin of money may pass muster -at a push- as a verifiable theory of its historical origin. Such instances as the Semitic shekel or the tea-money of Mongolian nomades (*both of them with intrinsic value*) suffice to show its²».

We can see that Schumpeter, who criticizes Aristotle's arguments on behalf of the «metallist theory», accepts that the first currencies had an «intrinsic value» and possibly makes the same mistake that he wanted to fight. In the absence of a paradigm different from the metallist one, sooner or later there is a drift towards a monolithic interpretation of the past, and he precludes himself the possibility to find other objects or facts deserving a different interpretation. From the point of view of the metallist theory, clay tokens or shells cannot be a currency nor have a monetary function, therefore they cannot be more than pieces of necklaces or amulets.

In spite of this, Schumpeter feels the inadequacy of his own arguments: «Primitive forms of existence are as a rule not more simple but more complex than later ones³» and can conceal the logically essential elements, instead of revealing them.

Today we know more of prehistory than Aristotle did (or Schumpeter), while we have already discovered the inadequacy of the metallist theory and we can interpret facts within a different framework. This sort of clay

«currency» would confirm the hypothesis that «the most primitive forms usually are more complex than the following ones».

The features of this prehistoric currency, which, in its different types, lasted some thousands years, are very suggestive, especially in their version of the *bullae*. These features are opposed to those of the anonymous uninformative currency:

Personalization: those taking part in an operation confirmed it by stamping their personal seal. The carrier had to deliver the *bullae* in one piece to avoid possible frauds. It was like an invoice and a cheque with the person's name. The *personalization* of currency, which takes place when it shows who sells and who buys, offers a possibility which, by being protected, can ensure the lawful State, that it is a non-arbitrary performance of Law to solve disputes, with an equal protection of law.

Diversification: the monetary instrument gave information not only on the trade agents, but also on the actual goods in the operation and, possibly, on the agreed value (in accounting units). It was a voucher and an invoice. *Diversification* of currency, with a specific monetary instrument for every operation and several sorts of monetary instruments (for domestic or foreign trade, for consumption or for companies, for savings or for investment, of mercantile origin or of communal origin...), can improve the control of the economic reality and can avoid the unbalancing or speculative transfer of money among economic cycles and sub-cycles.

Immobility: every *bullae* was used for one only operation. There was an interest in keeping it, putting it away for particular purposes (microeconomy) and, possibly, also for general (macroeconomy) or judicial purposes (responsibility). *Immobility*, that is the fact that every monetary instrument is used for only one sale-purchase operation, helps its filing away with an analytic-statistical or judicial end. It also avoids the up to now uncontrolled speed of circulation of the monetary mass which produces economic crises.

Apparently the system of tokens and *bullae* can also be considered as a monetary and accounting system in the same way that we consider the modern system of current accounts.

There are signs that the temples acted as banks, in the sense of doing the accounting among cities and of keeping surpluses. Most of the Sumerian tablets have been found in the Red Temple of Uruk.

With all these details from Mesopotamia, we may consider that there can be a market without an «intrinsic value currency» and that, in this case, the market uses instruments which allow to responsabilize, improve and furnish documentary evidence of the exchanges.

This conclusion can also be obtained from the daily observation of any western market, where intrinsic value currencies are non-existing, and the market works with «papers» and with current accounts.

The great difference between that system and the present one is that now we have lost the features which made it so permanent: today cheques can bear the person's name or be to the bearer (anonymous); invoices are usually personalized and describe the goods; but since the invoice can be paid without a cheque -cash-or with a cheque to the bearer, the whole system becomes sundered and confused.

It therefore appears that the only way to update this peculiar and useful monetary instrument would be to put together the invoice and the personal cheque, as one personalized, informative document, which could be filed away, and that we could call «cheque-invoice».

In our reality everything is instrumentally ready for this: current accounts, cheques to order, invoices and the technical means (paper and/or electronics) for their compact, agile and efficient use. We must simply become aware of the need to take this step and put the means for their correct use in a much more complex society, a complexity which the present monetary system cannot face efficiently.

CONSUMPTION CHEQUE-INVOICE				
				
Smith - Grocery 25 Park Street Bath IN: 675894903F Ct. Acct: 5689-4564-76789000		Customer: A. Roberts IN: 758940374D Ct. Acct: 5600-4562-89969456 Cheque-Invoice No: 324678590-9		
Area of protected information				
Code	Item	Price	Pcs.	Total
08634	Apples	0,30	3	0,90
08348	Tomatoes	0,80	2	1,60
08456	Noodles	0,60	4	2,40
08783	Rice	0,90	1	0,90
08974	Bleach	0,20	1	0,20
TOTAL				6,00
Single tax 5%				0,30
Total to be paid				6,30
1/989				
10.05.1991		Bath		
Area of general accounting				

Cheque-invoice.

From a visual point of view, we might draw a cheque-invoice as a document which separates an *area for general accounting* (type, amount and prices of articles; date and place) and an *area under judicial protection* (personal and accounting references of supplier and customer, with acceptance of the operation and of its payments by customers).

What are the advantages of a currency of the «cheque-invoice» type? Is it only the taste for recovering an ancient technique or custom? If it was lost, doesn't that mean that it could no longer fulfill a good function?

Before answering these questions in the following chapters, we will only mention a curiosity.

The Bible says that the lost paradise -Eden- was located between two rivers (in Mesopotamia?) How must human life have been in this place and in those ancient times, that myth has marked this place with the attribute of yearning? The Jews who reported the myth of paradise and of the original sin received through the oral tradition some special thing. Could this «thing» have happened 10,000 years before, in pre-agricultural communities? or was it relatively near -some millennium as a maximum? and in any case, what do we know of the pre-historic Eden?

The author places us in this area during the transformations conveyed by an accounting system. But all of a sudden, after relating it to the Sumerian tablets, she stops. She has finished her job. But she offers an unsuspected clue to explain what happened afterwards, when «History» was born.

Officially history starts with writing. But it also starts with the appearance of the intrinsic value currency - gold, silver, bronze-, of imperialisms, of wars organized among cities and States, of general corruption... It starts, in the Semitic tradition, with the knowledge of Good and Evil, the loss of paradise and the mark of the original sin peculiar to historic man. Of the sin which originated history...

Notes:

¹Denise Schmandt-Besserat (1978), «The earliest precursor of writing», Scientific American, Vol 238, N. 6, June 1978. See also the Spanish version «El primer antecedente de la escritura», «Investigación y Ciencia», número 23, agosto 1978.

²Joseph A. Schumpeter (1954), «History of Economic Analysis», Oxford University Press. New York, 1963, p. 64.

³Ib., p. 64.

Chapter 11. Facing up to things.

The features of a personalized and informative currency (cheque-invoice) provide: the responsabilization of all the free exchange acts (they leave traces); the development of a multicaptor system of all the features of every sales-purchase operation; and therefore, the possibility to experimentally compare most of the economic theories.

The *responsibilization* of all the free exchanges is a possibility offered by this non-anonymous currency if its introduction is done with suitable cautiousness (protection of personal data and their exclusive use for documenting court decisions). In this way the lawful State can be reinforced insofar as transgressors are dissuaded and the judicial solution of conflicts is fostered thanks to the substantial improvement of the documentation system of trade operations.

The *automatic* procuring, now possible thanks to telematics, of all significant data of every sales-purchase operation, without personal references, supplies a market information which, if available to the whole population, may help to overcome the opposition between the wantonness of mercantilism and that of state interventionism.

Political and economic theories will be *compared experimentally* therefore showing their ability to solve problems. Economic science, provided with a powerful system to secure important features of reality, will be able to improve its strategic function, not always sufficiently capable or credible.

Even if all the features are interrelated, the second and third one are strongly complementary, as we shall now see in detail.

First feature: responsabilization.

Let us imagine a country (for example, Catalonia) or a confederation of countries (for example, Europe), where people consider that law must be equal for everybody, and that robberies, frauds, illegal traffics, must be effectively pursued by law. We already know that today this is very difficult to attain -almost impossible. Let us now imagine that in this country a new framework is set up, wherein bank-notes and coins have been substituted by a system of personal current accounts and «cheque-invoices». Every person has a cheque-book of cheque-invoices, with which he can do his purchases. When he buys a piece of bread, a shirt or a washing machine... he pays with his cheque-book. In the cheque the seller must indicate the name of the establishment, the item's features and price, and also the place and date of the operation.

The shop-keeper takes the «cheque-invoice» to his bank and this makes the accounting transfer between the current accounts of the buyer and the shopkeeper. It is all very similar to what we do today, but with some fundamental differences. Some are just details, derived from the inconveniences of the present monetary system: the lack of change, miscalculations, the risk of loss or of robbery which implies buying and selling with anonymous banknotes and currency. It is evident that a cheque-book of «cheque-invoices» avoids most of these problems (we shall later see that for a greater suppleness «storage pay-cards» might be a good solution if they are correctly introduced).

If the system, therefore, appears practicable in the consumption field, it is even more so in the inter-company field, as, in fact, most companies in practice only use cheques and bank transfers.

What is the advantage of such a system? Let us go on with our story. Let us assume that I want to buy something that, according to social practice, is considered illegal, therefore it is not sold in approved places but only in hidden economy (sales of drugs, arms, explosives, white slave trade...). In this case it is clear that I cannot pay with a «cheque-invoice», and those in this trade cannot buy either without either of us leaving a trace. In the absence of «currency» bartering can help, through the exchange of goods and services. «I give you my radio in exchange for one dose of heroin.» But will the trader be able to buy drugs from the wholesaler paying with radios?

Bartering is a nuisance, because we do not always we want, need or accept what the other is offering us, and this limits the exchanges. At the opposite end, anonymous currency admits «all» sorts of exchanges, lawful

and unlawful ones. In the middle we have the «cheque-invoice» which allows lawful exchanges and hinders the unlawful ones.

Let us assume, however, that bartering is used. Who has a radio wants to sell it, but since he is no shop, nor can show any invoice saying he is the owner, he won't be able to do much. Another case of bartering may be carried out with «services»: I buy this gun from you in exchange for taking you to lunch, or going to bed with you, or helping you to find a job... Of course in these case there is no «monetary» track left, but this sort of deal can take place only in definite and occasional situations. It is not credible that a whole illegal organization may work only through the exchange of «services» or «threats». In a monetized society people want mainly money, and whoever accepts or causes a «service» does so as something extra or as a pastime. (Later on we will speak about the other large field of crimes related to corruption, traffic of influences, fiscal and accounting fraud...).

As we can see, the simple introduction of a personalized currency in the consumption area hinders the sale-purchase of illegal products. In the case of false «cheque-invoices» (for example, recording a product other than the one being sold), Law will always have much more information to find out than at present (when it is almost non-existent). Organized crime, maffia, great scandals, are usually very difficult to accuse, to break up and to clear because of the lack of formal evidence. Everything is done with anonymous money. Only when a cheque is written to the bearer, and if it shows a name (which is a mistake strictly avoided) the judge has evidence to carry on a suit.

In a «cheque-invoice» monetary system, on the contrary, the judge has a lot of information. Let us imagine a ghost company manufacturing fabric but, in fact, dealing with arms or drugs. The false invoices must correspond to a given industrial setup and must purchase the raw materials... It is not at all easy to keep double accounts in a monetary system where the accounts must balance. And since we are talking about companies, they will not be able to hire illegal labour under the basic wage... paying with a handful of banknotes in an envelope...

This new currency may help to solve the very serious problem of unpaid invoices. A simple law in any case would grant that, the «cheque-invoice» would always be cashable even if the company giving it out has no money in its current account. Sooner or later (since it only has one current account where its incomes are deposited) when it no longer has red figures, the given out «cheque-invoices» will be automatically cashed. The dread of unpaid invoices would find a better solution, mainly if, at the same time, an interbank fund was paid out immediately to the beneficiary and took legal steps against the debtor.

When talking about the demercantilization of some areas (chapter 9) we have pointed out the possibility that a new type of currency might avoid the impunity of the traffic of influences. In most legislations it is already foreseen that some given social functions (judges, politicians, public officials... and their respective bodies) are incompatible with some trade/corporate functions. To carry out some of these duties it is customary to request a list of properties when taking up a post. This list is again checked when the term of office is finished. Once again we must accept that all these methods are matters which, even if they show the danger of corruption, not only don't avoid it but in fact mask it, through the illusion of the ritualization of procedures. Since there is a law of incompatibilities... we feel confident that there is no corruption!

The introduction of the «cheque-invoice» would allow to establish very simple and clear system to meet this problem. Special current accounts could be created for those in these situations. That is, judges, politicians, public officials,... during their term of office would have a current account where they could receive only those deposits derived from their communal charge. This simple device would allow a total transparency for public officials without any need for inspections, declarations or bureaucracy. In this «communal charter» can be spent what is deposited for the public office, but since no mercantile operations can be made during the term of office, there can be no invoicing which would be an excuse to deposit amounts in the account. So the way is blocked to the different types of allurements which today are practically impossible to find out and to use.

As far as the possibility of bartering goods and services goes, we are in a position similar to the one described within the market, but in this case it is even more difficult because of the «overprice of honour». A judge or a politician well paid by the community does not sell his honour for a mess of pottage.

Even so, in this situation there are two features which can be considered weak: having the allurements be of advantage to the public official in a roundabout way through a relative; or at a future date when the term of office is over. But in both cases sooner or later footprints will be found of large, little justifiable, deposits. And certainly the judge in charge of the case will have a far easier life than now in establishing possible connections with relatives or with the person concerned himself at a future date. In this last case, some limitations can be established to go directly to the market by keeping this «communal charter» (with a special current account for communal financing) for some time (months, years) according to the importance of the position. It is perhaps better to pay some good holidays out of the market than to foster the custom of many public officials who, quietly, just after their term of office is over, become important shareholders in the boards of directors of the main companies in the country!

A communal charter of this sort could be extended to other professions and institutions wanting to de-commercialize and to come away from state control (education, health, communication means, social welfare, non-profit associations...). They would receive public money but would be non-profit bodies, managed privately and independently.

In short, with the «cheque-invoice» as the only currency, foul play would be much more difficult. «The opportunity to sin» would not be so ever-present. As the Italians say, *l'occasione fa il ladro*. But, as we shall also see, we cannot sue the offender without questioning the causes of delinquency. And not only for this reason, but, because out of consistency with what a civilized country should be in our days, a vital minimum must be ensured so that it is not necessary to break the law to make a living.

In a future volume we shall explain how the «cheque-invoice» system can bring about the introduction of a vital minimum and the money to pay for it, without increasing taxes and without bureaucracy nor roguery. We shall also specify with more detail the features and working of the «communal charter».

Second feature: beyond mercantilism and planning.

Up to now, especially in this last century, there have been two differentiated and antagonistic positions. The first one of them affirms that the free initiative of citizens, without any intervention whatsoever from anybody, is the best system for the production and distribution of economic goods. That is, the freer the market, the better. The second position holds the opposite: centralized planning is the best system to allocate resources and to not spoil them. From each position there takes origin a theoretical model society with different features: the first being, individual private property; and second being, state property; in the first case, benefits, profits, and egotism drive the market; in the second case, solidarity, rationality and altruism does.

Reality however has taken shape with mixed economies and, in fact, none of the two models exists in practice as a pure model. Possibly we should analyze this matter in more depth.

One of the starting problems of the free market is that it has been put forward as a game. However, is it a game with rules or free play? (Jean Duvigneaud). The market is, evidently, a game with interior rules. If it has no rules and becomes a free play it does not work. But the ambiguousness of the definition «free play» causes the «liberals» to look at any regulation of the market in disgust. We have here a very serious misunderstanding. The market has interior rules which can be modified to obtain a better efficiency in the production and distribution of wealth. The lack of clearness and definition of these rules (taking the market as a play) has caused those damaged by the game to step in: they have tried to deny the games in whole because they were free only for some of the market sharks, for the powerful.

The dream of centralized planning is for the State (representing the common people, especially the masses prejudiced in the free market game) to become only one company, which is something much more rational



than the fighting among companies within the market. There is no joking around. Economy is very serious and must be handled with the seriousness of the military headquarters.

Between the «game with no rules» and the «destruction of any game» there is another path, that is to define the market as a play with rules, as a game. The rules of this game must use the highest rationality but at the same time the highest creativity, the maximum freedom, and the maximum possible responsibility. These rules must set the limits of what can be traded and what cannot (what is communal, what has no price... what is free game, play, what Kant called an endless finality: art, literature, human relationship, communication, culture...).

However, with rules needs a system of information of the development of the game and good arbitration to solve conflicts. The free market considered that the information be freely given in the market itself - prices are fixed in the market place. And considered that conflicts should be solved by the Courts. Centralized planning trusted a complex informative system which had to be carried out by the nationalized bank, where some million party officials had to put together the information concerning offers and demands, and to rationalize the great single concern.

We have a feeling that none of the two theoretical models, and none of their practical applications, have solved the problem well, at least in the growing complexity of present day western societies.

None of the two systems have solved neither the information nor the solution of the conflicts which have appeared in the application of the more or less explicit rules which have been introduced.

In an indirect market, where there is no bartering and currency is used, the information complicates itself: on the one hand there is the sale-purchase of real and actual goods, and on the other hand there is the movement of money, which is not always parallel to the sale-purchase of goods. Between both there is, by definition and verification, a break which cannot be estimated. The result is trade chaos: surpluses side by side with destitution.

Some may think that these affirmations are exaggerated, but the study made by José Manuel Naredo (1989¹) is distressing. It shows the social importance of the fact that national bookkeeping does not record the incomes brought about by real-estate or stock exchange speculation. This slip of national accounting rewards a few social sectors and hurts all the others: with respect to the growth of the national income «it must be pointed out that this monetary amount does not correspond [...] to the incomes actually obtained by the Spaniards». Among other «fictions», «it does not take into consideration [...] the profits from the sale-purchase of movables nor real-estate, or from those derived from the management of financial assets in the banking business». He then defines the consequences of this accounting fiction and goes on to say: «during the period of 1985-1988 the general consumption price index grew at an average rate of 6 percent per year, stock exchange quotations grew at an annual rate of 48 per cent, and the average prices of real property reached about 30 per cent». The fact that the income derived from the sale-purchase of property and shares «does not appear in the official estimates of national income has increased the gap between real and conventional economy. So, while the government and the trade-unions focused their discussions on the growth (modest in any case) of the «macroeconomic framework», newspapers mirrored the new faces which appeared in the ranking of the great fortunes of the country thanks to the incomes which were the result of that «framework».

The record of all the monetary incomes (including the speculative ones) allows to better understand the confluence (difficult to explain with the conventional accounting version) of the «signs of an economic boom and a consumptive display unparalleled in the last ten or fifteen years, and a rate of unemployment and social rejection also unequalled before». By Naredo's reckoning, speculation (with 2.6 points) has helped the growth of national income more than all the industry taken together (with 1.4 points of actual growth). «It is clear -he goes on- that the present economic boom is not known for an expansion of industry and of jobs in this sector, but for its overlapping with the existence of declining industrial areas and pockets of unemployment and poverty».

«In other words, as far as inflation is concerned, we may say that what has «warmed up» is not economy, but a very peculiar sector of it: real estate. It is a sector where the spectacular inflationary trend has remained on the fringe of the indicators usually stirred up by the macro-economists, in spite of the fact that they have been the main reason for of recent growth (and of the «underlying inflation»»).

These accounting «fictions», which produce such serious outcomes, «must be maintained, even if it is because they follow methodologies in force», which means that national bookkeepings all over the world are equally fictitious.

Naredo has tried to calculate approximately the weight of the Stock Exchange and of the real estate speculations. Wouldn't it be interesting, too, to know «the profits [...] accruing from the handling of financial assets in the banking business»?



Let us now go through the theoretical planning alternative for the market disorder. In a planned system, with millions of bureaucrats and a few planners, information is falsified, mutilated, either through the technical inability to put it all together, or because of corruption, political pressure, or for fear of not meeting the five-year plan. When the appeal of the game is lost, production goes down, the black market appears, is tolerated, and everything starts rotting, for lack of initiative, creativity and for being choked by the forced ineffectiveness of bureaucracy. In an excellent book on the Soviet Union we find a perfect description of these situations: «Most of the problems which clutch the structure of central planning, stem from the control (which is excessive and at the same time ineffective) of the production factors, and from the slight reliability of the available information with respect to the effectiveness of these factors²». «To give an idea of the extent of the activities within this area, the Gosplan and offices in charge of the planning employ 15 million people, and every day, handle around 850 thousand million documents³». «The two factors explaining the growth of «complementary economy» are the requirement to fulfill (even artificially) the plans, and the general condition of scarcity which typifies Soviet economy⁴».

The rationalist and bureaucratic idea is the nucleus of the application of the planning system from its origins. According to Lenin, only one nationalized bank was to be the mission of framework of the socialist society with the «accounting control of the whole State, evaluation and verification of production, the distribution of goods and articles all over the State⁵». To do so, Lenin relied on the ability of the ten million officials the party could contribute.

A monetary system of the «cheque-invoice» type may allow the monetary units to move among current accounts exactly parallel to the movement of goods of every sale-purchase operation, and therefore allows the «cheque-invoice» to offer an exact and thorough information of what is going on in the market. It is only possible, paradoxically, to decentralize the market with a good informative centralization, as long as the centralized information is put within reach of all the market agents, as long as it is socialized.

Let us further discuss the proposal. With a «cheque-invoice» monetary system only the information is socialized and, with this fact, the market can constantly be ready to balance and improve production according to demand. But to socialize information it is necessary to centralize it, as sectorial and territorial dimensions of economy must be seen together. Now, what must be centralized and socialized is not personalized information, but exclusively the information on the object and circumstances of the operation (such as goods, place, day, price). Depending on the complexity and extent of the market, processing this information would be very cumbersome and expensive. But today we have means which Lenin did not, and which are being introduced much below their possibilities as far as the improvement of the economic balance and of the market are concerned. These means are electronic money or telematic money. We shall speak later of the possibilities and dangers of its use (chapters 17 and 18).

The «cheque-invoice», therefore, allows, in this macro-economic sense, to give shape to several possibilities, which today are considered utopias: to better control inflation-deflation by the simple fact that there is only so much currency «circulating» that is needed by the market; to improve the checking and self-control, on

equal terms, of the rules of the game adopted by the market; to bring about a free market within these rules, to be equally carried out by everybody; to release reliable information to all the market agents to improve their action as investors, producers or consumers; to responsabilize society thanks to the ability to observe the results of its own actions without having recourse to state interventions, which are usually considered as arbitrary impositions, even if they are well grounded (the unawareness of this supposedly good basis of interventionist steps brings unreliable people who, used to deceiving and ignoring the extent of the problems, may even demand more than that to which they are entitled).

Third feature. Neo-economic science.

The third great possibility of the application of a new, informative, monetary system is complementary to the last one we have discussed, and consists of supplying first-hand information not only to the market as a whole, but also to the «economists». The economic science suffers a great disrepute, to the extent that the name «science» is considered a euphemism that many economists dare not even utter. Disrepute comes from the fact that, as a data processing engineer of an important savings bank said, «the economists' task consists of half of the time forecasting some given results, and the other half trying to explain that they did not come to pass». Oddly enough, most of the innovators in economics have not been «economists» but engineers. They, being used to a very high degree of theoretical rigorousness which always faces facts, cannot accept economic esoterism. Perhaps economy will not progress as long as the systematic rigorousness of engineers does not penetrate it or substitute it. (At the end of chapter 8 we have already gone through the uncomfortable situation of «economy as a science» according to economists themselves.) Here is a short review taken from a suggestive article by Alfons Barceló (1988⁶).

«Economy has not yet gone beyond the stage of 'proto-science'. [...] There are only very few «economic laws» accepted as true and relevant by all the economists. There is no general agreement among experts on the 'object' of economy [...]. It is easy to realize that basic ideas are, often, vague and unfathomable... [...] If to all this we add some talked-about blunders as far as bad predictions and unsuccessful action programmes are concerned, we must not be surprised that they be considered scarcely reliable, both the recipes derived from theoretical jobs, and the systematic, inherited, body of knowledge. [...] It is an immature science. We might establish some sort of comparison between the present situation and the state in which biology or chemistry were used at the beginning of the 19th century... I do not think it is farfetched to say that the prevailing economic theory constitutes a blend of science, technology or ideology which is transmitted as a doctrine with many features of a theological sort. We must add that many of the central propositions of the economic theory are simple tautologies which do not contain any factual truth, or which refer to «possible worlds» with little connection with the historic, sublunar realities [...].»

The quotations adduced by Barceló in this article cannot be missed either: «To evaluate this complaint we may call on stage one of the present-day most famous economists, who accepted that «it cannot be denied that there is something outrageous in the spectacle of so many people working at polishing the analysis of economic situations, which we have no reason to suspect that have existed or may exist some time⁷»». «The Nobel prize winner Herbert Simon has said lately: «I think that handbooks -on microeconomy- are a scandal. I think that submitting impressionable youths to this formal exercise, as if it belonged to the real world, is a scandal... I do not know any other science proposing to deal with real world phenomena starting from affirmation which are in flagrant contradiction with reality⁸»».

He finishes with a clear appeal to improve the present situation. «In short, 'social engineering' has been always practiced on common sense bases, on more or less reliable traditions and by means of accumulating recipes for test and error trials. Now, the routine knowledge may be enough to maintain a given state of affairs, but it is unsuitable for projects of deep social changes. As a consequence, any endeavour to disturb the existing order, in an intellectually responsible way, needs an effort to develop and to fit together the different components of the economic, political and social technologies besides a solid scientific support to base the exchange programmes on».

In this respect, the intention to submit a «cheque-invoice» monetary system is to help to supply the economic technology with a powerful operative instrument, both for research and for verification. It will always be

difficult to ensure that the «monetary» economy reflects exactly the «real» economy in all its facets. But it becomes more and more apparent that the present monetary systems not only cannot fulfill this function but that essentially they hamper it.

To better understand what we mean, we may imagine that the introduction of a «cheque-invoice» monetary system one day becomes real. If this hypothetical introduction had helped to improve the economic science, we might imagine a document similar to the following description:

«In the last two centuries of the second millennium there appeared a branch of knowledge which was called «economic science» by imitation of the so-called «natural sciences». But unlike these, it did not apply any serious method to compare with reality the theories and hypotheses which were being formulated. They said that this method of comparison was not possible because the economic reality had a great number of unpredictable human components which could not be understood with the available information systems. As we know, there are some of these human components which for the time being, and possibly never, will not be able to be 'objectified, measured nor quantified'. This is one of the limitations of the science which has been accepted in the last centuries. But surprisingly they had not even been able to measure what could actually be measured, nor to record what could be grasped relatively easily and objectively (every elementary sale-purchase operation, with a record of the most significant information). While the monetary system wandered on one side, and the opinion polls, surveys and statistics straggled on the other, nothing appeared to be reliable, much less so exact and thorough. In a century of great mathematic and data processing advancement, they kept basing the monetary practice on absolutely anachronistic or unverifiable theories. The introduction of an informative monetary system greatly improved the research of the market analysts. The input-output tables could be obtained at first every year, then every month, until they could be processed almost daily. Hundreds of theories which had accumulated during two-hundred years could be verified. Looking at all this process from the perspective of time we see that the «economic science», dazzled with the great mathematic and 'scientific' outlay had forgotten something absolutely essential which had become the basis of the natural sciences: to define a measuring and processing system of information to allow the comparison of hypotheses with reality. This had helped physics and chemistry to progress... and so has neo-economy been able to move forward, up to the limits of its field of action, defined by the complexity of human motivations and social relations».

This text, intentionally provocative, unfortunately for those annoyed by it, can receive only the approbation of future history. Those annoyed, or those considering it too pretentious, have no other choice than to demonstrate its falsehood by offering better methods and results, for and from their 'science'.

He who has a clear conscience faces up to things. But nowadays very few people are willing to do so, because all of us have, hidden in some recess, some unconfessed 'sin' which we have made, not always willingly, but sometimes out of need, in order to survive. In a world of dissipation, of institutional corruption, of established lies..., everybody feels compelled to do the same, each one according to his possibilities. But foul play is possibly not a misfortune inherent in the human condition. At least, it is a reality which is favoured or not by some given social structures, that will be difficult to transform as long as there is a powerful and blocking weapon within reach of everybody and, most importantly, of the powerful.

Notes:

¹José Manuel Naredo, «Sector inmobiliario y crecimiento económico (1985-1988)». Paper presented in the Universidad Internacional Menéndez Pelayo. Later published by the Banco Hipotecario de España.

²Carlos Taibo, «La Unión Soviética de Gorbachov», Fundamentos, 1989, p. 25.

³Ib., p. 30.

⁴Ib., p. 34.

⁵Cristopher Hill (1947), «La Revolución Rusa», Ariel, 1969, p. 107.

⁶Alfons Barceló, «Rápido chequeo a la teoría económica», Cuadernos de Economía, vol. 16, 1988, pp. 343-366.

⁷Hahn, 1970.

⁸Simon, 1986.

Chapter 12. From clay to silicon, going through gold & paper.

The clay civilizations used clay for a personalized and informative accounting-monetary system (perhaps an element of a wide pacification among townships). The metal civilizations used it to help and improve the exchanges and the warlike, corrupting imperialism. The paper civilization has used clay to control the markets and peoples. The electronics civilization is using it for monetary speculation on a planetary level and to ensure the control of populations.

The clay civilizations (still considered as 'prehistory') probably enjoyed, to certain degree, peace among themselves, oddly enough, as long as they had a personalized and informative monetary system.

Official history starts with the introduction and domination of metals (for currency and weapons): the towns, which had been independent up until then, are submitted to historic imperialisms which have lasted until our days.

Paper introduced a greater degree of refinement in the process of monetary exploitation and in the growth of markets. The bankers took the role of decision-making in economy, peace and war.

The State frontiers have lost their security with electronic money. Any person of any office that «pulls the strings» of money will automatically be playing with the puppets politics, production, consumption, investment...

Every civilization has, among the things which differentiate it from others, some materials, tools, instruments, inventions... which seen from the standpoint of time, we can single out as distinctive of its culture.

For Western civilization, history starts about 4500 years ago when writing first appeared with the Sumer tablets. But even if we adopt this standard as a constituting element of history, we see that along almost 7000 years there were other cultures which already recorded graphic information on clay (chapter 10). These 7000 years of using the same information system in places very distant from each other (and on the whole space in the process of civilization) is a huge puzzle which challenges the 'wonders' of our history.

What else do we know about this long period in which the foundations of agriculture, market, currency, crafts, towns, bank, temples, State... are laid?

In a fertile land, near to large rivers, ethnic communities and inter-ethnic aggregates become settled, their farming improves and they start using some instruments to organize production and trade in its double manifestation, inside each settlement (possibly sharing and with an incipient exchange) and between settlements (with exchange and a growing control on accounting).

This is an important element. The exchange of products is not necessary when property is communal. But this is only possible in communities bound ethnically, by blood, culture and common myths. When this trust is lost and differentiated communal or collective properties appear, becomes necessary exchange among them. These first settlements were made up of small inter-mingled groups -two or three groups uniting to farm, build and protect themselves from the outside. This protection most probably caused the building of walls, which progressively became impregnable ramparts when the settlements became wealthy, and multi-ethnic towns, with less trust inside and more dangers outside. The walls became a very effective defence tool. It is possible that the towns enjoyed peace amongst themselves during a period of some thousand years, due to the effectivity of these walls. Each one independent, jealous of its autonomy and sure of its defence, during the day it opened its gates to merchants arriving with caravans and to strangers from other towns. In the market place trade transactions were made, which were recorded in the temple book-keeping. At night, outsiders had to leave the town. It seems that the introduction of an informative system such as tokens could not have been feasible without some sort of 'peacemaking' rules (result of defensive, non-offensive, mechanisms) which, during thousands of years reached a stability and acceptance and, at the same time, reinforced security and economic defence.

To carry on the hypothetical tale we must make a very important distinction, even if the words 'empire' and 'imperialism' are commonly used as synonyms. We shall call these towns 'empire-towns', meaning that their inner agreement of the constitution was freely made by the groups and inter-groups adopting it. The empire-

town looked for a common outer defence ('imparare') which allowed free game and the help among groups within it.

Official history starts with the Sumerian writing, but it also starts with a completely different situation from what we have described up until now. This situation can be defined, by contrast, as 'imperialism': one of the towns manages to overcome the others and to keep them, by right of conquest, under its control. If we call historic imperialisms 'empires', the confusion, besides being terrible, is suspiciously maintained by the imperialisms. These, supported by official history, want to deny the historic legitimacy of any free agreement of mutual help among groups. Imperialists want to underline that «towns» are unfeasible, that only 'unification' gives power, and that this must be done by the imposition of one of the groups, towns or States..., as history shows abundantly.

However, history starts not only when writing appears but also with a 'new' reality: imperialism. And with it, expansion, annexation and wars of domination. Unaccountably, the oldest Semites we know, the Akkadians, who had been lately penetrating into the culture and the lands of the Sumerians, upset the stable empire-towns. Sargon the Great, of Akkad, establishes the first imperialism of history, he destroys the old order and introduces the birth of the 'history of the imperialisms', the only one which has been considered this up until now. The history of empire-towns, free and independent, is prehistory! There is almost nothing in common. That was a different history in which historians of imperialisms are not even interested in mentioning. The garden of Eden is completely lost. It is a myth for children. Historic and civilized man 'is' what we know, and he has always been like that.

The Great Sargon's biography is very illustrative (and, as we shall see, original!) as he was «of humble birth and was abandoned by his mother in the Euphrates». Saved by the courtiers of the Sumerian king, he became his cupbearer. Later «he revolted against him, assumed power and built a new capital, Akkad. A clear example of a warrior king, conqueror and founder of empires (imperialisms!) bent on unifying Mesopotamia». He conquered and submitted most of the towns from «the Persian Gulf in the south to the region later occupied by Assyria in the north. In the south-east he reached Elam [...], he penetrated the north of Syria and perhaps also Asia Minor¹». A perfect description of the appearance of imperialism and of official history.

There remains an important question from these facts: how is it that this Akkadian king managed to subdue the other towns which had been independent during 7000 years? The walls enclosing them could not be destroyed by military means until much later, when Alexander the Great (another 'Great' emperor) used the catapult and the mechanic ballista in the sieges of Tyre and Sidon, 300 years before Christ. But we are talking about the Sumerian towns being subdued 2000 years before any war device was able to knock down fortresses!

The Sumerians, who were peaceful inhabitants of those lands during centuries, and who had been great cultural creators and inventors of the systems of tokens and bullae, therefore, of writing, were invaded and subdued by the Semites-Akkadians, who gained control of Mesopotamia in a few years. The title «king of Sumer and Akkad» was held by the following dynasties during over one thousand years with the evident intention of staying in power, based on the legitimacy of the first (cultivated) inhabitants and of the (barbaric) conquerors.

«On the other hand, there is a meaningful analogy between Sumer and Greece, for they not only were two important cultural centres, which gave shape to other civilizations, but, their basic political nucleus was the state-town²». In the same way that Greece became a victim of Roman imperialism, Sumer was defeated by the Akkadian imperialism. It now appears certain that 2700 years before Christ things began to change in Sumer, with wars among the towns. In three hundred years the Akkadians won and 'unified' them. In the same period and in the same areas, the *bullae* system started to be substituted for writing, at the same time the Semites started to master the secrets of precious metals -gold, silver, bronze-; of weight, with the precision scales; and quality, with aqua regia and the touchstone.

There is nothing that indicates how this triumphant warrior managed to get into the walled cities. We must remember that perhaps it was no coincidence, as Sargon had been a cupbearer -in charge of cellars, measures

and treasures. It is a daring hypothesis, and in any case a challenging one. A impregnable military town has only one weak spot: its gates. If the complicity -treason- of some town official is obtained, invaders can get in by night and seize it. But how could complicity be obtained? What was so valuable, that would cause an officer to take the risk of betraying his own town? Any valuable present would have aroused suspicion: how could he have obtained valuable goods without any operation being recorded in the temple, nor any operation made in the market place? To accept the position of 'town governor', appointed by the conquering king, was an unforgivable offence which would cause a very dangerous murderous hate. Eagerness for power had always been very limited by circumstances.

Sargon's ingenuity was to discover that there was a solution: to give a lot of gold in exchange for the 'complicity' of opening the gates. And at the same time, to promise that the 'normal' trend of the last years, when the Semites accepted gold as a 'currency' for all the exchanges, would become general with the new king. He would abolish the system of *bullae* and records; you could buy and sell without the Sumerians' administrative and 'oldfashioned' obstacles. It was certainly a good deal. Even so, if this officer did not accept, they would kill him and give the position to another officer...

The myths of 'miraculous' seizures of fortified towns are probably meaningful. Tokens have been found in the ruins of Jericho. And one day Jericho, the impregnable, was assaulted by Semites due to the fact that its walls were miraculously pulled down without fighting. They only paraded a gold ark in front of it... At that time, as much as now, it was necessary to keep up appearances, and conquerors did not like to show their tricks. They preferred to hide their shame under magnificent and mysterious myths which gave them heavenly support. The Trojan horse may be one more myth concealing the power of gold.

Under the Akkadian domination the role of the temples was reinforced and they were unified with the State; bureaucracy, compulsory taxes, oppression of women, ritual murders, monumental buildings, unceasing wars and conspirations increased. Since then, all the 'civilizations' have shared the same historic features. All has been sold and purchased with total impunity.

Since then, documental invoicing for book-keeping purposes has been separated from payment with the monetary instrument. Since then, bankers, tradesmen, and State have had their accounting systems, which have allowed to grant credits and collect interests; to create inflations and deflations, while increasing, reducing or forging 'currency' (always limited and limitable) according to their own interests. Since then, book-keeping has always been false, without an exact, parallel counterpart in actual exchanges.

The paper -and printing- civilization has developed the same issue: to improve the accounting and credit systems for a few and to 'free' them from the drawbacks of metals by the emission of banknotes (always controlled, too, by those who emit them arbitrarily, by definition). Cheques and money orders have still added more manoeuvring capacity.

The most invisible subtlety, but also the most powerful, has been reached. With the birth of the silicon civilization, and the basic material of chips, that is of electronics and telematics (data processing handled at a distance). It is neither gold nor paper but electronic recordings. But their structure is still, in its basic traits, the same as 4500 years ago, and to the same ends: not to leave any track, to control information, and to monopolize the ability to create purchasing power.

The hypothesis given out on the origin of 'official history' must evidently be submitted to a much more serious study. Presenting it has, however, a twofold function: induce further work and, open a challenging path on the subject under consideration. «*Se non è vero, è ben trovato*».

Notes:

¹Raimón Griñó, «Gran Enciclopèdia Catalana», Barcelona, 1979, vol. 13, p. 349.

²Ib., vol. 14, p. 67.

Chapter 13. Agility and accuracy.

But while the informative-scriptural-clay currency became slow, and the uninformative-paper-gold currencies became agile, the electronic currency allows for better information than the first currency and much more agility than the second ones.

The clay currencies finished when the growth of the markets made the metal currencies more 'useful'. Later, paper currencies substituted the metal ones for similar reasons. But the agility increase of metal and paper implied a loss of accuracy (in trustworthy information). Electronic money (compensations between current accounts) not only allows a greater agility but also a very comprehensive information system.

Those who assume that the sort of currency was a key element in the birth of the history of imperialism is a whim, will find it easier to accept this other parallel hypothesis: the technical possibilities of every civilization have created the type of currency according to the specific needs of the market at any time. Through consistency with the present technical possibilities and with the needs of contemporary markets, it is clear that we need a new sort of currency free from the yokes of the old sort which still keep it subdued and, with it, subdue the market and society.

The increase of agricultural techniques, the improvement of the transport systems, the growth of towns... caused the expansion of the markets and the need for more agile and more universal exchanges. The use of precious metals for currency helped to solve these problems in a much more adequate way than the difficult system of clay tokens and *bullae*. Knowing the techniques for handling precious metals allowed to go, from their initial use as straws, dust, grain, small ingots, to that of minted pieces with the king's guarantee.

The interest of individuals and of firms prevailed above the ancestral interests of the communities and of commoners. The freedom to buy, sell and become rich was considered more important than the protection against the misuse of this freedom, which had had priority during many centuries.

Markets grew, and with them the wars which opened new markets and which reinforced the winning States. Everything grew until, the crisis started for lack of cash. New, very expensive conquests, to ensure, new gold deposits... This has been an important part of history. For lack of enough gold to pay the armies, the king mints again his coins with less weight, or he melts them and mints out new coins with less actual value and the same nominal value. This is the story of constant official forgeries. Then the great inflation arrived with the underselling of the American colonies. Europe becomes full of gold, trade increases and so does the racing inflation. After some time, gold is again insufficient. It will always be scarce now. Silver will follow a similar path. However, in the middle of this hotbed, the alternative is being prepared. Paper and printing.

First come deposit certificates and bills of exchange. Later, come bank notes to the bearer. Afterwards, the State takes the emission monopoly. Then paper comes, simple printed paper, and trust. When the trust is lost, hyper-inflation repeats itself and leaves its track of poverty and wars.

How can we obtain a currency as agile as a bank-note but, at the same time appoint liabilities on the user? How can we obtain a currency which, besides being agile and appoints liabilities, allow an equivalence between what is sold and what is bought? How can we obtain a currency which does not oppose private liberty to the communal protection of its antisocial use?

Electronics already has a monetary instrument available which, under given conditions of application, may fulfill this need for maximum agility and, at the same time, maximum trustworthy information. During 4500 years instruments have not allowed to solve the problem satisfactorily. Now we have suitable instruments and we are also aware of the whole process undergone and of the great instrumental and political inadequacies which hinder the solution of the urgent problems which have been brought up.

To close this revision of the monetary changes, the authors of *La monétique*, starting from the French experience, explain, according to them, what has happened in history to produce changes in the means of payment, that is in the monetary instruments.

«The new means of payment are born in periods of economic and social changes. In the absence of a national consensus they need, for their diffusion, the support of a strong economic agent.

«Because of this, their massive diffusion is always delayed until the day when actual economy is really in need of a reorganization of the monetary flows, and therefore requires the change of the monetary object which is the means of payment.

«The same problems and conflicts have appeared, once more, in the seventies with the emergence of the electronic currency.

«It is the competition between the bank, trade and the State which is the motor of the evolution of the payment system.

«In looking at history, we feel there is a hypothesis which must be held: *to every leading payment means corresponds a leading economic actor, and the first one becomes the domination instrument of the second.*

«In face of an actor who ensures its monetary control on the circuit of a given means of payment, the introduction of a new monetary order goes necessarily through the promotion of new, more adjusted means of payment through an effort of diversification. It will then be easy to better understand the emergency of this new phase of rationalization and definition of the frontiers between agents -which we call the monetic phenomenon- in this structural crisis faced by the capitalist systems since the beginning of the seventies¹».

We may also consider other 'constants' that the authors do not underline enough or do not consider.

With every new monetary instrument, usually introduced by 'financiers', after some time the State replies trying to seize the invention, regulating it and, if it can, monopolizing it. And with every State reaction, the 'financiers' introduce a new instrument which gives them the advantage for some time.

In this century, changes are so swift that the State, and even traditional 'financiers' (bankers) are losing initiative due to the intelligent use of monetics by the trade corporations and financial middlemen, who put out their own credit or debit cards.

There also appears another historical constant: when the State rules a new means of payment, usually 'financiers' do not oppose it in a straightforward way. They are good citizens managing respectable institutions obedient to the public authorities. If they can, they go along with its subtle use, and if they can't, they start to look for a new means of payment which will again put them in a favourable position.

The time seems to be suitable for the change of our monetary instrument. As a matter of fact, the instrumental change is taking place very rapidly. According to FUNDESCO², some of the elements of financial innovation will be:

- 1992. Working in actual time of the whole banking operation.
- 1993. Integrated managements of the bank communications.
- 1994. Standardization of personal identification systems in the plastic cards.
 - Interoperativity among all the EEC cashier networks.
 - Diffusion of intelligent cards among over 30% of card users.
- 2000. Introduction of a universal operative system.

Who will carry out the change of a consistent and democratic application of monetics?

Notes:

¹Ugur Muldur and Nezih Dincbudack, «La monétique», Éditions La Découverte, Paris, 1987, p. 24.

²José Miguel Rodríguez Anton and Eduardo Bueno, «La banca del futuro» Pirámide, Madrid, 1990.

Chapter 14. Which option?

Anonymous currency is a fact embedded in most civilizations, especially in the Western civilization and the cultures which have been colonized by it. Any proposal of a change of civilization has, with respect to currency, three options:

First. Immediate and total demonetization -with the subsequent suppression of productive specialization and with the almost total self-sufficiency, combined with a bartering of goods and services.

Second. The modification of the monetary system (substitution of the present anonymous and uninformative currency through a personalized and informative one, thereby demythicizing currency and reducing the area of responsible monetization to the exchange of measurable goods and services).

Third. The consideration that currency is not a key subject, and therefore it must be left as it is.

The monetization of all the cultures on the planet has been, and still is, an aim of mercantilism which, by this means can constantly enlarge and control the markets, which would give them the power over newcomers. In face of this we must find ways to respect those cultures which do not want to become mercantiled, and at the same time, we must cast light on the works of the existing markets and point out liabilities to avoid their omnipresent power within their cultures of origin and in their intercultural relations. Let us consider three possible options.

First. Immediate demonetization. It can be total or partial -that is, of some activities or of some cultures. Since monetization comes from the appearance of market, and this is the result of private property (whether communal, collective or individual), demonetization implies the existence of human communities with communal property. These communities, as long as they share all their properties, do not compel their members to carry out mercantile exchanges, at least inside them.

Demonetization needs not only the destruction of the still existing communal cultures, but demands the creation of new communal cultures, by will or by force (!), in the individualistic cultures where they no longer exist.

Another inevitable consequence of demonetization is the suppression of productive specialization in as many levels as possible, in order to reintroduce the reciprocal gift or bartering with as little conflict as possible (within each community or between neighbouring communities). Obviously, the division of work outside the communal life compels us to exchange among strangers, that is to the monetized market, sooner or later. It is argued, that overcoming the division of work -manual and intellectual- helps self-management and self-provisioning, which are the basis of an emotionally balanced life, socially liberated from social fictions and, therefore, more equalitarian.

Now, perhaps, we should separate demercantilization and demonetization. In mercantiled and monetized cultures, some goods and services may be demercantiled, but society cannot be demonetized because everybody, in his lifetime, needs to purchase some given goods to live. As we have suggested in other chapters, we may suggest the demercantilization of a number of professions and services (for example, judicial, political, informative, educational...). But if these activities are no longer part of the market, if they are free of cost, it does not mean that they don't need currency both to be exercised (buildings, materials...) and to live of them the professionals work on them. The same thing could be said of natural resources, such as land, subsoil and water. It may be suggested to demercantile them and to put them under communal property to avoid speculation and destruction, but this does not mean that for their controlled, non-speculative use (such as rents, concessions or green taxes) it will not be useful, and above all necessary, to have a monetary system.

Therefore, the first option of demonetization appears not to be feasible in very complex societies and markets, the way most of them are today. On the contrary, it would certainly be possible to take some activities or some resources off the trading system which, out of the market dynamics, could better fulfill its role.

The extent of what can be taken off the trading system or not is mainly cultural. It depends on what every society values and the interest the different agents have to carry out a given productive trade function or a communal-liberal function. Some present-day cultures (that are fairly communal) have kept food out of the trading system. Any member of the community may take what he/she needs. On the other hand they have brought into the trading system other goods or services.

For the time being, it is difficult to think that, in the West, food may be taken off the trading system. A good example is the food production in socialist countries which has been kept out of the trading system. Without the lure of a monetary profit, nobody produces surpluses for sale, and the lack of food grows alarmingly. On the other hand, in the West it is accepted that some public, sanitary or cultural activities may better fulfill their function if they are free and out of the trading system. It is also necessary to consider the need to ensure a vital minimum to every person; a vital communal salary to grant food and other basic items to all members of society. Survival is now also being considered in the West as a fact which can be taken off the trading system, which can and must be obtained irrespective of one's productive contribution to the market. This path is the one which has been started by granting a pension to all those persons who, because of their physical condition (illness, invalidity or old age), cannot survive through their own work in the market (In the following chapter we shall talk about the possibilities of the West to take the path of going back to a communal, off-the-trade, system).

Second. Rationalization of the monetary system. In the markets which use monetary instruments made of metal coins or of bank notes, of cheques or of electronic accounts, whether they are legal or real, dirty or black, the rules of the market game must be again outlined and a new monetary system must be tailored to avoid as much as possible the problems of historic monetization: objectifying persons and their less material activities; free power of money; domestic and foreign trade imbalances; making the myth of money as the highest prestige...

This option offers a possibility to (re)discover currency as an instrument to improve human relations in certain aspects (exclusively for trade activities) and in complex situations (multi-ethnic societies, with an individualistic basis, with many sales-purchases and with many market agents). It is also a means to stop the damages of the present currency in other aspects (roles, professions and resources today «prostituted») and situations (communal cultures which will not, and need not, join the domestic or foreign trading system).

Third. Currency is not a key item. This is how it has been considered in official history up until now (both in the system's and in that of the system's critics). Therefore, no special step needs be taken. It will live if it must and it will die if it must.

The free exchange of consciences, the apocalypse of Western civilization, or the coming of a communist society -when socialism will not be betrayed- will determine the destiny of currency. Let us discuss the following three positions:

For some, the most important thing in life are transcendental values, the mutation of spirit. If this does not change, all instrumental or political changes are only a repression of human wickedness, but not its annihilation. If everybody was good then currency would be of no use. And while we attempt it, no control step will ever change egotism, and may even develop it with greater malevolence. And, besides, how can we expect an 'instrumental' change of something so vile as currency to be a means to help something so noble as the 'new man's' conscience?

For others, days are numbered for the West. Its path has no way out. It is a giant with clay feet. Sooner or later it will fall and the other cultures and nature will welcome this fact. Why should we attempt changes from inside the Western system? It is all rotten. No imperialism lasts one thousand years!

Still for a third group, the knowledge (historically determined) of the coming of a communist society has caused us to consider that currency was an invention of capitalism and that it will die with it.

The loathing of currency has been consciously impelled both by moralists and by apocalyptic and revolutionaries. For centuries people have been told that money is 'dangerous', the 'bait of sin'. 'Entrust it to us, the priests, bankers and politicians, and we will manage it well.' 'Money does not make people happy, they say, and it may even be an obstacle!'

Chapter 15. There is no return: the damnation of the West.

The most feasible and positive hypothesis is the second one: this option, that is the modification of the monetary system, becomes a possibility and an immediate need (to go beyond «official history» which started with anonymous currency, writing, corruption and imperialism) hoping that it will help to walk towards the first option (demonetization and getting out of the trading system) in another historic state, which we do not feel probable in the middle term.

The failure of a return to communism-collectivism by force is much more dramatic and eloquent than the failure of a return to voluntaristic communalism of Christian or hippy inspiration. In the two attempts there has been a confusion between 'community of ethnic origin', strongly endo-structured, and 'voluntaristic collectivity' with a more or less free 'co-election'. Collectivity, if it takes place freely, may become ethnically/ethically communalized after long processes. But neither freedom in the communist case, nor enough time in the communalist case, have gone with the essays of a 'return to the origins' carried out in this century in the West.

Now, without actual communities, rooted and structured around the reciprocal gift and outer barter, the West is condemned to work with productive specialization within large areas of population. And with this detail both the first option (demonetization), and the third one (currency is not a key item) may become illusory or irresponsible. To go on thinking, as up to now, that the type of currency is not a key item is, in fact, to accept things as they are and to give up a possible instrument to modify them.

All over the world, north and south, east and west, under capitalism and socialism, a more or less subtle corruption is ever present, and the monetary imbalances of a State affect, for good or for ill, the economy of the others. The divorce between money and actual production causes the life of millions of people to sink or to lift up, and condemns them to starvation or to opulence.

There are now persons from all continents who, from their non-western life experience or from anthropologic research, doubt that Western civilization is as beneficial as it has been shown to us up to now, not only for other cultures but even for its own children. There are already voices which consider necessary a change of meaning and of route if we do not want to follow the path of destruction. Some voices are heard which denounce the inability of Western culture (too bedazzled by its technological miracles) to understand the contributions and the dynamics of other cultures...

«Economicide consists of destroying the economic reciprocity bases of communities, either to impose denationalization, or to impose collectivization. Economicide is today the most secret weapon, but possibly the most effective, of the West against the 'Third World' (against 2/3 of the world¹)».

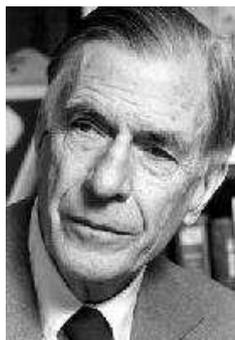
«Collectivization [...] suppresses individualism, prestige or personal responsibility and, therefore, it hampers competition among all of them to produce more and better. The invalidation of prestige as an immediate consequence invalidates the creative or productive work of surpluses. Individuals have nothing else left, as a motive of production, beyond biological self-consumption. Collectivization, therefore, establishes a dynamics of under-development of reciprocity communities. Its failure is clear in agricultural societies of the Soviet Union, of the GDR, of Poland, of Czechoslovakia, of Vietnam, of Nicaragua, of China, at least before it reinstated family and communal exploitation²».

«The confusion between community and collectivity is final and as serious as the confusion between charity and gift which carry out most non-government organizations to help the Third World³».

«The underdevelopment of marxist inspiration is no better than the capitalist help to the Third World. One uses development as a Trojan horse to destroy the Third World economy, the other refuses to acknowledge gift -a present- and reciprocity as the basis for another economic system different from that of generalized exchange.» «Both show that they obey well to the logic of the exchange market, while the community is based on reciprocity».

To acknowledge the right of other ways of living to exist, is not only a right which every Westerner affirms in the Declaration of Human Rights, but also a means to find the ways which have been lost in the West: the measure of things. Western ethnocentrism blinds our so-called objectivity in most observations. Not only

must we respect the other cultures out of consistency with our formal tradition, but their life may help us to relativize our richly miserable civilization.



«Wealth can be reached by two different ways. Needs can be easily satisfied either producing much or wishing very little. The most common conception, in the style of Galbraith, is based on assumptions especially suitable to the market economy: that men's needs are great, if not infinite, while their means are limited, even if they can increase. In this way the gap between means and ends may be reduced by means of industrial productivity, at least to the point when the «basic necessities products» become plentiful. But there is also a zen way to wealth which starts from premises different from ours: that human material needs are finite and scarce, and technical means are immutable but, generally speaking, sufficient. With the zen strategy, people enjoy an incomparable material abundance [...] with a low standard of living⁴».

«This is, in my opinion, the best way to describe the hunters-harvesters and the one which helps to explain some of the oddest economic behaviours, such as 'prodigality', that is the tendency to consume rapidly all the available reserves as if there were no doubt that more can be obtained⁵». Free from the obsession of want, never being in a hurry, to 'work' 20 to 30 hours a week, to have a lot of free time to sleep, to talk, to visit, to dance and eat together, the non-depletion -with no return- of the natural environment, human evaluation being considered more important than the simple meeting of material needs, the absence of chronic starvation... are the main features defining this way of life which the West considers «primitive» but at the same time also as the 'lost paradise'.»

On the contrary the opinion we have 'primitive' life conditions is what has been transmitted to us by most anthropologists: «'A simple survival economy', 'limited free time out of exceptional circumstances', 'relentless demand for food', 'meagre natural resources, only very relatively trustworthy', 'absence of economic surpluses', [...] this is how, generally speaking, anthropologic opinion expresses itself with respect to hunting and harvesting⁶».

«It is possible that (this opinion) be one of the clearest prejudices against the Neolithic, an ideologic appreciation on the ability of hunters to take advantage of land resources, which is in perfect agreement with the historic attempt to deprive it of this good. We have inherited this prejudice of Jacob's descendants who «were dispersed to the West, to the East and to the North» doing wrong to Esau who was the elder and a valiant hunter, but who, in a famous scene, sold his birthright⁷».

On the contrary, we should need a more distinct and realistic view on the wonders of the progress of our Western civilization: «The industrial and market system introduces poverty in a way beyond all comparison and to a degree which, until our times, had never been seen by far. Where production and distribution are governed by the performance of prices, and all sustenance depends on earnings and expenditure, the shortage of natural resources becomes the clearest and easiest to estimate the starting point of all the economic activity⁸».

«Shortage is the sentence given out by our economy and, therefore, also the axiom which rules Economy: the application of insufficient means against alternative ends to obtain the greatest possible satisfaction under given circumstances⁹».

«Having credited hunters with middle-class motives and paleolithic tools, we judge their situation desperate¹⁰».

«We feel inclined to think that hunters-harvesters are poor because they possess nothing; perhaps we should think that, for this same reason, they are free. "Their extremely limited material possessions free them from all sorts of worry with respect to their daily needs and allow them to enjoy life (Gusinde, 1961¹¹)».

The author becomes paradoxically subversive: «The amount of work (*per capita*) increases with the evolution of culture and the amount of free time diminishes¹²».

«But, in the first place, what should we say of today's world? It is said that one third to one half of mankind every day goes to sleep hungry. In the old Stone Age proportion must have been much lower. The age we are living in now is that of an unprecedented hunger. Now, in the age of the greatest technologic power hunger has become an institution. We can turn over another venerable sentence: hunger increases relatively and absolutely with the evolution of culture.

«This paradox completely illustrates my point of view. Hunters and harvesters have a low living standard because of circumstances. But taken as an objective and with suitable production means they may, usually, easily satisfy all their material needs. The evolution of economy has known, then, two contradictory movements: enrichment, but at the same time impoverishment; appropriation of nature, but expropriation with respect to man. The progressive aspect is, no doubt, technological. This has shown itself in many ways: as an increase of offer and demand of goods and services, of the amount of energy at the service of culture, of productivity, of the division of work and of freedom with respect to environmental conditions¹³».

«The most primitive population in the world had scarce possessions, but was not poor. Poverty is not a small amount of things, it is not only a relationship between means and ends, but mainly a relationship among persons. Poverty is a social condition, and as such it is an invention of civilization. It has grown with civilization, as a jealous distinction among classes and, fundamentally, as a dependence which can make peasants more sensitive to natural disasters than any Winter camp or settlement in Alaska¹⁴».

«Primitive economies were sub-productive. Most of them, both farming and pre-farming economies, do not seem to take advantage of all their economic possibilities. Their working capacity is not made the most of it, technological means are not properly used and natural resources are not taken advantage of.» «Production is low with respect to the existing possibilities. In this respect, 'underproduction' is not necessarily incompatible with a primitive 'wealth'¹⁵».

«The 'economic problem' may easily be solved using the techniques of the Paleolithic period. This implies that only when culture reached the peak of its material achievements, it built an altar to the Unattainable: Infinite Necessities¹⁶».

These references to human diversity in the past and in the present on how to spotlight economy may produce some yearning for the lost paradise, an idealistic anguish of an impossible return. This is the damnation of the West: to study, to know, to compare other ways of human living, and feeling that there is no turning back. But not going back does not mean to unconditionally support all the present as the only way to the future. The West has a will and an ability to modify history according to the progressive awareness of the fact that there are always several options.

Simultaneously with this awareness of the 'fragility and utopia of the universalization of endless progress and development' we must be able to find ways which will allow us to re-direct, before it is too late, the suicidal trend in which we have involved the planet's life.

Where should we start? with the change of mentality and with awareness? but how shall we attempt this while the education, communication and information means mould the consciences and the values of most of the planet's inhabitants according to the prevailing Western model? How can we free these means from dependence from the States and the great companies?

If we want to start with a political change, how shall we attain that organizations and political parties be less conditioned by those supporting their electoral campaigns?

If we want to start with an economic change, how can we overcome the crises while economic science gropes about?

If we want to start with an inner conversion, how can we attain it while 'the spirit of freedom' is to a large extent imprisoned by the religious institutions which serve power?

If we want to start with ecologic changes, or with the North-South relations, how can we stop the great pressure groups and the States with the right of veto from boycotting more or less openly all the decisions detrimental to their interests?

We may ask the same question with respect to another subject: how can we start a change of monetary system if the present anonymous currency is a subtle weapon used by all these factual powers to stop the changes which must be urgently achieved? Possibly one of the differences in the fact that a type of currency may be modified by passing a bill, in one day, and that when a new informative and responsabilizing currency is introduced, it can help solve most of the difficulties we have just mentioned, while changing any of the other structures requires very complex, long and complicated processes. In our time we may learn from history that any great revolutionary change in the end becomes blocked by the great problems which have not been faced and poisoned by the anonymity of currency, which spoils everything again.

At the beginning of this chapter we said that the hypothesis of modifying the monetary system appeared to be more feasible and positive than the other two. We shall now see its social feasibility and we shall leave its technical feasibility for the following chapters. This statement, that an instrumental change (a tool for other changes) is easier than a direct change on complex structures (whether economic and political structures, or cultural-inner structures, still more complex), is a hypothesis. That is, it has not yet been consciously tested, and this, has an advantage with respect to the other outstanding 'revolutions'.

This suggestion of a monetary reform, of an instrumental change, has the advantage that, opposite to revolutions demanding a change of customs and institutions accepted as normal by western population (abolition of private property, of parliamentary democracy, of formal liberties...), the change of currency does not affect the existence of these institutions, but affects what the same institutions and public opinion denounce as a danger of a lawful state: the inability to fight against corruption and delinquency; the ineffectivity of the judicial system; the lack of responsabilization of free acts, both in the market and in politics; the inequality of opportunities; the lack of solidarity of economic redistribution; the unfair and heavy taxation; the manipulated uninformation; the non-participation in the systems of political decision-making... That is, the change of currency can help to deepen the democratic and mercantile tradition. If judicial equality and personal freedom are formally proclaimed, we must find the means to bring about their actual application in as many situations as possible.

With respect to the socialist West we might also establish a parallel of social hypocrisy between proclaimed formal rights and reality. But perhaps at present it is no longer worth it. Facts speak more clearly than analyses.

Perhaps of the two systems which we have compared up to now we might find a creative way out taking positive elements from the two, thanks to the possibility, offered by the new type of currency, to directly control the agreements reached in common in a new Europe, not divided in blocks nor in nation-states.

Notes:

¹Dominique Temple, «Alternatives au Développement», Centre Interculturel Monchanin, MONTreal, 1988, p. 105.

²Ib., p. 105.

³Ib., p. 105.

⁴Marshall Sahlins (1974), «Economía de la Edad de Piedra», Akal Universitaria, Madrid, 1983, pp. 13-14.

⁵Ib., p. 14.

⁶Ib., p. 14.

⁷Ib., p. 15.

⁸Ib., p. 16.

⁹Ib., pp. 16-17.

¹⁰Ib., p. 17.

¹¹Ib., p. 27.

¹²Ib., p. 50.

¹³Ib., p. 51.

¹⁴Ib., p. 52.

¹⁵Ib., p. 55.

¹⁶Ib., p. 53.

Chapter 16. Neither heaven nor hell.

The key issue in favour of the second hypothesis -modifying the monetary system- is to see if its practical application is feasible, and to value its dangers and possibilities.

We must not be so naive as to believe that the second option -modifying the type of currency- shows no dangers or is not free of difficulties. In the present complex societies we cannot go back to clay. But the different possibilities offered by a personalized and informative type of currency must not have, as a result, a simultaneous and overall single type of instrument or of universal system. Every reality, every culture in which an anonymous currency is more or less used, willingly or unwillingly, if the second option is accepted, must find which features of the cheque-invoice, and to which degree, are considered necessary to be introduced, with respect to:

the special problems and the profits which are expected from it;

the instrumental technical possibilities available, and the protecting precautions.

In the following chapters we shall study the technical possibilities and the necessary judicial and political precautions. Now we shall shortly describe and evaluate some models and possibilities of monetary change under several specific realities.

To help visualize possible application models, we shall submit four different ones, evaluating for each the degree of: economic information, personalization and liability.



We can call the first model *Reagan-Gorbachev*. It was submitted by Donald T. Regan, after having been Secretary of the Treasury in the USA while Ronald Reagan was President. The plan was not applied in the USA, but was partially applied, for different reasons, in the USSR by Gorbachev at the beginning of 1990. «In order to control the exchange of cash by drugs wholesalers, retailers and hawkers [...], the Treasury should unobtrusively mint new notes of 50 and 100 dollars, of different colour and size than the present ones. With a warning of 10 days, all the existing 50 and 100 dollar notes should stop being legal tender, and everybody should have to exchange his old notes for the new ones. Banks and other institutions should keep a register of cash transactions above 1,000 dollars.

Reports would be sent to the tax inspectors with the name and tax identification number.

«This would cause a great panic among those holding great amounts of cash. If the money were legitimate, nobody would have anything to fear. This may create confusion during a couple of months, but which honest citizen would not be ready to suffer a small inconvenience in order to get hold of these lawbreakers? This would hit the criminals where it hurts most, their wallet.

«Three things only could be done with money: to keep it in business, to spend it, or to save it. If it were invested through a bank, this plan could intercept the funds. If the benefits were kept in cash, the change of currency would cause its seizure. If it were kept in the business in 50 or 100 dollar notes, they would lose their value¹».

The model is shrewd, and is a good indicator of the impunity given by the present, anonymous currency. But this model shows the changes which have hardly any impact. After some months, the mafias would reorganize themselves and everything would be again as before. This model does not offer an information of the whole market, it only wakens the area of hidden and illegal economy. It personalizes and appoints liabilities, but only temporarily.

The second model could be called the *electronic purse*. It has been worked out by Jordi Domènech, engineer, and it suggests that every person should have his savings recorded in an 'electronic purse', designed to carry out operations directly with anybody else's 'purse' with whom a trade operation is to be carried out: with this system rents could be collected, and products and services could be sold and bought. The model is amazing. Everybody becomes his own bank. There could be financial middlemen who could collect transfers of currency for collective investment. An automatic fiscal collection could be worked out when some very

regular or security operations were carried out (periodic copy of the purse information in some given terminals).

Unless the purse had all the operations recorded, this model does not give information on the overall economy. Even if all the operations were personalized, it does not grant on its own any sort of liability, except that, in the case of judicial research, the judge may have access to the purse's information.

The third model, the *companies' cheque-invoice*, is today already in practice. Most companies carry out their operations among them by means of cheques and current accounts, with a data-processing basis. It would only be necessary to put in one single document the invoice and the cheque of all the operations. This model would avoid the feeling of excessive control, as it would leave consumers to use the already limited, present levels of notes and coins for their ordinary expenses, while they could be compelled to make cheque-invoices for important operations (some luxury items, real estate, investment bonds...). An important and trustworthy economic information could be obtained. The liability-appointing personalization would bear upon important operations and, in exchange, would not cause offence to the sensitive 'freedom' of many citizens who wish to feel, even if only in their imagination, little controlled.

The fourth model, the *total cheque-invoice*, would imply the exclusive use for all operations of money recorded in current accounts, and the suppression of all anonymous and uninformative currency. It would be a possibility in those societies which had already found the advantages -economic and anti-fraud- of the model *companies' cheque-invoice* and which decided to invest in the diffusion of the data-processing equipment necessary to extend to consumers the daily use of monetics. This greater economic information and responsabilization of liabilities would call for greater changes in the political and judicial structure ensuring the protection of privacy, while attacking the impunity of crime. These conditions are carefully studied in chapters 18 and 19.

After considering these four possible models, let us see now how their combination, to a greater or lesser degree, may lead to a change of monetary instrument under various present circumstances.

Exporting countries, but with a reduced domestic market.

In the case of a country with a simple domestic market, but with a major export market (for example, certain African or Central America countries), a combination may be made between 'notes with few monetary units' for lower consumption operations and a 'nominal and informative cheque-invoice' for really important operations such as: expensive or de luxe products; wholesalers; all the investment or purchase operations among domestic companies; import-export operations; public administration operations.

We must ensure that the most important, and the most strategic, volume of money movement be under an independent judicial control and at the same time supply information for a joint economic management. For small consumption it will not be too serious that anonymous paper-money be used in small units. It may also be established that this small units be valid only for a certain period of time (one week or one month) and that, in this case, it be supplied to every consumer according to the availability in his current account, through the savings banks operating the public's current accounts.

A mixed introduction (small-change anonymous currency for current consumption, and cheque-invoice for important operations) in a market with the above-mentioned features could avoid the action of mafias and local bosses, hinder public corruption, guard against multinational companies and control the army, while respecting at the same time the customs and the level of education of an important part of population, perhaps not prepared yet to use scriptural or electronic cheque-invoices. These them could be used, however, by companies and the public administration.

Industrialized countries.

A very different case is that of industrialized countries which have very complex and sophisticated markets. In these countries and in most international commercial networks, electronic money is playing the lead. We face here, therefore, an important decision to be taken.

In industrialized countries not only are companies and public administration ready for a general introduction of a monetary cheque-invoice system, but also small shops, services and the general public. In this setting, the telematic cheque-invoice has an effective possibility of implantation, and at the same time offers a consistent and democratic framework thanks to the already widespread diffusion of the different sorts of electronic money which are invading these countries.

The ECU (*European Currency Unit*) is a completely abstract currency which, at present, has not physical support of metal or paper. Europeans have, with the ecu, a historic opportunity to carry out the economic and political integration of the continent with one single currency, for recording purposes and personalized, thanks to the fact that, at the same time, all the monetic networks are already practically connected. (See annex: A plan against corruption).

International exchanges.

In the field of international trade the introduction of a cheque-invoice would not show any technical problem for its use, neither scriptural nor telematic, because in practice at present it already uses these supports. It is because of the joint inconsistency of the application of the electronic and scriptural money that the greatest and most serious imbalances take place in international trade and financial transactions and operations. The flows of long and short term capital not always correspond to actual purchases or investments. The massive movements of *hot money* and many of the purchases and mergers of companies produce a divorce between the monetary market and the market of actual goods and services. The capital market becomes largely autochthonous and follows its own rules of the game (creation of capital on capital) which endanger and put off balance the real economy.

A new international monetary system could be based on the cheque-invoice. In the same manner as the ecu, an ICU (*International Currency Unit*) could be introduced which would supply international trade with a monetary unit for the exchanges of real goods and services, without having to accept the dangerous, unstable and speculative hegemony of the US dollar. It appears evident that the creation and circulation of huge amounts of monetary units all over the world -through electronic transfers- with the only objective of speculating, taking advantage of the time differences or of the momentary imbalances of this or that stock exchange, is no good basis for any international economic order. And on the contrary, a cheque-invoice system which only allows to move money if it corresponds to some sort of real operation (goods, services and investments) may be a good basis.

We must study more in depth to which extent it is possible to introduce the hypothetic cheque-invoice monetary system in one or more States or at an international level, and viceversa: if it could be so at an international level without thereby implying any actual State. These questions are important not only to find out the consistency of the proposal but also to orientate and make possible the political decision in one sense or the other. (The international subject will be studied more in depth in a coming essay).

Countries in transition to real capitalism.

The growing acceptance of market mechanisms in the Eastern European countries offers a historic opportunity to avoid bringing into the trading system some of the main malfunctions of the 'capitalistic market economies'. In this respect, taking into account some of the positive contributions of the socialist countries is concerned, we must ask ourselves:

how can we avoid the denationalization and the introduction into the trading system of the land, with the resulting speculation and the burying of investment resources?

how can we promote a longed-for and necessary increase of incomes, not to be used exclusively to purchase consumers' goods -mainly imported- thereby dooming necessary domestic investments to dependence from external debt?

how can we create investment and capitalization instruments to avoid the speculation of stocks and the subtle and dangerous financing of real economy, which promotes the accumulation of money in a few hands, outside the circuit of real production?

how can we avoid, without further increasing bureaucracy, that the corruption of the old regime be perpetuated under new ways thereby hindering the strengthening of the lawful State?

These questions have a difficult practical reply within the present financial and monetary system. Taking inspiration from Joan Casals (1987²), who suggests the introduction of one single title -quasi-money- for the savings assigned exclusively to investment, side by side with normal money. The possibilities of the cheque-invoice would allow to be applied to this 'money' which strives to protect the investment cycle. One part of the incomes (of salaries, profits and dividends) might be set apart exclusively for investment, in this way the workers and employers would become joint owners of the companies. The much discussed return to the private ownership of the land might find an agreed solution. The state property of the land would change to communal property and, when necessary, the old private owners would be compensated, exclusively with 'money' assigned to domestic investment.

With this system total incomes of the population would increase but it would be avoided that this were used only to increase the consumption as they could only be used for investment. The market would have the actual use of each of the income parts (such consumption item or such investment in a given company). In exchange for this, the macroeconomic values could be indirectly controlled, by modifying the percentage ratio between consumption money and investment money in salaries. Insofar as the personalization of monetary instruments became general, hidden, unlawful or the remaining speculative economy would be curbed.

With the introduction of this monetary instrument reserved for investment it would be easier to separate flows and stocks, and therefore natural resources would be more easily included in the economic system, in order to avoid their present, antiecollogical, externalization.

In this chapter we have only tried to prove that in the subject under consideration there is a wide number of solutions, and that to apply more or less of them depends on the problems which we want to be face, on the possibilities offered by every reality for its transformation, and also on the risks we may be ready to take and on the ability to introduce political mechanisms to ensure the right performance.

Notes:

¹«Cómo dar buen uso al dinero de la droga», El País, 21.9.1989.

²Joan Casals, «El socialisme sòlid», La Llar del llibre, Barcelona, 1987.

Chapter 17. Monetics: a temptation or a challenge.

The use of electronic money, here and now, is becoming also an instrument of authority and control on people (lack of protection of privacy, risk of police repression, factually arbitrary taxation...). There are three options available: First, to radically reject any use of electronic money; Second, to suggest a use of it with guarantees; Third, to ignore the issue.

Electronics, as many other human inventions, was born mainly as a military instrument. It has its defenders and its opposites, both radical. Advantages and drawbacks, possibilities and all sorts of dangers are on the table. Its use may reduce the consumption of paper (and therefore of woods) but the screens may damage your health; it reduces transports, consumption of power and of some metals, but depends on an electric and telephone quality network; it frees from many repeating jobs in graphic arts, from secretaries, book-keeping and archives, but it creates 'addiction'; it gives a great autonomy and malleability of use, but also a great concentration of information in the hands of a few...

As a matter of fact, the present application of data processing in the field of money (monetics) offers practical advantages (less paperwork, self-control of bank services, greatest security against robbery or fraud...) but then it does not protect people's privacy against possible police and tax control nor against anybody's action with criminal purposes (bribery, manipulation of information...).

But let us go step by step. In the first place, what is monetics? it is a computerized currency, when it is interconnected at a distance (tele) it is also called telematic currency (teleinformatics).

The cashiers cards for credit or debit payment, are the best known element of monetics. But in order to have a teleinformatic monetary system working it is necessary to have a complex system of card readers, computers and data bases which update the inputs and outputs of the current accounts of all the card users.

The best known cards are those with magnetic strip, where among other things the secret code of the user is recorded. The latest cards are those the French call *carte à mémoire* (card with a memory), and smart card in English. They are also called 'chip card' because the fact that a chip is included is the most distinctive feature, which separates it from the magnetic strip card. The chip, a small, built-in, computer, is the key of its most remarkable features: a better certification (to know if the card is a forgery), a better identification (to identify its owner), a better guarantee (to avoid pirates from deciphering it), a better secrecy (to operate with cipher-messages).

The magnetic band cards have become unreliable. Any moderately skilled pirate can decipher the secret code and get hold of somebody else's money. On the contrary, the chip cards are much more reliable and allow besides new functions, among others that of carrying with us our own small bank, practically unassailable and inviolable. In an automatic cashier of sorts the card user credits it with a given amount of monetary units from his current account. He then carries 'cash' to effect payments in any establishment with the matching reader, without having to look up if his account is overdrawn and without having to carry bank notes, or coins or cheques. The card becomes a purse, a wallet and a cheque-book which may be replenished with 'purchasing power' in the automatic cashiers, without having to carry one cent, while nobody besides the holder can dispose of it.

The memory capacity of the chip-card allows to make inviolable the personal identification code and also to record other identification keys, more complex but more reliable and more within reach of everybody, so that the famous code must not be learnt by heart. In this respect there are already available different identification systems related to the physical features of the card's owner: finger prints, tone of voice, DNA structure, ballpoint pressure when signing... Generally speaking, chip cards become a means to preserve all that must be protected from forgery and listening-in: access key, confidential transmissions, medical files... They also offer the possibility of becoming a portable file: pocket organizer, personal telephone and address book, basic medical data...

Its great capacity to record and classify information allows to reduce the number of cards for every user (cashier, credit, company, medical, parking ... cards) to only one for all these functions.



Only the user has the key to gain access to the confidential information. To peruse joint information between the user and a body, for example a bank, two keys are necessary -as in a safe. A fraudulent attempt of one of the two parties blocks the access and may even imply the selfdestruction of the card.

So the chip card offers a great degree of privacy and at the same time leaves track of all the operations. It gives the opportunity to introduce it as a system which, while defending privacy, leaves track for the defence of the lawful State against criminal actions. Let us now see the social possibilities, positive and negative, of monetics.

The use of the chip card is much easier and comfortable for the user of any age, young or old. Many old people feel uncomfortable with the problems of having to pay and receive their change with coins and notes, or with the complication of automatic cashiers, which compel to learn secret codes by heart, or with the formalities of having to write and sign cheques. The memory card simplifies all this, and still more if it includes some inalterable, personal identification system, such as fingerprints, hand prints, or voice recording. These are patent systems, feasible and which are already used in high security areas.

Their application allows to introduce the security which some systems need to operate. «The smart card may produce fundamental changes in the economic working of society. For example, used as a key, they may supply the necessary degree of security to grant that the computer networks are really feasible. In order to have a completely electronic system of bank compensations and funds transfers, it is essential to ensure that non-authorized users may not have access to the system. Smart cards may create this actual coupling of data processing and telecommunications¹».

Electronic invoicing is being added to the electronic transfer of funds from the banks and to the electronic payment with card. «A dozen great European companies of the chemical area are planning to substitute in a few weeks the paper orders and invoices produced by their trade exchanges for a completely electronic system which will indelibly record the corresponding data. [...] This will allow to reduce the costs of the administrative departments and the transcription errors, and to quicken operations. Ecologists defend the electronic exchange²».

«In 1986 there were 36 million cards in France. In Europe there were 100 million, and over 800 million circulated in the USA. In the next ten years 80 million new cards will be emitted and 400,000 monetic terminals will be installed in Europe. The value of this industrial market is estimated to be 800 million ecus (in March 1987 one ecu was worth about 7 francs³)» That is, about 110,000 million pesetas.

Why is monetics so well accepted? «The cost reduction of the payment system is the main reason. So, the cost of the unit handling of operations carried out by cheque or magnetic card is of about 3 and 6 francs, respectively». «On the contrary, about 1995 the handling costs of payments carried out with memory cards will be as low as 1 franc⁴!». The use of monetics offers «great advantages to financial middlemen, as it reduces general expenses, mainly because of giving up cheques in about 60%. For shop-keepers, the use of this electronic system will imply the advantage of having an immediate payment system, while present methods - cheque, credit card- imply a delay. Besides, customers will go through the cashdesk much more quickly⁵».

Around 1994 about 80 per cent of cashier's operations in banks will have been substituted by automatic cashiers or by direct payment with card. The mixed card (magnetic band and chip) will be operating in all European cashiers. For the year 2000 a 'universal operative system' is being organized which will allow to carry out operations in any bank in the world.

Now, all these possibilities of the intelligent cards are being wasted. Since they were introduced in 1974, over 10 years have gone before the French banks accepted them. As a matter of fact, they are not thriving so much as their promoters had hoped.

The following comments are a significant intimation of the problem entailed by the lack of a consistent and democratic application of this technology, which hinders its generalization: «Intelligent cards is still 'a technology waiting for a good application'⁶». «Advanced products find no opening in a market which hesitates to accept the utmost safety.» «For the time being, control through fingerprints has been put aside because of the refusal of the unemployed to be submitted to such a severe control'⁷».

The fact is that, while generally speaking, citizens accept that control is inevitable, they do not like to feel totally harnessed. They need to believe that they are not, that they still have some degree of freedom and privacy. «Our privacy is paramount, and our nearest friend or relative knows us only partially. Nevertheless, our private world is foundering. As a matter of fact we are leaving an electronic track full of personal information behind us which, in time, will be able to disclose any feature of our lives, and which, depending on whom has access to it, will notably bear upon our future. This is the path towards which we are inexcusably bound. The future will not exist without the computer science, but precisely because every day our lives are more bound to the computers world, we must take protective steps. The best of all is to have laws protecting us from computer interfering and protecting our privacy. We should all have the right to know which is the information available on ourselves, where it is kept, who has access to it and for which purposes it is used⁸».

In Spain the preliminary draft of a bill prepared in 1984 by the Socialists, which aimed at acknowledging these rights, was stopped by the undersecretaries of the Interior and of Finance. The new draft of Organic Act for the Regulation of the Automatized Handling of Personal Data, does not seem to offer many guaranties of protection of privacy. In France there is a law which follows the guidelines of the European Agreement for the protection of people as far as the automatized handling of personal data is concerned. According to this agreement (in force in Spain since 1985, but not yet shaped in a law) personal information revealing racial origin, political opinions, religious or other convictions, and also personal information concerning health or sexual life, cannot be automatically handled unless the domestic law in every country grants suitable guarantees. Even so, the Agreement, after affirming that 'no exception will be admitted', accepts it when 'this exception, foreseen by the law of a signatory State, is a necessary step in a democratic society: for the protection of the State safety, of public safety, for the monetary interests of the State, or for punishing penal offences; for the protection of the rights and liberties of other persons'⁹».

The control system of these ambiguous provisions is entrusted to an independent body. When this is an 'authority' appointed by Government it 'allows coarse breaches of guarantees to take place through lack of a democratic control. The German federal commissioner, according to what is cynically established by the Federal Act for the protection of information, of 1977, 'will be independent and only subject to law. He will be subject to the judicial tutorship of the Federal Government. The federal commissioner will be under the Federal Ministry of the Interior. He will be subject to the hierarchic control of the federal minister of the Interior.' As the German saying goes, 'to hire a wolf to protect lambs'¹⁰». In France, on the contrary, the 'National Committee for Data Processing and Freedom, with an autonomous budget and executive structure, informs the Parliament and gives technical support to Magistracy. The 21 members of the Commission are 3 members of Parliament and 3 senators elected by their respective Houses; 4 judges appointed by the Upper Judicial Council; 4 data processing experts appointed by the ministers of Justice, Industry, Science and Education; 3 experts appointed by the trade unions, and four officials appointed by the minister of the Interior'¹¹».

As a matter of fact in Spain «there is evidence of the automatic handling forbidden by the European Agreement on political opinions and other personal information. Several outrageous decisions in the border control are the visible element which gives away the contents of the personal files of the State Security Bodies and Forces, enough to bear pressure on the Ministry concerned every time there is a project of regulation¹²».

It may be a good thing to analyse a social model of application of the computer science which is leading us to the dreadful world described by George Orwell in his novel *Nineteen eighty-four*. This actual model has been introduced in the Federal Republic of Germany, which, in spite of having signed the European Agreement on the protection of information, becomes the leader in its infringement and a model for other countries in the EEC. Let us see the description made by a German citizen¹³.

«The modern State today has a technology available to carry out a control of citizens which we must define as worrying. And the control process is still growing.

«The ghost of the 'Überwachungstaat' (the watchful State) is already a fact. Let us take some examples:

The computer-readable identity card is already a fact in the FRG (I have one).

The controversial census of 1987, which was carried out under a strong and unprecedented repression, has supplied the State with an instantaneous, frightfully accurate, demographic display for its plannings.

As a consequence of the antiterrorist laws, at the end of the 'eighties the 'Rafterfahrdung' (the network searching) was introduced, which is a sophisticated method to record people by means of computer filtering programmes. In the data archives of the BKA, the Federal Central Police, and of the secret service, which in German is called, meaningfully, 'Verfassungschutz', that is 'protector of Constitution', there are data of about 20 million people already. Data which concern their political attitude, reading tastes...

This method's improvement implies and explains at the same time the greed to store more and more data on any citizen, until the 65 million citizens be filed with their individual political profile.

As a matter of fact at present there is no control to stop or limit this process. To mitigate it there is an impotent Commission in the German Parliament, and the already mythical official 'responsible for the protection of data', who is an employee of the Ministry of the Interior(!).

«Also in the labour area -offices and factories- the control of white and blue collar workers is growing. In the large German companies it is customary to prepare a personal card for every employee, which supplies information on every step taken during his working hours.

«The surge of rationalization, and the introduction of personal computers in the public and private Administrations is almost to an end. The *Paisy* system, which controls personnel and organizes the human equipment, produces stress and isolation on workers, and damages their physical and mental health. The statistics of the IG-Douck trade union for 1987 show that with the introduction of computerized work places, the level of illnesses and allergies has gone up alarmingly.

«The technology of cable television -another popular achievement of the eighties in Germany- after five years experience, has become a new attack against the citizens' brains with its stupid blend of advertising and manipulated news.

«To finalize this matter, we must remember the closed-circuit television in every company, underground stations, supermarkets, streets..., which round off the feeling of living already in an 'Orwell' world.»

Within this framework, the growth of a movement of rejection of the total surveillance system can be understood, which criticizes not only its instruments but also the so-called 'technology of inhumanity'.

The export of the German model is a fact. «When in 1977, Rodolfo Martín Villa visited the BKA in the FRG, he received a lesson of postmodern machiavellism; [...] he was shown that the most aggressive centralism was compatible with a federal State. He learned how, thanks to powerful data-processing systems, personal bank data were connected to those of the Social Security, University, Justice and Finance Administrations. The programme was bought by the Ministry of the Interior as a model for the State of self-governed regions, and it has been an heirloom which the Socialists have taken up. While all over Europe the social regionalistic, autonomistic and nationalistic movements are increasing, which claim for a decentralization and self-government or independence, the new technologies allow the States to introduce systems of centralism much



stronger than what had been born in the past. Strategic data-processing may empty of their contents political notions such as federalism, autonomy or independence, depending on who is controlling the central computers¹⁴». The Guardia Civil (Police) computer, called Duque de Ahumada, belongs to this plan: «It is basically dedicated to the repression of crime and to the control of salaries and armaments. [...] Data of the antiterrorist warfare, besides descriptions of alleged ETA members and their movements. In the breaking up of the Madrid commando of ETA, computers have allowed cross-information on the Basques living in Madrid». This «intelligence network is connected to the police, which also has another large computer: Berta¹⁵».

In the face of all these facts, a part of the population may think that anonymity of currency is a rather positive factor, as it is a protection against the *big brother* (the State).

Following this reasoning, the introduction of a monetary instrument such as the telematic cheque-invoice would call for an already 'clean' society, a democratic one, which would not use the new currency as a control tool against the people. To suggest a change of society through a change of currency would amount to start building a house from the roof.

The objection is correct. But we must also consider that the problem, up to now, is that all attempts to start building the house by the foundations and walls of the social revolution, have been swamped, without any roof to protect them, neither from factual powers (old or new), nor from the subsequent corruption. Today, in the building area, there are techniques which allow, starting with a few very solid pillars, to start the house from the roof. Simply a few well located pillars, and the roof is a protection for the subsequent building of walls and interiors. No great foundations, nor great main walls are needed. Just a few well-placed pillars, and the roof acts as a protection for the construction of walls and interiors.

If a number of rules of the game are not changed, the introduction of the telematic currency without guarantee is an enormous 'Orwellian' danger. But this is the path already taken by the States, the banks, the police, even when they accept laws or agreements: they ignore them, as we have seen, through artful means or through control methods of formally acknowledged rights.

We must then find if there is a way to introduce a new monetary system to change the rules of the game which allow up to now to use the control systems only against the people and in favour of the powerful. It is easier to accept a control if you think that it is the same for everybody, citizens and rulers, and if, at the same time, positive results become apparent: social solidarity, improvement in the solution of conflicts, less police repression, lower taxation, more autonomy...

In the field of macroeconomics there is another group of unsolved problems, produced by credit cards and by the new means of payment which do not go through the banks -created and offered by financial agents and by large trading companies. The use of cards is making still more difficult the effectiveness and credibility of monetary aggregates (M1, M2, M3, M4...), which are the system of macroeconomic information of Governments, and on whose basis they carry out their economic policy. The new payment means not only bear upon the composition of monetary aggregates, but they also make extremely difficult the calculation of the speed of money. If up to now it was quite difficult to try to know what produces inflation and how it can be relieved, now, with electronic money out of traditional circuits and accounting categories, chaos is enormous. «In fact, the ease for transferring funds from one account to another, makes the relationship between currency stock and gross national product more unpredictable and, therefore, more unforeseeable¹⁶».

To round off this overview of the two faces of monetics, the key item of the security of the data processing systems must be considered: piracy and fraud. «A group of young Germans [...], the Chaos Computer Club, has been able to decipher all the entry codes to the NASA computer network, in such a way that they have all their data banks available and can even interfere in their operative programmes. This action exposes the weakness of the defence systems of these computers¹⁷». «The first case of a computer fraud was the one carried out by Stanley Goldblum, chairman of the board of EFLIC, for a total amount of 27,000 million pesetas, which he obtained by issuing a great quantity of false policies. [...] The banking area of the USA estimates a yearly loss of over 280 million dollars through frauds carried out by its own personnel (10 times more than the losses due to holdups. [...]) In the United Kingdom, one single employee of the data-processing area of an American bank obtained 1,600 million pesetas in just one day. [...] The great risk is terrorism. It is very simple to paralyse basic necessities activities by acting on the key points of a data-processing system; for example, traffic¹⁸».

To avoid this sort of problems there are very reliable systems (see next chapter) which are not ordinarily used on the argument that they are more expensive than the losses originated at present by piracy. The question is whether it is not possible, or there is no will to do it. The problem of these security systems is that they do not allow the fraudulent access of anybody, not even of those in control of the body where they are adopted. Perhaps, what is feared by the managers who do not consider profitable to spend money in security... is to lose the possibility of handling information on their behalf in order to conceal their irresponsibilities.

As far as the use of monetics in the western-industrial context is concerned, after having considered the main possibilities and their great dangers, we have three options which can be taken:

First. A rejection of the use of electronic money.

To take the decision to stop the proliferation, and to effect the suppression of electronic money, we must accept the re-proliferation of traditional payment systems (paper money). This would leave for solution, in present complex societies, all the faults which have been found up to now with this sort of anonymous currency.

Besides this, criticizing and rejecting the computer science -in this case, monetics- implies the risk of actually perpetuating it, if the way is not found to ensure its completely effective, practical and daily disappearance, a way which may not be easy for lack of popular support or because of the scientific-technical dynamics itself created in the West.

Second. Guarantee of a democratic use of electronic money.

Up to now, the introduction of monetics has not been submitted to any social debate nor to any global legal nor political framework, which would allow a consistent and democratic use of it. It has been the result of having technological research meet trading interests of companies producing monetic services and the interest in cost reduction, or to improve the banks' and other companies' services.

Some shy legislations set forth, but do not solve, a very difficult problem: how to reconcile within a lawful State, the necessary transparency of the citizens' actions with the protection of their privacy, which is the basis of protection against the abuse of the powerful. By whom and how are controllers controlled?

In the field of macroeconomics, the possible contributions of a consistent application of monetics is a matter completely unknown to most economists, who apparently have never even asked themselves about it, while its partial and rapid introduction is producing modifications of the financial system which they do not know how they can be discovered and controlled.

In the legal framework the introduction of monetics sets forth serious problems because new types of informatic crimes must be faced, but in no case the judicial bodies appear to have stopped to consider the vast possibilities offered by an exact and exhausting documentation system to research crimes and offences and to obtain conclusive evidence, whose default today prevents in many cases to condemn not only financial

scandals, but also a great number of the cases which are judged and which, directly or indirectly, are related with money. The inefficiency of justice therefore justifies the actions of a very dangerous repressive police.

All the above makes the study and submission of guarantees for the use of electronic currency a venue for finding solutions to some of the most serious problems that its disorderly introduction is causing, and at the same time to open the doors to deal with other problems which up to now had been rather insoluble.

These guarantees -which we shall develop in the following chapters- include a parcel of:

political steps (suppression of anonymous currency, creation of a communal statute, an automatic, non-personalized fiscal system...);

judicial steps (organizing, financial and documentary independence);

technical steps (legally protected separation of socialized 'book-keeping' information and of 'personal' information; setting of parallel 'data-processing networks' for the automatic comparison of accounting processing (Executive Body) and personalized processing (Justice).

Third. To ignore the issue.

The third option lies in considering that the reality of monetics is not important. For one reason or other, more or less interested or interesting, the idea is to leave things as they are in this matter.

To take this position -without becoming accomplice in the present situation- we must have the ability to act in other more important areas, which would indirectly imply a substantial modification of these 'secondary' monetary realities.

Notes:

¹Robert McIvor, «Tarjetas inteligentes», Investigación y Ciencia, enero 1986.

²«La facturación sin papel, en marcha», Cinco Días, 7.10.1987.

³Ugur Muldur and Nezih Dincbudack, «La monétique». Éditions la Découverte, Paris, 1987, p. 5.

⁴Ib., p. 5.

⁵«La CEE fija los derechos de los usuarios de las tarjetas de crédito», Expansión, 22.9.1988.

⁶«¿Qué pasa con las tarjetas inteligentes?» Investigación y Ciencia, noviembre 1989, No. 149.

⁷«La tecnología se adelanta a la sociedad en los sistemas de control», El País, 4.4.1990.

⁸Vladimir de Semir, «Somos un simple rastro electrónico», La Vanguardia, 26.10.1987.

⁹Julián Marcelo, «Informàtica i control personal», Novàtica, No. 74, p. 10.

¹⁰Ib., p. 17.

¹¹Ib., p. 17.

¹²Ib., p. 13.

¹³Dedy Jesgartz, «Informe sobre la Moneda Telemàtica a la RFA» (not published).

¹⁴Santi Vilanova, «Estat paral·lel», Diari de Girona, 9.12.1987.

¹⁵«El duque de Ahumada cabalga de nuevo», El País, 15.2.87.

¹⁶Ugur Muldur and Nezih Dincbudack, «La monétique», Éditions La Découverte, Paris, 1987, p. 118.

¹⁷«Un grupo de jóvenes alemanes consigue penetrar en el ordenador de la NASA tras violar sus claves», La Vanguardia, 16.9.1987.

¹⁸«Ladrones por ordenador», El País, 18.11.1987.

Chapter 18. The taming of the bull.

The second hypothesis is the one which seems to us as the most suitable, namely, a guarantee of a democratic use of electronic money. In order to work it out we suggest:

First. The suppression of all anonymous currency (to be substituted by a single system of electronic currency for all: wealthy and poor, rulers and subjects).

Second. The protection of personal data (only accessible to the interested party and to an independent Justice, when a sentence must be documented).

Third. The socialization of accounting data in order to go beyond the centralist planning and mercantilist chaos; to balance the monetary mass while avoiding inflation-deflation; to re-distribute surpluses in a solidal way and to improve/outdo present fiscal systems.

As we have seen the proposal of a new monetary instrument may include the possibility of a consistent and democratic application of monetics: electronic system of funds transfer activated by intelligent, personalized cards, difficult to bias.

In order to attempt to avoid the dangers of monetics, and to take advantage of its possibilities as an instrument of social change, we must find a framework of social, trade, economic, judicial and political rules of the game, to ensure an appropriate use of monetics, which must be that of an instrument to define liberties and solidarities. In this chapter we shall present the application conditions to avoid dangers, and in the following chapter some of the possibilities of social change which may take place.

To choose to establish a system of guarantees for the democratic and consistent use of electronic currency is certainly risky, because, side by side with great possibilities, it seems that the first option could be legitimated (monetics as a control of the people while people cannot control those who control it). In order to avoid this danger the conditions of application of monetics must be very clear.

First. The substitution of all sorts of anonymous currency through a system of personalized current accounts, activated by intelligent cards which support the 'cheque-invoice' of every 'monetary' act, in such a way that corrupting and unsolidary black money cannot circulate without leaving trail.

Electronic currency should be the only one to be declared legal tender. All previous forms of anonymous currency (notes, cheques, coins, quasi-currency... would lose their value after this being noted in each person's (individual or collective) current account.

The suppression of the parallel circulation of the two sorts of currency -the present anonymous currency and the electronic personalized currency) is essential to avoid as much as possible foul play. If, as it is being done, bank-notes are not invalidated, most people will use electronic money -which leaves trail- for lawful operations, and the few who have control of anonymous currency will use it (without leaving any trail) for the same unlawful operations as always -blackmail, robbery, arms and drugs traffic, bribery...

The electronic currency information should be handled in a different way according to the following considerations:

- Personal data (name and current account number) would be protected under professional secrecy by the bank, which would only need them shortly to record the credit or debit into the account. Later they would be filed, under professional secrecy, by Justice which, besides protecting them against any interference, might need them for documenting its sentences. The indiscretion of bank and justice professionals not only would be legally punished but it would also be difficult to carry out without leaving trail (this is explained later on).

- Book-keeping data (goods, price, place...) would be socialized, that is put at the understandable disposal of the whole population, to avoid informative monopolies, to generate a free trade operation, and to rationalize the invention of money.

The present application of electronic currency does not consider these differences or guarantees. The results are known: anybody, with influence or money, may use the personalized information of anybody else to damage him; Justice still does not have available the exhaustive information needed to work properly. The results against the informative monopoly and trade corruption are almost nil.

In short, the fundamental principle of a democratic and consistent application of telematic currency is that in the market *there cannot be a currency movement without a corresponding movement of 'merchandise'* (goods or trade services).

Justice will be able to find out if there has been a currency movement without it being related to the sale or purchase of 'merchandise', a phenomenon which clearly shows that an unlawful operation has taken place. In the case of donations of money or presents of goods of some importance, it will be necessary to document them properly to ensure the legal change of property and to avoid them to become a cover for corruption.

Second. The protection of personal data, at present not granted by any of today's democratic, fiscal or monetic systems, is fundamental. This protection must be ensured as much as possible with a number of consistent political, fiscal, judicial, social and technical steps .

If basic rules of the game must be found to allow a use of monetics with guarantees it is not sufficient to suppress anonymous currency if we do not define the body of institutions which are strategic to suitably handle the information derived from the generalization of electronic currency, institutions which not always carry out the 'formal' function with which they have been entrusted.

The problems stated in chapter 9 on how to obtain as far as possible independent cultural, political and judicial institutions, so that they may be free from the servitude of 'who pays gives the orders', assume here their capital importance. In the next chapter we shall explain in more detail the objectives and the working of what we might call '*communal statute*'. At present we shall only submit the essential traits to locate the bodies necessary for a good management of monetary information.

In most present societies we may separate the trade area (made by those who produce goods and services in the market, addressed to the obtention of profits) and the communal area (made by those who offer society services which are not subject to the market laws, many of them included today in the public sector or in non-profit institutions).

It appears that the separation between *communal statute* (services and professions offered freely and which would be financed by the community) and *trade statute* (workers, investors, operators and inventors paid by the market) would avoid the market money ('power of wealth') to take in its service free professionals and communal services ('power of knowledge').

The incompatibility lists, always casuistic and easily broken, are unable to avoid the monopolizing of public influence in the hands of some well-situated few in the market and in public life. This factual power must be reduced as much as possible, as it also attempts on the lawful State. The main goal of this separation is to avoid trade money to become 'political' power and the communal-liberal service to become business.

This separation would imply:

- the existence of an absolute incompatibility between the practice of a communal activity and the practice of a trade activity; and also the incompatibility of most communal activities among them.
- the real inability -through a suitable ruling of the monetary circuits and of the sort of current accounts- to channel money privately obtained in the market towards communal activities and viceversa (excluding consumption, of course).

By means of these two mechanisms it would be easier to avoid the illegitimate intrusion of factual power (which is created in the shade of anonymous trade money) in general communal activities and, more specifically, in institutions of political, social and judicial rule, which are of a clearly non-mercantile vocation and tenure.

In the context of the communal statute we must create or find a body to look after the protection of personal data, and to watch/compare the reliability of the economic information supplied by the Government. Occasionally we have mentioned in this work the need to improve the documentation systems of the administration of justice, and also to increase its independence. If we do not want to create new institutions, it appears to us that the judicial body is the most suitable to take up the protection of the personalized data - as it has no power to impose a dictatorship- and, at the same time, these data are very valuable to carry out its function of investigating crimes and documenting sentences.

The same data processing system would only allow the access -also personalized- to the data bases of those members of the court in charge of a case requesting it. Any unjustified query, besides being technically difficult, would be legally punished.

It is clear that the most delicate point in our proposal of a general introduction of monetics is that of the independence of Justice, an institution which becomes the protector of the privacy and guarantee of the lawful State. In the following chapter we shall submit a framework to ensure its utmost independence and renovation. Here we shall only add a note on the self-control systems of the telematic networks, which make them virtually inviolable.

In order to avoid mishandling the information it would be necessary to establish self-control systems to ensure the utmost inviolability. There are several ways to do so. One of the most usual and reliable works with three parallel computer networks which process the same data. A very high degree of security is achieved, mainly if the hardware, the software and the human teams are different and independent.

These three networks would also control that the three networks (also highly inviolable) would not mishandle the processing of accounting data without personal references, which the centre for the socialization of information would need for economic functions.

Alltogether, it may appear very expensive and very complicated, these systems are already in use when strategic information and controls are at stake.

In «El Pais» of 12th March 1986, the data-processing coordinator of the provisional counting of votes for the referendum on the NATO explained how this process was carried out: «With respect to the data-processing mechanism which will allow to know at about 10 p.m. the provisional results, he does not disguise his satisfaction because he considers it infallibly reliable [...]. The data are introduced every 15 minutes into the central computer -*as a matter of fact there are three computers which work in parallel in case any failure in the system takes place*» (Antonio Humada).

For a simple recount of votes three computers are installed to avoid the failure -error, mishandling- of the system. Couldn't the same be done to ensure the reliability of the macroeconomic and judicial data?

The installation of three or five networks for the parallel processing of data -to ensure that the same results are obtained- is usual in many expensive and sophisticated «systems» (for example in space-ships and in atomic submarines). Why should it be considered expensive to install them in such strategic matters as the economic or the judicial system?

Third. The socialization of accounting data -not personal data-, that is the data concerning the type of merchandise, prices, places, ecologic qualities... must be available to all in an intelligible way at every level of interest.

Monopoly of information is power. Socialization of an exact and thorough market information -without personal references- might bring about a very effective free action in every area, if it were understandable and within everybody's reach. The control of mass media by private concerns -as a form of business- or by the State as an opinion control- is one of the most subtle and effective weapons in the hands of factual powers, for the purpose of perpetuating themselves.

A communal statute would permit the removal from the trading system of all the mass media and data bases, and also to de-nationalize and decentralize them.

The accounting monetary information -without personal references-should be verified with the data of the data processing network of Justice, to avoid errors or meddling.

Socialization of economic information would allow a range of possibilities which are now ruled out by the irrationality of the monetary system. Among these possibilities (which we shall study in the following chapter) we can mention:

- a protection against data hampering by all the powers;
- the people's awareness of the consequences of the actions of the several market agents;
- overcoming irresponsible control of economy by the large concerns or by the State, with the subsequent wasting of resources;
- automatic balance between activated monetary mass and the value of sold merchandise, and, therefore, control of monetary inflation-deflation;
- the takeover of actual, equilibrating and potential surpluses, as a step towards their solidary distribution, by means of communal salaries, among the population and as a system to take the 'communal' activities and functions off the trading system and the State control;
- the improvement of the present bureaucratic and non-functional fiscal systems, by equity and simplification.

The foreseeable conditions of application would be: the total documentation, pointing out of liabilities and elucidation of all trade and social acts, through their monetary component -always under an independent Justice.

Society could make use of these techniques to fight against the constitution of illegitimate powers without, however, limiting the legitimate freedom of every person within the smallest, established rules.

We would be naïve if we thought that this would be the final step to attain the disappearance of factual powers, of foul play and of monetary corruption, as the inexhaustible, human capacity and resourcefulness could always think up new and more subtle ways of domination. This, however, must not be an obstacle to consider that the introduction of these steps could not be a very important progress to instrumentally hinder most of the foul play carried out for the last 4500 years.

After these steps had been taken, most of them instrumental, we could set the bases to build rules of social game, with the well-founded hope that they would not be reduced, once again, to nothing; we might start to set the bases for a more genuine lawful State.

The application of these three steps should be made very carefully, both in the social and in the technical features. It would be necessary to carefully consider the feasibility and the special difficulties to apply the conditions of a democratic and consistent use of electronic money. As an example, the following should be considered:

how, and in which delay are the present payment systems changed to the new ones? What happens with foreign currencies, how are they converted and who holds them?

how are sufficient software, hardware and human resources to be prepared and who should have them available?

how should the creation of duties for lawful goods take place, and how the lawfulness or unlawfulness of some products (arms, drugs, industrial poisons) or services (should they become free services?) could be submitted to a political decision?

how should companies or persons be introduced into the market or into communal services, when they live thanks to present lawbreaking (prostitution, illegal traffics...)?

how should the centres for socialization of general accounting be created (by productive sectors, by territories, general...)?

how should the networks and the programmes for the diffusion and perusal of accounting data be designed (private and communal televisions and computers)?

how should all the data concerning the public management be published in a personalized way (the only exception) in the network for the socialization of information?

how should the dynamically equipped centre of economy be organized: finding out surpluses, collection of one single tax, invention-exvention of money, automatic distribution according to statutes...?

how should the Ministry of Justice be suppressed and Justice be organized in an independent and specialized way, with its own judicial police?

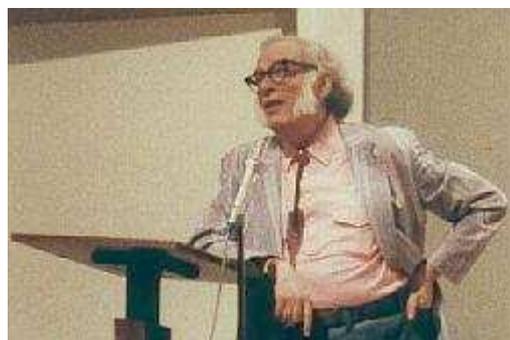
how should the systems for the protection of personalized data be designed and created (three networks, independent in Justice) with respect to the State?

...

Many of these questions demand a deeper study of their actual difficulties and of their possible solutions.

Depending on how the reading is done, these questions become serious dangers or vast possibilities. But what we are going through, and what future trends appear to be, strengthens many of the dangers and almost none of the possibilities.

Really there are two options at stake: the one is risky but with some grounds; the other is a non-option: the imposition of facts, of the determinisms of technology and 'security', which at present are shown to us as accomplished facts without asking for our consent, of offering alternatives to the model which is forced on us.



To put an end to this polemic subject, some striking words by Isaac Asimov:

«Reducing injustice, after all, benefits everybody. Computers may supply the necessary techniques to control, more effectively than ever in history, injustice even from computers themselves».

«But if computers watch computers, who watches the watchmen? the question is not new and it has a solution. Every guardian does not lose sight (electronic sight, of course) of the others. In a system of democratic government, this is called 'separation of powers'».

«Which further blessings will come from automation? One of the dreams is a world without money».

«The automatic electronic calculation of personal assets updated after every operation?».

«Let us imagine that everybody had a device tuned to his fingerprints... Through a pre-established operation, the device would indicate the exact condition of our current account, the amount available for our operations».

«Any imaginable operation -deposits for wages, investments, expenses, from the purchase of a newspaper to the benefits from shares- would only be legalized when the devices of all the parties participating in the operation were introduced in a computer terminal which would transfer the amounts (the electronic impulses) from one card to the other. We would obtain an endless procession of cheques instantly signed, for any value below the available cash».

«The Administration could automatically discount the taxes on any operation, proportionally to its amount and to the income level of the individual receiving the money».

«The idea of wealth would lose its importance in such a society, where there would be no cash flowing, because money would be less visible. And this would be more certain if the society of the 21st century found a logic way to reduce, at least partially, inequalities in the distribution of wealth; in a society without money it would be less painful to pay taxes, because operations would never be visible».

«Injustice? it would be reduced, because fiscal fraud and swindle would be more difficult. The inhumanity of computers is mainly that, when they are programmed and work correctly, they do not admit intrusions in their behaviour¹».

Notes:

¹Isaac Asimov, «Qui necessita diner?» Muy Interesante, 1984, No. 41.

Chapter 19. Let us imagine that...

Electronic money, duly controlled, may become an instrument to try to solve conflicts which up to now were unsurmountable: between documented liability and freedom of action; between social solidarity (socialism) and personal freedom (democracy; between creation of wealth and redistribution of surpluses.

It may bring about the separation and the free personal choice between trade activities (profit motive) and communal-liberal activities (non-profit motive). It may help to complement the information centralization (global viewpoint) and decentralization of action (individuals, communities, districts, townships, regions, nations, companies, organizations... freely confederated according to the subsidiarity principle). It may help the quantification of materials and energies dispersed or degraded and the collection of funds for their protection or substitution.

This is a difficult chapter. It is usually easier to limit oneself to criticize than to imagine possible futures. Even so, we shall submit a number of possible steps to give shape to new rules of the game. This list of imagined steps is only a sketch. We should like to help to promote research and debate, at a time when we have been left without reference models to orientate, from the present, the construction of a society taking advantage of the creative possibilities brought about by the fall of dogmas, and essaying other solutions other than the ones which have failed, to solve old and new problems.

All these steps can help to better fathom the inner dynamics of the suggested model, which will be submitted in greater detail in another volume.

We shall have mainly to imagine..., to imagine a bold stage, which we think is technically and economically possible. A stage which, in any case, may help us to reflect and compare reality to discover its failures and possibilities.

The rules of the game which we shall submit, in a short form, are just a list of explicit or latent suggestions which, in democratic cultures, have been tried or claimed. We think they may be, mostly, a contribution to research by those who want to find ways to go beyond socialism and capitalism. The only novelty, perhaps, is in the fact of presenting them as related parts of an overall model which can become feasible thanks to the capacity to have an informative instrument which points out liabilities to carry them out in a little coactive and little bureaucratic way.

Some aspects of these rules of the game are a *sine que non* condition for a consistent and democratic application of electronic money and, at the same time, a feasible objective thanks, precisely, to the possibilities brought about by electronic money. They look for a cleaner, clearer, freer, more responsible and solidary game:

1. Liability and new organization of government institutions: political, judicial and civic.
2. Independent, open, documented and free justice.
3. Free but documentally liable market.
4. Independent and free communal services.
5. Self-balanced, ecologic and informative economy.
6. Free political federation and civic confederation of the ethnic groups which make up the geopolitical society.
7. Balanced and interdependent foreign relations.

We shall finish this chapter with a description of possible benefits for citizens in such day-to-day aspects as those concerning citizens' security.

1. Liability and new organization of government institutions: political, judicial and social.

Public institutions and officials show a trend to convert their service responsibility into a power irresponsibility. The political theory born of the French Revolution consecrated formal democratic principles (independence among the executive, legislative and judicial powers; universal suffrage...) but did not make

sure of how to grant their observance. Lacking liability systems, public administration falls easily and with impunity into breach of trust and enlightened despotism: formal-official democracy and actual non-official powers.

In spite of the two hundred years from the proclamation of democratic liberties, even at a formal level they have scarcely ever been fully in force: monarchic restorations, executive despotisms, limitation of vote, association and expression... We may say that, except for some few States, and for some few periods, the legacy of the French Revolution must still find its formal, and even more its actual definition. Why?

Before suggesting possible ways to deepen democracy, here is one preliminary recommendation: it is necessary to situate the following proposals within a framework where socialization of accounting monetary information and automatic redistribution of money to finance cultural, relief and territorial self-government needs, might avoid the endless discussions on the financing of these activities. Most conflicts between the State and other institutions (cultural and territorial), caused by the lack of clear accounts, might be solved, thanks to automatic processes out of every discussion. In this way the accounting centralization would offer a socialized information which would help decentralization of Government.

In order to avoid the social control officials to become a power against the people, it would be necessary to start a number of 'anti-power' steps to bring about the free responsibility of the governing body. Some of the feasible steps, to develop with more rigour the democratic political theory and make it really operative, might be:

- Radical separation between the functions and the election systems of the legislative, executive and judicial bodies at all levels of society.

Ensuring the independence between the executive and the legislative powers would avoid to formation of 'executive parliamentarisms' -which govern by executive decree-, a procedure typical of any dictatorship. Ensuring independence between State (executive and legislative powers) and Justice would allow this one to defend the lawful State.

- Equal terms for common financing and advertising spaces for all candidates to any election. The impossibility of private financing because candidates would be enclosed in the communal statute and could only receive communal financing. Candidatures with open lists, from which persons would be voted, who submitted specific programmes and engagements, and who would not be submitted to vote discipline.

Equal terms for all options and the system of proportional representation would allow the influence of minorities (the seeds of future transformations). Communal financing could avoid the influence of pressure groups which 'buy' votes by means of bank credits or donations for electoral campaigns. Open lists would allow to ask for personal liabilities from the elected, in whom electors have deposited their trust.

- Documented liability of all the acts of public control, when the legal term of office had finished, in face of an independent Justice.

We must strive for all 'responsible public person' to be actually so in face of Justice, and this will only be effective if it has the documentation of the decisions taken. Political immunity during the term of office must correspond to a total transparency when it comes to its end. It must be avoided that only 'God and history' be the ones to judge the rulers' 'liability'. For example, it must be avoided that, at the end of their term, public officials become (as it often happens) members of the boards of directors of the companies to which they have done favours. The publication of all the assets of public officials when they start their term of office and an auditing at the end are also systems of clarification and liability, which might become almost automatic.

- Limiting continuous re-elections with suitable systems, different for the executive and the legislative officials.

The present possibility of re-election 'professionalizes' politics and increases the possibility of transforming it into power; it makes the active participation of more citizens difficult, who are never 'prepared' to carry out public commitments.

- Reduction of all the functions that the State has usurped and their transfer to the civilian society (districts, townships, regions, ethnic groups, utilitarian concerns, communal bodies...) for their free exercise, independent and grounded on the citizens.

The reduction of functions of present statism is fundamental to avoid the reproduction of bureaucratic power structures. The welfare state should be substituted by the liability of citizens and their basic institutions which, united, should take up the free and plural management of communal services (health, education, information, arts, self-government...) and of productive activity (company, initiative, investment, work, innovation...) according to the subsidiarity rule (every level takes up what it can).

2. Independent, open, documented and free justice.

Most of the political theories formally acknowledge the need for an independent Justice. In practice, however, the State or the factual powers have found the way to make this independence only apparent, mediatizing it and conditioning it. The independence of Justice is a complex matter. In order to avoid this independence to be an excuse to create closed corporative powers, to perpetuate ruling classes..., a number of steps such as the following should be taken:

- Suppression of the system of competitive examinations and *numerus clausus* to enter into the body of judges.

For example: any lawyer with six years practice could register free in the school of judges (the Organic Law foresees this system of access but only for one third of the places). At the end he would act as an assistant for three years to a judge that the candidate would choose freely. If the judge, under his responsibility and public prestige, gave him his approval, he would be automatically appointed as judge and would start to practise in any of the vacant places which would always be available in order to improve the judicial service according to priorities in the budget of Justice. «A country with more judges than policemen could probably be more solidary and free than a country with more policemen than judges.» What can we expect if in Spain there are over 100,000 policemen and only 2,000 judges?

- Open associations of judges, responsible of appointments without any interference from the State.

Closed corporativism contributes to the constitution of factual powers. With our proposal, the corporations of judges would break their closed and classist structure (going from 2,000 to 6,000 or 10,000 judges would change magistrature also with respect to quality. Open professional bodies, with self-discipline among colleagues of every professional category, and the urge for prestige, honesty and effectiveness of the judicial body (endowed with the exact and comprehensive documentation to fund its sentences and prevent the possibility of bribery) are very important elements for making Justice self-responsible in the appointment and removal of judges.

- Financing Justice through a system other than the conditioning budget of the Ministry of Justice (an evidently surplus Ministry) is a *sine qua non* condition for its independent and completely free management.

For example, a percentage established constitutionally -on the GNP, or on the general State budget-administered with accounting clarity by the associations of judges, could ensure a free and effective judicial action against any interference or attempt to drown it through lack of money. The existence

of a Ministry of Justice and of a Government's budget for Justice attempts against the proclaimed necessary independence of this institution.

- The activation of judicial procedures does not only demand a greater number of judges but also their specialization, diversified by subjects and areas.

For example, every trial judge, in his territorial level, would carry one only case until it was finished. The existing judicial specialties, and those which would have to be created in such a complex world as ours (penal, civil, political, medical, mercantile...), would allow a much more exact action to solve specific conflicts of every social group. The judicial extension to all territorial levels (district, township, region, ethnic and interethnic groups...) would allow to solve at every level many conflicts which today are piled up in provincial or state courts.

- With the suppression of anonymous currency, the possibilities of abuse by Justice are instrumentally and practically much reduced. With informative and personalized currency, Justice - which protects against any interference whatsoever the monetary data bases- has, at the same time, an exhaustive and exact information to document -in public, if necessary- many of its sentences.

There is a terribly great mistrust generated by Justice among population, because the scandals of bribery, the lack of means and the arbitrary sentences -for lack of conclusive evidence- are recurrent.

- Today's audio-visual recording systems and self-control telematic systems allow to solve greatly the famous question of 'who controls the controller? who controls Justice?'

Among other means, the installation of three informatic systems (each one with different machines, programmes and human teams) to process the monetary information independently and simultaneously would stop (to a high degree of statistical probability) all sorts of manipulation of information, and would grant the total inviolability of the citizens' privacy. The audio-visual recording of the judicial acts would help the lodging of complaints against judicial outrage and the revision of sentences at higher levels.

3. A free market, but documentally liable.

A clear and responsible policy, based on a lawful State guaranteed by the impossibility of unpunished wrongdoing by the factual powers, and by the independence of a documentary Justice, is an element of fair rules of the game, which can improve the highest and best liberties, responsible in all social fields. Beyond some crippled markets -planned or falsely free- which are shelter of all sorts of exploitation (on persons and on natural life), it is necessary to make true some steps to help the market with as many real liberties as possible within accountable and solidary rules of the game. Without these rules of the game, the factual powers of any system decide on and against the remaining population. The introduction of a telematic currency could improve a policy of freedom and of social solidarity, as long as the market did work. Production and sale of utilitarian products is the wealth-generating motor, and its redistribution is not only a solidary attitude, but it is necessary for the good working of the market and for the wealth of producers (operators, workers, investors and inventors). Production is prior to consumption and investment. But generating consumption (purchasing power) and investment (credits) capacity allows to carry on producing more and better.

The 'free market' has been the lid for all sorts of foul play. The 'suppression of the market by decree', however, has been the lid for productive foolishness and ineffectiveness. The market is a very ancient and useful human invention. Even if it is prohibited, sooner or later it emerges again under shape of 'black market' or officially camouflaged under the name of 'socialist mixed economy'. The problem is not market yes or market no, but disorderly market or responsible market. These rules of the game might take into account, among others, the following elements:

- One single telematic monetary system, as a sales-purchase system allowing a documentarily liable freedom; supplying a total information to duly orientate the investments and production of free investors, operators, inventors and workers; opening a path to make state planning useless, and to contribute elements to overcome mercantilist crises.

The informative darkness of the present market does not help at all the liable freedom of the market agents (producers and consumers). This informative darkness, based on an irrational and uninformative monetary system, does not allow to know what is being produced nor what is actually consumed, and, therefore, stops a free action to reestablish the constant imbalances which are generated.

- The free competition and private initiative might help the production and sale of goods insofar as means were available so that this market freedom did not become a licence to help the foul play of the monopolies and oligopolies.

The documentation for every act of sale-purchase; the understandable and free socialization of all the monetary-mercantile information; the establishment of minimum antidumping prices; the substitution of company advertising through an agile and operative information of products and services in every area; the free hiring and unhiring; the establishing of an indefinite salary of forced unemployment; the communal support of savings; the suppression of all the Social Security fees and of taxes on production or incomes; the improvement of citizens' safety with the instrumental impossibility of frauds, swindles, unpaid debts, robberies and hold-ups... are steps which might help to create a market more responsible and free than the present one.

4. Voluntary and free communal services.

If the market function is to produce and consume goods useful for life, the function of the communal area is to offer 'cultural' services in the widest sense of the word. The feature of communal-liberal professions and institutions is that, since always, they proclaim themselves altruistic and unselfish. The confusion between the market and the communal area has included this one, usually, within the tertiary mercantile sector of 'services'. It has been allowed to become one of the most influential factual powers, that of 'knowledge', which is related to and is at the service of those 'having money'.

- It would be necessary to cause the demercantilization and the nationalization of communal professions and institutions, to put them at the free and unselfish service of all individuals, nationalities and collectivities.

To reach the gratuity of services, while helping the free practice of professionals and the freedom of choice of 'customers' or 'users', it would be necessary to supply the communal statute of a communal funding, to allow the free practice with the necessary equipments. The struggle between public and private -health, education, mass media, research...- is a deceit which attempts against the freedom of education (teachers), of expression (journalists) and of creation (artists) and against the free choice by 'customers' or users of the services. In short, it is a struggle between two private interests: the official private powers and the factual private powers.

- The access system to any communal profession and the working system of any communal institution might be similar to those which have been submitted for Justice.

Suppression of competitive examinations and tests, direct access after the studies and probationary period without *numerus clausus*, communal funding, total gratuity of services, limitation of the professional practice outside the communal statute, incompatibility with any mercantile job and remuneration...

- In principle the communal statute would be open to all the professions and institutions that have since always proclaimed themselves altruistic and unselfish. That is, according to their respective

deontologies, non-profit and at the unconditional service of anybody requesting their service for assistance, culture, etc. The communal statute would include in the first place, all the persons and institutions dedicated to the public administration (politicians and public official). There might also be included non-profit bodies and associations (sports, cultural, trade-unions, political...), and most professionals and institutions which today are discussing whether they are public or private in the field of health, education and information, research, assistance...; also, the professionals in the field of culture and art (writers, artists...) and of religious communities.

The main feature of all these services would be their gratuity and, therefore, they would be financed by the community. The community would pay the persons, the equipments and the expenses of the daily operation. The second feature would be their total freedom of action within the communal statute: everybody could carry out his profession as he thought fitting, as long as his help were free to 'customers' and did not harm anybody, under sanction of his professional association or the corresponding specialized justice. In the current accounts of the persons of the communal area - individuals or institutions- only money of communal origin could be deposited. In this way the 'operations' of those having money to control politics, Justice, education, health, information... would become difficult. It would therefore be incompatible to receive money from the 'community' for a communal job and, at the same time, to receive money for mercantile jobs or operations.

- The amount of money necessary for financing those included in the communal statute could be obtained mainly by the communal creation of money (now this creation is mainly done by the private bank). So the money for the public services would not come out only from taxes nor from emissions of public debt. This is one possibility which an informative monetary system can offer: to know how much monetary value must be created and to distribute it so that production may be consumed. (It is one of the hypotheses we are studying and which can upset the conventional views of economy. Because of its importance it will be dealt with in a separate essay).

To understand the dynamics of the communal statute something very important must be underlined. The communal sector does not produce goods directly essential for survival. We can say that it is an addition, very human, and important, but still an addition to the actually basic world of the production of 'material' goods for life. In the market dynamics goods are created, bought and sold. Its consumption surpluses allow those not producing 'material' goods to consume them, and, therefore, to be financed to buy them. If the production of consumption goods diminishes, the retribution of those depending on the communal statute in time will inevitably diminish. This will push them to help to produce more or better, either directly (getting into the market), or indirectly (improving education, health, research, services, information, politics...).

- To make this dynamics feasible, everybody receiving communal salaries or allowances would have a number of communal 'points' allotted. The total sum of points allotted with respect to the communal monetary mass would give the monetary value of the point, which might vary according to the value of the consumption production, on the one hand, and according to the total number of points allotted, on the other.

In this way a feed-back mechanism would be established for self-regulation, which might be a good system to avoid the bureaucracy of the public services. The competitiveness which improves service, would take place in the whole of the liberal professions, thanks to this self-regulating mechanism - variation of salaries according to the value of points-, and it would also take place within each professional category, by stimulating the increase of salary and/or category. So, in this last case, in order to reward a well done job in the communal sector, it could be established that each 'professional category' might vote every year a given percentage of associates so that they might step up in the professional category as far as salary was concerned, even if they had not the preparation or there were no places available- to get there from the point of view of the professional practice.

- Every communal professional could go into the market and viceversa, but with a waiting time and cautionary steps, to be applied according to cases.

The separation between the two statutes would also allow the creation of a mixed statute (communal-mercantile) to help either crafts, or some works and services of general interest which need political prices, but for which the help of private capital is missing to carry them out.

A daily application of the distinction between the mercantile sector and the communal sector would evidently present a number of doubts and objections both with respect to the distinction standards, and to the process of gradual and sectorial introduction. The study of these doubts, however, does not correspond to the level of diagrammatic exposition we are carrying out.

5. Balanced, ecological and informative economy.

Up to now, the economic system has been defined as an apparently balanced system: so much production is equal to so much savings-investment plus so much consumption. This balance has been deceitful, mainly because there was no available system that would document, quantify and direct the different trade flows; an impossible system under an irrational currency.

But the economic system as a whole is also irrational because, being a closed system it forgets the inputs and outputs of the system in their entirety. That is, it forgets the inputs of energy and materials, and their output with a larger degree of entropy, as residues or pollution.

A rational currency not only tries to help to equilibrate the economic system, but can also contribute elements to locate the balanced economic system within an ecological framework.

One of the functions of currency is to offer a homogenizing system of all the productions and of all the consumptions. But besides this, the function of a rational currency might be to offer information on the productions and their materials and energies, all of them heterogeneous.

This information might be very valuable to rationalize the use of materials and energies: by socializing the information on their use and penalizing or helping some production processes or some products automatically (introducing an ecological tax). With the income obtained the use of recirculated energies and materials might be fostered, a fund for the research and application of new, less depleting and less polluting processes might be created, and a plan of integral ecology (land, woods, water, air...) might be financed.

The information and the financing possibilities would help to get off the trading system, and to put under communal property all the natural resources strategic for the survival of mankind and for the balance of the ecosystems. The demercantilization of resources -under communal property and management- might avoid the squandering of many of them which today is carried out only because it is cheaper than other methods (as far as prices are concerned) or because they give, to some companies, more short-term benefits.

In this way we might start to consider that some, up to now, unquestionable 'economic goods' may become 'economic evils'. The economic growth, measured only with homogenizing monetary units may become very questionable if we consider it under the point of view of growth of the degree of entropy or of the production of pollution implied.

The working out of a lawful State, with equal actual freedom and solidarity legally for everybody, demands the establishment of an economic democracy, that is, of an economic system allowing actual freedom and solidarity for everybody also in trading aspects.

- The first social freedom and solidarity is to have a right to consumption, that is, to have money to buy what is vitally necessary. Without the ability to consume this vital minimum, and without free cultural-communal services, democracy is only for those who already have money and culture.
- The possibility of giving out money to every person just for their sake and of financing the communal services could be feasible thanks to the monetary system which would allow the right communal invention of money for balancing the market, and a simplified automatic fiscal collection.

- The quantitative and qualitative increase of consumption goods depends on the ability of the production agents to generate them. So, it would be necessary to strengthen those who produce private wealth (workers, managers, investors, inventors), because from their ability would depend explicitly the financing of those depending on the communal statute. The more or better private wealth, the more or better communal wealth for distribution. And better communal services. With this distributive system, private good would not be opposed to common good, but it could improve it greatly and, as a consequence, the common good would also improve private good.
- The overcoming of the inflation-deflation crises might be one contribution of a rational monetary system: in every sale-purchase operation the cheque value corresponds to the invoice value. The speed of circulation of money would be under control and it would not disturb the economic balance (ratio between the value of the offered goods and the value of the monetary demand), which would become almost automatic: it would be possible to invent communally, and in the right measure, the amount of money necessary for every increase of the trade value of production.
- The socialization of trade information, that is, putting it within reach of all the society, would open the possibility of a more intelligent and effective democratic action both in the market and in public finance, an action which would allow to go beyond the 'centralist planning' and the 'mercantilist misappropriation'.
- The necessary reduction of the legal working time, in order to face structural unemployment, might be financed by means of a communal plan avoiding the extent possible to inflict its cost on the companies or on the workers. Salaried work would become less and less important in the whole of production, and forced unemployment should be faced by restating the motto 'who does not work should not eat', while fostering creative communal occupations.

6. Free federation and confederation of ethnic groups making up the geopolitical society.

To defend actual liberties calls for the fostering of autonomy and independence of everybody. But not only individuals must be considered as persons, but also national persons. To avoid confusions in such a delicate matter we understand that national persons (also called *ethnic groups*) are those making up a geopolitical society (which usually is multinational and is co-ordinated, and often dominated, by a State. An ethnic group is a nation with a conscience of having a culture, an ethics and, sometimes, its own language.

Respect of human rights includes not only individuals and collectivities, but also human nations (ethnic groups), from the most basic nuclei (families, communities of neighbours, districts...) to the most complex ones (townships, regions, historical ethnic and interethnic groups).

- Respect to ethnic groups would demand their free and negotiated adherence to the federal agreement constituting the geopolitical society they make up either willingly or conditioned by the world geostrategic situation.

There is no important reason to keep the anachronistic centralist Nation-States, beyond that of fostering the concentration of power in the hands of despotic statisms. The free bond of every ethnic and interethnic group to a project of political society is one of the most important democratic indicators, and is the basis of any attempt of peaceful solution of the interethnic relations. In our nearest reality, the construction of a Europe of ethnic groups may be an exciting project to overcome the chauvinisms of the nation-states, unable, up to now, to create a European federation overcoming statisms, and to positively channel the resurgence of ethnic groups.

- The federal framework, protecting in face of the outside all the ethnic groups which make up the geopolitical society, would also allow the free multiple inner federation among them at all territorial levels for an effective and free government of each of them.

The districts, the townships, the regions, the historical ethnic groups and their respective autonomous governments may apply today, with due knowledge, thanks to the telematic information, the subsidiarity principle: each assumes what it can do, and federates with others for what it cannot do alone. This could be done, keeping in mind the different overall factors participating in the solution

of a problem. A complete information and a fair, undiscussed, financment allow the assumption of responsibilities, very interesting in order to attack the creation of centralist powers, and to foster the actual participation of citizens, starting the democratic practice from the basis.

7. Balanced and interdependent foreign relations.

In the hypothetic stage of the application of the monetary change in one single State, the new rules of the game might open new possibilities in the relationship with other geopolitical societies (States) and, specially, in the balance of foreign trade.

In a world becoming more and more interrelated in all aspects, a hypothetical global change must be relocated within a wide geopolitical framework in order to help to overcome the Nation-States and to give cohesion to projects of political federation of many ethnic and interethnic groups, as for example in the case of the construction of a Europe of ethnic groups. But it is possible that the necessary construction of a Europe, solidary among the different ethnic groups making it up, and solidary with the other peoples of the Earth, be not the project of the Europe of the present Nation-States.

Any change in the rules of the game of one of the present Nation-States, or of Europe as a whole, would need the establishment of a new system of relations with the rest of the world.

Relations should be restated at different levels:

- At the economic level: finding a balance between incomings and outgoings; to stop exploitation and to give back -when necessary-; to cancel the foreign debt generated by debatable bank operations; to foster the establishment of a new monetary system against the speculation and the hegemony of some currencies (dollar, mark, yen...).
- At the political level: to improve co-operation, overcoming military blocks and fostering the free federation of larger areas.
- At the cultural level: to respect the different cultures and economies, and to improve mutual knowledge and dialogue.
- At the ecological level: to improve the balance of planetary ecosystems and to reconvert contaminating industrial systems.

The suggestions which have been submitted all along this book in the monetary and trade aspect must now be applied in the interstate relations. In order to improve this change some principles, agreements and instruments should be established to allow:

- To stop the futile circulation of currencies and their speculative use in the Stock Exchange.

Money, as a notation in current accounts, could only take place from company to company, as a counterpart of a sale-purchase of merchandise -goods and services- or as an anticipated purchase power -credit- to buy some. The country's currency, therefore, could not be quoted in the Exchange, and it could not be speculated with.

- The equilibrium of trade balances among geopolitical societies to avoid the dependence of some and the imperialism of others, to avoid irresponsible foreign indebtment.

Recording every trade operation with abroad (sale-purchase, credits, interests) would help to obtain a very reliable information to attain an equilibrium between the value of imports and that of exports. Customs duties might become a regulating element of free trade and to burden both imports and exports if the agreed equilibrium of a bilateral or multilateral agreement of foreign trade were broken. This equilibrium would compel, for example, to pay well raw materials of the countries which have been exploited up to now, because, on the contrary, they could not buy manufactured products for the same value. It is absolutely unreasonable to expect to have an always favourable balance of trade,

because if this is so then other countries have it unfavourable. With this system the terrible problem of indebtment would be limited.

- Establishing the purchasing value for each currency with respect to the purchasing value of some given merchandise -or of a number of them-, a value as stable as possible which would allow, to relate the value of this currency with the others so that trade could take place under fair conditions. This could be a system as long as a rational international system were not introduced.

The present acceptance of dollar and of a few other strong currencies for international payments, seriously imbalances the world trade because they fluctuate according to many different interests: the dollar going up or down means wealth for some or poverty for others.

- The possibility of the world redistribution of resources, especially of production surpluses, thanks to the possibility of invention of money with respect to the surpluses in the domestic market, which in this way could be exported to lacking countries without having to destroy them for fear of not selling them or of prices sinking below the cost price.

When money is not documentally rational, its lack may stop another country from buying goods and produce a loss for the producing country which cannot sell it -in the case of a saturated domestic market. This infernal circle, which does not benefit anybody, might be studied with an informative currency channelling trade offers and supplying purchasing power to the possible exporting-importing dealer (with credits) and at the same time the possible consumers (financed by the community) of another geopolitical society lacking this merchandise.

To avoid immigration, because of the great differences of life conditions among countries, the possibility of granting non-retrievable credits to countries in difficulties, according to the unused, own productive capacity, might help to introduce similar rational monetary systems in other places. It would be necessary to keep watch, however, so that 'co-operation' did not become the cause of destruction of the market in the receiving country or of creating new artificial needs for their culture.

- The movement of people from one country to another, without having to change national currencies, thanks to the utilization of their own money card of international diffusion.

All the above rules of the game, submitted schematically, may not give a clear enough idea of the possible advantages that common citizens would have in their daily life. Trying to overcome this difficulty we might imagine their repercussions in such a complex matter as that of security.

Insecurity is today the excuse to strengthen the police statism. On the other hand, it does not help to avoid the *causes* of small delinquency nor to solve 'terrorism', always a profitable business for power.

With a system of personalized and informative telematic money, security would not need arbitrary, ineffective and corrupt police bodies. On the one hand, the personalization of monetary and trade relations, and on the other the solution of the main subjects of social violence (destitution, poverty, proscription, drugs... and the lack of federative freedom of ethnic groups), might contribute a drastic reduction of social violence.

The suppression of anonymous money would stop the practical realization of most crimes related to money (which are the most). The allocation to every person (especially to dropouts and jobless) of communal salaries, together with free cultural and assistance services, would strike at the root some of the causes of most present delinquency. A special help to women would allow them to be more easily free from the consequences of crimes which today are not even denounced (beatings by the husband, rape...) and would depenalize acts which present legislation condemns (abortion, divorce...).

The legalization, controlled by the monetary system, of the use and trade of drugs (alcohol, tobacco, marijuana, acid...) would avoid rackets and harmful adulterations of products; and would allow to eliminate the taste of subversive and dangerous adventure generated by the prohibition. Suitable treatments of detoxication in the hands of independent professionals with enough means, a clear information on the effect of drugs and the possibility of developing personal interests up to now forbidden for lack of means, seem to us better systems than police search.

Most common crimes (currency evasion, forgery of documents, swindles, blackmail, hostages, hold-ups, robberies, prostitution, white slave trade, pandering, traffic of drugs, arms, works of art, bribery of officials, politicians, judges, murder or devastations to order, extorsions...) need, use or look for anonymous money. Its suppression would stop the use of the *corpus delicti*. Probably new forms of delinquency would appear, but it would be a success if, for some time, most of the causes and instruments of the present ones could be eliminated.

The armed struggle for class freedom or for national freedom, within the framework of a society freely federative of the ethnic groups which make it up, and effectively solidary, specially with the underprivileged, would practically loose its inducement. But also without a possibility of working with personalized currency, as it would preclude the usual sources of financement of these organizations (secret funds, hold-ups, revolutionary tax...) and the traffic of arms.

All these steps might bring back the leisure of walking without being besieged by beggars, robbers, layers of bombs, or... by antiriot police actions.

The function of the police forces would be to watch over the respect of the rules of the constitutional game and the coexistence rules of every ethnic community. Under normal conditions the police might go unarmed. The execution of the rules of the constitutional game would not depend so much from repression -always ineffective in the long run- as from the taking-on of documented liability of free acts of persons in face of Justice, which would have available this documentation for investigating or judging a case. Insofar as the flexibility of democratic institutions were real, the voice of minorities would be heard much more easily, without condemning them to the use of violence.

These are some of the rules of the game which, one way or other, might serve to introduce and at the same time take advantage of the informative and personalized currency. It is understood that they are only proposals for a deeper study. It is always risky to explain complex and interconnected matters in a simple and straightforward way. But not explaining them may stop seeing the relation between the suggested monetary change and the possible new stage for the social change.

Chapter 20. Changing the key to open the door.

While the change of values, customs and behaviours is usually slow and it becomes dangerous to practice from outside the persons because of ideological or religious pressures, the instrumental change, today technically feasible, of a hypothetically key-tool, according to tragical historic results, may help to state, cleaner, freer, more solidary and liable new rules of the game than up to now. The central hypothesis is that the lawful State and the economic equity formally proclaimed by Western culture are impossible to reach under the present monetary system. With a new type of currency we shall be able to find out if this is really a key piece which favours the emergency of a new civilization or if, on the contrary, it is an unimportant element.

The Earth is sick. The human species has become the most dangerous pest for the planet's life, and therefore also for the human beings themselves. Human population increases over one million every five days.

Let us examine some of most serious symptoms of the sickness. The destruction of the ozone layer (probably by the carbonate fluoride gases) and the hothouse effect (produced by the massive combustion of hydrocarbon) worsen the already worrying pollution of air, water and soil, radioactivity, desertization, the exhaustion of non-renewable resources... All these facts produced by the human species attempt against the basic balances which have been forming during millions of years and which have allowed the development of life on this planet.

The growth of the world population worsens many of these imbalances. But paradoxically, it is not the areas of the world with a greater population increase who are mainly responsible for the destruction of these balances. The model of 'Western' civilization -industrialist, productivist and consumist- is the main agent of destruction of resources and of contamination. Transnational companies are the missionaries which carry it all over the planet. The dynamics of supernational neocapitalism needs the world expansion of its markets: it imposes an accelerated rhythm in all levels of life and produces a strong concentration of power of decision in a few transnational companies which are above the Nation-States and the international bodies.

This expansion of the markets appears, often, under the euphemism of 'co-operation with the underdeveloped countries'. It creates false hopes in millions of persons who cannot, and never will, live in the 'heavenly' consumption society without converting the Earth into a vast rubbish chute. The Western system offers 'goods' (and 'evils') and 'services' (and 'disservices') to a small part of the world population thanks to the exploitation of the majority and to the debasement of the planet.

The expansion of the markets, limited by the lack of purchasing power of the exploited and indebted populations, has been orientated for long decades to the military industry. In the last years, with the reduction of the arms race, produced by the changes in the East/West conflict, industrial compounds have found other openings for their 'pacific' expansion. In an indirect way, the Permanent Court of the Peoples, meeting in Berlin in 1988, offered a solution in this sense. After denouncing the World Bank and the International Monetary Fund as mainly responsible for the indebtedment of most non-Western States, the Court suggested to 'cut the military expenses per year in a 20 per cent and that the savings be applied to reduce the debt of the Third World. This would eliminate the debt in 5 or 6 years' as 'we must be aware that the Third World debt is slightly higher than a trillion dollars; and that the present expense for military purposes *in one year* is approximately the same¹'.

All this complex situation, -increased by the impact of the mass media- produces simultaneously alarm in the population and a paralysis in the politicians of the States and international bodies. At the same time, we are discovering that many of the great problems which affect us will become irreversible in the next decades if everything stays as it is, if we do not take conscientious decisions. And catastrophes will not only reach the poor, as up to now, the rich also will suffer the consequences.

It seems that present formal democracy has not been designed, nor is ready, to face complex problems nor vertiginous and permanent changes. Democratic political institutions are demonstrating that they are not able to or cannot take urgent or long term decisions. According to Harvard Professor Daniel Bell, 'the Nation-States are too small to face the great problems and too large for the small problems'. Politicians -together with Parliaments, are conditioned by the votes of citizens, who are not always aware of the seriousness of the situation or who do not want to lose their privileges. But politicians are also conditioned by the financing of

electoral campaigns. Banks and companies are the main supporters (either legal or illegal) of parties. The factual powers -thanks mainly to the anonymity of money- are the ones which, as a last resort, condition the taking of decisions through their support to the parties, bribing politicians, judges and officials, and through their control of the mass media (and therefore of the conscience of the population).

The States, with their available tools, are unable to protect themselves from the supranational strategy of the large banks, which dictate the international economic order (financial dictatorship), control more and more the same transnational companies and use the public posts of the States and of the international bodies to introduce the economic policy which suits their interests. «Corporations have started to be dominated by the magicians of finance, who know very little about production but know everything about financial strategies²».

The so-called «free market» -the panacea of self-regulation- practically does not exist anywhere, neither within the Nation-States nor within the world trade. Monopolies, oligopolies and public intervention cover almost all the strategic markets or the most profitable. And behind all of them, «helped by the revolution in the information and communication technologies, private bankers preside today a network made up of global finances³» which dominates all the markets -oligopolistic, monopolistic and of imperfect competition-. Even the market of ideas, of information and of politics belongs to this network.

All the proposals in favour of a new economic international order, of an improvement of the level and of the quality of life of an impoverished population, of the defence of environment... must not only go through the sieve of electoral interest of the States Parliaments and through the sieve of the information mass media, but also through the (undemocratic) right of veto of the United Nations, and, above all, through the right of veto of the International Monetary Fund and of the World Bank (the patrons trade unions of the «Money Mandarins»). These money mandarins, motivated by the short term benefits, are creating, without any democratic legitimation, a supranational economic order which bears upon the planet's life and which shuts the doors to the changes which should be introduced.

The central hypothesis which has been submitted in this book is the following: the bases of democracy -a State with law and social justice- have been and ever will be only formal -not real- for most people, as long as the type of currency allows the factual powers to go unpunished and a radical improvement of the economic science and of its practical effectivity be made impossible. To modify the type of monetary instrument appears therefore a necessary condition -even if not sufficient- for the necessary decisions to be taken democratically. In other words, as long as there is a sort of anonymous and uninformative currency, the political changes will be apparent, without much influence on the most important facts, because there will always be somebody with enough money to stop the right decision to be taken, or to diminish its effectivity if it happens to be taken.

A change in the type of currency might create the conditions to overcome this blockade and to open the door to democratic decisions. Without demanding a change of ideology nor of faith, without attacking what every society considers good, we basically suggest an agreement on the modification of an instrument allowing to make liable, to optimize and to modify the rules of the game introduced by every society.

The changes of tools are much less violent than the changes of imposed customs. «The trick of the change of hour shows how easy it can be to get everybody up, every day, one hour earlier, by stating that, from one day on, when it is six o'clock for the sun everybody should read that it is already seven o'clock. Without any doubt, to reach the same result directly or by coercion, many bills would have to be passed, many time-tables to be changed, to put up a great network of guardians... And, what is most disturbing, to bear many complaints and, perhaps, to have to face a few riots of the people who do not like to get up early⁴». This is the fun of instrumental changes, changes which are put in practice by the Governments at any time in economic policy, completely within the law.

Not always are changes necessary, but even when they are, they may not always possible. Inertia, ignorance or vested interests often stop changes from being introduced. In critical moments, those who have an interest in keeping a privileged situation foster a feeling that everything is right, that it could not be better, that human

condition is such and nothing can be done, that nothing is perfect, and that it is dangerous to look for a new situation.

Only when the crisis is serious enough feel people compelled to look at haste for other ways. But sometimes, because of the seriousness of the crisis, we lose the ability to find them when they are most needed. The crisis itself upsets and pushes us to trodden paths without any way out or to paralysis.

What we have been explaining tries to stimulate the need for change and to help to get it in a given direction. Change for its own sake is as absurd as is tradition for its sake. The direction is important, and sometimes it happens to be wrong. But the way to get there is not less important, and sometimes, because of ignorance, even the direction has been lost. In other words, we propose a tool to try to overcome one of the common problems of historical revolutions: that everything changes, but that the power of a few goes on.

Notes:

¹Permanent Court of the Peoples. «About the policies of the IMF and the WB», West Berlin, 1988.

²Howard M. Wachtel, «The Money Mandarins», Pantheon Books, New York, 1986, p. 3.

³Ib., p. 3.

⁴Joan Casals, «Europa a l'any 2025» (not published), Barcelona, 1976, p. 7.

Summary: the twenty theses.

1. Money has become, whether we like it or not, a key piece in human relations in many contemporary cultures.
2. Relationships among individuals, nations and societies grow or dwindle, are balanced or unbalanced, become just or are perverted, with, in and for currency.
3. This ambivalence of currency is caused by its application: instrument of control, of power, of corruption... or instrument of exchange, of responsibility, of shared information.
4. Another «responsibilizing-informative» use of currency does not depend, however, only from the good will and the morality of the people, but it depends also on the type of currency, that is from the features of the monetary instrument.
5. An biased viewpoint of the history of currency has made the Aristotelian vision of currency (third merchandise with intrinsic value) predominant over the Platonic vision (abstract monetary sign with which to make a rule of three).
6. Monetary transformations have shown that the «metallist» Aristotelian vision is not in a position to allow a balance between growing merchandises and a limiting material currency. The «nominalist» Platonic vision becomes stronger through the practice of the growing abstraction of today's monetary systems.
7. The features of the different forms of historic (metallist) currency are: anonymity, uniformity and mobility.
8. The instrumental features (anonymity, uniformity, mobility) of this sort of historic currency bring about all sorts of crimes with, in or for it; they make a metric and informative system (multicaptor) of all the significant facts of each sale-purchase operation impossible; and therefore, they prevent the experimental verification of any of the economic theories and policies.
9. The features of anonymous currency foster also monetization, mercantilization and prostitution of many human features, even of the most immaterial ones (training, information, research, health, law, politics, art, sex, spirit.), while, paradoxically, they do not help to solve satisfactorily the most basic functions of currency which would be to foster the exchange of goods (not evils) and services (not disservices) and to allow the equilibrium between production and consumption-investment in complex societies which cannot use bartering.
10. But currency can be, and probably has been during 7,000 years, at the dawn of the civilizations of Western Asia- an instrument with radically different features: personalization, diversification and immobility.
11. The features of a personalized and informative currency (cheque-invoice) provide: the responsabilization of all the free exchange acts (they leave traces); the development of a multicaptor system of all the features of every sales-purchase operation; and therefore, the possibility to experimentally compare most of the economic theories.
12. The clay civilizations used clay for a personalized and informative accounting-monetary system (perhaps an element of a wide pacification among townships). The metal civilizations used it to help and improve the exchanges and the warlike, corrupting imperialism. The paper civilization has used clay to control the markets and peoples. The electronics civilization is using it for monetary speculation on a planetary level and to ensure the control of populations.
13. But while the informative-scriptural-clay currency became slow, and the uninformative-paper-gold currencies became agile, the electronic currency allows for better information than the first currency and much more agility than the second ones.
14. Anonymous currency is a fact embedded in most civilizations, especially in the Western civilization and the cultures which have been colonized by it. Any proposal of a change of civilization has, with respect to currency, three options:
 - o First. Immediate and total demonetization -with the subsequent suppression of productive specialization and with the almost total self-sufficiency, combined with a bartering of goods and services.
 - o Second. The modification of the monetary system (substitution of the present anonymous and uninformative currency through a personalized and informative one, thereby demythicizing currency and reducing the area of responsible monetization to the exchange of measurable goods and services).

- Third. The consideration that currency is not a key subject, and therefore it must be left as it is.
15. The most feasible and positive hypothesis is the second one: this option, that is the modification of the monetary system, becomes a possibility and an immediate need (to go beyond «official history» which started with anonymous currency, writing, corruption and imperialism) hoping that it will help to walk towards the first option (demonetization and getting out of the trading system) in another historic state, which we do not feel probable in the middle term.
 16. The key issue in favour of the second hypothesis -modifying the monetary system- is to see if its practical application is feasible, and to value its dangers and possibilities.
 17. The use of electronic money, here and now, is becoming also an instrument of authority and control on people (lack of protection of privacy, risk of police repression, factually arbitrary taxation...). There are three options available:
 - First. To radically reject any use of electronic money;
 - Second. To suggest a use of it with guarantees;
 - Third. To ignore the issue.
 18. The second hypothesis is the one which seems to us as the most suitable, namely, a guarantee of a democratic use of electronic money. In order to work it out we suggest:
 - First. The suppression of all anonymous currency (to be substituted by a single system of electronic currency for all: wealthy and poor, rulers and subjects).
 - Second. The protection of personal data (only accessible to the interested party and to an independent Justice, when a sentence must be documented).
 - Third. The socialization of accounting data in order to go beyond the centralist planning and mercantilist chaos; to balance the monetary mass while avoiding inflation-deflation; to redistribute surpluses in a solidal way and to improve/outdo present fiscal systems.
 19. Electronic money, duly controlled, may become an instrument to try to solve conflicts which up to now were unsurmountable: between documented liability and freedom of action; between social solidarity (socialism) and personal freedom (democracy); between creation of wealth and redistribution of surpluses. It may bring about the separation and the free personal choice between trade activities (profit motive) and communal-liberal activities (non-profit motive). It may help to complement the information centralization (global viewpoint) and decentralization of action (individuals, communities, districts, townships, regions, nations, companies, organizations... freely confederated according to the subsidiarity principle). It may help the quantification of materials and energies dispersed or degraded and the collection of funds for their protection or substitution.
 20. While the change of values, customs and behaviours is usually slow and it becomes dangerous to practice from outside the persons because of ideological or religious pressures, the instrumental change, today technically feasible, of a hypothetically key-tool, according to tragical historic results, may help to state, cleaner, freer, more solidary and liable new rules of the game than up to now. The central hypothesis is that the lawful State and the economic equity formally proclaimed by Western culture are impossible to reach under the present monetary system. With a new type of currency we shall be able to find out if this is really a key piece which favours the emergency of a new civilization or if, on the contrary, it is an unimportant element.

Conclusion: the change of change.

«This will not take us anywhere. All the changes of model fail. Why should we waste so much ink and paper?».

Tired of trying to «change everything to discover that nothing changes» as in the process of the Spanish transition, or in the discovery that «socialism is the longest way to reach capitalism», we are tempted, as it is shown by the contemporary «political» theory and practice, to accept things as they are, with the historic fatalism therein implied, a fatalism unsuitable to Western people, who still want «to dominate» nature.

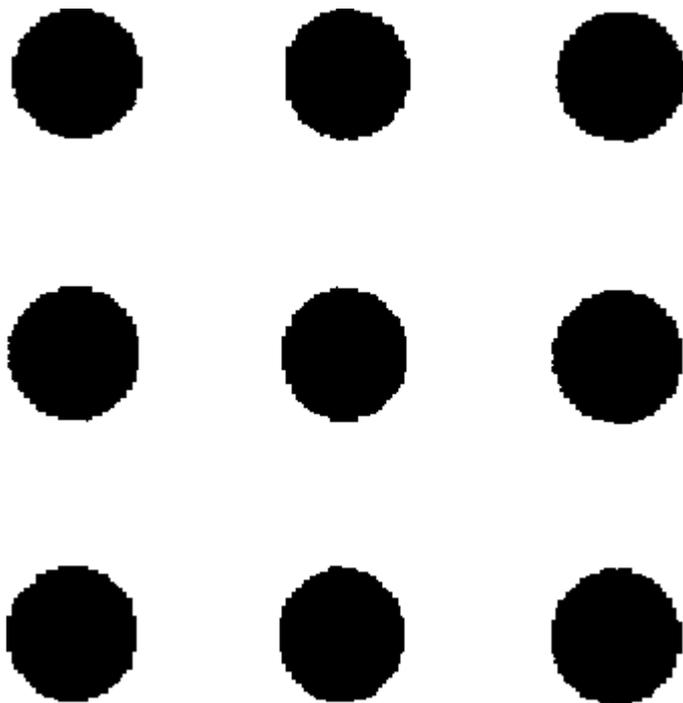
«History offers a long list of revolutions, whose results were, in great measure, identical conditions as those which the revolution wanted to overcome and substitute by a happy world». «The most sober minds may reach the following sad conclusion: 'Probably it would have been better to leave things as they were'¹». «One thing is to be aware... of the change of something into its opposite, but it is very difficult... to find that this change does not mean any change at all within the general model. Most human conflicts and many conflict-generating solutions take place because of this blindness²».

«A system going through all its inner possible changes without an overall change taking place in it, may be considered as involved in an endless game. It cannot produce from inside itself the conditions for its own change, it cannot produce the rules for a change on the basis of its own rules³».

In order to understand what it means an overall change, it is very useful to read the whole book by Paul Watzlawick on this matter. In this suggestive book there is, however, a short game which visually exemplifies this difficulty to create changes if the context is not modified.

We take the liberty of reproducing this example for those readers who do not know it.

«The nine dots shown in figure 1 must be connected to each other by means of four straight lines without lifting the pencil from the paper. The reader who does not know this problem, should stop here and look for his solution on a piece of paper, before going on with the reading and, above all, before seeing the solution in the following page (figure 2)».

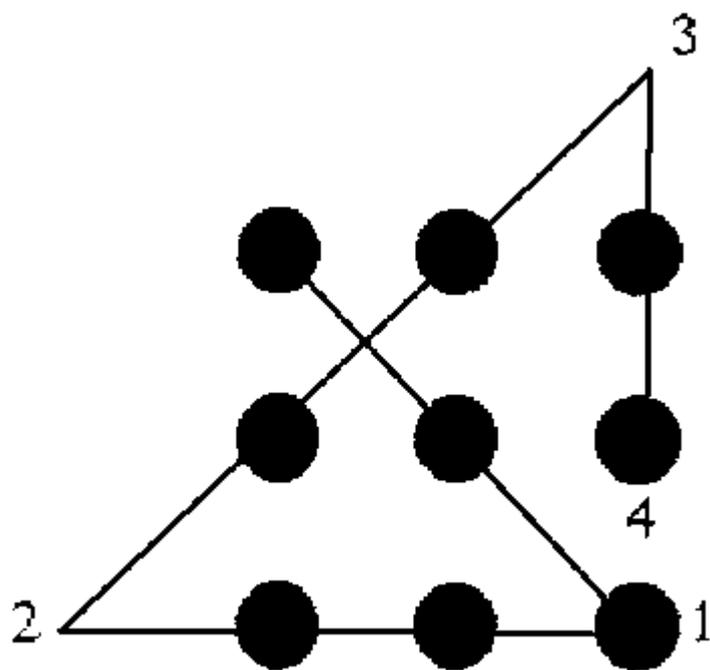


(Figure 1).

«Almost everybody trying for the first time the solution of this problem introduces as a part of the solution an assumption which makes the solution impossible. The «assumption» consists of thinking that the dots make up a square and that the solution must be found inside it, a self-imposed condition which is not contained in our instructions... So, the failure does not rest in the impossibility of the job, but in the attempted solution. Having created thus the problem, the combination of the four attempted lines does not matter at all: there will always be, at least one dot not connected. The solution consists of... leaving the field where the solution is sought. Those who fail and give up, usually feel a surprise in face of the unexpected simplicity of the solution (figure 2). The similarity of this example with many real situations of life is evident⁴».

«At one time or another we have all felt locked in some sort of cage and, then, it was the same to try to find the solution in a quiet and logical way or, which is more frequent, frenetically running round a vicious circle. But it is from inside the cage... that the solution appears to be a surprising ray of inspiration beyond our control». «It is clearly different that we consider ourselves as pawns in a game, whose rules we call reality, or as players who know that the rules of the game are «real» only insofar as we have created them or have accepted them and that we can change them⁵».

The difficulty to change this society, or to change people, lies in the fact that the problem, possibly, is not correctly stated. Some things are as they are, and need not be changed because this will cause a confusion which does not go anywhere. On the contrary, there are things, considered unimportant, which are not ideal nor important transformations but that, perhaps, are problems which may have a solution. To separate the key problems from pseudo-problems, to find which key instruments and changes of minimal rules of the game are possible to face these problems, is therefore, one of the important tasks. We must find the steps being the minimum common denominator of a wide range of interrelated problems. And, besides, they should be unknown steps, nor repeatedly failed, but of course to be tested.



(Figure 2).

In this research is included the hypothesis on currency as an instrument for the introduction of a number of measures which, accepted by the Western democratic tradition, or proposed by the new social movements, may become an efficient ladder in the attempt to allow the radical changes needed by mankind. All this without having to break most of the existing social relations, except those which the same democratic culture considers unrepresentable and dangerous.

Perhaps some of the suggested proposals may be helpful to people when, one day, the need and the will be felt to get free from the impunity of factual powers to try new ways.

Notes:

¹Paul Watzlawick (1974), «Cambio», Herder, Barcelona, 1985, pp. 41-42.

²Ib., p. 42.

³Ib., p. 42.

⁴Ib., pp. 44-45.

⁵Ib., p. 46.

Annex. A Plan Against Corruption. Suggestions for a regime of transparence.

Democracy loses its legitimacy when the lawful State totters. And the lawful State totters when the judicial system is not independent enough from all sorts of pressures and does not have available reliable information to support its judgements with evidence in order to avoid impunity of crimes and offences. But democracy becomes weaker also when politicians do not know how to get rid of corruption and when public administration is neither transparent nor effective.

In our book «**The power of money. Monetics against corruption**» a number of steps are suggested to ensure a consistent and democratic introduction of monetics (electronic money). These steps would endow Justice with an effective information system which would ensure the intimacy and privacy of citizens against illegal interferences and at the same time would provide the necessary documented transparence which the lawful State needs.

The book is a contribution to the discussion on which information must be gathered and which not, who must have access to it and for what. One of the main theses is that through monetics, in some very well defined conditions, society may have available a system to foster freedom (beyond the constrictions of bureaucracy) but also to foster self-responsibility, so that free actions leave the necessary footprints to allow the follow-up and clarification of criminal conducts (terrorism, drugs, arms, bribery, frauds, robbery...).

This is not the time to explain in more detail the technical features and the legal conditions which may make feasible in the short term a system of social self-responsibilization. But it seems convenient to point out the coincidence between the publication of this book and the public request made by politicians to find suggestions to make corruption impossible. I therefore take this opportunity to publicly propose for discussion some items of a possible plan against corruption. This plan starts from the gradual application of what might be called a «transparence regime».

The «transparence regime» is based on the hypothesis that the person or organization adopting it commits itself to make all payments and collections by means of special cheques through bank accounts, it therefore commits itself to effect all operations with nominal and informative cheques. Nominal, because they will only be valid if they show the names of the two persons carrying out the operation. Informative, because, besides its function as a cheque, it will also have a function as an invoice: it will show the goods or services which have caused the deal to take place, with their prices and features. The people under the transparence regime - because of their public function- or resorting to it voluntarily, will not be able to use cash (anonymous bank notes) under serious penal sanction. In order to improve the system and avoid bureaucracy and paper work, this system of cheque-invoice may become very agile and reliable taking advantage of the latest possibilities of monetics (electronic transfer of funds activated by intelligent money-cards).

For a democratic use of the «transparence regime» it will be necessary to state very clearly who will have access to this information, and how. The information concerning the operations of public institutions will be freely accessible to all citizens and will have to be submitted in a form easily understandable by the different kinds of people who look them up. On the contrary, the information of personal operations, and even those of politicians and public officials, will only be accessible to the person concerned and to the judicial system when it becomes necessary to start an inquiry or to gather documentary evidence for a sentence.

On the other hand, as this regime becomes more popular, the non-personalized information of the cheque-invoices (goods, services, prices, date, place,...) will supply very exact and thorough information to improve economic theory (with an increase in the quality of statistics, indicators, and so on) and to make economic policy more operative (optimization of the fiscal and financial system, budgetary control, separation between actual and speculative economic activities...). It will also help to radically improve control over the monetary mass (for every movement of money there will be a parallel movement of goods or services: it will not be possible to move money without reason), with a favourable influence on the control of the monetary inflation. An important part of present day social problems will have to be re-focused as a consequence of the new emerging framework: some solutions will become obsolete and, on the other hand, it will be necessary to face new challenges.

As concerns the safety of the data bases handling the information, it will be possible to increase very much the system's selfcontrol if the processing and storage of data are carried out simultaneously through three parallel networks (with different hardware, software and human teams), with extremely personalized and specified access keys. There are self-control systems already in use for high security sectors, which, when started, make manipulation statistically impossible. It would be necessary to guarantee the complete independence (political and financial) of the body having in charge the information. This independence would not be dangerous as it would have no effective executive power.

The application plan of the «transparence regime» takes into consideration different suggestions for the four main social groups where it could be applied: politicians, public institutions, private concerns, and citizens. The idea is that the plan should start to introduce compulsory mechanisms of transparence and responsabilization in the first two groups: politicians and public institutions; and voluntary mechanisms, with fiscal advantages, in the other two: private concerns and citizens.

Suggestions of transparence for politicians.

Most of the corruption problems come from the financing system of parties and elections. Citizens know little the whole of laws and mechanisms regulating, with little efficiency, the financing of the agents and of the mechanisms of political renovation. We shall not start now discussing the complex debate which must be carried out on the system of parties and elections. In any of the present-day or future possible models it would be necessary, however, to introduce a total transparence as a condition which can be demanded from those who say they are serving the common good. The game must be outspokenly clear. But in order to carry on this game it is necessary for all the players to be under the same condition of transparence. The main idea of the plan, in this case, is that the transparence regime should be fully applied to political parties, their staffs, elections candidates and elected charges. That means that any public or private contribution and any expenses of the party or of its officers should be under the «transparence regime». And that the judicial system -as we shall see, also submitted to transparence- should be able to clearly verify the lawfulness of the operations. Those who think that, under these conditions, nobody will be willing to go in for politics, forget that, perhaps, the lack of transparence is one of the many factors which stops many citizens from going into active politics, as long as the price be the dark game where not always it is the best who make progress.

Suggestions of transparence for public institutions.

Most of the faulty management of public funds and of the ineffectiveness of public administration comes from its excessive bureaucracy, which demands many formal controls which, in fact, not only do not prevent a faulty management but usually are a factor which increases it: tenders, auctions, awards,... restrain quick and responsible decisions, put up the price for works and services, and conceal inefficiency and maffias which, in short, harm the citizens and the country. The «transparence regime» gives consistency to what some administrations say they do as a rule, but which is not always carried out: that all cheques be nominal. The system would then imply that this should be compulsory in the whole of the public administration and, besides, cheques should indicate the reasons of the operation (invoice). To complete responsabilization of institutions and their officers, the transparence regime should include all those receiving public money (politicians, judges, army, public officials) so that the controllers may also be legally controlled under suitable judicial protection. It would then be necessary to consider if the transparence regime should be applied to those citizens and bodies that receive public aids and grants: both to know if the awarding systems are fair enough and to know if the right to get them and their use are legally correct. Public and mixed concerns should also be submitted to the «transparence regime»: not only because it is through intermediary companies -much less controlled- that not very clear operations can be carried out, but also because, through this system, almost half of the economic activity of the country (which should give example of a responsible management) would clearly inform of its management operations.

Suggestions of transparence for private concerns.

Most of the great companies and some of the small ones have today systems of inside information which allow them to have a very clear view of their movements and operations, both their own and of those carried

out with other companies. Electronic invoicing and payment are asserting themselves in wide sectors. But, because of the mistrust produced by the public sector and thanks to an unfair fiscal pressure (the honest ones who pay, pay for themselves and for those who do not pay: the result is that honesty spells ruin), it is not easy to impose the «transparence regime» if the companies and citizens are not first convinced that the public sector sets the example and that an effective public management justifies specific taxes. But the path to a transparence with guarantees seems democratically unavoidable, and it should be fostered by rewarding companies and private bodies willing to take up the «transparence regime». In this case a number of fiscal reductions and diverse incentives should be established to clearly favour transparent companies, granting them competitive advantages with respect to the others. The public cost of these reductions not only would be compensated by the reduction of costs of uneffective inspections and controls, but also by the increase of sure incomes and the higher enthusiasm produced in honest sectors, up to now disheartened by the unloyal and illegal competition.

Suggestions of transparence for citizens.

The technical difficulty of introducing a cheque-invoice system (paper or electronic) for the public administration or companies is no good excuse for not trying. It is technically feasible in the EEC. For the small companies and shops, however, and for many citizens, a short-term introduction of a general system of cheque-invoice may not seem so easy. It must also be considered to what extent citizens are willing to be submitted to a «transparence regime» without being sure, not only that institutions will set the example, but also that they will be in a position to stop a fraudulent access or with a totalitarian goal. It is therefore necessary to give time so that the results of the introduction of the «anti-corruption plan» in the public sector are clear enough. In the meantime, it must be kept in mind that the technical difficulty of introducing a cheque-invoice system for consumers becomes smaller and smaller. Intelligent cards (cards with a chip able to store information and to avoid a fraudulent access to it) are quickly gaining ground. In France is soon to be introduced an «electronic purse». With only one personal card, where each one puts the money of his bank account, it will be possible to make all sorts of payments: transport, services, shops,... The French banks and «la Poste» appear to be interested in this because it implies a reduction of costs for everybody: for the banks (to compensate a cheque is much more expensive), for shops (reduction of costs of management of cash-flow, stocks and accounting) and for customers (only one card much surer than the magnetic band ones, protection against theft or loss, protection of privacy).

Suggestions for the «transparence regime» within the framework of the European unity.

The ECU (European Currency Unit), the European currency, is a practically electronic pure Unit of Account. Paradoxically, the European Parliament has summoned a competition de design the future ECUS bank-notes, an anachronism contrasting with the quick advance of the networks of telematic money all over Europe. In the next few years will converge both the agreement to introduce the ECU and the total compatibility of intelligent cards in all the automatic cashiers and sales terminals all over Europe. Wouldn't it be advisable to think of a consistent and democratic application of monetics, which would convert the future ECU into a monetary instrument to foster transparence and participative democracy? The ECU-CARD would be the card of the EEC citizens, which would help to a good construction of Europe, improving the control by citizens of institutions, simplifying the participative systems of election and decision (in Norway the CIVIS card will allow to vote electronically) and optimizing the fiscal management and the distributive policies.

Proposals in the framework of international relations.

In the last months the organization **International Transparence** has been created, as a result of an alliance among several organizations and Governments, to end with corruption in trade relations. This organization, whose head office is in Berlin, is preparing behaviour rules, and agrees with the importance of starting to control the activities funded by public money. These «behaviour rules» stress the need to avoid the existence of «parallel book-keepings» and the introduction of inner and outer control systems to ensure the enforcement of the «rules». The «transparence regime» contributes a powerful control system for the execution of the «rules» on level with the challenge proposed by the electronic world operations.

The gradual introduction of the «transparence regime» must not make us forget that national and international corruption cannot be effectively fought while the dominating monetary system be based on the legal tender of anonymous currencies which instrumentally foster the double accountancy and impunity of corruption.

Social innovation must modify the rules of the social game as technical innovations unveil new dangers, but also new possibilities.

Democracy will lose legitimacy little by little if it does not find a system to ensure at the same time a lawful State, avoidance of corruption, protection of privacy, and a clear and effective public administration. The loss of democratic legitimacy leads always to totalitarianism. This Plan against Corruption wants to open a discussion on the best way to foster a deeper and responsible democracy. Those citizens, managers, officials or politicians who want to play fairly, have a trail to follow.

Barcelona, 24th February 1992 (First). 7th April 1993 (Second).