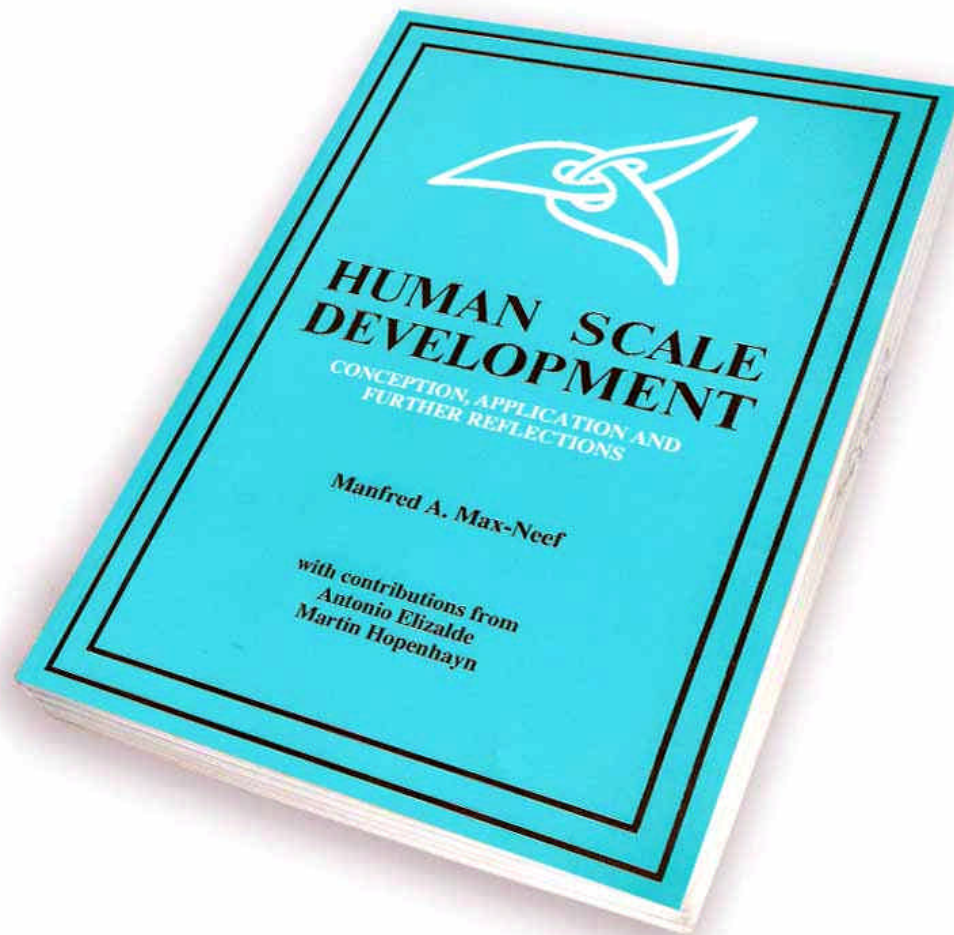# HUMAN SCALE DEVELOPMENT

CONCEPTION, APPLICATION AND FURTHER REFLECTIONS

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With contributions from
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Foreword by Sven Hamrell
Dag Hammarskjöld Foundation

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FOREWORD

The Dag Hammarskjöld Foundation has since the publication of the 1975 Dag Hammarskjöld Report, *What Now: Another Development,* concentrated heavily on the sectorial aspects of the alternative development strategies advocated in this seminal document. A long series of seminars has been organized under the Foundation's auspice or in cooperation with like-minded organizations to test the applicability of the ideas of Another Development—need-oriented, self-reliant, endogenous, ecologically sound and based on structural transformations—in areas such as rural development, health, education, science and technology (especially plant genetic resources and biotechnology), international monetary policy, information and communication, and participation.

An interesting and unusual example of this is the Latin American project on Human Scale Development, the objective of which was lay a foundation for future action programs by analyzing the concepts of human needs, scale and efficiency and by focusing on unemployment and local development financing, that is, concepts and problems that had not been penetrated in depth in *What Now.* This project was undertaken in 1985 and 1986; it was organized by the Development Alternatives Centre (CEPAUR) in Chile and the Dag Hammarskjöld Foundation, Sweden, and was directed by Manfred Max-Neef.

Ever since the results of the project were published in a Spanish edition of *Development Dialogue* in 1986, under the title of *Desarrollo*

a Escala Humana: una opción para el futuro, it has attracted wide attention in Latin America. And it is probably not an exaggeration to say that it is perhaps one of the most photocopied documents of its kind, having found its way to the most unexpected and remote places. According to records kept at CEPAUR, close to fifty seminars, symposia and workshops have been held on the basis of the report in different parts of the continent, many of them spontaneously organized by interested bodies without assistance from CEPAUR. Thus, "Human Scale Development" has become an important topic of the development discussion in South and Central America.

But there are also more concrete examples of the impact of the report on policymakers at the national and local levels. Governmental bodies in Colombia, Venezuela and Argentina have taken a keen interest in the ideas advanced. In Argentina, for instance, the National Mental Health Program is being adapted to accord with the ideas set out in the report, and in the Argentine province of Mendoza, communities, schools and hospitals are applying the principles and methodology of Human Scale Development in their work.

More significant, however, is the extent to which social movements and grassroots organizations have been inspired by the report, and this despite its, in pan, highly theoretical character it has, in fact, been popularized by grassroots organizations through posters and even through comic book style publications aimed at non-academic readers. Further evidence of this interest are the hundreds of letters received by CEPAUR and the Dag Hammarskjöld Foundation, requesting not only additional copies of the repon and copies of the project papers, but also assistance in the organization of seminars and workshops as well as practical and financial assistance in the implementation of Human Scale Development programs.

One can speculate about the reasons for this unexpectedly positive response, but one of them is probably that Human Scale Development, with its strong emphasis on the role of human creativity in development, has provided a conceptual framework which seems to show a way out of the sterile confrontation between traditional developmentalism and neo-liberal monetarism. Based on the principle that "the purpose of the economy is to serve the people, and not the people to serve the economy" and on a sophisticated but unavoidably controversial in-depth analysis of 11 te nature of human

needs, it is a challenging new contribution lo development philosophy.

This book is both an English translation of the original Spanish work and an extension of that work finto what the author calls "Further Reflections." It should merit the attention of the international development community as should the action programs now being worked out by different grassroots organizations and by CEPAUR. Many of them, including CEPAUR, also deserve being financially assisted. It is, therefore, sad to note that so far almost no such support has been forthcoming; development agencies still seem to prefer to lose their funds in conventional failures rather than having to justify their use in unconventional successes.

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PREFACE

The essays contained in Part One of this book crystallize the work, essentially transdisciplinary in nature, carried out in various countries in Latin America by a team of researchers. It was prepared over a period of eighteen months with the collaboration of professionals from Chile, Uruguay, Bolivia, Colombia, Mexico, Brazil, Canada and Sweden. Their expertise covered such academic disciplines as economics, sociology, psychiatry, philosophy, political science, geography, anthropology, journalism, engineering and law. The participants constituted a stable core group that guaranteed continuity in the processes of collective investigation and reflection inherent in the project. From the beginning, close working relations were established, thus nurturing an intense intellectual exchange. The participants gathered together three workshops during the project, which was conducive to a profound reflection on various aspects of the development problematique. In addition, special guests were invited to each of the three workshops and enriched the quality of the debate.

The proceedings of each of the workshops and the working papers produced by the participants form the basis of this book. The final compiling and editing was the responsibility of the CEPAUR staff, whose challenge was to integrate in a coherent manner the diverse inputs rather than just reflect the particular opinion of each of the participants. The document produced on the basis of the three workshops was then discussed at a final evaluation seminar at the Dag Hammarskjöld Centre

in Uppsala. *

The conception presented in this book is a contribution to development philosophy. As such, it offers suggestions, while remaining open to further elaboration.

This project was the result of the joint efforts of the Development Alternatives Centre (CEPAUR) in Chile and the Dag Hammarskjöld Foundation in Sweden. It grew out of the need to place the Dag Hammarskjöld Report of 1975, entitled *What Now: Another Development,* in the Latin American context, giving special consideration to the myriad changes that have occurred in the last decade. The text that follows aspires to have as interlocutors persons involved in regional and local development, planning, politics, academic disciplines concerned with development and, most importantly, those dedicated to the humanization of a world in crisis. Thus, the ideas presented here are an attempt to integrate fines of research, reflection and action that substantially contribute to the construction of a new paradigm of development, less mechanistic and more humane.

Part One of this book was published in Spanish as a special issue of *Development Dialogue* in 1986 under the title *Desarollo a Escala Humana: una opción para el futuro.* That version was then translated into English by Joey Edwardh and Manfred Max-Neef and appeared in 1988 as another special issue of *Development Dialogue.*

A new section, "A Note on Methodology," has been added to this book version, as have the final two chapters which constitute Part Two of the book.

The first of these new chapters is an expanded version of an essay on "The Pruning of Language," which was published in 1988 in modified form in *Development,* the journal of the Society for International Development. The second chapter is an edited version of the

Schumacher Memorial Lecture delivered by the author in October 1989 in Bristol, England.

Both of these additions to the present book represent, if not finished products, at least paths into new and open fields of research and reflection. They underscore the elusive and never-ending search for final answers in the quest for human betterment through development.

The Development Alternatives Centre, CEPAUR, is a non-governmental organization of international scope, dedicated, through research of a transdisciplinary nature and action projects, to the reorientation of development by stimulating forms of local self-reliance, satisfying fundamental human needs and, in a more general sense, to promoting human scale development.

Manfred Max-Neef
Executive Director, CEPAUR

ABOUT THE CONTRIBUTORS

Manfred Max-Neef, Chilean economist, is the founder and Executive Director of the Development Alternatives Centre—CEPAUR—in Chile. During the early 1960s he taught at the University of California, Berkeley, and later served at FAO and ILO as general economist and as project director, respectively. He is the Rector of the Universidad Bolivariana, a member of the Club of Rome and the author of *From the Outside Looking In: Experiences in Barefoot Economics.* In 1983 he received the Right Livelihood Award, frequently described as the Alternative Nobel Prize, at a ceremony in the Swedish Parliament.

Antonio Elizalde, Chilean sociologist, is the Deputy Director of CEPAUR, Secretary-General of the Universidad Bolivariana and Professor of Development Theories at the Diego Portales University in Santiago. He was formerly an expert with UNICEF and Director of Regional Planning in Southern Chile before the dictatorship.

Martin Hopenhayn, a U.S.-born philosopher of Argentinean parents, taught in the School of Economics of the University of Chile and worked as a Research Fellow in CEPAUR. A prolific and talented young writer of essays and aphorisms, he presently serves as an expert for the United Nations Economic Commission for Latin America and the Caribbean in Santiago.

In 1987 the three co-authors shared the National Prize for the Defense and Promotion of Human Rights awarded by Editorial Emisión of Chile.

PART ONE: HUMAN SCALE DEVELOPMENT

1.

RE-READING THE LATIN AMERICAN SITUATION: CRISIS AND PERPLEXITY

Manfred Max-Neef, Antonio Elizalde and Martin Hopenhayn

A Crisis of Proposals and a Crisis of Utopias

Nowadays, it is almost commonplace to state that Latin America is in a state of crisis. The descriptions and interpretations of this crisis are many; hence, the diagnosis of the disease is seemingly complete. Due to the complexity of the symptoms that we are faced with, no consensus as to the treatment has been generated. Perplexity, the outcome of a situation for which we cannot recognize a precedent, has kept us in a deadend alley and barred the road to imaginative, novel and bold solutions. However, intuition suggests that the convencional and tradicional

prescriptions, regardless of whoever may have proposed them, will not work. Nonetheless, there is a kind of paralyzing fear inhibiting the design of radically different approaches that could eventually emancipate us from this state of confusion.

This fear is quite understandable. It is not easy to put aside theoretical and ideological constructions along with their corresponding strategies for action that over the years has been the basis not only of beliefs, explanations and hopes but also of passions. But the fact is that the extent of this crisis seems to go far beyond our capacity to assimilate it fully, understand it and, hence, internalize it. This crisis is not just economic, nor just social, cultural or political. On the contrary, it is the convergence of all these, which, added together, become an entirety exceeding the sum of its parts.

At a political level, the crisis becomes very acute owing to the inefficiency of the existing representative political mechanisms in coping with the actions of the financial power elite, the increasing internationalization of political decisions and the lack of control of the citizenry over public bureaucracies. The increase in technological control over society, the arms race and the lack of a deep-rooted democratic culture in Latin American societies also contributes to the configuration of a political universe which does not have an ethical foundation.

At a social level, the increasing fragmentation of socio-cultural identities, the lack of integration and communication between social movements and the increasing impoverishment and marginalization of the masses have made the conflicts within the societies unmanageable as well as rendering constructive responses to such conflicts impossible.

At an economic level, the system of domination is undergoing widespread changes as a result of the following processes: the internationalization of the economy; the boom of financial capital with its enormous power of concentration; the crisis of the welfare state; the increasing participation of the military complex in the economic life of the countries; and the multiple effects of successive technological changes on the patterns of production and consumption.

These complex and interacting forces place Third World countries in a position of enormous disadvantage. They are forced, with the complicity of government and the ruling classes, to demand tremendous sacrifices at great social cost in order to "heal" their financial systems

and meet their well-known debt-servicing obligations to the creditor countries of the industrialized world. In the face of this uncertain combination of circumstances, which is more awesome than gratifying, the answers and quests for alternatives to authoritarianism, to neoliberalism, to developmentalism* and to populism become bogged down in ill-considered reactions and short-term programs.

We have dubbed this situation the "crisis of utopia" because in our opinion its most serious manifestation seems to lie in the fact that we are losing, if we have not lost already, our capacity to dream. We are struggling in an exhausting insomnia which impairs the lucidity so desperately needed to cope with our problems forcefully and imaginatively. Instead, we have become drowsy managers of a crisis which we feel is impossible to solve by our own means. This drowsiness, a product of the crisis of utopia, takes many forms: a sense of defeat, a loss of will, an over-excessive individualism, fear, anxiety, cynicism and demobilization.

The issues and causes of the past, for which we fought—successfully or unsuccessfully—seem today to be shrouded in mist. Our reasons become diffuse, and those of us who still retain a will to struggle end up, without realizing it, fighting causes that do not correspond to the real development issues at stake. Thus, our first desperate effort is to come to terms with ourselves and in so doing persuade ourselves that the best development that we can expect—over and above any of the conventional indicators that often instilled an inferiority complex in us—would be the development of countries and cultures capable of being coherent with themselves.

The proposal contained in this book does not purport to be a solution to our crisis. It is, nonetheless, an option. It is an alternative stemming from a long process of collective thinking by a group of Latin Americans who were supported in their reflections by a handful of friends from Sweden and Canada. In this book, we share our revitalized capacity to dream.

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* We have chosen "developmentalism" as the best translation for the Spanish "desarrollismo." It refers to the development philosophy promoted mainly by the United Nations Economic Commission for Latin America (ECLA) during the 1950s and 1960s.

Limitations to Our Development

If we restrict our analysis to the economic components of the crisis and observe their historical behavior in the economic and development policies implemented in Latin America over the last four decades, we observe a clear pendular process. The periods of expansion eventually generate financial and monetary imbalances resulting in stabilizing responses which, in turn, ultimately bring about high social costs leading to further expansion.

In this pendular tendency, we can identify clearly the two great economic factions which have been predominant in the Latin American context: developmentalism and neo-liberal monetarism. For different reasons, neither orientation accomplished its original objectives. However, not everything is negative in a failure so it is well worth devoting some careful thought to the manner in which each of these two perspectives have marked the economic and socio-political history of the region.

Frustrations of Developmentalism and Monetarism. Developmentalism was a deeply mobilizing experience. It was a generator of ideas and of currents of thought. During its period of predominance a number of important institutions were created: the United Nations Economic Commission for Latin America (ECLA), the Inter-American Development Bank (IDB), the Latin American Free Trade Association (LAFTA), the Andean Pact and important regional initiatives such as the Alliance for Progress. Within the different nation states many initiatives were encouraged, including planning agencies, various kinds of development organizations, policies that nurtured industrialization, banking reforms, improvement of statistical systems, people's movements and varied attempts at structural reforms. Also, during this period emerged the first strong arguments and theses advocating the need to protect our exports affected by an ongoing deterioration of the terms of trade.

Finally, it was those Latin American economists, ascribing to developmentalism, who became the determinant actors in the setting up of the United Nations Conference on Trade and Development (UNCTAD).

During the 1950s and 1960s, it made perfect sense to speak of an ECLA current of thought or of a philosophy of the IDB. A creative effervescence dominated these times. The positions of these organizations generated debate and for the first time the centers of power in the North argued back, if defensively. In the decade of the 1970s, this creative energy was slowly contained. The Latin American international agencies began to lose their original identity. Neo-liberal monetarism, which had already made its sporadic incursions—without managing to impose its character beyond the periods of stability in the economic cycle—began to break forth with all its vigor.

Obviously, the failure of developmentalism cannot be ascribed either to a lack of ideas or to a dearth of creativity. Much to the contrary, its contributions in creating a rich and diversified economic structure have been colossal. Its failure was due to (a) its inability to control monetary and financial imbalances; (b) the productive structure—particularly industry—that it generated placing great emphasis on the concentration of resources; and (c) the fact that its approach to development was predominantly economic, thus neglecting other social and political processes that emerged with increasing strength and relevance, especially after the triumph of the Cuban Revolution.

The history of monetarist neo-liberalism is quite different. *If developmentalism was a generator of thought, monetarism has been a concocter of prescriptions;* at least this is true of the way in which it has manifested itself in our countries. Within our context, it is not possible to detect in a clearcut way a neo-liberal thought or philosophy as such. This is not because this current of thought lacks foundations; it is only necessary to read the Austrian economists to understand this. The problem arises from praxis where this perspective has been applied dogmatically and without sensitivity to the Latin American context. Unlike developmentalism, monetarist neo-liberalism has had calamitous results over a shorter time period. In Latin America, it has been sustained by dictatorial or pseudo-democratic regimes. There is evidence enough that the pressure generated by the social costs of this model can only be kept under control by repression. Monetarist neo-liberalism resembles a Phoenician collapse that leaves nothing after it but a tremendous void, the positive appearance (in some cases like Chile) of conventional economic indicators notwithstanding.

No doubt, monetarist neo-liberalism should have been applied more congruently with the wealth of thought of its creators—especially the Austrians—but its failure in the Latin American context would have been unavoidable. This is true for at least three reasons. First, it is able to encourage economic growth, but it is not a generator of "development" in the widest sense of the word. Second, its assumptions of economic rationality are profoundly mechanistic and therefore cannot be adapted to the conditions of poor countries, where it is impossible to uproot poverty through the liberalization of a market from which the poor are excluded. Third, in restricted and oligopolistic markets, where the economic power groups are not confronted with forces able to check their behavior, economic activity is very speculative, resulting in a concentration of resources that is socially unbearable.

We must stress, finally, that both schools of economic thought share some elements, although with different intensity. Both have been affected by mechanistic tendencies and have generated economies based on concentration. From the point of view of neo-liberalism, growth is an end in itself and concentration is accepted as a natural consequence.

As for developmentalism, growth is an economic condition which will bring about development. Both assume that concentration encourages growth __ an ascertainable fact in statistical terms. However, neo-liberalism does not see any seed whatsoever to check growth, while developmentalism acknowledges that there are limitations to growth but fails to control it. The denouement of this story spanning forty years finally brings us to the situation of perplexity in which we live today.

Reactions to Frustrations. There are different reactions to the current situation. There are those, for instance, who hold that the disaster has not taken place after all. They make their point by stating that over the last two and a half decades income levels have more than doubled, that there has been a remarkable economic growth in most of the region and exports have multiplied. All of this is true. There are, however, those who unveil the other face of reality: that poverty is increasing in the popular sectors; that more than one-third of the economically active population struggles between unemployment and underemployment; that social deficits such as inadequate housing have escalated; and, finally, that the existence of a foreign debt which,

regardless of ethical considerations as to this solution, is clearly unpayable and may increase our poverty and deplete our resources to structurally irreversible limits.

There are also those who envisage the possibility of revitalizing schemes that were attractive in the past by amending some mistakes. Others, including the authors of this book, perceive an immense void where there is room to design radical alternatives. The second position is based not only on the perception of a worn-out historical experience, but also on an awareness that serious errors could be made if conventional solutions are applied to overcome this crisis.

In creating the future, there is either the risk of making errors of perception, or of making errors of action. Concerning perception, two serious mistakes are often made. The first is to believe that the Latin American crisis can be ascribed principally to an external crisis. The second, stemming from the first, is to assume that our depression is just a passing historical circumstance. Although it is true that external conditions do considerably influence dependent and vulnerable economies like ours, it is, nonetheless, also probable that a recovery of the capitalistic economy in the North will not affect significantly our own recovery. As the following paragraphs illustrate, the reason lies in our possible errors of action.

It would be a delusion to base a strategy for future development on the expansion of exports of primary products. Very simply, indicators suggest that the bulk of primary products will be affected, for different reasons, by unfavorable terms of trade. Moreover, others are already being replaced by more efficient substitutes. Another strategy based on the diversification of exports, that is, of manufactured goods, would inevitably come up against the protectionist policies of the powers in the North. Also, to assume a type of development that is nurtured by external' contributions of capital is ruled out altogether due to the serious and insoluble condition of indebtedness in which we are forced to live.

From what has been argued, it follows that our situation is not the result of a historical accident. In our opinion, the future lies in mustering all our energy to design imaginative but viable alternatives. The conditions for these alternatives seem to be quite clear. If the two schools of economic thought which have prevailed in the Latin American setting have not been able to satisfy the legitimate needs of the Latin American masses, a new perspective is called for which aims

at an adequate satisfaction of human needs. Furthermore, if future development cannot be sustained through the expansion of exports or through substantial injections of foreign capital, an alternative development must generate a capacity for greater self-reliance.

Objectives of Human Scale Development

This book proposes an orientation which would enable us to create conditions for a new praxis based on Human Scale Development. Such development is focused and based on the satisfaction of fundamental human needs, on the generation of growing levels of self-reliance, and on the construction of organic articulations of people with nature and technology, of global processes with local activity, of the personal with the social, of planning with autonomy and of civil society with the state. *

Human needs, self-reliance and organic articulations are the pillars which support Human Scale Development. However, these pillars must be sustained on a solid foundation which is the creation of those conditions where people are the protagonists in their future. If people are to be the main actors in Human Scale Development, both the diversity as well as the autonomy of the spaces in which they act must be respected. Attaining the transformation of an object-person into a subject-person in the process of development is, among other things, a problem of scale. There is no possibility for the active participation of people in gigantic systems which are hierarchically organized and where decisions flow from the top down to the bottom.

The State and Social Participation in Latin America. Human Scale Development assumes a direct and participatory democracy. This form of democracy nurtures those conditions that will help to transform the traditional, semi-paternalistic role of the Latin American state into a role of encouraging creative solutions flowing from the bottom upwards. This is more consistent with the real expectations of the people.

Although we do not claim to offer a historical and sociological

* By "articulation" we mean the construction of coherent and consistent relations of balanced interdependence among given elements.

analysis of the models of the states in the region, it seems important, however, to point out the historical inability of these states to create spaces for popular participation. The conditions that led to independence and the creation of national states in Latin America were followed by development processes which were promoted and controlled by the national oligarchies. In the realm of the political, these new states appeared as liberal democracies, while in the realm of the economic, their aim was capitalist development and integration into foreign markets. These democracies excluded the popular masses from political life, hence, depriving them of channels for social participation and access to political power.

The crisis of the oligarchic state was triggered by the restricted character of the spaces for participation and the limited access of the majority to social benefits. This situation generated populist regimes, the purpose of which was to combine increased popular participation with the formulation of homogeneous national projects geared to rapid yet secure modernization. The policies of populism paved the way for new forms of political representation—universal suffrage—and mechanisms for sectoral representation. As a form of government, the main contribution of populism was to recognize social groups which, until then, had been excluded from political activity. Since the state itself assumed responsibility for the integration of new actors in development, this resulted in a considerable increase in its regulating function. Greater political participation of sectors incorporated into the sociopolitical involved redistributive policies managed by the state.

The populist state was strong enough to gain legitimacy in the eyes of the traditional oligarchy. However, it was compelled to consolidate homogeneous national projects under pressure from such internal forces as powerful economic interest groups and from such external forces as imperialist policies imposed by the rich countries. These homogeneous projects were unable to reflect the heterogeneous nature of the sectors and communities which make up civil society. Hence, social participation and popular action were undermined by the authoritarianism inherent in the "single project," and by bureaucratic and paternalistic mechanisms which strengthened vertical social relations and the concentration of power.

The tension between homogeneous national projects and the diver-

sity of social actors demanding a role as protagonists in their future is repeated in the number of progressive regimes to be found in the region. These regimes did not seek legitimacy through political democracy which makes them different from the populism constituted by universal suffrage—but via popular support obtained through the expansion of social benefits and through making corporate-type trade unions believe that they were in control of many of the functions of the state.

In the last two decades, regimes based on authoritarianism and neo-liberal monetarism have dominated the Southern Cone of Latin America. In these states, political power is buttressed by the physical and psychological repression of the civil populations. Moreover, the policies implemented have meant the systematic decimation of the socio-economic benefits which wide sectors had attained under the protection of the populist or progressive regimes. It is in these repressive regimes that those processes of social participation and popular protagonism have been arrested. It is precisely within these regimes and in conjunction with the acute economic crisis that the democratic opposition is reassessing the need to establish an order based on political democracy with real social participation.

We wish to emphasize at this point the democratic nature of the alternative proposed. Instead of relying on stereotyped ideological options, this book advocates the need to develop processes of economic and political decentralization, strengthen genuine democratic institutions and encourage increasing autonomy in the emerging social movements.

The creation of a political order that can represent the needs and interests of a heterogeneous people is a challenge to both the state and civil society. The most pressing question, not only for a democratic state but also for a society based on a democratic culture, is how to respect and encourage diversity rather than control it. In this regard, development must nurture local spaces, facilitate micro-organizations and support the multiplicity of cultural matrixes comprising civil society. This type of development must rediscover, consolidate and integrate the diverse collective identities that make up the social body.

Processes which nurture diversity and increase social participation and control over the environment are decisive in the articulation of projects to expand national autonomy and to distribute the fruits of economic development more equitably. Hence, it is essential to prevent the increasing atomization of social movements, cultural identities and communities. To articulate these movements, identities, strategies and social demands in global proposals is not possible through the programs of homogenization that have characterized the Latin American political tradition. New institutional mechanisms capable of reconciling participation with heterogeneity are required on the part of the state. Also required are more active forms of representation and greater translucency in the practices of the public sector.

It is not the purpose of this document to propose a state model that promotes Human Scale Development. Rather, our emphasis is on empowering civil society to nurture this form of development. This is not to minimize the importance of the state but to develop further the potential role of social actors, of social participation and of local communities. Our preoccupation is a "social democracy" (or rather a "democracy of day-to-day living"), which does not imply a lack of concern for "political democracy" but a firm belief that only through rediscovering the "molecular" composition of the social fabric (micro-organizations, local spaces, human scale relations) is a political order founded on a democratic culture possible. We believe that in order to avoid the atomization and the exclusion of people—be it in political, social or cultural terms—it is absolutely necessary to generate new ways of conceiving and practicing politics. Thus, this book attempts to open up a space for critical reflection on the way we live and, more importantly, on the urgent need to develop a new political praxis.

Fads and Biases in Development Discourse. Beyond the limited synthesis provided in the preceding sections, our shared thinking has enabled us to reach some conclusions about the pressing need to modify substantially our concepts and approaches to development.

We live and work within a historical age which ignores the sub-history that makes it possible. Hence, on a day-to-day basis we observe the serious discrepancies that exist between the rhetoric and actions of political leaders and the expectations and ambitions of the popular sectors. We seek to justify our actions in the thoughts ascribed to the defunct hero of the day. We do this without even realizing the wisdom of the men and the women who raise the corn, and in sharing it with those who

share their misery, manage to survive—not because of what we have done, but despite of what we have not done.

We live and work within models of society that overlook the growing complexity of the real society in which we are immersed. Therefore, we watch the feverish and obsessive doings of the technocrats who design solutions before having identified where the real problems lie. We seek the justification of the models in the models themselves, so that when the solutions fail, it is not due to a failure of the model but to entrapments set up by reality. That reality, the presence of which is strongly felt, is not perceived as a challenge to be faced, but rather as a problem to be brought under control by re-applying the model with greater tenacity.

We live and work according to the tenets of our formally acquired knowledge. Thus, we see in so many leaders a pathological fear of people's action and of freedom. The people are to be helped and guided by those who arrogantly ignore what the people need and want. Thus, programs are designed to develop "awareness," because for some odd reason it is assumed that those who suffer are not aware of the reasons for their suffering.

We live and work to construct an order, without understanding what can be ordered or what we are putting in order. We constantly witness an obsession with form, which allows us to conceal our unconscious fear about the uncertainties underlying the problems at stake. We confuse law with justice and regulations with efficiency. We identify generosity with charity and participation with favors granted from the top. We use words without living up to their content and we eventually come up with caricatures instead of consistent contexts within which to sustain the construction of our individual and collective life projects.

Taking into account what has been stated, the proposal we have developed is not a model. It is an open option which is justified only to the extent that we understand it, internalize it and implement it through a praxis that is in itself a process in constant motion. There is nothing in it that advocates a final solution, since we are fully aware that human beings and their surroundings are part of a permanent flow which cannot be arrested by rigid and static models.

2.

DEVELOPMENT AND HUMAN NEEDS

Manfred Max-Neef, Antonio Elizalde and Martin Hopenhayn

Reflections on a New Perspective

Is There Anything to Be Added to That Already Stated?

The literature on human needs is vast and in many cases has contributed substantially to our understanding of this issue. It has influenced the fields of philosophy and psychology and has become a focus of attention in the political, economic and social disciplines in general. In recent years, international agencies, concerned with promoting development, have adopted as their criterion for action the satisfaction of so-called basic needs. In 1975, the Dag Hammarskjöld Report, *What Now: Another Development,* established such an aim as one of the pillars of a new type of development to be established urgently

in order to overcome the degrading state of impoverishment that holds the majority of the inhabitants of the Third World in its clutches. Nowadays, it is accepted almost as commonplace that development and human needs are irreducible components of a single equation. However, within this perspective there is still much to be done.

First, this new approach, interweaving development and human needs, must go far beyond a simple makeshift rehashing of a paradigm in a state of crisis. From the very outset, it involves creating conditions for a new way of conceptualizing development. It mean a substantial modification of the prevailing perceptions about strategies for development. For instance, no "New International Economic Order" can be relevant if it is not supported by the structural reformulation of a compact network of "New Local Economic Orders."

Likewise, it means acknowledging that the social and economic theories, which have sustained and directed the processes of development, are not only incomplete but also inadequate. It entails becoming aware that new and more disquieting frustrations will dominate our increasingly heterogeneous and interdependent world if development models, based on mechanistic theories and misleading aggregate indicators, are applied.

Human Scale Development, geared to meeting human needs, requires a new approach to understanding reality. It compels us to perceive and assess the world, that is, people and their processes in a manner which differs completely from the conventional one. Likewise, a theory of human needs for development must be understood precisely in those terms—as a theory for *development.**

In much the same way that a geologist in examining a stone will see attributes other than those perceived by an architect, human needs are discerned differently, according to the ideological and disciplinary lens of the viewer. This is not to suggest that we should come up with new forms of reductionism; on the contrary, the different perceptions and understandings are interwoven facets of the human needs issue. What is at stake here is a question of form and of emphasis. The challenge to all of us is to internalize an approach to development based on human needs which, once understood, will

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* We use here the notion of theory as a deductive process evolving from a set of postulates.

guide our actions and expectations.

The Need for Transdisciplinary Approaches. The purpose of this section is to make a theory of human needs understandable and operational for development. This effort is not grounded in any particular field of study, as the new reality and the new challenges inevitably compel us to adopt transdisciplinary approaches.* Evidence for this orientation is provided by the fact that we are rarely analyzing a specific problem but instead a web of complex issues that cannot be resolved through the application of conventional policies founded upon reductionist disciplines.

In much the same way that a disease is a medical problem, and that the same disease having become an epidemic transcends the field of medicine, our present challenge lies not only in how to deal with problems, but also in how to cope with the tremendous magnitude of the problems. Their growing magnitude and complexity is transforming problisciplinary contours into problem complexes of a diffuse transdisciplinary character. In the throes of the terror of the French Revolution, Marquis de Sade uttered in dismay: "There is no longer any beautiful individual death." In an analogous way, in the midst of the present reality that overpowers us we can exclaim: "There is no longer any beautiful specific problem."

Only a transdisciplinary approach allows us to understand, for example, how politics, economics and health have converged. Thus, we discover an increasing number of cases where poor health is the outcome of unsound politics and bad economics. If economics policies designed by economists, affect, which they do, the whole of society,

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* Transdisciplinarity is an approach that, in an attempt to gain greater understanding, reaches beyond the fields outlined by strict disciplines. While the language of one discipline may suffice to *describe* something (an isolated element, for instance), an interdisciplinary effort may be necessary to *explain* something (a relation between elements). By the same token, to *understand* something (a system as interpreted from another system of higher complexity) requires a personal involvement that surpasses disciplinary frontiers, thus making it a transdisciplinary experience.

economists can no longer claim that they are solely concerned with the economics field. Such a stance would be unethical, sine it would mean avoiding the moral responsibility for the consequences of an action.

We face bewildering situations where we understand less and less. If we do not devote considerably more energy and imagination to designing significant and consistent transdisciplinary approaches, our societies will continue to disintegrate. We live in a period of transition, which means that paradigm shifts are not only necessary but indispensable.

Three Postulates and Some Propositions

Development is about people and not about objects. This is the basic postulate of Human Scale Development.

The acceptance of this postulate—whether on intuitive, ethical or rational grounds—leads to the following fundamental question: How can we determine whether one development process is better than another? In the traditional paradigm, we have indicators such as the gross national product (GNP) that is in a way an indicator of the quantitative growth of objects. Now we need an indicator about the qualitative growth of people. What should that be? Let us answer the question thus: best development process will be that which allows the greatest improvement in people's quality of life. The next question is:
What determines people's quality of life? Quality of life depends on the possibilities people have to adequately satisfy their fundamental human needs. A third question therefore arises: What are those fundamental human needs, and/or who decides what they are? These questions need to *be* examined before any answers can be suggested.

Needs and satisfiers. It is traditionally believed that human needs tend to be infinite, that they change all the time, that they are different in each culture or environment and that they are different in each historical period. It is suggested here that such assumptions are inaccurate, since they are the product of a conceptual shortcoming.

A prevalent shortcoming in the existing literature and discussions about human needs is that the fundamental difference between *needs* and *satisfiers* of those needs is either not mide explicit or is overlooked

altogether. A clear distinction between both concepts is necessary, as will be shown later, for epistemological as well as methodological reasons.

Human needs must be understood as a system: that is, all human needs are interrelated and interactive. With the sole exception of the need of subsistence, that is, to remain alive, no hierarchies exist within the system. On the contrary, simultaneities, complementarities and trade-offs are characteristics of the process of needs satisfaction.

As the literature in this area demonstrates, human needs can be satisfied according to many criteria. We have organized human needs into two categories: existential and axiological, which we have combined and displayed in a matrix. (See Table 1, page 32.) This allows us to demonstrate the interaction of, on the one hand, the needs of Being, Having, Doing and Interacting; and, on the other hand, the needs of Subsistence, Protection, Affection, Understanding, Participation, Idleness, Creation, Identity and Freedom.*

From the classification proposed, it follows that, food and shelter, for example, must not be seen as needs but as satisfiers of the fundamental need for Subsistence. In much the same way, education (either formal or informal), study, investigation, early stimulation and meditation are satisfiers of the need for Understanding. The curative systems, preventive systems and health schemes in general are satisfiers of the need for Protection.

There is no one-to-one correspondence between needs and satisfiers. A satisfier may contribute simultaneously to the satisfaction of different needs or, conversely, a need may require various satisfiers in order to be met. Not even these relations are fixed. They may vary according to time, place and circumstance. For example, a mother breastfeeding her baby is simultaneously satisfying the infant's needs for Subsistence, Protection, Affection and Identity. The situation is ob-

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* Although in Judeo-Christian culture, we have been told that "idleness is the mother of all vices," we strongly believe that it carries many virtues. In fact, Idleness and Creation seem to be inseparable if the former is understood as "the state of mind and spirit that is inviting to the muses." A brilliant argumentation about the subject may be found in Bertrand Russell's *In Praise of Idleness*. In any case, idleness is not laziness.

viously different if the baby is fed in a more mechanical fashion.

Having established a difference between the concepts of needs and satisfiers it is possible to state two additional postulates. First: *Fundamental human needs are finite, few and classifiable.* Second: *Fundamental human needs* (such as those contained in the system proposed) *are the same in all cultures and in all historical periods. What changes, both over time and through cultures, is the way or the mean by which the needs are satisfied.* (See Argumentation, pages 23-28.)

Each economic, social and political system adopts different methods for the satisfaction of the same fundamental human needs. In every system, they are satisfied (or not satisfied) through the generation (or non-generation) of different types of satisfiers. We may go as far as to say that one of the aspects that define a culture is its choice of satisfiers. Whether a person belongs to a consumerist or to an ascetic society, his/her fundamental human needs are the same. What changes is his/her choice of the quantity and quality of satisfiers. In short: *What is culturally determined are not the fundamental human needs, but the satisfiers for those needs.* Cultural change is, among other things, the consequence of dropping traditional satisfiers for the purpose of adopting new or different ones.

It must be added that each need can be satisfied at different levels and with different intensities. Furthermore, needs are satisfied within three contexts: (a) with regard to oneself *(Eigenwelt);* (b) with regard to the social group *(Mitwelt);* and (c) with regard to the environment *(Umwelt).* The quality and intensity, not only of the levels but also of contexts, will depend on time, place and circumstances.

Poverty and Poverties. The proposed perspective allows for a re-interpretation of the concept of poverty. The traditional concept of poverty is limited and restricted, since it refers exclusively to the predicaments of people who may be classified below a certain income threshold. This concept is strictly economistic. It is suggested here that we should speak not of poverty but of poverties. In fact, any fundamental human need that is not adequately satisfied reveals a human poverty. Some examples are as follows: poverty of subsistence (due to insufficient income, food, shelter, etc.); of protection (due to bad health systems, violence, arms race, etc.); of affection (due to authoritarianism,

oppression, exploitative relations with the natural environment, etc.); of understanding (due to poor quality of education); of participation (due to marginalization and discrimination of women, children and minorities); and of identity (due to imposition of alien values upon local and regional cultures, forced migration, political exile, etc.). But poverties are not only poverties. Much more than that, *each poverty generates pathologies.* This is the crux of our discourse.

Economics and Pathologies

The great majority of economic analysts would agree that rising unemployment everywhere and Third World international indebtedness rank as the two most important economic problems of today's world. In the case of Latin America, hyperinflation should be added.

Unemployment. Unemployment is a problem that has always existed in industrial civilization to a greater or lesser degree, but because it has become a structural component of the world economic system as we know it, everything seems to indicate that we are now facing a new type of unemployment that is here to stay. It is known that a person suffering from extended unemployment goes through an emotional "rollercoaster experience" which involves at least four phases: (a) shock, (b) optimism, (c) pessimism and (d) fatalism. The last phase represents the transition from frustration to stagnation and from there to a final state of apathy, where the person reaches his/her lowest level of self-esteem. It is quite evident that extended unemployment will totally upset a person's fundamental needs system. Due to subsistence problems, the person will feel increasingly unprotected, crisis in the family and guilt feelings may destroy affections, lack of participation will give way to feelings of isolation and marginalization and declining self-esteem may very well generate an identity crisis.

Extended unemployment generates pathologies. But, given the present circumstances of generalized economic crisis, we must no longer think of pathologies as affecting individuals. We must necessarily recognize the existence of *collective pathologies of frustration,* for which traditional treatments have been inefficient.

Although unemployment is caused by economic processes, once it

has reached critical proportions, both in quantity and duration, there is no economic treatment capable of solving the problematique. It has become an issue of transdisciplinary proportions that still remains to be understood and constructed. This, in terms of a program for the future, represents the first challenge.

External Debt. The external debt of the Third World is also responsible for another set of collective pathologies. Very simply, the soundness of the international banking system is maintained at the expense of the health and well-being of Third World peoples. As John Gummer, President of the British Conservative Party, commented in 1985 in *The Guardian:* "The United States imports the savings of the rest of the world and exports inflation. This is a serious problem." Due to prevailing circumstances the debtor countries must initiate an era based on the politics of hardship so as to maximize their revenues through exports. This occurs unavoidably at the expense of the irreversible depredation of many natural resources and the increasing impoverishment of people. This process of impoverishment does not vary with the ups and downs of the market for it is structural in nature. To ascertain the nature of the terrible collective pathologies, which are arising in the poor countries as a consequence of this aberrant situation, is the second challenge.

Hyperinflation. The Latin American experience demonstrates that hyperinflation is a phenomenon that goes far beyond the economic field and affects all aspects of society. During the last few years, countries, such as Brazil, Argentina, Bolivia and Peru, have been devastated psychologically and socially by a currency in which their users have little confidence. Over and above the economic consequences of daily devaluation (financial speculation, a chronic decrease in productive investments and a systematic deterioration of real wages), constant inflation, with annual rates of three or even four digits, erodes a people 's faith in their country and gives rise to a deep uncertainty about the future. Concern for the "health" of a currency generates collective feelings of growing pessimism in relation to the country, the state and the future of each individual. This acute deterioration in confidence, along with a sense of uncertainty and scepticism create a phenomenon which is difficult to reverse and an environment where innovative alternatives

capable of overcoming an inflationary crisis are almost impossible to generate.

The issue of hyperinflation has economic, social and psychological component. The new concept of inertial inflation acknowledges that inflation, in part, feeds on itself. That is to say, inflationary expectations condition the behavior of individuals in such a way that the inflationary spiral is accelerated, thus becoming a self-fulfilling prophecy. Hence, the only effective way to cope with this issue is through a consistent transdisciplinary strategy.

Only three examples have been given here. However, there are many other economic processes which, when conceived and designed in a technocratic manner and within a reductionist perspective, can generate collective pathologies. All economists should exercise the necessary self-criticism in order to recognize these maladies and anticipate their detection. This implies, of course, the willingness to adjust to a principle which is almost always forgotten: *the purpose of the economy is to serve the people, and not the people to serve the economy.*

Politics and Pathologies

Persecutions that arise from political, religious and other forms of intolerance are as old as humanity. However, the "achievement" of our times is the tendency of the political leaders to direct their actions according to such incredibly schizophrenic generalizations about "the enemy" that we are heading straight toward omnicide, that is, the destruction of us all.

Fear. Such political schizophrenia is not only to be found at the level of global confrontations between the big powers; it also has its counterparts (mirror images) at many national levels. They are all accountable for the great increase in *collective pathologies of fear.*

We suggest four categories of collective pathologies of fear organized according to their origin: (a) those caused by semantic confusions due to ideological manipulation; (b) those that spring from violence; (c) those caused by isolation, exile or marginalization; and (d) those that come from the frustration of life projects. Most certainly, there are others bot 'hese seem to be enough by Gay off example

Euphemisms. The discourses of power are full of euphemisms. Words no longer fit with facts. Annihilators are called nuclear arms, as if they were simply a more powerful version of conventional arms. We are "the free world", a world full of examples of the most obscene inequities and violations of human rights. In the name of the people, systems are created where people must simply comply obediently with the dictums of an "almighty state." Peaceful protest marchers are severely punished and imprisoned for public disorder and subversion, while state terrorism is accepted as law and order. Examples could fill many pages. The end result is that people cease to understand and, as a consequence, either turn into cynics or melt into impotent, perplexed and alienated masses.

Violence, Marginalization and Exile. Violence directly upsets the need for Protection, thus inducing intense anxiety. Isolation, marginalization and political exile destroy people's identity and break up families, destroying natural affection and creating guilt feelings which are often accompanied by suicidal fantasies or attempts. The frustration of life projects by political intolerance systematically erodes the creative capacity of people, leading them slowly from active resentment into apathy and loss of self-esteem.

Our third challenge consists of recognizing and assessing those collective pathologies generated by diverse socio-political systems. Every system creates in its own way obstacles to the satisfaction of one or more needs, such as Understanding, Protection, Identity, Affection, Creation and Freedom.

Summary

The main conclusions we can raw are:

1. Any fundamental human need not adequately satisfied generates a pathology.
2. Up to the present we have developed treatments for individual and small group pathologies.
3. Today, we are faced with a dramatic increase in collective pathologies for which treatments have proved

4. The understanding of these collective pathologies requires transdisciplinary research and action.

The fourth challenge is to develop a fruitful dialogue in pursuit of a constructive interpretation of the issues and solutions raised in this book. New collective pathologies will be generated within the short and long term if we maintain traditional and orthodox approaches. There is no sense in healing an individual who is then expected to go back and live in a sick environment.

Every discipline, in becoming increasingly reductionist and technocratic, has given way to a process of dehumanization. To humanize ourselves again from within our own disciplines is the great challenge. Only such an effort can build the foundations for a fruitful transdisciplinary endeavor that may truly contribute to the solution of the real problematique affecting our world today.

A sense of responsibility for the future of humanity along with transdisciplinary action is crucial. This may be our only defense. If we do not take up the challenges, we will all be accomplices in creating and maintaining sick societies.

Argumentation

Human Needs: Deprivation and Potential

A development policy aimed at the satisfaction of fundamental human needs goes beyond the conventional economic rationale because it applies to the human being as a whole. The relations established between needs and their satisfiers make it possible to develop a philosophy and a policy for development which are genuinely humanistic.

The very essence of human beings is expressed palpably through needs in their twofold character: as deprivation and as potential. Understood as much more than mere survival, needs bring out the constant tension between depravation and potential that is so peculiar to human

Needs, narrowly conceived as deprivation, are often restricted to that which is merely physiological and as such the sensation that "something which is lacking is acutely felt." However, to the degree that needs engage, motivate and mobilize people, they are a potential and eventually may become a resource. The need to participate is a potential for participation, just as the need for affection is a potential for affection. To approach the human being through needs enables us to build a bridge between a philosophical anthropology and a political option; this appears to have been the motivation behind the intellectual efforts of, for example, Karl Marx and Abraham Maslow. To understand human beings in terms of needs, that is, conceived as deprivation and potential, will prevent any reduction of the human being into a category of a restricted existence. Moreover, if needs are conceptualized in this way, it is inappropriate to speak of their being "satisfied" or "fulfilled." They reflect a dialectic process in as much as they are in constant movement. Hence, it may be better to speak of realizing, experiencing or actualizing needs through time and space.

Human Needs and Society

If we wish to define and assess an environment in the light of human needs, it is not sufficient to understand the opportunities that exist for groups or individuals to actualize their needs. It is necessary to analyze to what extent the environment represses, tolerates or stimulates opportunities. How accessible, creative or flexible is that environment? The most important question is how far people are able to influence the structures that affect their opportunities.

Satisfiers and Economic Goods. It is the satisfiers which define the prevailing mode that a culture or a society ascribes to needs. *Satisfiers are not the available economic goods.* They are related instead to everything which, by virtue of representing forms of Being, Having, Doing and Interacting, contributes to the actualization of human needs. (See page 30.) Satisfiers may include, among other things, forms of organization, political structures, social practices, subjective conditions, values and norms, spaces, contexts, modes, types of behavior and attitudes, all of which are in a permanent state of tension between consolidation

and change.

For example, food is a satisfier of the need for Protection in much the same way that a family structure might be. Likewise, a political order may be a satisfier of the need for Participation. The same satisfier can actualize different needs in different cultures and in different time periods.

The reason that a satisfier may have diverse effects in various contexts is due to the breadth of the goods generated, how they are generated and, how consumption is organized. Understood as objects or artifacts which make it possible to increase or decrease the efficiency of a satisfier, goods have become determinant elements within industrial civilization. In industrial capitalism, the production of economic goods along with the system of allocating them has conditioned the type of satisfiers that predominate.

While a satisfier is in an *ultimate sense* the way in which a need is expressed, goods are in a *strict sense* the means by which individuals will empower the satisfiers to meet their needs. When, however, the form of production and consumption of goods makes goods an end in themselves, then the alleged satisfaction of a need impairs its capacity to create potential. This, in turn, leads to an alienated society engaged in a senseless productivity race. Life, then, is placed at the service of artifacts, rather than artifacts at the service of life. The question of the quality of life is overshadowed by our obsession to increase productivity.

Within this perspective, the construction of a human economy poses an important theoretical challenge, namely, to understand fully the dialectic between needs, satisfiers and economic goods. This is necessary in order to conceive forms of economic organization in which goods empower satisfiers to meet fully and consistently fundamental human needs.

This situation compels us to rethink the social context of human needs in a radically different way from the manner in which it has better approached by social planners and designers of policies for development. It is not only a question of having to relate needs to goods and services, but also to relate them to social practices, of organization, political models and values. All of these have an impact on the ways in which needs are expressed.

In a critical theory of society, it is not sufficient to specify the predominant satisfiers and economic goods produced within that society. They must be understood as products which are the result of historical factors and, consequently, liable to change. Thus, it is necessary to retrace the process of reflection and creation that conditions the interaction between needs, satisfiers and economic goods.

The Vindication of Subjectivity

To assume a direct relation between needs and economic goods has allowed us to develop a discipline of economics that presumes itself to be objective. This could be seen as a mechanistic discipline in which the central tenet implies that needs manifest themselves through demand which, in turn, is determined by individual preferences for the goods produced. To include satisfiers within the framework of economic analysis involves vindicating the world of the "subjective" over and above mere preferences for objects and artifacts.

We can explain how needs are met—our own and those of others in our milieu, family, friends, members of the community, cultural groups, the economic system, the socio-political system, the nation and so forth. We can try to understand how satisfiers and predominant economic goods are related in our environment to the manner in which we emotionally express our needs. We can detect how satisfiers and the availability of goods constrain, distort or enhance the quality of our lives. On this basis, we can think of viable ways to organize and distribute the satisfiers and goods so that they nurture the process of actualizing needs and reduce the possibilities of frustration.

The ways in which we experience our needs, hence the quality of our lives is, ultimately, subjective. It would seem, then, that only universalizing judgment could be deemed arbitrary. An objection to this statement could well arise from the ranks of positivism. The identification which positivism establishes between the subjective and the particular, although it reveals the historical failure of absolute idealism, is a sword of Damodes for the social sciences. When the object of study is the relation between human beings and society, the universality of the subjective cannot be ignored.

Any attempt to observe the lile of human beings must recognize the social character of subjectivity. It is not impossible to advance judgments about the subjective. Yet, there is a great fear of the consequences of such a reflection. Economic theory is a clear example of this. From the neo-classical economists to the monetarists, the notion of preferences is used to avoid the issue of needs. This perspective reveals an acute reluctance to discuss the subjective-universal. This is particularly true if it is a question of taking a stand in favor of a free market economy. Preferences belong to the realm of the subjective-particular and therefore are not a threat to the assumptions that underlie the rationale of the market. Whereas to speak of fundamental human needs compels us to focus our attention from the outset on the subjective universal, which renders any mechanistic approach sterile.

The way in which needs are expressed through satisfiers varies according to historical period and culture. The social and economic relations, defined by historical and cultural circumstances, are concerned both with the subjective and the objective. Hence, *satisfiers are what render needs historical and cultural, and economic goods are their material manifestation.*

Human Needs: Time and Rhythms

Owing to the dearth of empirical evidence, it is impossible to state with absolute certainty that the fundamental human needs are historically and culturally constant. However, there is nothing that prevents us from speaking of their socio-universal character because people everywhere want to satisfy their needs. In reflecting on the nine fundamental needs proposed in this book, common sense, along with some socio-cultural sensitivity, surely points to the fact that the needs for Subsistence, Protection, Affection, Understanding, Participation, Idleness and Creation have existed since the origins of "homo habilis" and, undoubtedly, since the appearance of "homo sapiens."

Probably at a later stage of evolution the need for Identity appeared and, at a much later date, the need for Freedom. In much the same way, it is likely that in the future the need for Transcendence, which is not included in our proposal as we do not yet consider it universal, will be-come as universal as the (other needs. If seems Men, to as sume that fundamental human needs change witb the pace of

evolution, that is to say, at a very slow rate. Therefore, fundamental human needs are not only universal, but are also entwined with the evolution of the species. They follow a single track.

Satisfiers behave in two ways: they are modified according to the rhythm of history and vary according to culture and circumstance.

Economic goods (artifacts, technologies) behave in three different ways: they are modified according to episodic rhythms (vogues, fashions) and diversify according to cultures and, within those cultures, according to social strata.

In summary, perhaps we may say that fundamental human needs are essential attributes related to human evolution; satisfiers are forms of Being, Having, Doing and Interacting related to structures, and economic goods are objects related to particular historical moments.

Evolutionary, structural and episodic changes take place at different paces and in different rhythms. The movement of history places the human being in an increasingly unrhythmical and unsynchronized domain in which human concerns are neglected more and more. In the present moment, this situation has become extreme.

The speed of production and the diversification of objects have be-come ends in themselves and as such are no longer able to satisfy any need whatsoever. People have grown more dependent on this system of production but, at the same time, more alienated from it.

It is only in some of the regions marginalized by the crisis, and in those groups which defy the prevailing styles of development, that autonomous processes are generated in which satisfiers and economic goods become subordinated once again to the actualization of human needs. It is in these sectors that we can find examples of synergic types of behavior which offer a potential response to the crisis that looms over us. These autonomous processes, which are well worth studying and understanding, are discussed in Chapter 3.

Foundations for a Possible Systematization

Classification of Human Needs

We have emphasized that what we require is a needs theory for development. This poses the problem of constructing a taxonomy of fundamental human needs which may serve as an instrument for both policy and action. Undoubtedly, there are many ways in which needs may be classified. Hence, any categorization must be regarded as provisional and subject to modification as new evidence arises and calls for changes. For the purposes of development, a multi-dimensional taxonomy which establishes a clear-cut difference between needs and satisfiers is a useful and feasible tool. Unfortunately, in formulating such a classification, we lay ourselves open to the charge of arbitrariness. But, considering that the task is absolutely necessary, we can minimize the risks if we abide by the following conditions:

1. *The classification must be understandable.* The needs listed must be readily recognizable and identifiable as one's own.
2. *The classification must combine scope with specificity.* It must arrive at a limited number of needs which can be clearly yet simply labeled but, at the same time, be comprehensive enough to incorporate any fundamental felt need.
3. *The classification must be operational.* For every existing or conceivable satisfier, one or more of the needs stated must cap pear as a target-need of the satisfier; the classification should allow for an analysis of the relationship between needs and the ways in which they are satisfied.
4. *The classification must be critical.* It is not sufficient for the categorization to relate satisfiers to needs. It is essential to detect needs for which no desirable satisfier exists. Also, it is to identify and restrain those satisfiers that inhibit the actualization of needs.
5. The classification must be propositional. To the extent that it is critical and capable of detecting inadequacies in the relation between the existing satisfiers and the fulfillment of needs, classification should serve as a trigger mechanism to work out

an alternative order capable of generating and encouraging satisfiers for the needs of every man and woman as integral beings. It should also replace non-inclusive satisfiers by others of a more comprehensive nature, thus attempting to actualize several needs.

The categorization suggested represents one option. It is related to development and we consider it operational for development. Nonetheless, it must be regarded as an open proposal on which improvements must be made.

Needs, Satisfiers and Economic Goods

We have already stated that within the context of our proposal, needs not only indicate deprivations but also, and at the same time, individual and collective human potential. On the other hand, satisfiers are individual or collective forms of Being, Having, Doing and Interacting in order to actualize needs. Finally, economic goods are objects or artifacts which affect the efficiency of a satisfier, thus altering the threshold of actualization of a need, either in a positive or negative sense.

A **Matrix of Needs and Satisfiers.** The interrelationship between needs, satisfiers and economic goods is permanent and dynamic. A dialectic relationship exists among them. If economic goods are capable of affecting the efficiency of the satisfiers, the latter will be determinant in generating and creating the former. Through this reciprocal causation, they become both pan and definition of a culture which, in turn, delimits the style of development.

As Table 1 indicates below on pages 32-33, satisfiers can be organized within the grids of a matrix which, on the one hand, classifies needs according to the existential categories of Being, Having, Doing and Interacting and, on the other hand, according to the axiological categories of Subsistence, Protection, Affection, Understanding, Participation, Idleness, Creation, Identity and Freedom. This matrix is neither normative nor condusive. It merely gives an example of possible types of satisfiers. In fact, this matrix of satisfiers, if completed by

individuals or groups from diverse cultures and in different historical moments, might vary considerably.

An examination of the different squares in the matrix with their possible satisfiers demonstrates clearly that many of the satisfiers can give rise to different economic goods. If we take, for instance, square 15, showing different ways of Doing to actualize the need for Understanding on page 32, we see that it indudes such satisfiers as investigating, studying, experimenting, educating, analyzing, meditating and interpreting. These satisfiers give rise to economic goods, depending on the culture and the resources, such as books, laboratory instruments, tools, computers and other artifacts. The function of these goods is to empower the *Doing of Understanding.*

Examples of Satisfiers and Their Attributes

The matrix presented is only an example and in no way exhausts the number of possible satisfiers. Because satisfiers have various characteristics, we suggest for analytical purposes five types that may be identified, namely: (a) violators or destroyers, (b) pseudo-satisfiers, (c) inhibiting satisfiers, (d) singular satisfiers and (e) synergic satisfiers. (See Tables 2 through 6.)

Destroyers. Violators or destroyers are elements of a paradoxical nature. When applied with the intention of satisfying a given need, not only do they annihilate the possibility of its satisfaction over time, but they also impair the adequate satisfaction of other needs. These paradoxical satisfiers seem to be related particularly to the need for Protection. This need may bring about aberrant human behavior to the extent that its non-satisfaction is associated with fear. The special attribute of these violators is that they are invariably imposed on people. (Table 2.)

Pseudo-satisfiers. Pseudo-satisfiers are elements that generate a false sense of satisfaction of a given need. Although not endowed with them aggressiveness of violators or destroyers, they may on occasion annul, in the not too long term, the possibility of satisfying the need they were originally aimed at fulfilling. Their main attribute is that they are generally induced through propaganda, advertising or other means of persuasion. (Table 3.)

Table 1: MATRIX OF NEEDS AND SATISFIERS*

Needs according to axiological categories \ Needs according to existential categories	BEING	HAVING	DOING	INTERACTING
SUBSISTENCE	1/ Phísical health, mental health, equilibrium, sense of humor, adaptability	2/ Food, shelter, work	3/ Feed, procreate, rest, work	4/ Living environment, social setting
PROTECTION	5/ Care, adaptability, autonomía, equitibrium, solidarity	6/ insurance systems, savings, social securitía, health síastems, rights, family, work	7/ Cooperate, prevent, ptan, take care of, cure, help	8/ Living space, social environment, dwelling
AFFECTION	9/ Self-esteem, solidarity, respect, tolerance, generosítía, receptiveness, passion, determination, sensuality, sense of humor	10/ Friendships, family, partnerships, relationships with nature	11/ Make love, caress, express emotions, share, Cake care of, cultivate, appreciate	12/ Privacy, intimacy, home, space of togetherness
UNDER-STANDING	13/ Critical conscience, receptiveness, curiosity, astonishment, discipline, intuition, rationality	14/ Literature, teachers, method, educational policies, communication policies	15/ investigate, study, experiment, educate, analíaze, meditate	16/ Settings of formative interaction, schools, universities, academies, groups, communities, family
PARTICIPATIOÑ	17/ Adaptabilitía, receptiveness, solidaritía, witlingness, determination, dedication, respect, passion, sense of humor	18/ Rights, responsibilities, duties, privileges, work	19/ Become affiliated, cooperate, propose, share, dissent, obeía, interact, agree on, express opinions	20/ Settings of participative interaction, parties, associations, churches, communities, neighborhoods, family
IDLENESS	21/ Curiositía, receptiveness, imagination, recktessness, sense of humor, tranquility, sensuality	22/ Games, spectacles, clubs, parties, peace of mind	23/ Daydream, brood, dream, recall old times, give waía to fantasies, remember, relax, have fun, play	24/ Privacy, intimacy, spaces of closeness, free time, surroundings, landscapes.
CREATION	25/ Passion, determination, intuition, imagination boldnoss, rationality, autonomy,	26/ Abilities, skilis, method, work	27/ Work, invent, build, design, compose, interpret	28/ Productive and feedback settings, workshops, cultural groups, audiences, spaces for expression, temporal freedom

Table 1 - continued

Needs according to axiological categories \ Needs according to existential categories	BEING	HAVING	DOING	INTERACTING
IDENTITY	29/ Sense of belonging, consistency, differentiation, self-esteem, assertiveness	30/ Symbois, language, religion, habits, customs, reference groups, sexuality, values, norms, historical memory, work	31/ Commit oneself, integrate oneself, confront, decide on, get to know oneself, recognize onesetf, actualize oneself, grow	32/ Sociat rhythms, everyday settings, settings which one belongs to, maturation stages
FREEDOM	33/ Autonomía, self-esteem, determination, passion, assertiveness, openmindedness, boldness, rebelliousness, tolerance	34/ Equal rights	35/ Dissent, choose, be different from, run risks, develop awareness, commit oneself, disobey	36/ Temporal/spatial plasticity

'The column of BEING registers *attributes* personat or collective, that are expressed as nouns. Tho column of HAVING registers *institutions, norms, mechanisms, tools* (not in a materiat senso), *laws,* etc. that can be expressed in one or more words. The column of DOING registers *actions,* personal or collective, that can be expressed as verbs. The column of INTERACTING registers *locations and milieus* (as times and spaces). ht stands for the Spanish ESTAR or the German BEFINDEN, in rho sense of time and space. Since there is no corresponding word in English, INTERACTING was choson á *faut de mieux.*

Table 2: VIOLATORS OR DESTROYERS*

Supposed Sattsfier	Need to Be Supposedhy Satisfied	Needs, the Satistactton of Which it impairs
Arms race	Protection	Subsistence, Affection, Participation
Exile	Protection	Affection, Participation, Identity, Freedom
National Security Doctrine	Protection	Subsistence, Identity, Affection, Understanding, Participation, Freedom
Censorship	Protection	Understanding, Participation, Mimosa, Creation, identity, Freedom
Bureaucracy	Protection	Understanding, Affection, Participation, Creation, Identity, Freedom
Authoritarianism	Protection	Affection, Understanding, Participarton, Creation, Identity, Freedom

* Violators or destructors are elements of a paradoxical effect. Applied undor the pretext of satisfying a given need, they not only annihilate the possibility of its satisfaction, but also render the adequate satisfaction of other needs impossible. They seem to be especially related to the need for protection.

Inhibiting Satisfiers. Inhibiting satisfiers are those that generally oversatisfy a given need, therefore seriously curtailing the possibility of satisfying other needs. With some exceptions, they share the attribute of originating in deep-rooted customs, habits and rituals. (Table 4.)

Singular Satisfiers. Singular satisfiers are those that satisfy one particular need. In regard to the satisfaction of other needs, they are neutral. They are characteristic of plan and programs of assistance, cooperation and development. These satisfiers are similar in that they are institutionalized; that is, their origins are in institutions of the state, of the private sector or of the voluntary or non-governmental sector. (Table 5.)

Synergic Satisfiers. Synergic satisfiers are those that satisfy a given need, simultaneously stimulating and contributing to the fulfillment of other needs. They share the attribute of being anti-authoritarian in the sense that they constitute a reversal of predominant values, such as competition and coerciveness. (Table 6.)

Exogenous and Endogenous Satisfiers. The first four categories of satisfiers are exogenous to civil society as they are usually imposed, induced, ritualized or institutionalized. In this sense, they are satisfiers which have been traditionally generated at the fop and advocated for all. On the other hand, endogenous satisfiers derive from liberating processes which are the outcome of acts of volition generated by the community at the grassroots level. It is this that makes them antiauthoritarian, even though in some cases they may originate in processes promoted by the state.

One of the important aims of Human Scale Development is to affect change in the nature of the Latin American State. It should move from its traditional role as a generator of satisfiers, which are exogenous to civil society, to a stimulator and creator of processes arising from the bottom upwards. Particularly, given the tremendously restrictive conditions which the current crisis imposes on us, an increase in the levels of local, regional and national Self-reliance should deemed a priority. This objective can be met through the generation of synergic processes at all

Table 3: PSEUDO-SATISFIERS*

Satisfier	Need Which It Seemingly Satisfies
Mechanistic medicine ("A pill for every ill")	Protection
Exploitation of natural resources	Subsistence
Chauvinistic nationalism	Identity
Format democracy	Participation
Stereotypes	Understanding
Aggregate economic indicators	Understanding
Cultural control	Creation
Prostitution	Affection
Status symbols	Identity
Obsessive productivity with a bias to efficiency	Subsistence
Indoctrination	Understanding
Charity	Subsistence
Fashions and fads	identity

*Pseudo-satisfiers are elements that stimulate a false sensation of satisfying a given need. Although they lack the aggressiveness of violators, they may on occasion annul in the medium term the possibility of satisfying the need they were originally aimed at.

Table 4: INHIBITING SATISFIERS*

Satisfier	Need	Needs, the Satisfaction of Which te Inhibited
Paternalism	Protection	Understanding, Participation, Freedotli, Ichnitity
Overprotective family	Protection	Affection, Understanding, Participatton, Idtenenn, Identity, Freedom
Taylorist-type of production	Subsistence	Understanding, Participation, Creation, Identity, Freedom
Authoritarian classroom	Understanding	Participation, Creation, Identity, Freedom
Messianism (Millenniatism)	Identity	Protection, Understanding, Participatlon, Freedom
Unlimited permissiveness	Freedom	Protection, Affection, Identity, Participation
Obsessive economic competitiveness	Freedom	Subsistente, Protection, Affection, Participation, idleness
Commercial tetevision	Leisure	Understanding, Creation, Identity

* Inhibiting satisfiers are those that by the way they satisfy (actually oversatisfy) a given need seriously impair the possibility of satisfying other needs.

Table 5: SINGULAR SATISFIERS*

Satisfier	Need that It Satisfies
Programs to provide food and housing	Subsistence
Curative medicine	Subsistence
Insurance systems	Protection
Professional armies	Protection
Ballot	Participation
Sports spectacles	Leisure
Nationality	Identity
Guided tours	Leisure
Gifts	Affection

*Singular satisfiers are those that aim at the satisfaction of a single need and are, therefore, neutral as regards the satisfaction of other needs. They are very characteristic of development and coopera- tion schemes and programs.

Table 6: SYNERGIC SATISFIERS*

Satisfier	Need	Needs, the Satisfaction of Which it Stimulates
Breast-feeding	Subsistence	Protection, Affection, Identity
Self-managed production	Subsistence	Understanding, Participation, Creation, Identity, Freedom
Popular education	Understanding	Protection, Participation, Creation, Identity, Freedom
Democratic community organizations	Participation	Protection, Affection, Leisure, Creation, Identity, Freedom
Barefoot medicine	Protection	Subsistence, Understanding, Participation
Barefoot banking	Protection	Subsistence, Participation, Creation, Freedom
Democratic trade unions	Protection	Understanding, Participation, Identity
Direct democracy	Participation	Protection, Understanding, Identity, Freedom
Educational games	Leisure	Understanding, Creation
Self-managed house- building programs	Subsistence	Understanding, Participation
Preventive medicine	Protection	Understanding, Participation, Subsistence
Meditation	Understanding	Leisure, Creation, identity
Cultural television	Leisure	Understanding

*Synergic satisfiers are those that by the way they satisfy a given need, stimulate and contribute to the simultaneous satisfaction of other needs.

levels of society. Chapter 3 of this book is concerned with how such processes can be unleashed.

The fact that several of the satisfiers offered as examples do not ap- pear in the matrix is due to the fact that the tables are more specific. It must be borne in mind that the matrix is merely illustrative and not nor- mative.

Applications of the Matrix

The schema proposed can be used for purposes of diagnosis, plan- ning, assessment and evaluation. The matrix of needs and satisfiers may serve, at a preliminary stage, as a participative exercise of self-diag- nosis for groups located within a local space. Through a process of regular dialogue—preferably with the presence of a facilitator acting as a catalyzing element—the group may gradually begin to characterize itself by filling in the corresponding squares.

The outcome of the exercise will enable the group to become aware of both its deprivations and potentialities. After diagnosing its current reality, it may repeat the exercise in propositional terms: that is, iden- tifying which satisfiers would be required to fully meet the fundamental needs of the group. As the satisfiers are selected with increasing levels of specificity, they should be discussed critically by the group in terms of their characteristics and attributes, in order to determine if they are—or should be—generated exogenously or endogenously by the community itself. Such an analysis will demonstrate the potential capacity for local self-reliance. The same analysis of proposed salisfienrs will enable the group to assess not only whether their posi tive effects are singular or synergic, but also whether the negative effects are violators, inhibiting satisfiers or pseudo-satisfiers. The next stage of reflection of the group is to determine whether access exists to thc necessary economic goods and material resources.

The proposed exercise has a twofold value. First, it makes it pos- sible to identify at a local level a strategy for development aimed at the actualization of human needs. Second, it is an educational, creative and participatory exercise that brings about a state of deep critical awareness: that is to Say, the method is in itself a generator of synergic effects. (More about this in the following section.)

The technique described is not restricted only to an analysis of local spaces. It is likewise applicable at regional and national levels. In local spaces, it can be a broad-based participation process where those representing the interest of the economic, political and social domains of the community may express their ideas.

At a regional level!, the exercise should be undertaken by a carefully chosen team that not only represents the different domains of endeavor, but also by virtue of its representative nature combines both public and private interests. At the national level, it is essential that the task should be approached in a transdisciplinary manner because of the complexity of the issues.

Articulating and Regaining Diversity. In this way, an alternative process moving from the local to the regional and to the national makes it imperative to develop suitable methodologies which allow us to reconcile harmoniously the views, expectations and proposals arising from the different spaces. In the third part of this book, proposals are made to this end.

Development geared to the satisfaction of fundamental human needs cannot, by definition, be structured from the top downwards. It cannot be imposed either by law or by decree. It can only emanate directly from the actions, expectations and creative and critical awareness of the protagonists themselves. Instead of being the traditional objects of development, people must take a leading role in development. The anti-authoritarian nature of Human Scale Development does not involve making the conflict between state and civil society more acute. On the contrary, it attempts to prove, through the method proposed, that the state can assume a role which encourages synergic processes at the local, regional and national levels.

We believe that regaining diversity is the best way to encourage the creative and synergic potential which exists in every society. Therefore, it seems advisable and consistent to accept the coexistence of different styles of regional development within the same country, instead of insisting that "national styles" should prevail, when these have so far proved to be instrumental in increasing the affluence of some regions at the expense of the impoverishment of others. These national styles are conceived mostly in order of strengthen or preserve national

We should not blind ourselves, however, to the fact that unity does not mean uniformity. There may exist a sounder foundation for real unity when a wealth of cultural potential arises freely and creatively, nurtured by opportunities, the technical back-up and the support for their development.

A Note on Methodology

The Effort to Understand

Since the publication in 1986 of the Spanish version of *Human Scale Development,* considerable experience has been accumulated about the utilization of the matrix of needs and satisfiers (outlined the preceding section) for analytical purposes, with diverse groups in different countries. The methodology developed so far has shown that it allows for the achievement of in-depth insight into key problems that impede the actualization of fundamental human needs in the society, community or institution being studied.

Starting from the assumption the author has developed elsewhere (see Chapter 5, About the Pruning of Language), it can be said that we know how to describe, and that we have learned to explain. However, what we often overlook is the fact that describing and explaining do not amount to *understanding.* The methodology developed so far may probably allow for that additional step into greater awareness.

For a simple yet comprehensive presentation of the methodology, we shall follow the steps of an imaginary two-day workshop ¿attended by fifty people. The purpose of the exercise is to allow participants to reflect on the reality of their society at large in the light of Human Scale Development theory, in order to design ways of overcoming or coping with the most important problems detected.

Phase One. The group is divided into five sub-groups of ten people. (E^{x}perience has shown that ten seems to be an optima! size for the purpose.) The proposed task for each group is to construct the matrix containing the destructive elenments (satisfiers) affecting their society –that is, all those "destroyers" that impede the

actualization of the fundamental human needs. For the purpose, all groups receive thirty-six self-adhesive pads, numbered from 1 to 36, each representing a blank grid of the matrix to be filled in.

Phase Two. For the first two hours, the groups are requested to concentrate on filling in the grids corresponding to the column of Being; that is, grids 1, 5, 9, 13, 17, 21, 25, 29 and 33. Each point entered in the grid must be the result of group discussion. It is stressed by the seminar coordinator that the column headed Being registers *attributes,* personal or collective (negative, in this case), that are expressed as nouns. For example, in grid 17, Participation, negative elements could be: authoritarianism, discrimination, indifference, etc.

Once the two hours are completed, all pads are collected and pinned on the wall, thus representing five columns of Being, at a sufficient distance from one another to allow space for the other three columns to be produced in order to complete five matrixes.

The next two hours are devoted to filling in the grids of the column Having. Participants are reminded that the column Having registered institutions, norms, mechanisms, tools (not in a material sense), laws, etc. that can be expressed in one or more words. Again, examples that have shown up are: national security doctrine, repressive institutions, discriminatory education laws and so on. Once the time is completed, the pads are again collected and placed on the wall next to each of the corresponding previous five columns.

A break of three hours is taken, and the participants gather again in the afternoon. A long break is important because, if properly carried out, the exercise is very intense and demanding.

The next two hours are devoted in an analogous manner to the column Doing. It is stressed that the column Doing registers *actions,* personal or collective, that are expressed as verbs. As a mere illustration, examples could be discriminate, oppress, impose, censure.

During the final two hours, the column Interacting must be completed. It is explained to the participants that Interacting refers to *locations or milieus in the sense of times and spaces.*
The day finishes with five negative matrixes of destruction placed on the wall.

Phase Three. During the evening, a group of volunteers is requested to consolidate the five matrixes into one. The practical way of doing this is to take all five number 1 grids, eliminate all repetitions and synonyms and produce only one grid representative of the whole. The same is done with all the other grids until a single matrix is produced, representing the perceptions of all fifty participants. The matrix is drawn on a large chart (say, 120 by 80 cms) and placed on the wall so that on the following morning it can be examined by the participants.

Phase Four. In the next session, the participants are divided into nine groups; one for each fundamental human need. The matrix is cut with scissors into nine strips so that each group receives one part. It should be clear that each strip represents one need with its four grids filled in with the negative satisfiers.

The group is asked to start a discussion in order to select from each' of the four grids the one element they consider to be the most important and decisive. In other words, that destroyer must be selected that carries the greatest weight in the lot. In exceptional cases, two can be selected from a grid. The selection must in each case be a consensus reached through debate and discussion. This phase should take as long as it requires.

Phase Five. Each group delivers the list of the four to eight negative satisfiers selected. The list is now written into a new blank matrix, will be identified as the synthesis matrix. It represents the picture of the most negative elements affecting that society, community or institution (as perceived by the participants) inasmuch as the actualization of fundamental human needs is concerned. It represents the paramount challenges that must be tackled. Therefore, the discussion and interpretation of the synthesis matrix must be carried out in a plenary session.

Phase Six. If time allows, or if the coordinator is able to establish a long-term relationship with the participants, an additional exercise is highly advisable. Employing exactly the same procedure as for the construction of the negative matrix, the participants are asked to produce the matrix of their Utopia; that is, of how Huir society ought to be for them to fee! really satisfied. When carrying out this part of the exercise, the negative matrix should not be in the hands of the participants, since

they might simply be tempted to fin in the new one just with the opposites of the earlier one.

Phase Seven. Once the second exercise is completed, the participants are confronted in a plenary session with both synthesis matrixes: the negative and the positive. What follows is a discussion about the bridging from one to the other. Here again small groups can be organized, the idea being a sort of game where the winning group finds the most synergic "bridging" satisfiers. In fact, the discussion will inevitably consist of selecting satisfiers. Hence, each one that is proposed or suggested must be jointly analyzed in order to establish its characteristics. Is it endogenous or must it come from outside the community? Is it singular, linear or synergic? Such a participatory discussion can turn out to be rich and stimulating and in itself represents an experience with synergetic effects.

The New Awareness

Early in 1987, a seminar like the one described was carried out in Bogotá, Colombia, with fifty high-ranking university officials and academics from all over the country as participants. After reflecting on the destructive elements affecting Colombian society, and going through the successive phases previously described, they selected from the matrix of synthesis the following list of components as the most significant: Aggressiveness, Indifference, Obedience, Censorship, Acceptance, Apathy, Dependence, Alienation, Neutrality (internal), Uprooting, Ideological manipulation and Repressive institutions.

This list determined the following analysis and conclusions. If one asks for a description of Colombian society, the reply may well give an image of a society suffering from a high degree of violence. If one asks for explanations, one may be given a profile of all the different groups that are in conflict and, hence, determine that violence. But, if we look at the above list, which is the product of an intense process of introspective analysis, we perceive something quite interesting and probably unexpected. There is violence—a great deal of violence — in Colombian society, but the deep underlying problem, as revealed by the list, was deemed to be *Fear.* Whether that fear is the result of violence or its cause (or both) is difficult

—perhaps impossible— to say. But in any case, what appears to be probable, is that the "disease' the patient is suffering from is fear. Therefore, if the remedies prescribed concentrate exclusively on the attempt to cure violence, one may be applying an inadequate or incomplete prescription for the wrong "disease." The result may be that the patient gets worse.

The final assessment of the participants was that the methodology—regardless of whether it did or did not reveal *new* truths - allowed for the discovery of unexpected facets of a problem, thus increasing awareness about what was relevant.

Further Examples

Since the Colombian experience, many additional seminars have been carried out both in Northern as well as in Third World countries. Although much more work has to be completed in order to confine some probable tendencies, it is already dear that unsuspected yet significant findings will come to light. One of the most interesting ma y be the fact that no correlation seems to exist between achieved levels of economic growth and relative happiness of the people concerned. The other aspect that comes into light is the poverties (as defined in Human Scale Development theory) that exist in every society.

Without going into any analysis, the examples that follow are quite dramatic in themselves. Table 7 (pages 44-46) is the consolidated negative matrix representing British society, as interpreted by a group of some forty socially concerned business people and activists. It can easily be seen through the sheer quantity of elements included grid that the exercise stimulates participants to overcome any form of modesty or shyness. In fact, our observations have shown that at Some point during the exercise, the urge to unearth truly and honestly (no matter how painful it may be) what is ailing in one's society is highly testified. Table 8 (page 47) is the synthesis matrix of the previous one, and shows, to say the feast, a society that fans to communicate Table 9 (page 48) is the synthesis matrix of an experience with participants similar to those in the British example, but representing the Swedish Society Looking at it, one soon gets the feeling that one is facing a society of lonely people.

Table 7: CONSOLIDATED NEGATIVE MATRIX (GREAT BRITAIN)

	BEING	HAVING	DOING	INTERACTING
SUBSISTENCE	Selfishness, wastefulness, disconnectedness, imbalance, addictiveness, self-indulgence, insatiability, passivity, acquisitiveness, greed, egotism, confusion, anxiety, stress, regression, dependence, powerlessness	Malnourishment, homelessness, ill-health, unemployment, monetarism, overproduction, pollution, economic policy, inequality, consumerism, unsustainability, centralization, hyperurbanization health policy, social acceptance of inequality	Pollute, steat, degrade, speculate, monopolize, advertise, close off, ignore, overeat, grab, talk to avoid doing, hoarding, discriminate in trade, adultera te food	Disharmony with nature, greenhouseeffect, pollution, housing developments, separation from the land, destruction of wildlife habitat, degraded environment, overplantural designs, systemic waste
PROTECTION	Fear, nationalism, hostility, paranoia, secretiveness, possessiveness, repression, self-destructiveness, aggressiveness, paceránalism, selfishness, unpredictability, dogmatism, dependency, racism, elitism, introversion, alienation, subservience, greed, indifference, competitiveness, vulnerability	Totalitarianism, armamentism, Official Secrets Act, Censorship, nationalism, profiteering bureaucracy, army, property "curativo medicine," housing policy and market, social acceptance of violence, discrimination, prejudice, vandalism	Destroy, poison, exploit, absolve responsibility, destroy other species, dislocate, impose, control, dictate, fight, arming, dangerous driving, pollute, neglect, overprotect	Military bases, degradation of the environment, unsafe streets, unsale transport, badly designed housing, spatial discrimination, overcrowding, balanced demographic distribution, lack of secure common spaces, urbanization
AFFECTION	Rationality, cynicism, superficiality, fear, narcissism, aggressiveness, jealousy, overprotectiveness, alienation, possessiveness, Englishness, insecurity, permissiveness, promiscuity, loneliness, distrust, inhibition, reserve shyness, arrogance, frigidity, intellectuality, numbness	Education system, organization, media, family breakdown, generation gap, pornography, sexism, prostitution, turning affection finto a commodity, commercialization, break-up of extended family, commercialization of caring, automation, computerization	Separate, isolate, neglect, dominate, destroy, take for granted, abuse, rush, inhibit, moralize, put a price on things, trade in affection, devalue, fail to communicate	Isolation in crowdedness, loss of feeling of permanence, design problems, overcrowded schedules, visual pollution, overcrowding, spatial paranoia, break-up of family environment, warped time priorities, climate, lack of time, lack of qualitative space
UNDER-STANDING	Bigotry, secretiveness, "cleverness," unreceptiveness, apathy, prejudice, willful ignorance, fear insularity, reserve, setfishness, elitism, competitiveness, xenophobia, goal-centredness, insecurity, greed, distrust, cynicism, authoritarianism, subservience, caste labeling	Press/media, education system, achievement orientation, political dogmatism, gaialessness, specialization, the Church, Ten Commandments, British institutions, self-censorship, conditioning, prejudice, information overload, dogmatism	Intellectualize, manipulate, overplan, complicate, oversimplify, overemphasize technology, abdicate, devalue intuitiveness, depersonalize, misinform, use jargon, confuso, devalue oneself, filtering, getting emotionally flooded, sentimentalize, ignore, act without compassion, deny	Distancing from Nature, education structures removed from environment, fast pace of change, speed of information and activity inhibits integration, incompatibility of language systems within the social environment
PARTICIPATION	Inhibition, isolation, snobbishness, coercion, apathy, egoism, facelessness, laziness, closed-mindedness, disagreement, emotionality, rationalism, collectivism, ignorance, illiteracy, stupidity, cynicism, inexperience, intellectualism, complacency, dishonesty, defensiveness, superficiality, pragmatism, numbness	Ill-health, British electoral system, class system, centralized government, representative democracy, food aid, monopolios, secret societies, professional associations and bodies, bureaucrats, experts, discriminating laws, mental institutions, welfare state, growing power of government, hierarchical structures, outdated social norms, social inequality, prejudice	Divide, not tolerate, exclude, withdraw, censor, impose participation, conceal, collude, deceive, patronize, repress the vote, relinquish responsibilities, opt out, control, distrust, withhold, desire to know everything going on	Elitist clubs, overprofessionalization of sports, unsafe transport, lack ef communal spaces, spatial discrimination, private ownership of space, fragmentation of housing, conurbations, centralization
IDLENESS	Hyperactivity, apathy, utilitarianism, addictiveness, nervousness, inflexibility, loneliness, depression, egoism, competitiveness, schedulism, fatigue, stress, Calvinism, productiveness, guilt, confusion, unimaginaaiveness, exploitation, repression, greed, ebries simia, directiveness, loar, insecurity, feverishness	Unemployment, professionalism in sports, work ethic, criminality, Victorian values, junk entertainment, Calvinism, television, family/parents, teachers, consumerism, advertising, telephone, obtigations, work, hostile environment wagery	To win, to run marathons, rush around, try to get results, overplan timetables, to judge and repress, work too hard, business, focus outside ourselves, ignore what is going on inside us, act from conditioning and habit, to burn out	Congostion, corporate greed for space, British weather, package holidays, overcrowded schedules, temporal paranoia, lack of spaces te be idle, environment not adapted to climate, lack of quietness and private space

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	BEING	HAVING	DOING	INTERACTING
CREATION	Inhibition, reserve, fear, dullness, boredom, conformity, workaholicism, apathy, anomie, formalism, institutionalism, inadequacy, saturation, stubbornness, willfulness, fear, acceptance, seriousness, left-brainedness, repressiveness, indifference, self-denial, numbness	Oppression, censorship, industrialization, mass production, division of labour, advertising industry, large-scale production, etiquette, media, specialization, examination system, the military, illness, didactic nature of educational system, education for mass production, school systems, predominance of material objectives	Commercialize, devalue local creativity, bias creativo minds to industrial needs, idolize, fetishize, destroy, discourage, institutionalize, put down others, judge, make comparisons, moralize, focus on ends rather than means, deny left/right balance	Time pressure, lack of space, controlled environment, from nature, tamed environment, no place for created things, no community space, warped sense of appropriate time use, no access to communal facilities, poor rhythms in creativity, no time to review, overcrowding, speed required to produce, lack of group creativity
IDENTITY	Powerlessness, fear, chauvinism, insecurity, elitism, fatigue nationalism, saturation, insignificance, rationalism, centralism, collectivism, agism, sexism, racism, lack of self-esteem, possessiveness, alienation, conformity, rootlessness neurosis, aggressiveness, imbalance	Caste system, social rules, class structure, media, fashions, galalessness, separation, role conflict, irrelevance, industrialization, the sheer number of people, depersonalization, loss of community, material poverty statistics, preconceptions, prejudices, ridicule, stereotype, money, power, advertising	ro search for uniqueness, ritualize, become obsessed, repress, isolate oneself, conform, collude to maintain status quo, institutionalize people, wear a uniform, hile and suppress, surrender to others' expectations, adopt positions, refuse to know oneself, deny connection with others and the environment	Commuting, pub culture, overcrowding, regimentation, degraded environment, closed family systems
FREEDOM	Constraint, oppression, acquisitiveness, passivity, totalitarianism, ignorance, rationalism, fear, obedience, resourcelessness, civility, cowardice	Deprivation, poverty, censorship, illness, British electoral system, unequal representation, machismo, injustice of judicial system, individualism, censorship, centralization, Whitehall, class system, unemployment, Official Secrets Act, mortgages, pensions, social norms, stereotypes, prejudices	To polarize decision-making, distrust, repress, rob, devalue fear, self-deception, abdicate responsibility, corrupt, control through money and/or power, act from habit, conform, legislate	Lack of space, 40-hour work week, laws regulating opening hours, threatening environments, domination by cultural environment to lack in poverty, lack of rights to common spaces, rational frontiers, overcrowding, creation of poor quality space, majority rights versus individual freedom

Table 8: NEGATIVE SYNTHESIS MATRIX, (GREAT BRITAIN)

	BEING	HAVING	DOING	INTERACTING
SUBSISTENCE	Self-indulgence	Unsustainability	Pollute	Disharmony with nature
PROTECTION	Self-destructiveness	Profiteering, prejudice	Exploit	Degradation of environment
AFFECTION	Family breakdown	Rationality, alienation	Devalue	Break-up of family environment, warped time priorities
UNDER-STANDING	Prejudice	Gaialessness	Abdicate	Fast pace of chango incompatibility of language systems within social environment
PARTICIPATION	Apathy	Centralized government	Give up responsibilities	Lack of communal spaces
IDLENESS	Guilt	Junk, entertainment	Rush around, ignore what is going on inside us	Congestion
CREATION	Inhibition	Predominance of material objectives	Commercialize, discourage	Distance from all natura
IDENTITY	Fear, rootlessness	Gaialessness	Refuse to know oneself, denying our connection with others and the environment	Degrade environment
FREEDOM	Fear	Deprivation	Devalue	Creation of poor quality spaces

Table 9: NEGATIVE SYNTHESIS MATRIX (SWEDEN)

	BEING	*HAVING*	*DOING*	*INTERACTING*
SUBSISTENCE	Meaningless-ness, gluttony	Big scale society	Self-destroy	Environment ex-ploitation
PROTECTION	Fear, anonymity	Centralisation	Avoid res pon-sibility, avoid con-tact	Pollution
AFFECTION	Fear of closeness	Mass society	Avoid contact	Dehumanized ar-chitecture
UNDER-STANDING	Prejudice	Fragmentation	To stress	Isolation
PARTICIPATION	Powerlessness	Vast scaleness, expert rule	Subordinate	Isolation
IDLENESS	Lack of self-con-fidence	Protestant work ethic	Worry, fill up time with "important" things	Lack of time
CREATION	"Who-are-you-to-tell-me" attitude	Mass conformity	Overestimate technocratic thinking	Lack of traditional expressions, vast distances between home and places
IDENTITY	Lack of con-fidence, false-ness	Official lies	Decide against convictions	Decisions made far from people affected
FREEDOM	Security-orienta-tion	Bureaucracy	Obey, over-regu-late	Conformity with city and housing planning

The next three tables represent Latin American cases. Table 10 (page 50) is the synthesis matrix of a Bolivian experience carried out with representatives of some forty-five non-governmental organizations working at grassroots levels, especially with peasant communities. Tables 11 and 12 (pages 51-52) correspond to a complete exercise, carried out in its seven phases in the Municipality of La Paz in the Province of Mendoza, Argentina. It is the poorest municipality of the province, and the exercise was conducted by two hundred citizens. Table 11 is the negative synthesis matrix, and Table 12 is the desired synthesis matrix. It is interesting to note that the contents of the last matrix have little to do with what is generally assumed to be of paramount importance in conventional development criteria. Here we have some food for thought!

Options That Determine Development Styles

Human Needs: From the Linear to the Systemic Approach

Fundamental human needs must be understood as a system, the dynamics of which do not obey hierarchical linearities. This means that on the one hand, no need is more important per se than any other; and that on the other hand, there is no fixed order of precedence in the ac-tualization of needs (that need B, for instance, can only be met after need A has been satisfied). Simultaneities, complementarities and trade-offs are characteristic of the system's behavior. There are, however, limits to this generalization. A pre-systemic threshold must be recog-nized, below which a feeling of deprivation may be so severe that the urge to satisfy the given need may paralyze and overshadow any other Impulse or alternative.

The case of subsistence may serve to illustrate this clearly. When the possibilities of satisfying this need are severely impaired, all other needs remain blocked and a single and intense drive prevails. But such a situation does not hold true only in the case

Table 10: NEGATIVE SYNTHESIS MATRIX (BOLIVIA)

	BEING	*HAVING*	*DOING*	*INTERACTING*
SUBSISTENCE	Ignorance	Corruption	Exploit	Lack of infrastructure, poor demographic distribution
PROTECTION	Insecurity	Institutional arbitrariness	Discriminate	Spatial discrimination
AFFECTION	Insecurity	Loss of moral values	Deceive and cheat	Geographical isolation, split families
UNDER-STANDING	Ignorance	Obsolete educational system	Marginate, dogmatize	Inadequate milieus, lack of communication systems
PARTICIPATION	Discrimination	Centralization, no respect for human rights	Prejudice	Lack of infrastructure
IDLENESS	Deorientation, repression	Lack of adequate educational systems	Manipulate	Lack of time for oneself due to survival efforts
CREATION	Alienation	Education based on memorizing	Underestimate	Lack of adequate milieus
IDENTITY	Domination	Lack of integration policies	Indoctrinate	Irrational urban growth
FREEDOM	Authoritarianism	Injustice	Dominate	Dependence

Table 11: NEGATIVE SYNTHESIS MATRIX (Mendoza, ARGENTINA)

	BEING	*HAVING*	*DOIN*	*INTERACTING*
SUBSISTENCE	Dependence	Unemployment	Depend	Destruction of the environment
PROTECTION	Paternalism	Inadequate social security	Depend	Isolation
AFFECTION	Selfishness	Lack of positive attitudes toward fellow-creatures	Criticize	Separation of families duo to seasonal working schedules
UNDER-STANDING	Incommunication, mediocrity	Authoritarianism	Accept, pseudo-inform	Inadequate demographical distribution
PARTICIPATION	Ignorance	Ignorance about rights and duties	Depend	Isolation
IDLENESS	Lack of interest	Lack of leisure means	Devalue	Lack of stimulating milieus, crowdedness
CREATION	Conformism	Mediocrity	Destroy	Isolation, crowdedness
IDENTITY	Lack of personality	False prejudices	Divide	Isolation
FREEDOM	Dependence	Lack of consciousness about true liberties	Divide, speculate	Milieus of dopondence

of subsistence. It is equally relevant to other needs. Suffice it to say, that total lack of affection, or the loss of identity, may lead people to extremes of self-destruction.

The choice of whether to follow the assumptions of linearity or the systemic assumptions is such an important one that it will determine the resulting style of development.

If linearity is favored, the development strategy will most probably establish its priorities according to the observed poverty of subsistence. Programs of social assistance will be implemented as a means of tackling poverty as it is conventionally understood.

Needs will be interpreted exclusively as deprivations and, at best, the satisfiers that the system may generate will correspond to those identified in this book as singular. Last, but not least, linear assumptions will stimulate accumulation regardless of people's human development. Paradoxically, this option results in a circular cumulative causation (in tbe sense of Myrdal) and thus the poor remain poor inasmuch as their dependence on exogenously generated satisfiers increases.

If one opts for the systemic assumptions, the development strategy

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If one opts for the systemic assumptions, the development strategy

Tabfe 12: POSITIVE SYNTHESIS MATRIX (Mendoza, ARGENTINA)

	BEING	*HAVING*	*DOING*	*INTERACTING*
SUBSISTENCE	Drive	Capacity to complete projects	Construct system of higher education	Care about human and natural resources
PROTECTION	Personality	Respect for family	Conscientize	Integration
AFFECTION	Solidarity	Capacity to give of oneself	Criticize constructively	Spaces of encounter
UNDER-STANDING	Harmony, dialogue, critical conscience	Perseverance	Value virtues of others	Non-discriminatory communication
PARTICIPATION	Initiative, humility	Respect for human rights	Dialogue	Factories and universities
IDLENESS	Willingness, originality	Imagination	Recreate	Places of encounter
CREATION	Imagination	Originality	Work	Stimulating milieus of production
IDENTITY	Authenticity	Integrated personalities	Take responsibility	Feel part of social system
FREEDOM	Respect	Responsibility	Take conscience	Adequate milieus

will favor endogenously generated synergic satisfiers. Needs will be understood simultaneously as deprivations and potentials, thus allowing for the elimination of the vicious circle of poverty.

It follows from the aboᵛe that the way in which needs are understood, and the role and attributes ascribed to the possible satisfiers, are absolutely definitive in determining a development strategy.

From Efficiency to Synergy

To interpret development as proposed here implies a change in the prevailing economic rationale. It compels us, among other things, to undertake a critical and rigorous revision of the concept of efficiency. This concept is often associated with notions such as the maximization of productivity and of profits, the ambiguity of both terms notwithstanding. If we stretch economic criteria to the most alienated extreme of instrumental reasoning, productivity appears quite inefficient. In fact, by overemphasizing the need for Subsistence, it sacrifices other needs and so ends up threatening Subsistence itself.

The dominant development discourses also associate efficiency with the conversion of labor into capital, with the formalization of economic activities, the indiscriminate absorption of the newest technologies and, of course, the maximization of growth rates. In the eyes of many, development consists of achieving the material living standards of the most industrialized countries in order for people to have access to a growing array of goods (artifacts) which become increasingly more diversified.

It may be asked to what extent such attempts at emulation make any sense at all. First, there is no evidence that people in those countries experience their needs in an integrated manner. Second, in the rich countries, the abundance of goods and economic resources has not proved to be a sufficient condition for solving the problem of alienation.

Human Scale Development does not exclude conventional goals, such as economic growth, so that all persons may have access to required goods and services. However, the difference with respect to the prevailing development styles lies in considering the aims of development not only as points of arrival, but as components of the process itself. In other words, fundamental human needs can and must be realized *from the outset and throughout the entire process of development.* In this manner, the realization of needs becomes, instead of a goal, the motor of development itself. This is possible only if the development strategy proves to be capable of stimulating the permanent generation of synergic satisfiers.

To integrate the harmonious realization of human needs into the

process of development gives everyone the possibility of experiencing that development from its very outset. This may give origin to a healthy, self-reliant and participative development, capable of creating the foundations for a social order within which economic growth, solidarity and the growth of all men and women as whole persons can be reconciled.

Development capable of combining synergy with efficiency may not be enough to fully attain that which is desired, but it is surely sufficient to persuade people that the undesirable is not always unavoidable.

3.

DEVELOPMENT AND SELF-RELIANCE

Manfred Max-Neef, Antonio Elizalde and Martin Hopenhayn

Toward a Self-reliant Development

On Multiple Dependencies

Up to the present, the efforts to establish a New International Economic Order and a new international division of labor have been unable to alleviate the economic, financial, technological and cultural relationships of dependence of Third World countries on industrialized nations. The increasing power wielded by financial capital has restricted further the capacity and the right of debtor countries to determine their own destiny. In this regard, the adjustment policies imposed by the International Monetary Fund on Latin American governments, applying for loans to maintain their disproportionate debt service payments, reflects the power of the international banking system to undermine the sovereignty of poor countries.

The patterns of consumption, exported by the affluent countries and

imposed upon Third World countries, subject the latter to relationships of exchange that make dependence more acute, perpetuate their internal imbalances and threaten their cultural identity. It is the industrial countries that not only control a substantial part of global industrial production, but also produce and market the new "breakthrough" technologies. They are also responsible for propagating the message that such technologies along with their accompanying products are absolutely essential for any society seeking to improve the welfare of its members.

The dependence on such patterns of consumption is encouraged from within Third World countries by power groups that reap the benefits derived from marketing them. This has contributed significantly to the indebtedness of Latin American countries. According to estimates made by the economist Jacobo Schatan,[1] between 1978 and 1981 the amount of non-essential imports rose to $14 billion in Mexico, to $10 billion in Brazil and to $5 billion in Chile. For example, luxury imports accounted for a per capita expenditure of $79 in Brazil, $200 in Mexico and soared to $513 in Chile. India, however, only imposed luxury goods to the value of $5 per capita, and it is no mere coincidence that its foreign debt is much lower than that of Latin American countries.

To break away from imitative consumption patterns not only frees us from the spell of cultural dependence, but also creates the conditions for a more efficient use of the resources generated in the periphery. It further lessens the negative impact of protectionist policies that industrial countries put into practice to shelter their own products. The various forms of dependence reinforce one another. The different domains of dependence—economic, financial, technological, cultural and political—cannot be viewed in isolation from one another, since the power of one is derived from the support it receives from the other domains.

It is because of these multiple dependencies that development geared toward self-reliance and the satisfaction of human needs is inhibited. The satisfaction of such fundamental human needs as Subsistence, Protection, Participation, Creation, Identity and Freedom is restricted by the demands which the international centers of power,
either explicitly or implicitly, impose upon the countries in
the periphery. This is apparent in matters of political models, guidelines for economic growth, cultural patterns, incorporation of technologies, options for consumption, exchange relationships and ways of solving social conflicts. The acceptance of such demands not only nurtures dependencies, but also reinforces them. We are caught in a vicious circle within which little or nothing can be accomplished in terms of satisfying the most vital needs of the great masses in Third World countries. Under such conditions, it would be more accurate to speak of "antidevelopment" countries, rather than of developing countries.

The political issue of Human Scale Development does not consist of seeking spaces which the New International Economic Order might open up for the economies of the periphery. On the contrary, it is a question of defining a self-reliant development strategy and, from this perspective; look for possible support from the New International Economic Order which can help to promote these objectives. For example, it is not a question of maximizing exports in terms of the demands from the center, and then wondering how to utilize export revenues. Instead, we should begin by regulating the flow of exports and decreasing the flow of imports, as is consistent with more endogenous and self-reliant development.

In much the same way as we have coped with an *interrelationship of domains of dependence* (financial, technological, cultural and political), we are paralyzed by an accumulation of *spaces of dependence* (local, regional, national and international). Economic concentration along with the centralization of political decisions generates and reinforces dependencies among these different levels. Poor countries are subjected to the will of the rich countries; and within poor countries the same pattern exists, where local and regional realities seem doomed to subordinate their development to the decisions of centralized political and economic interests.

Self-reliance at the Center of Development

Dependent relations from the international space to the local spaces, and from the technological to the cultural domain, generate and reinforce processes of dominance that frustrate the satisfaction of human needs. II is only by generating self-reliance, where people assume a leading role in different domains and spaces, Mat it is

possible to promote development processes with synergic effects that satisfy fundamental human needs.

We understand self-reliance in terms of a horizontal interdependence and in no way as an isolationist tendency on the part of nations, regions, local communities or cultures. Interdependence without authoritarian relationships is able to combine the objectives of economic growth, social justice, personal development and freedom in much the same way that a harmonious combination of such objectives can achieve both the collective and individual satisfaction of the different fundamental human needs.

Understood as a process capable of promoting participation in decision-making, social creativity, political self-determination, a fair distribution of wealth and tolerance for the diversity of identities, self-reliance becomes a turning point in the articulation of human beings with nature and technology, of the personal with the social, of the micro with the macro, of autonomy with planning and of civil society with the state.

Articulation Among Human Beings, Nature and Technology. The behavior generated by an anthropocentric cosmology that places human beings above nature is consistent with the traditional styles of development. Hence, the economistic view of development, measured by means of such aggregate indicators as the GNP, indiscriminatingly regards as positive any processes where market transactions take place, regardless of whether they are productive, unproductive or destructive. As an example, it is in this way that the indiscriminate depredation of natural resources makes the GNP grow, as in the case of a sick population when it increases its consumption of pharmaceuticals or use of hospital facilities.

Seemingly, modern technologies may often be deceptive. A remarkable example is that of the North American farming system, acknowledged for its great efficiency. Highly mechanized and benefiting from subsidized petroleum, it is an extraordinarily inefficient system when measured in terms of the amount of energy used to yield a set amount of kilo/calories. Nonetheless, when measured in monetary terms, it con-tributes to the growth of the GNP. These examples also hold true for the countries of the Third World, very much under the "spell" of the latest technologies.

In Mexico, according to information provided by the Xochicalli Foundation, it is estimated that 19,000k/cal. are used in order to put 2,200k/cal. of food on the table. Furthermore, the amount of energy consumed in transporting foodstuffs in Mexico is almost equal to the total energy required by the primary sector for food production. The fact that such situations are considered to be positive is undoubtedly a conceptual aberration.

Since Human Scale Development is concerned mainly with the fulfillment of fundamental human needs of present as well as future generations, it advocates a concept of development which is essentially ecological. This implies, on the one hand, creating indicators capable of discriminating between what is positive and what is negative and, on the other hand, designing and using technologies that can be adapted to a truly eco-humanist process of development and thus ensure the conservation of natural resources for the future.

Articulation Between the Personal and the Social. The prevailing political models and development styles have been unable to make compatible personal development and social development. The exercise of power, especially when inspired by restrictive ideologies, tends to either lose sight of the person in the archetype of the masses or to sacrifice the masses to the archetype of the individual. In fact, there are many models that postpone social development in the name of consumer sovereignty, while overlooking the fact that reducing a person to the mere category of a consumer also impairs the possibilities of personal development.

Social and personal development are inseparable. Therefore, it would be unreasonable to expect that one of them may automatically be the consequence of the other. A healthy society should advocate above all the development of every person and of the whole person.

Traditionally, it has been thought that owing to scarce resources, we are obliged to choose between personal and social development strategies rather than adopt comprehensive policies. Undoubtedly, such thinking arises from a conventional conception of efficiency. If, however, we consider conventional resources along with non-conventional resources with their synergic potential (see On Resources, page 76), we realize that comprehensive policies are viable, and that only by combining, personal and social development is it possible to achieve a

healthy society comprised of healthy individuals.

The articulation between the personal and social dimensions of development may be achieved through increasing levels of self-reliance. At a personal level, self-reliance stimulates our sense of identity, our creative capacity, our self-confidence and our ᵖeed for freedom. At the social level, self-reliance strengthens the capacity for subsistence, provides protection against exogenous hazards, enhances endogenous cultural identity and develops the capacity to generate greater spaces of collective freedom. The necessary combination of both the personal and the social in Human Scale Development compels us, then, to encourage self-reliance at the different levels: individual, local, regional and national.

Articulation Between the Micro and the Macro. Relationships of dependence flow from the top downwards—from the macro to the micro, from the international level to the local level, from the social domain to the individual domain. Relationships of self-reliance, on the contrary, have greater synergic and multiplying effects when they flow from the bottom upwards; that is to say, to the extent that local self-reliance stimulates regional self-reliance, which in turn fosters national self-reliance. This does not mean that policies at the macro level are intrinsically unable to communicate self-reliance to micro-social levels, but it does imply that two challenges must be met. The first involves minimizing the risk of reproducing vertical relationships in the name of regional and local self-reliance. The second means self-reliant processes originating from micro-spaces should be less bureaucratic, more democratic and more efficient in combining personal growth with social development. It is precisely these social and physical spaces--family, group, community and local—which have a distinct human scale dimension; that is, a scale where the social does not annul the individual; rather the individual may empower the social. In Human Scale Development, these spaces are fundamental to the generation of synergic satisfiers.

It is not our intention to suggest that self-reliance is achieved simply by social and economic interaction in small physical spaces. Such an assumption would do nothing but replicate a mechanistic perception which has already been very harmful in terms of development policies.

f self-reliant processes at the global and local levels do not complement each other, the most likely consequence will be the co-opting of the micro by the macro. Complementary relationships between the macro and the micro, and among the various micro-spaces, may facilitate the mutual empowering of processes of socio-cultural identity, political autonomy and economic self-reliance. (See pages 85-86.)

Articulation Between Planning and Autonomy. To achieve increasing levels of political autonomy and economic self-reliance in local spaces, it is necessary to promote processes with such objectives. This poses a central challenge for Human Scale Development: *to reconcile external promotion with internal initiatives.* The spontaneous activity of local groups or of isolated individuals cannot have any real impact if not nurtured and empowered through the action of planners and politicians. What is needed is global planning for greater local autonomy. This planning should be capable of mobilizing existing groups and communities, to transform their survival strategies into life) options that are organically articulated as political and social projects throughout the national space.

Articulation Between the State and Civil **Society.** To transform dependence into autonomy requires deep structural changes in the relationship between the state and civil society. These changes seek not only to create and reinforce self-reliance, but also to solve the conflicts and contradictions that may arise in the process of generating increasing self-reliance. The interconnection between multiple dependencies (from the international to the local, from the technological to the sociocultural) can only be confronted through social mobilization geared to the consolidation of self-reliance and through a deep respect for the diversity of cultures, forms of organization and uses of local space. Furthermore, self-reliance increases critical awareness. This means that more people will assume their role as social protagonists and, as such, this increasing participation must be harmonized within an organic whole.

As long as economic and social organizations remains framed within a pyramidal political logic, it will be extremely difficult locate and diversify resources in a way that comes to terms with the structural

heterogeneity of the Latin American population. For this reason, it is necessary to counterbalance the state's logic of power with the demands for political autonomy that arise from civil society—from the people and their organizations. It is through effective experiences of self-reliance that it will be possible to overcome the prejudice that efficiency necessarily goes hand in hand with centralized decision-making.

To deny the role of the state and of public policies in the execution of planning and resource allocation is not realistic. On the other hand, the surrender of social and productive organizations, generated by civil society, to a "macrocephalic" state would corrupt the process of developing self-reliance.

Encouraging self-reliance in many spaces means considering development not as an expression of a predominant class or of a single political project controlled by the state, but as the outcome of a diversity of individual and collective projects capable of empowering one another. In order to guarantee such processes, the state must assume the critical role of opening up spaces for the participation of different social actors. In this manner, the reproduction of mechanisms of exploitation and coercion are controlled, thus guarding against the consolidation of harmful projects acting to inhibit the diversity that needs to be strengthened and reinforced.

Empowering Groups and Social Actors

In contrast with the prevailing economic rationale, Human Scale Development—focused on encouraging self-reliance within the different spaces and domains—does not consider accumulation as an end in itself, or as a panacea that cures all the ills of Third World countries. Although it in no sense minimizes the importance of generating surpluses, its emphasis is on the consolidation of groups, communities and organizations capable of forging self-reliance. Through its expansion and articulation from the micro-spaces to national settings, economic accumulation can eventually help to progressively satisfy the fundamental human needs of people. The capacity of the different groups and individuals to decide how to use and allocate their own resources will ensure a use of surpluses that is neither discriminatory nor restrictive.

Spaces and Actors. In local spaces, which are more human in scale, it is easier to generate initiatives in self-reliance that could be potential alternatives to pyramidal structures of power. It is in human scale spaces that personal and social development can reinforce each other. Therefore, there is no dependence which can be done away with effectively until we rediscover and then nurture the initiatives of social organizations at the grassroots level. The role of the state and of public policies is to identify these embryonic initiatives, reinforce them and help them to multiply. Besides, it is within local spaces that people act to satisfy their fundamental human needs.

Alternative policies central to Human Scale Development are needed in order to empower social actors to initiate autonomous, self-sustaining and harmonious development in the different domains. This does not imply, of course, that Human Scale Development is solely concerned with small social and physical spaces. The impact of the international recession on Latin American countries and the structural imbalances of peripheral capitalism make it obvious that development in local spaces is inadequate unless it is complemented by global policies to alleviate the precarious conditions of the dispossessed masses. However, such policies must include in their agenda the allocation of resources capable of stimulating self-reliance within local spaces.

Self-reliance Versus Instrumentalization. Self-reliance presents a contrast to the uniformity of behavior among social sectors and actors that is conventionally expected. People are no longer just instruments for the efficient accumulation of capital. In the Third World, the price paid for capital accumulation and efficiency is dependence. Yet, dependence inhibits the satisfaction of fundamental human needs and, therefore, is a price which should not be tolerated. It means that the dispossessed masses are manipulated in relation to the demands made by the great centers of economic power and that heterogeneous forms of culture, production and organization are considered mere stumbling blocks to growth.

An economic rationale is needed that does not ascribe importance to indiscriminate accumulation nor to the mere improvement of conven-

tional economic indicators irrelevant to the well-being of people, nor to principles of efficiency unrelated to the satisfaction of human needs. *This rationale is aimed at enhancing people's quality of life and is sustained by respect for diversity along with a refusal to turn some people into instruments of others and some countries into instruments of others.*

The Logic of Economics Versus the Ethics of Well-being. It is necessary to counter a logic of economics, which has inherited the instrumental reasoning that permeates modern culture with an *ethics of well-being.* The fetishism of numbers must be replaced by the development of people. The state's vertical management and the exploitation of some groups by others must give way to a social will encouraging participation, autonomy and the equitable distribution of resources.

It is absolutely necessary to do away with a priori categories and assumptions which, thus far, have not been questioned at the levels of macro-economics and macro-politics. A commitment to Human Scale Development makes it necessary to encourage individuals to assume responsibility for a development alternative based on self-reliance. In this respect, the central question for Human Scale Development is: What resources are to be generated, and how should they be used in order to nurture self-reliance in individuals and in micro-spaces?

Self-reliance involves a kind of regeneration or revitalization emanating from one's own efforts, capabilities and resources. Strategically, it means that what can be produced (or worked out) at local levels is what should be produced (or worked out) at local levels. The same principle holds true at the regional and national levels.

Opting for Self-reliance. Self-reliance changes the way in which people perceive their own potential and capabilities. Often their sense of value and self-worth has been denigrated as a result of center periphery relations. The reduction of economic dependence, one of the objectives of self-reliant development, is not expected to be a substitute for trade or exchange. These will always be necessary as certain goods or services cannot be generated or provided al a local, regional or na-

tional level. Thus, self-reliance must of necessity acquire a collective nature. It must become a process of interdependence among equal

partners so that forms of solidarity prevail over blind competition.

Self-reliant development permits a more complete and harmonious satisfaction of the system of fundamental human needs. By lessening economic dependence, subsistence is safeguarded, since economic fluctuations (recessions, depressions) cause greater damage when a center-periphery structure prevails. Furthermore, it fosters participation and creativity. It stimulates and reinforces cultural identity through an increase in self-confidence. Finally, communities achieve a better understanding of technologies and productive processes when they are capable of self-management.

On the Invisible World

The Invisible World and Its Potential

It is not our intention to present the invisible sectors or the micro-organizations as absolute sustainers of a structural transformation of society or as redeemers of contemporary history. If we have devoted an important part of this book to these protagonists, it has been with the purpose of emphasizing what is ignored in a great part of the literature on development, namely, all the "sub-history" of everyday life where productive practices are linked closely to collective survival strategies, cultural identities and popular memory. Fully aware of all the economic and cultural limitations of the invisible world, we think, however, that such a world contains and generates connections between economic practices, social organizations and cultural features which cannot be disregarded in any discussion concerned with endogenous development. Finally, our emphasis on the invisible world and its micro organizations also conforms to the need to complement other perspectives emphasizing development from the bottom upwards in order to acknowledge as relevant what traditionally has been seen as marginal. Moreover, we are interested in efforts to understand the dynamics of other emerging protagonists, such as youth groups, women's organizations, trade unions, entrepreneurs, indigenous

groups, and so forth. We do not wish to contribute to an idealization of the popular sectors. We simply intend to recognize their value and potential as social actors who can help create a participatory and decentralized form of democracy—the practice of democracy at a human scale.

The economic crisis dominating Latin America expresses itself in many different ways. One of the most significant manifestations of this situation has been the sustained expansion of the invisible sectors over the last few years. In countries with high unemployment levels, the contingent of the active population that holds non-salaried jobs is of such a magnitude that there is no longer any sense in considering it as a residual sector of society. By a strange kind of dialectic, these sectors manifest themselves both as an extreme expression of the crisis and as a possible means of emerging from it. Because they lack opportunities in the formal market, unemployed workers and their families generate alternative forms of productive organization and of work in general, thus giving rise to an extraordinary diversity of survival strategies. The invisible sectors are marked by precarious living and working conditions, the consequences of a permanent lack of security imposed by the competitive market that creates disadvantages for these sectors where productivity is low. All this is aggravated by the fact that the invisible world becomes very useful to a capitalism which is unable to generate sufficient jobs in the formal economy.

Strengthening Micro-organizations. As a potential means of solving the crisis, the invisible world creates through survival strategies a myriad of community organizations as well as productive micro-organizations. In this sub-world, the ethics of solidarity that have evolved from within are an indispensable resource for survival in the milieu where a dominant logic of competition prevails. In this way, an endogenous force of solidarity confronts permanently the exogenous forces of competition. In this confrontation, there are two diametrically opposed perspectives: (1) that the exogenous pressures may weaken these organizations to the point where they will be dissolved through "inertia" or incorporated into the competitive rationale of the dominant system; or (2) that these organizations will gain strength thus attaining increasing degrees of self-reliance and ultimately transferring the vitality

of their solidarity to other sectors of society. For the latter to happen, it will be necessary to decentralize decisions, to increase access to resources and to promote popular participation.

This does not mean that a self-reliant development policy should concern itself exclusively with the internal reinforcement of the invisible sectors. Such a thesis would be partial and reductionist. What is at stake is to liberate the wealth of social creativity, of solidarity and of self-managing initiatives which the invisible world has spawned in order to survive in a restrictive environment. These initiatives, through more generally applied policies, will challenge the logic of indiscriminate competition and dependence.

The Need for Horizontal Networks. The invisible actors should organize horizontal networks, undertake mutually supportive action, articulate individual and group practices and thus develop shared projects. In this way, they will be able to do away with the fragmentation which presently threatens their existence. National projects that include these sectors in decision-making and planning can minimize the effects of exogenous pressures and strengthen the endogenous potential.

The Invisible World and the Latin American Crisis

An unmistakable feature of Latin America's development is the inability of the formal economic sector to absorb the steady increase in the economically active population. It generates a surplus labor force comprised of the unemployed and the underemployed, who insert themselves in the labor market through a variety of low income-generating self-employment schemes, that is, survival trades. This heterogeneous sector of society has spawned a multiplicity of organizations where the non institutionalized productive unit is predominant. All these heterogeneous activities take place outside the formal productive sector.

Individuals and families, organized in small economic units that fill the empty spaces of the system and undertake economic activities spurned by the modem capitalistic sector, make up a significant part of the labor force in almost all I in American countries. The participation of

whether organizad on an individual or on a social basis. Although these organizations are embryonic in character, it is necessary to investigate and to verify if they gcnuinely represent alternativa forms pertincnt a new style of development. Such an evaluation would involve studying the multiplicity of rationales that underlie these organizations. But if theoretical investigation is to be translated finto political change, it is also necessary to identify those new social protagonists that are emerging from within the invisible world and are potential agents of change. A comprehensive study of both rationales and of social protagonists would help to pave the way for new forms of organization capable of changing social reality.

This investigation would in no way diminish the historical role of capital as the majos instrument of economic modernization in the region, nor the role of the state as an instigator of capitalist initiatives. Capital and the state are far too important in our countries to be overlooked. To ignore them may leal to serious errors of analysis and the implementation of erroneous development policies and actions.

Self-reliance and Production of Knowledge. Human Scale Development calls for a restructuring of the way we pursue knowledge in order to create critical awareness throughout society. The cognitive instruments needed to counteract the multiple forms of dependence

ust be made accessible to all. Such a task requires thai the new ideas con front the dominant ones in the spaces where public policies are constructed. Therefore, it is necessary to coordinate action in order to guarantee that ideas are undcrstood and discussed in all those domains and settings promoting people-centered development.

We require research leading to the creation of data bases capable of measuring and evaluating what is relevant lo Human Scale Development. It is, therefore, advisable to modify the statistical and qualitative systems of information in such a way that they reflect the structural heterogeneity and psycho-cultural specificities of the different regions and, abo^{y}e all, the potential that underlies this diversity.

It is necessary to encourage popular participation in the production of relevant information. This will require, on the one hand, redesigning our research methodologies and practices in such a way that they not only make information available to the people, but also insure that it is relevant to their interests. This type of data must be generated through participatory practices and widely accepted community self-diagnosis techniques.

It might be appropriate to encourage the creation of idea banks at national levels and then interconnect them throughout the Latin American region. These banks would gather information on grassroots initiatives aimed al local self-reliance. Thcy would also collect information on the use of non-conventional resources (see On Resources, page 76), and on technologies and public policies conducive to the promotion of the ideas of Human Scale Development.

It is advisable to modify the educational curricula in the centers of higher learning so that they systematically consider development alternatives, especially their epistemological, propositional and methodological aspects. The training of researchers is essential to generate information crucial to Human Scalc Development, and also

counteract the tyranny of reductionist ideologies and the unilaterally adopted views on the topic of development.

It is important to improve the quality of adult education as well as the work of development promoters and activists so that it may be consistent with the objectives of community participation, self-reliance and the satisfaction of fundamental human needs. Moreover, post-graduare programs in teaching and research should be encouraged to emphasize the systematization of the problems that arise in connection with the quest for development alternatives in our countries. Finally, it is advisable to organize a network of closely linked research and training centers in ordcr to create a system of permanent feedback that may con-tribute to the design of a new development paradigm.

On Micro-organizations
Micro-organizations in the Invisible Sectors

One of the most remarkable manifestations of the invisible world is the wide spectrum of micro - enterprises and other small

economic organizations which operate in the empty spaces left by the capitalist market. The rationale that characterizes these micro-organizations may be determined by such factors as the need to survive in a situation of acute crisis, the lack of opportunities offered by the modern market economy or a conscious decision to adopt an alternative to employment in the formal sector of an economy governed by its own internal discipline, hierarchy and tradition. The rationale governing micro-organizations is based only partially on the capitalist principle of accumulation through profit.

Heterogeneity of Micro-organizations. Often these economic micro-organizations are subordinated to modern capitalism. Nonetheless, their diversity, together with their alternative rationale, distinguishes them from the enterprises of the modern sector that operates on capitalist principles in increasingly oligopolistic markets. Some studies have indicated that the structures through which these micro-organizations operate generate low productivity and low incomes. This renders the jobs performed in such non-institutionalized sectors unattractive except to the poorly qualified, and to those who for other reasons (the handicapped, migrants, women, etc.) have limited access to the formal labor market. There are instances, however, where micro-organizations have emerged as deliberate alternatives to salaried employment, or as a defense mechanism against an environment that is socially and politically hostile. In such cases, the prevailing motivation might be solidarity expressed through a new social experience—that is, work as a creative endeavor and not just as a survival strategy. The heterogeneity of the sector is multi-dimensional; there is a great diversity of activities performed, of methods of marketing goods and services and of ways of organizing work (individual micro-units, cooperatives, family enterprises and so on).

Lack of Stability **of Micro-organizations.** Another feature of micro-organizations is their instability demonstrated by their high birth and death rates. Such organizations face serious difficulties in surviving due to such factors as the size of the market, location, structure of costs, opportunities for entering into a competitive market, the potential for diversifying sources of inputs and raw materials, the capacity to

avoid dependence on a few buyers (especially middlemen), access lo credit and the like. These constraints, which determine whether micro-organizations are able to reproduce themselves, may be overcome with the help of assistance programs sponsored by public or private agencies. A new concept of economic and social resource management (see On Resources below), along with an alternative view of the process of development, makes it possible to minimize the dependent, unstable and random character of the micro-organizations of societies which, like those of Latin America, show a great structural heterogeneity.

In the absence of a new vision, the life span of most of the economic micro-organizations will be short and they will be characterized by limited periods of accumulation followed by frustrated attempts at growth. Although it seems paradoxical, these experiences, inherent in the invisible world, represent a potential alternative to the scourge of unemployment. Since the modern sectors of the economy will not be able to solve the negative effects of the crisis by themselves, the need to support and stimulate these micro-organizations becomes obvious.

Micro-organizations and Macro-policies. In order to secure the development and the continuity of these organizations, the role of the state becomes fundamental. The state can undermine their existence either by neglect or by the repression of social movements which, originating within the micro-organizations, tend lo form alliances with other sectors of civil society in the struggle to regain the power concentrated in the state. Therefore, to promote micro-organizations, emphasis must be given to structural changes and to an organic articulation between the micro and macro levels of society. The socio-political and economic impact of the micro-organizations comprising the invisible world will depend on their capacity to relate to the whole of the society. Furthermore, their eventual influence will also depend on whether they limit themselves to organizing survival strategies or, whether in addition and by means of these strategies, they become the embryos of an alternative form of development.

Limitations and Potentials of the Micro-organizations

It would be absurd to identify Human Scale Development, in its broader sense, with only the invisible world, and even more so with a sub-division of these, which we call economic micro-organizations. We should, however, try to identify within these units the embryos of different forms of social organization of production and work, which could be incorporated into new styles of development.

One of the manifestations of the economic and social crisis affecting the countries of the region is the problematique of the invisible world. Hence, they play a critical role in the search for policies and programs to overcome the crisis. Even though alternatives to the existing order may have their origins in some micro-social spaces of the invisible world (anti-authoritarian spaces which combine an economy, a culture and a political will), their transformation into viable alternatives affecting the global situation will depend on the identification of, and support for, those protagonists and those social organizations capable of putting their vision into practice.

Therefore, the question of invisibility has to be included in the problematique of the transition to new forms of social organization. In this regard, we must not overlook the fact that certain experiences associated with the invisible world are proving to be perfectly capable of surviving the crisis from which they originated in the first place.

Whatever the structure that defines the invisible world, the political bearing of these on the rest of society will also depend on the creativity of the persons involved. In other words, in order to foster structural changes, it is necessary to separate within the invisible world the mere mechanisms of resistance to the crisis from mechanisms which are motivated by a search for greater autonomy. The latter may eventually contribute to a more lasting structure and inspire the creation of new development strategies.

Self-reliance as a Socio-economic Process. The degree of self-reliance that popular organizations may reach in their operation and management is directly determined by the, way in which such organizations insert themselves and participate in the market. We must acknowledge, however, that absolute self-reliance is utopian. What is both desirable and possible is *the achievement of increasing degrees of self- reliance.* In other words, self-reliance will be determined by the way in which the micro-organizations relate to other social actors and organizations. Since self-reliance is forged through these connections, it must be understood as a process defined by a system of relationships. If, as a consequence of the crisis, many popular economic organizations attempt to construct practices of self-management, this constitutes an important step toward self-reliance as well as greater autonomy. It indicates that groups and communities have the will to exert control over their own conditions of life. It is in this sense that these micro-organizations are the embryos of Human Scale Development. They represent a potential for the transformation of economic and social relationships basic to the construction of a democratic culture.

All this must, of course, go hand in hand with the availability of resources that lead to the generation of economic surpluses and thus allow for the reproduction and growth of these organizations.

Challenges for the State. A permanent threat to micro-organizations wishing to attain greater levels of self-reliance and autonomy are the cooptive strategies of the state, political parties and other institutions which operate according to a logic of power. Economic micro-organizations and social movements in general are frequently neutralized by a political landscape dominated by pyramidal structures in which struggles for hegemony are constantly taking place.

The problem of cooptation is critical in shaping the articulations between local organizations and global processes. Cooptation is achieved through the identification and political manipulation of the social actors. This invariably leads not only to a loss of their identity, but also to actions that ultimately defeat their endogenous objectives. Within these dynamics, the system of relations established between the micro-organizations and the macro-structures of power eventually result in micro-organizations losing control over their own resources and their own destiny.

The direction of these articulations depends to a great extent on the ideology of the state. Within the context of authoritarian and anti-democratic political processes, public resources are distributed with

strings attached. They are aimed at inducing the recipient communities to adopt particular types of behavior or perform actions which the state considers convenient for the established social and political order. In the case of a merely representative democracy, the allocation of public resources occurs within policies of social reform integral to an ideological perspective which also conditions the functioning of micro-organizations and of social movements, thus undermining their capacity for autonomy and self-reliance. However, it is obvious that a representative democracy presents more favorable conditions for the co-existence of multiple socio-cultural identities than authoritarianism does. In any case, democratic political activity, together with an economic system that allocates resources according to the real needs of the different social groups, are indispensable requirements for the propagation of Human Scale Development.

On Resources

Resources for Self-reliance

In implementing concrete policies aimed at Human Scale Development in Latin America, a decisive step is the strengthening of local organizations that operate with an anti-authoritarian rationale (solidary, synergic, participatory) and increasing self-reliance. If such "organizational embryos" can be strengthened, it will be possible to lessen the risk of cooptation of the micro by the macro, and increase the permeability of the macro by the micro. A policy that promotes resources *for* local development (which implies decentralization and participation) and *from* the local organizations is the cornerstone of structural transformation "from the bottom upwards."

To this end, it is necessary to examine the problem of resources within small economic organizations, to evaluate critically the conventional concepts of resources, to seek alternative ways of mobilizing financial resources and, above all, to consider the importance of nonconventional resources for local development and, in particular, for the development of small economic organizations.

Work as a Multi-resource

When analyzing a productive unit in order to evaluate its efficiency and its method of organization, the orthodox paradigm of economic theory, based on the concept of production functions, advocates that the flow of production during a given period of time depends (among other things) on the stock of capital and on the use of a certain amount of work, both combined in a given proportion. From this it follows that both work and capital are mere factors of production, that is to say, inputs for the productive process. Within such a perspective nothing, in a formal sense, makes a machine different from human work, which is purchased in the market just as other goods are since it has a price (wages) and is subject to the free play of supply and demand.

Economic theory's primitive interpretation of work and capital as homogeneous was superseded by the so-called "Controversy of Capital" or "Cambridge Controversy." The idea of homogeneity was transcended by the "Theory of Human Capital." Yet, in the new version, human work appears restricted to the process of accruing capital through investments in education and training. Apart from being objectionable on ethical grounds, this theory contains a conceptual sophism by virtue of which the workers appear, to a certain extent, as capitalists.

Over and above this reductionism, these notions omit a set of resources that are work-related and which historical experience compels us to consider. Work constitutes much more than a factor of production: it fosters creativity, mobilizes social energy, preserves communal identity, deploys solidarity and utilizes organizational experience and popular knowledge for the satisfaction of individual and collective needs. Work has, then, a qualitative dimension which cannot be accounted for either by instrumental models of analysis or by economic manipulations of production functions.

Within the framework of the current crisis, the qualitative dimension of work becomes all the more evident in those activities that are undertaken by many micro-organizations. They are intangible elements 1101 measurable or definable in units comparable with those used for the

conventional factors of production. Linked to a broader concept of work, these resources have a decisive role in compensating the scarcity of capital with qualitative elements for the increase of productivity. Understood as a force which mobilizes social potentialities, *work, more than just a resource, is a generator of resources.*

A reconceptualization of resources—work included—is both necessary and viable. It enables us to overcome one-dimensional views, which tend to subordinate development to the exclusive logic of capital.

The new concepts to which we have made reference, and the choice of alternatives for generating resources, require two fundamental aspects to be considered. Both will be examined in the following sections. The first is related to non-conventional resources, and the second to financial alternatives for local development.

Non-conventional Resources

Non-conventional resources are important not only for the survival of micro-organizations, but also for the constitution and development of social movements in different countries of Latin America. We find examples in the Popular Economic Organizations in Chile (PEO), in the grassroots Christian communities of Brazil, in the organizations of squatter settlements in Peru, in youth and women's movements, native peoples associations, ecological groups and so forth.

Analogous organizations exist in all the countries of the region, and are made up of people who have decided to muster their energies to share the task of satisfying their fundamental needs through the construction of collective life projects.

There are many cases of micro-organizations that are created not only to overcome the absence of work opportunities in the more modern sectors of the economy, but also to come up with deliberate alternatives both to alienation and to the hierarchical organization of work dictated by capitalism, in factories, offices and in other organized services. A good number of these organizations devote themselves to economic activities which guarantee their self-reproduction, while also promoting social, cultural and recreational activities. Production and marketing of goods and services is complemented with such activities as communal

house-building projects, organic farming in small family plots, cooking community meals in "common pots," collective purchasing, popular theater and others.

Beyond Economic Resources. The resources that such movements and organizations avail themselves of is not limited to those that are conventionally understood as economic resources. While the latter are restricted to work with its different characteristics, as well as to capital, other possible resources are:

1. Social awareness;
2. Organizational know-how and managerial ability;
3. Popular creativity;
4. Solidarity and ability to provide mutual aid;
5. Expertise and training provided by supporting agencies;
6. Dedication and commitment from internal and external agents.

It is necessary to stress a very special peculiarity that distinguishes conventional from non-conventional resources. While the former are depleted when used, the latter are lost only to the extent to which they are *not* used. For instance, power that is relinquished is power that is lost, money that is given is money we no longer have, whereas solidarity that is shared with others is solidarity that grows, knowledge that is transmitted is knowledge that expands itself.

Non-conventional resources enable development to take place that goes far beyond the notion of accumulation (while including it), sine it is also based on the acquisition of practical knowledge generated by the community itself. Such an accumulation of knowledge expands, in turn, the potentiality of the resources themselves. Another distinctive trait of these resources (and one which reverses the usual economistic perspectives) is that unlike conventional economic resources, which are characterized by scarcity, non-conventional resources are plentiful. They also have a tremendous capacity to preserve and transform social energy for processes of deep change.

Complementarity of Conventional and Non-conventional Resources.   The use of non-conventional resources, such as

those listed above, not only stimulate self-reliance, but also insure a better performance of conventional resources, especially of capital. This is lustrated by the experience of many local projects undertaken in Latin America with the support of international organizations. Unfortunately, a great number of projects, which have all the necessary financial support, vanish into thin air because of their inability to motivate people and to arouse the endogenous potential of the groups that they intend to benefit. Hence, any conventional resource which is not supported in the community by a "will to be" and a "will to do"—that is to say, by the emergence of non-conventional resources which the community decides to mobilize—will end up collapsing.

This reconceptualization of resources not only widens the options that are possible in matters of policies and planning; it also underlines the fact that the main agent of transformation is the capacity of the human being to activate his or her sensitivity, imagination, volition and intellectual talent in an effort that extends itself from personal develop- ment to social development thereby generating a process of integration of the individual and the collective. It is precisely this synergic capacity of non-conventional resources which make them indispensable for Human Scale Development. And it is because of their historical and cul- tural dimension that a policy of using non-conventional resources is much more than an economic policy.

Non-conventional Resources and Social Democracy. These resources will be important instruments for transformation when they are rooted in the communities and "stored" in their historical and cul- tural tradition. It is the community which can enhance these resources and make the use of them viable because they are inherent in it. Thus, *the strengthening of non-conventional resources also involves the strengthening of community participation and of self-reliance.*

To the non-conventional resources mentioned, we may add other analogous ones that flow from historical-anthropological contexts as well as the social structures that include social networks, collective memory, cultural identity and world views.

Any alternative that aims to achieve Human Scale Development will necessarily entail a policy of activating non-conventional resour- ces. This forces us to meet a great ideological challenge, namely, to

advance along the lines of:

1.　Identifying and making use of favorable historical circumstan- ces in order to multiply the initiatives which civil society creates to manage the available resources in a new way.
2.　Identifying and broadening those social spaces which contain a greater potential in terms of non-conventional resources.
3.　Identifying and motivating social actors capable of using these resources for structural changes conducive to Human Scale Development.

Alternatives for Local Financing

The conventional financial system has neither adjusted itself to promote local development, nor provided any support to alternative ex- periences of economic organization. This is part of a political context that needs to be critically reviewed. This review is all the more impor- tant when we become aware of the economic crisis which the countries of the region are undergoing. Stabilization policies aimed at solving the problems of internal imbalances and external indebtedness were under- mined by irresponsible lending by the international system of private finance, the powerful economic groups and the state. Far from helping our countries to develop, these processes precipitated a profound economic and social crisis which has no precedent in the history of Latin America. A fact that should not be overlooked is that channeling huge funds to both the powerful economic groups and the state reinforced a crisis which further impoverished all those sectors that have tradition- ally been excluded, in social, economic and political terms, from the historical process of economic expansion.

One of the main problems in relation to local financing is the ab- normal enlargement and centralization of the state in Latin America. More resources would be available to promote self-reliance of local spaces in many countries of the region if tax, monetary and financial reforms were undertaken. This would allow public and private resour- ces to be related more directly to local needs and to the less favored groups in the population. The discussion about decentralization versus centralization than acquires great significance for Human

Scale Development. In this manner, the role of the state is redefined as an allocator of resources to favor development geared to strengthening local spaces.

The financial institutions that may be concerned with local financing of Human Scale Development must state goals and forms of operation going far beyond conventional principles. In the first place, these institutions must promote local creativity and support community initiatives that are organized through solidary, horizontal and equitable relationships. Second, they must encourage the greatest possible circulation of money at the local level. This means attracting locally generated surpluses and making them circulate as many times as possible within the local space, thus increasing the multiplier effect of a given level of deposits and savings. Third, these institutions must adjust themselves so that the savers, or the generators of surpluses, may decide on the use of their resources, thus allowing for a greater transparency in the relationship between saver and investor that may, in turn, promote greater participation in activities devoted to making development alternatives in the local space more viable. Fourth, these financial institutions must be managed in a cooperative way by people in the community itself, which means that the management should also be local in origin. Finally, if the local financial institution is to gain credibility, it must be protected against any potential liquidity crisis. This protection could be provided by an organization such as a Central Bank or any other sound public banking agency.

In terms of the above, it is necessary that the banking system in Latin America should adopt a new orientation which may broaden its concept of funding. In this way, it could overcome restrictive practices, doing away with the conservative barriers which demand guarantees in property or collateral as an indispensable condition of any loans granted.

Without reducing their autonomy, local banks should also be related to the national and international financial systems. With regard to the latter, one could think of creating a Latin American regional bank, the primary function of which would be to support local financing. Such a bank, regional in character, could be conceived as a cooperative institution composed of local banks.

Another form of local financing is barefoot bauking. This is a mechanism which is generally connected with some official financial institution. Its objective is that of allocating resources to activities undertaken by local groups which otherwise would have no access to funding from any other banking institution, either public or private. The system has many variations but, in general, it operates through the identification of investment opportunities carried out by especially trained people who live within the community. Such agents choose activities according to their suitability to local conditions and their potential for development. In these cases, support is adapted to the real possibilities of the local project, instead of the project having to adapt itself to exigencies of the financial market.

Local financing also requires that the funding institution itself (or any other public or private agency) should provide, if necessary, technical support to organize and undertake projects which will avail themselves of the economic opportunities to be found in the local space. This requirement should not be understood as a formal one, but as an instrument to enable the viability of the effort to be assessed and to improve external support.

In the case of the Grameen Bank Project in Bangladesh, the loans generated savings, which is fairly unusual. What usually happens is the opposite, namely, that savings generate credit. The relation between savings and loans has been the subject of new proposals in recent reports. It has been advocated—in the light of the problems faced by the poorer communities seeking alternative forms of development that the mobilization of savings, combined with loans at the local level, is one of the most important means to promote the development of the community. On the other hand, there are experiences that show that the informal sector has a great potential for generating savings and that this potential has scarcely been explored. The savings institutions in the local spaces emerge, then, as important agencies for the support of alternative experiences, particularly if they are cooperative and restrict themselves to small geographical spaces, thus taking up the role of popular banks. In order to give greater consistency to local development, these institutions must also: (1) have a decentralized structure; (2) relate, in the closest possible way, the generation of savings to local credit needs; and (3) overcome or find alternative ways of usual demands of guarantees for granting credit.

Autonomy and Macro-policies

It is essential to design policies to support the development of the invisible sectors by means of training programs, credit and technical assistance to small producers, favoring in particular those micro-organizations that are capable of deciding on and managing their projects by themselves in a collective and solidary manner.

Likewise, training programs, credit and technical assistance must have the fundamental objective of increasing the capacity of micro-organizations and community groups to exercise control over the goods and services required to reduce poverty, enhance the quality of life and improve habitat and environment, thus stimulating self-reliance in the communities, municipalities and regions.

It would also be appropriate to encourage the application of development strategies which acknowledge and respect the diversity of realities and of forms of organization that characterize Latin America at the local, regional and national levels and thus transform diversity into a promoter of development. This must involve a systematic effort to deconcentrate political power so that it can be exercised in a more egalitarian way in the different domains of society, thus ensuring adequate consideration of local and regional interests.

Finally, there is an urgent need to research ways of fundamentally restructuring the financial and banking systems within our countries in such a way that they contribute to development not only in global terms, but also specifically in the regional, municipal and community spaces, giving special emphasis to the potential for self-reliance in local organizations. In this connection, we must consider the creation of local banks (not branches of national banks) that stimulate community savings and the circulation of surpluses inside the communities which generate them.

Recapitulation

Challenges and Alternatives

Human Scale Development, geared to the satisfaction of human needs, attains through self-reliance its true and irreducible value. At a practical level, opting for this kind of development requires as an initial impulse a policy for mobilizing civil society. In order to promote structural changes, the mobilization must meet two challenges. First, it must stimulate the use of non-conventional resources in setting up collective life projects aimed at achieving self-reliance and the actualization of human needs. Second, it must support and strengthen local development initiatives so that their influence overcomes spatial limitations and contributes to the construction of a new hegemony in the national domain. If the different local micro-spatial practices are to become a new social reality, they must be articulated within a project that calls for global development. Hence, the decisive political importance of the micro-macro articulation. The fundamental issue is to enable people from their many small and heterogeneous spaces to set up, sustain and develop their own projects.

Challenges Within the Political Sphere. The existing political structures are faced with the challenge of recognizing and regaining the wealth of dynamism contained in the social movements of the invisible world in order to integrate them as significant, rather than residual, protagonists in a new project for society. In the present circumstances, owing to such factors as economic and social marginalization and the inefficiency of conventional political practices, we witness with increasing frequency responses of social struggle which do not match the traditional patterns of political activity. A willingness to set up groups and organizations with informal non-bureaucratic structures, to participate in collective forms of decision-making and to be pragmatic, rather than ideological, in setting objectives are all traits which political institutions seeking to redefine themselves should take into account.

Such a redefinition compels these institutions to develop mechanisms for sharing in decisiou-making, to combine ideological and strategical requirements with those of a more practical and ethical nature and to

engage in a revitalized dialogue expressed in terms of needs *felt* and *mobilized* by the communities themselves.

Articulation Without Cooptation. A critical problem is that of the size of an organization, since this is not unrelated to the system of values that can be generated within it. Smaller organizations have the scope to develop internal horizontal relationships of greater solidarity and less constrained by ideology. However, they lack the capacity to promote global alternatives. Within this context, the central problem for the development alternative we seek is how to build up the movement but avoid bureaucratization or, to put it another way, how to achieve *articulation without cooptation.* This challenge is unresolved, and can only be solved through the interaction between social theory and praxis. If the problem is not dealt with, Human Scale Development will be restricted to a mechanism that favors people in the micro-social spaces, thus perpetuating in the larger spaces an order that excludes the mass of the people and, eventually, reduces this alternative to a mere idea which cannot be put into practice more widely.

Only a development style that aims to satisfy human needs can take up the postponed challenge to stimulate the growth of all men and women, and of their entire personalities. Only increasing self-reliance in the different spaces and domains can give root to such development on the Latin American continent. Only absolute respect for the diversity of the m any worlds that make up the wide world of Latin America will ensure that autonomous development is not restricted to the realm of utopia. Only the articulation of these diversities in a democratic project committed to deconcentration and decentralization of political power can release the combined energies needed to bring about development that is truly designed for human beings.

NOTE

1. Jacobo Schatan, *World Debt: Who Is to Pay?* London: Zed Books, 1987.

4.

THE UNRESOLVED PROBLEM OF MICRO-MACRO ARTICULATION

Manfred Max-Neef

Seeking Solutions

The problem of micro-macro articulation remains to be resolved within economic theory and in development policies as well. Indeed, a satisfactory solution is still a long way off. It is therefore legitimate to wonder whether it is in fact a real problem and, if so, whether it has a solution. In considering this question, it is important to be aware that the history of economic theory has itself been a history of options rather than solutions.

The Ebb and Flow of Economic Theory. The first "world view" of economics as a discipline as such—mercantilism—was a macro-economic view. The aftermath of the crisis of mercantilism determined that the three ensuing economic revolutions, represented in succession by the physiocrats, the classical school and the neo-classical school, should correspond to micro-economic views, the differences among

them being in the main determined by diverging criteria as to the notion of value.* The fourth revolution—Keynesianism—again envisaged economics as macro-economics, and gave rise, among many other contributions which are difficult to discard, to be notion of aggregate indicators.

Post-Keynesians, neo-Keynesians and present-day monetarists, no matter how much they endeavor to rid themselves of their immediate past, are still dwelling in the macro-economic abode that Keynes erected. But the very crisis itself once again restates the dilemma: Is economics mainly micro-economics or macro-economics? In all likelihood, an answer does not exist. It is quite possible that alter nearly 400 years we may well conclude that the problem lies not in the fact that we have not found an answer, but that we have been unable to pose the question properly.

The theories, policies, strategies and development styles that sprouted in the aftermath of the Second World War have been influenced or even determined by the prevailing economic theory. If it has been macro-economic in scope, development has also been understood as macro-development, and the preferred indicators for development have been the aggregate indicators of Keynesian macro-economics. The problem of micro-macro articulation, unresolved by economic theory, has therefore not met with a visible solution in development processes either.

The Problem of Aggregation

The bewilderment which characterizes the current situation becomes overt in the somewhat extreme debates and stands taken on the different approaches. On the one hand, the economists from the neoAustrian School, committed to "methodological individualism," bold that every type of behavior can only be understood in individual terms and that, consequently, there are no collective entities, such as communities, societies and governments, the attributes of which are

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* The neo-classicists work with macro-concepts which however, are
  based on rather naive postulates.

different from those of individuals. With the revival of "homo economicus," who acts rationally by resorting to the most efficient means to attain his goals, it is concluded that the new economic theory should restrict itself specifically to the only real and concrete level, that is, the micro-economic level.

On the other hand, we come upon arguments that warrant the existence of both levels as real entities. Such arguments stem from paradoxical findings sustained both in empirical evidence as well as in mathematical demonstrations. In this sense, examples are offered to show that what each individual pursues as the best for himself can, at the aggregate level, rests in a situation that nobody desires. From such evidence it is concluded that individual decisions cannot be aggregated with the purpose of constructing a meaningful totality. Over and beyond a given critical threshold, the aggregate consequences may eventually fully negate the individual intentions.

A Dialectic Interpretation. Without purporting to come up with an eclectic solution, it is necessary to acknowledge, in our opinion, that there exist sound and persuasive elements in the two arguments that we have chosen as extreme examples. It seems sensible to admit, on the one hand, that observable and understandable behavior does in fact occur at the level of the individual, that is to say, at the micro-level. In much the same way, we would have to accept the factual existence of *macro-situations* , which does not mean, however, that it is possible to speak of *macro-behavior.*

A more suitable approach might be to suggest a dialectic interaction between *macro-states* and individual *behaviors* in such a way that even though they exert a reciprocal influence on each other, neither can be predicted mechanically merely by observing its counterpart. In other words, what we advocate is that a given macro-state (political, economic, environmental, etc.) should exert an influence on individual behavior, and that the latter, in turn, should bring about changes in macro-states. Since human systems are not mechanical, the non-linear interactions between the micro-elements of a system may give rise to various macro-states which reflect the interactions at the micro-level.

The impossibility of making mechanical predictions about human systems compels us to devote energy to dealing with such notions

instability, chance, uncertainty, choice, thresholds of different types and catastrophes.

From all that has been suggested it is only possible to arrive at the conclusion that even though there exists between the micro and the macro an indissoluble *relationship,* it is nonetheless true that it in no way involves an *articulation.** Thus, we are confronted with two fundamental questions: (a) what would the micro-macro articulation in itself be? and (b) is it really possible to achieve it?

Micro-macro Articulation. By articulation we mean, in this case, that global processes and self-reliant micro-spatial processes complement each other effectively *without there being a cooptation of the micro by the macro.* This vertical complementarity is also seen in conjunction with a horizontal complementarity between the various micro spaces so that processes of socio-cultural identity, political autonomy and economic self-reliance are enabled to empower and reinforce each other.

The abo^{y}e is by no means a definition. We are fully aware that it is, rather, a picture of "what ought to be." In this sense, it does not represent the situation of observable Latin American reality. Furthermore, on the basis of accumulated evidence, we can only conclude that true micro-macro *articulation* is not possible within the economic systems that currently predominate in our countries. This conclusion is somewhat drastic, but we consider it very difficult to confute.

Any possible articulation goes far beyond the causalities and mechanistic assumptions underlying both economic theory and the development strategies applied so far. It necessarily and inevitably involves a dcep transformation in the modos of social behavior and interaction. It requires, in practice, the transformation of the person-object into a person-subject and, in theoretical tercos, that the competitive rationale of maximizing be replaced by the solidary rationale of optimizing. In other words, that the "homo economicus" he replaced by the "homo synergicus."

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* Every articulation among elements is a relation, but not every relation is an articulation. See footnote in Chapter 1, page 8.

Articulation, Protagonists and An articulated society does not arise mechanically; it is constructed. It can only be constructed when people act as protagonists, and this can only take place in human scale spaces, where the person has a real presence and is not reduced to a statistical abstraction. The process must be organized from the bottom upwards, but promoted by people who have malle the conscious decision to act synergically. The program is not simple, but however complex it may be we envisage no alternative.

What has been suggested becomes possible when a social system capable of developing its capacity for adaptation is constructed: a system in which innovation, novelty and qualitative change are organic, even though these may be unforeseeable and unpredictable. In this sense, it is necessary to kcep in mind that the capacity for adaptation of a system is inversely proporcional to the degree of rigidity of its structure. These rigidities should be understood either as fossilized hierarchies, marked social inequalities, authoritarianism or inert bureaucracies. Therefore, real "protagonism" and interdependence, built from the grassroots upwards to its superstructure, rcpresent the only possibility of preserving a flexible structure capable of adapting itself.

Articulation and Sense of Direction of the System

The Latin American panorama reveals a set of deeply disarticulated societies. Even in past periods, in which countries displayed and sustained high rates of growth of their GNP, the disartieulation remained unsolved. However, the most sustained of all ratos of growth is the poverties (as defined within this book) within which the great majority of Latin Americans struggle.

Many reasons have been offered to account for Chis dramatic contradiction. It is not our aim to refute any of those arguments. We only wish to add another argument, which has so far received very little attention. We state it in tercos of a hypothesis: every a priori direction imposed upon a disarticulated socio-economic system further inhibits its possibilitics of articulation. Stated in other words: it is

not the *imposed* direction which will achieve articulation, but, on the contrary, it will be articulation that determines the most desirable direction.

If the current conditions are taken into account, there is hardly any sense in "forcing" the direction of a system. The priority is clear. What is required is to channel all efforts into bringing the parts of the system together into a coherent articulated whole. Only an articulated system can aspire to be a healthy system. And only a healthy system can aspire to self-reliance, to meeting the needs and fulfilling the potential of people.

PART TWO: FIRST STEPS INTO

FURTHER REFLECTIONS

5.

ABOUT THE PRUNING OF LANGUAGE (AND OTHER UNUSUAL EXERCISES) FOR THE UNDERSTANDING OF SOCIAL IMPROVEMENT*

Manfred Max-Neef

The Problem

While trying to interpret the megacrisis that has taken over our present world, we suffer from a sort of generalized confusion in our approach to understanding. This means that there is no way of breaking the code of the crisis if we are not able to adequately codify our own form of understanding. Although we know how to *describe* and how te *explain,* we seem to overlook the fact that describing plus explaining does not amount to *understanding.*

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* An earlier version of this chapter was published under the title of "The Pruning of Language" in Development, 1988: 2/3, the journal of the Society for International Development.

The former have to do with knowledge, which is the stuff of science, while the latter has to do with meaning, the stuff of enlightenment. The result of this confusion is that at this stage of history, we know a lot but understand very little.

Manifestations of the Problem

The confusion in our approach to understanding reveals itself in at least three ways: (a) our involvement with options of secondary relevance, (b) the utilization of simplistic theories for the interpretation of social complexity, and (c) the impoverishment of our language.

Options of Secondary Relevance

We fight for options. However, when after opting, things do not work out the way we expected, it may be due to the fact that the chosen option was, without our being aware of it, of secondary relevance. This means that there must be (and we must look for it) an underlying option of primary relevance that has to be tackled first. A few illustrations may clarify the point.

Obsessed as we seem to be with power, we always believe that things will change (for the better, of course) once "we" are in power (whoever that "we" may be—ourselves or those who represent our feelings and beliefs). To believe something like this is, of course, quite naive. If we look back in time, we will realize that at this stage all sorts of powers, or combinations of powers, have already been in power. Yet, as far as growing human satisfaction and welfare are concerned, things do not seem to be improving very much, all those past exercises of power notwithstanding. The preoccupation as to *who* should be in power is, therefore, an option of secondary relevance. The underlying question of primary relevance to be examined is power itself. If we understand it as the capacity of control and manipulation exercised by the person (or group) that has the force, and contrast it with *authority—un*derstood as the capacity of influence exercised by the person (or group) to whom legitimacy is granted because of recognized capacities and qualities—we may pose our question thus: "Are things going wrong because it is the wrong group that is in power, or are things going wrong.

because there is something wrong with power?" Today, more than ever before in this century, this question demands an answer, and the answer consists of deciding whether or not we are willing to substitute authority for power, and thus re-invent true democracy again. Authority as defined here can only function at the Human Scale.

In the midst of the New International Economic Disorder that has brought about the inequity as well as the iniquity of Third World indebtedness, many countries are again concerned with the problem of who should have control of the banking system—the state, the private sector or a combination of both. This is, of course, an important matter. However, we should ask: Are so many national finances in disarray be-cause there is something wrong with those who *control* the banking system, or is there something wrong with the banking system itself? Although this question may justify a whole treatise, we recall here just a few financial debacles characteristic of our present times.

> From the production of goods and services, the dynamic edge of economic activity has shifted to paper transactions and speculation. Future markets and speculation have begun controlling real producers and consumers such as the poor, and women, tribals and peasants in the Third World, dispensing with them if they do not
> into the market transactions of artificially created prices. Instead of a sustainable reproduction of wealth, the global economic system, led by commercial capitalism, has started to focus on instant wealth creation through speculation at the cost of the future—and of the poor. The decade of 1973-1982 has seen the escalation of capital flow from transnational banks and financial institutions to the Third World. This phase of borrowing is at the root of the contemporary Third World debt crisis. And this borrowing was induced to recycle the huge amounts of liquidity that the financial system of the North had built up and could not absorb. The Third World became an important source for investment at high profitability: profits of the seven biggest U.S. banks rocketed from 22 percent in 1970 to 55 percent in 1981, and to a record 60 percent in the following year. The South was caught in a debt trap, borrowing merely to pay interests on earlier loans.1

In older days, economic growth came from production, while today wealth is created from unproductive economic fictions. Not more than 5 percent of commodity transactions on future markets turn into actual exchange of goods. It goes without saying that it is high time that such a system undergoes a radical reconceptualization, fitting the demands

and exigencies of our world's present reality.

For a long time, one of the most pressing options in Latin America has been that of dictatorship or political democracy. It would seem outrageous to say that this is not a highly relevant option. Its importance notwithstanding, a still more important option should be brought to the fore. We may phrase it thus: "Are the Latin American societies going to consolidate an authoritarian (and often repressive) culture, or are they capable of constructing a democratic culture, that is, a democracy of everyday life?" In other words, a democracy that begins in the household and extends itself to the school, to the working place, to the church, to the trade union, to the political party; all conceived as participatory institutions, yet organized in a rigidly hierarchical and authoritarian manner. This consideration is most certainly of primary relevance, because no political democracy can expect to last if it is constructed upon the foundations of an authoritarian culture. It will collapse sooner or later, as we have so often witnessed. Dictatorships in Latin America, even in places like Uruguay and Chile, should not be dismissed as historical accidents affecting societies of long-standing democratic traditions. The truth of the matter is that dictatorships are in many respects periodical exacerbations of underlying authoritarian cultures.

Social Complexity and Simplistic Theories

A simplistic mind is a mind full of answers. It is also a mind that seldom realizes the simple fact that answers must be preceded by pertinent questions. The person with a simplistic mind looks for inspiration and knowledge in simplistic theories, mainly in those that confirm his or her preconceptions. Furthermore, he or she tends to be very active. Hence, we are talking about someone who can be very dangerous indeed.

I have found many development experts in my life—having myself been one for many years—with a very simplistic mind and a very active personality. If I were to depict the archetype of such an expert in a comic strip, presented would be a man with a somewhat perplexed expression in his face, carrying a fat attache case full of answers, while actively looking for the problems to fit the answers.

Quite apart from the caricatures we may devise, the serious fact remains that while our societies have become increasingly complex, our theories of society, whether social or economic, have become increasingly simplistic. This is dangerous, because we know that the parameters of a system can only be controlled from a system of higher complexity. In other words, through simplistic theories and models we cannot expect to understand the behavior of the type of social systems of which we are members in our world today. There are many examples of this, and a few should suffice here.

First of all is the disproportionate importance granted to economics, artificially disassociating it from other human disciplines such as politics. In fact, politics today seems primarily concerned with economic problems. Summits are mainly economic summits, and macroeconomics seems to be the cathedral of modern mythology. There no longer appears to be any significant problems of humanity that remain outside the realm of macro-economic manipulation. Yet we seem to forget what macroeconomics is all about and, more than that, what recent history can tell us. Quoted below is a dramatic statement by the distinguished economist Jane Jacobs:

> Macro-economics—large-scale economies—is the branch of learning entrusted with the theory and practice of understanding and fostering national and international economies. It is a shambles. Iis undoing was the good fortune of having been believed in and accepted in a big way. We think of the experiments of partial physicists and space explorers as being extraordinarily expensive, and so they are. But the costs are nothing compared with the incomprehensively huge resources that banks, industries, governments and international institutions like the World Bank, the International Monetary Fund and the United Nations have poured into tests of macro-economic theory. Never has a science, or supposed science, been so generously indulged. And never have experiments left in their wakes more wreckage, unpleasant surprises, blasted hopes and confusion, to the point that the question seriously arises whether the wreckage is repairable; if it is, certainly not with more of the same.[2]

The belief in the efficiency of certain macro-economic models is so intense, that one often wonders whether they have not become pan of a new form of religion. As a matter of fact, we can witness over and again that when an economic policy based on a closer macro - economic model fails to deliver, the reaction of the economic establishment behind

that policy will be such that one can only reach the conclusion that while the model is always right, it is reality that plays foul tricks. Hence, the model not only remains, but is reapplied with greater vigor.

The fascination with macro-economic models is partially due to the fact that all their components are measurable. This is important because for a simplistic mind, all that is important is precisely that which can be measured. Therefore, one should no longer be surprised that there are so many economists around who, instead of finding satisfaction in being more or less correct in their predictions, prefer being wrong with high precision.

Another manifestation of simplism is what I should like to call "Northern thinking for Southern action." If as a Latin American economist I wish to become an expert in Latin American development problems, it is necessary to study in the United States or in Europe to be respectable in the eyes of both my Southern and Northern colleagues. It goes without saying that this is not only dangerous but absurd. In fact, it has led to a systematic inability on the part of such "appropriately" educated economists to interpret their own reality. Just one example:

In all economic theories, beginning with Cantillon and Adam Smith and continuing with Ricardo, Marx and all the way through Keynes and Phillips (with his beautiful curves), something identified in the modern jargon as stagflation (inflation with growing unemployment) simply could not occur. It did not fit any respectable economic theory practiced at the time of the phenomenon's appearance. Yet, at the end of the 1960s, it became quite clear that suddenly in the United States inflation was no longer trading off against drops in unemployment. The initial reaction of most economists was that what seemed to be happening was actually not happening. Surely all would return to normal if thresholds were readjusted. But reality was stubborn, and the growing evidences had to be accepted as a turning point in economics—actually the end of Keynesianism followed by the disastrous emergence of the Friedmanian monetarists.

Now, if we just attempt to be simplistic, we may describe stagflation as a situation characterized by high and rising prices together with insufficient jobs. This is surprising, because that is precisely one of the characteristics that has prevailed in more countries. With Northern thinking (and with the kind of by Southern economists as well),

something like stagflation could only be discovered and so acquire legitimate existence if, and only if, it appeared in the North. The fact that it was to be found everywhere in the South simply went unnoticed. After all, a poor country that is expensive for its own inhabitants is normally dismissed as very inexpensive by all its Northern visitors. Cases like this—and there are many more—should invite deep critical reflection.

Impoverishment of Our Language

One of the consequences of the type of simplism described so far is, of course, the impoverishment of our language and, in particular, of the development language. While being the product of a culture, a language is also a generator of culture. Hence, if the language is poor, the culture is poor. By the same token, if the development language is poor, development itself will be poor. Overestimated yet nonsensical indicators (about which so much as been written) are just one example of dominant components of the development language. Another example is the fragmentation of people and societies as a result of the semantics of reductionist and mechanistic thinking.

The interesting thing about an impoverished language is that, contrary to what might appear as obvious; it is not a language that requires more words and concepts. What characterizes a poor language is that it has too many words behind which—knowingly or unknowingly—we hide our ignorance.

In endeavoring to enrich a language, the challenge consists of finding the key words that exist behind those voids of ignorance.

Searching for Answers

As a mental exercise, an adequate pruning of key words should be the answer to an impoverished language. The principle behind the act of pruning should be clear to anyone who has ever been interested in orchards. Through pruning we will achieve more and better from less. Fewer branches and leaves will allow more light to be absorbed and thus produce better fruits. In the case of a language, the pruning of chosen words will force us inevitably into higher degrees of clarity,

The answer to the dangers emanating from the utilization of simplistic theories consists of devising methods which, either through our direct participation or through our committed intellectual involvement will allow us to actually become part of, or really to feel identified with, that which we intend to understand. No understanding is possible if we detach ourselves from the object of our intended understanding. Detachment can only generate knowledge, not understanding.

The possibilities of improving our choice of options, our capacity to fluently distinguish between those of primary and secondary relevance, will greatly depend on the quality of the solutions we may give to the other two problems: language and simplism. Hence, let us re-examine the suggested answers in action.

On Pruning

In order to play my game—because a mental game is what it is—I chose to prune from my language the following words: development, economic growth, efficiency and productivity. In addition to these words, such conventional economic indicators as Gross National Product and its offspring were also pruned. A fundamental question arose immediately: "Without these words, can I make judgments about social improvement, or must I suffer in perpetual silence?" What follows is the result of my personal experience in answering the challenge.

I again asked myself the old question: "What should be the aim of my society?" In the past, an answer, such as "sustained growth, higher productivity and increased efficiency as a means to the achievement of ever higher stages of development so that all the people can satisfy their basic needs," would have sounded nice and be acceptable. Now, such a statement becomes perfectly meaningless. It finally became clear to me that any social system's fundamental aim should be the achievement of *coherence;* that is, of coherence with itself, meaning in turn that it should not become a caricature of some other system. Furthermore, a coherent system should fulfill at least three attributes that will be identified as Completeness, Consistency and Decidability.

1. *Completeness*, meaning that the system strives to organize itself in a way that allows for its reproduction in an increasingly self-reliant manner. In other words, the fundamental human needs of all the members of the system can increasingly be met with the satisfiers generated within the system.[3] This neither implies self-sufficiency, nor autarchy or isolationism. Trade and other forms of exchange should by all means take place, the only precaution being that they do not do so at the expense of the peoples' security and well-being, as is the case when socio-economic strategies are arranged according to the simplistic and fallacious belief that all will be better off once the GNP grows sufficiently.

2. *Consistency,* meaning that the system's chosen form of reproduction leads to no self-destructive contradictions. Going back to the pre-pruned language for the purpose of illustration, a good example of a self-destructive contradiction is economic growth at the expense of environmental degradation or resources depletion. Self-destructive contradictions can also arise in the political and cultural spheres. A consistent system, as described here, is essentially a synergic system.

3. *Decidability,* meaning that the system has an inbuilt capacity to learn from experience—its own and those of others. As a consequence, the system may allow its members to make relevant choices. A system that satisfies this attribute cannot have an authoritarian structure, where information flows only in one direction from the top downwards. It requires a participatory structure where feedback is not inhibited. A decidable system, as described here, is essentially a direct democracy, where diversity in all its forms and manifestations is not only protected but stimulated.

The pruning of language opens possibilities for the design of new and relevant indicators of social improvement. Indicators of completeness, of consistency and of decidability may lead, without falling into the mathematical shortcomings of aggregate global indicators, to the eventual emergence of some sort of meaningful "Global Coherence" notions. A program (in the scientific sense of the word) is open for exploration. 4

On Interpretation

An isolated element (object) "a" can be described but cannot be explained. A relation between elements through a given operator "*" that makes the relation possible, for example, "a * b" can both be described and explained. Now, as mentioned in the opening remarks of this chapter, describing plus explaining does not amount to understanding. The system "a * b" can only be understood from a system of higher complexity. This means that in the case of human systems (or sub-systems), as is our concern here, only when I increase the complexity of a system (or sub-system) by becoming part of it—"Y * (a * b)"—can I begin to understand it.

Although the formulations of the previous paragraph may seem obscure to some, they illustrate (perhaps in an oversimplified manner) what we have in mind. The idea can, however, be expressed in more colloquial terms. Suppose that you have studied everything there is -from the anthropological, cultural, psychological, biological and biochemical points of view—about the phenomenon of love. You are an erudite. You know everything that can be known about love, but you will never understand love unless you fall in love. This principle is valid for all human systems, although it is almost always overlooked. In fact, social and economic research seldom goes beyond describing and explaining. Take the case of poverty, for instance. I dare say that if we have so far been unable to eradicate poverty, it is because we know too much about it, without understanding the essence of its existence as well as the mechanisms of its origins.

The last statement leads me to an additional reflection. Problem solving belongs to the realm of knowledge and requires fragmented thinking. In the realm of understanding, problem posing and problem solving do not make sense since we deal with transformations that start with, and within, ourselves. It is no longer the "we are here, and the poor are there, and we have to do something about it, so let us devise a strategy that may solve the problem." It is rather the "we are part of something that has to be transformed because it is wrong, and, since I share the responsibility for what is wrong, there is nothing that can stop me from starting the process by transforming myself." Even *if* I am a researcher, I must learn to integrate myself with the object of my re-

search.

There are, of course, different forms of achieving integration between researcher and object of research. It need not be physical integration, although in the case of social, economic and often cultural research, it should. There are methods of mental integration in the abstract fields of research, but it is not the purpose of this chapter to describe such methods. In any case, it should be added that if we had more "barefoot" economists and sociologists around, we might begin to witness some improvements in the results of economic and social policies.

Conclusion

Having carried out the exercise of pruning and becoming aware of the limits of knowledge on the one hand, and of the differences between knowledge and understanding on the other, there is no harm in going back to my old words, even to my old language. If I do so now (and it would be foolish if I did not), both the words as well as the language to which they conform will no longer be masks behind which ignorance remains hidden but will become fertile spaces for the permanent progress toward intellectual wholeness.

NOTES

1. Vandana Shiva, *Staying Alive,* London: Zed Books, 1988, p. 220.
2. Jane Jacobs, *Cities and the Wealth of Nations,* New York: Random House, 1985, p. 6.
3. Concerning the concept of Fundamental Human Needs and Satisfiers, see M. Max-Neef, A. Elizalde and M. Hopenhayn, *Human Scale Development,* Dag Hammarskjöld Foundation, Uppsala, Sweden, 1989, adapted as Part One of this book.
4. The Development Alternatives Centre (CEPAUR) in Chile, headed by the author, is presently engaged in research along such fines.

6.

A STUPID WAY OF LIFE*

Manfred Max-Neef

Insight

Since childhood, I have been concerned with what I considered to be a very important question: "What makes human beings unique? Is there some human attribute that no other animal shares with us?" The first answer received was that human beings have a soul, and animals have not. Since I loved, and still love, animals, it sounded a bit strange and painful. Furthermore, if God was so just and generous—which I still believed in those days—he would not make such a discrimination. So, I was not convinced.

A few years later, under the influence of early teachers, I was led to conclude that we were the only intelligent beings, with animals having only instincts. It did not take too long to realize that I was on the wrong track again. Thanks to the contributions made by ethology, we know now that animals also have intelligence. And so I pondered, until one day I finally thought I had it— humans are the only beings capable

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of humor. Again I was disappointed by a study demonstrating that even birds make jokes and "laugh" at each other. I had almost decided to give up, having become a university student in the meantime, when I mentioned my frustration to my father. He simply looked at me and said: "Why don't you try stupidity?" Although shocked at first, the years have passed, and I would like to announce that, unless someone else can claim legitimate precedence, I am very proud of probably being the founder of a new and very important discipline—the discipline of stupidology. I hold, thus, the strong opinion that stupidity is a unique trait of human beings. No other beings are stupid except us!

Of course, such statements may sound a bit strange, even whimsical, at first. But in the winter term of 1975, I gave a course in Wellesley College, Massachusetts, open also to students of MIT, the title of which was "Inquiry into the-Nature and Causes of Human Stupidity." It was, as you can imagine, a very well-attended course. People thought that is was going to be fun, which in fact the first two sessions were. During the third session, participants began looking a bit more serious and by the fourth, there were already long faces. And as the course went on, we all discovered that it was a damn serious subject.

Crisis

Now why do I mention this? Well, I am a person who travels a great deal, perhaps too much. And so last June and July, I completed my third voyage around the world in twenty months. It turned out to be a very special experience with something happening to me that never happened before while in Bangkok—the capital of one of my favorite Asian countries. The first morning I awoke to a state of great depression, as if I was facing a deep existential crisis. The sensation was, if it can be expressed in words: "I have seen too much. I don't want any more of it. I am fed up!" It was a dreadful, terrifying feeling, and I asked myself: "Why am I feeling this?" The answer carne in the form of the sudden comprehension that what grows the fastest—that what is diffused the widest and with the greatest efficiency, velocity and acceleration in the world today—is human stupidity. Whether I experienced the finalization of a plan to bulldoze away thousands of rural villages in Rumania

in order to modernize and expand agricultural production;' or witnessed the colossal World Bank-financed transmigration program in Indonesia, which eradicated millions of people and transported them from one end of the country to the other in the name of development; or whether it was that Thailand 's development authorities were very proud to announce that day that in the north, which was still heavily forested, several hundreds of villages were going to be destroyed with the people reinstalled in fourteen urban centers "with all the amenities they would require for a developed society"—all reflected the same kind of stupidity.

So I realized that stupidity is a cosmically democratic force. It contaminates everyone beyond race, creed and ideology. No one is safe. And whether in the North, the South, the West or the East, we commit the same stupidities over and again. Something happens to render us immune to experience.

Not all seemed dark, however. In the midst of my crisis, I realized that other trends were taking place, and that there were also positive signs. Actually, in the end, it all amounted to a sensation that I was witnessing the last 100 meters of a ten-kilometer race between two irreconcilable forces, and that one of them would win by just the tip of a nose, meaning that it might turn into the most important "tip of the nose" in human history.

Two forces, two paradigms, two utopias, if you wish, brilliantly described in Vandana Shiva's book *Staying Alive,*[2] that bring about a schizophrenic world. Every person concerned cannot possibly avoid falling into a schizophrenic state. This is our reality and we cannot fool ourselves. So the question is how do we face a situation like this? How do we interpret it? Or, how is it that we have fallen into a situation like this since I honestly believe that the world has not always been schizophrenic?

The final outcome of my crisis was relatively positive. A few days later I found myself on a beautiful Polynesian island with my wife the perfect place to fall in love with life again. Imagine walking into the crystal clear sea water of a magnificent coral red' and the fish coming up to eat from your hand. It was marvelous and 1 began to recover, and so I could continuo my reflections under more auspicious circumstances.

It always happens that one receives help from friends, not only friends one has met personally, but friends one has made through books. On this occasion, it was Ludwig Wittgenstein who came to my aid. I focused again on the problem of language. Language is not only the expression of a culture, but it also generates culture. If the language is poor, the culture is poor. But the point is that we are also trapped by language. Language is a form of imprisonment. The way in which we use words or concepts influences and sometimes even determines not only our behavior but our perceptions as well. Every generation, as pointed out by the great Spanish philosopher José Ortega y Gasset, has its own theme, that is, its own preoccupation. I would add that every generation also has its own language in which it is trapped.

On Constraints of Language

We are trapped, whether we want to be or not, in the language of economics, which has domesticated the entire world. A language domesticates us when it manages to permeate our everyday life and our everyday forms of expression. The language of economics is used in the kitchen, among friends, in the scientific associations, in the centers of culture, in the club, in the work place and even in the bedroom. Whatever part of the world, we are dominated by the language of economics and it heavily influences our behavior and perceptions.

Now the fact that we are domesticated by a certain language is not necessarily negative, although in this case it may be. It boils down to a question of coherence and incoherence, which I would like to explain and illustrate.

In the late 1920s and early 1930s, during the period known as the "Great World Crisis," the language of Keynesian macro-economics emerged. Keynesian macro-economics was not only the response to a crisis, but it allowed for its interpretation and, more than that, it was an efficient tool to overcome the crisis. It was a case, as I would like to call it, of a language coherent with its historical moment.

The next language shift occurred in the 1950s when the "development language" emerged. Although Joseph Schumpeter had already written about the concepts of economic development in the

1920s, it was not until the 1950s that it became fashionable. Now the language of development was not the consequence of a crisis; it was quite the opposite. It was a language that responded to the enthusiasm generated by the spectacular economic reconstruction of post-war Europe. It was an optimistic language based on the strong belief that we had at last found the remedy to eradicate poverty from the world. Remember some of its cliches: rapid industrialization, modernization, urbanization, big push, take-off, self-sustained growth, etc. It delivered many important and some spectacular changes all through the 1950s to 1960s that seemed to justify the optimism. In a way, it was again a case of coherence between language and historical reality.

Since the mid-1970s and all through the 1980s (this latter decade already baptized in United Nations circles as "the lost decade"), a new crisis, this megacrisis that confronts us now, came about—a megacrisis we are still unable to interpret in all its magnitude. The strange thing about this crisis is that it has not generated its own language. In this megacrisis, we are still using the language of development, "enriched," so to speak, through the introduction of precisely the most reactionary principles unearthed form the cemetery of neo-classic economics. So what we have now is a language based on the enthusiasm of unlimited economic growth and expansion faced with a reality of social and ecological collapse. This means that we are living—and this may be one of the outstanding characteristics of the present crisis—in a situation of dangerous incoherence: our language is incoherent with our historical reality.

This is not because an alternative language has not emerged. There are alternative languages that may prove to be more coherent, but the truth of the matter is that none of them have managed to cast the old one out. What we actually find is that, in the best of cases, some of the concepts of alternative languages have penetrated the still dominant language, but simply as adjectives. They represent only cosmetic improvements. Take a concept such as sustainability (all the byzantine discussions about and around its definition notwithstanding) being metamorphosed into sustainable growth. The merits of unending growth are not discussed, because its assumed virtues are a paramount component of conventional economic fundamentalism. So, all that is allowed for in the dominant language is a "nicer" growth.

Why do alternative languages not penetrate further? One reason is that much of the so-called alternative effort is not addressed to those who still adhere to the conventional and traditional positions. There seems to be a prevalent attitude, summed up in such observations as: "We don't talk to them"; after all, "academic are worthless"; "Western science is harmful"; "business people are insensible." After all, if we are unable to dialogue intelligently, we will never cease to be schizophrenics. But these skeptics will remain; we cannot expect them to leave the planet. So those who are making efforts to change things should also try to make themselves understood by others. It is our turn, and we must have a sense of self-criticism. I would never adhere to the idea that we own the truth; that would be arrogant in the extreme. I simply presume that we are searching for something in good faith, but we may also be wrong, and looking back in twenty years, we may say: "How naive I was, how absurd my position. I never realized this and that."

There is nothing wrong in making mistakes; there *is* something wrong in being dishonest, and it is that which we cannot afford. We make proposals, we make propositions, and this is natural among humans. We tend to believe, probably influenced by the logical principle of the excluded middle, that every proposition is either right or wrong. That is why we are so passionate in always taking sides. I would recommend Wittgenstein again because then you will realize that propositions are not necessarily right or wrong. In fact, perhaps the majority of propositions are nonsensical, and this is something very important to keep in mind. We should also realize that it is very dangerous when beliefs turn into rigidities and inflexibilities. We have lived through the historical experiences of blue and brown and red fundamentalist intolerances. I sometimes shudder when I think of the possibilities of a future green fundamentalist intolerance.

Some Solutions?

This world is tired of grand solutions. It is tired of people that know exactly what has to be done. It is fed up with people walking around with a briefcase full of solutions looking for the problems that fit those solutions. I strongly believe that we should start respecting the capacity of reflection and the power of silence a bit more.

This world probably requires something extremely simple—to *be* together with it, and enjoy the magnificent diversity such an effort can bring about. But when I say *be,* I mean *be,* not be this or be that. This is in my opinion the greatest personal challenge each of us is faced with: to be brave enough to *be.*

Now, sine we are all concerned here with human well-being and the health of our planet, just let me remind you of a few facts. First, we are living in a planet in which societies are increasingly interconnected and interdependent in everything that is positive and everything that is negative. Actually, this is how it should be with every living system. Yet, due to the human attribute of stupidity, we fail to take advantage of the conditions of interdependence and interconnectedness to give solidarity a chance to display its synergic possibilities for overcoming our grave predicament. We still seem to favor the economic efficiency of greed and the political dynamics of paranoia. This maintains a global system in which poverty keeps increasing worldwide and a great deal of the scientific and technological effort is directly or indirectly geared toward insuring the possibilities of destroying the entire human species.

Second, it no longer makes sense to talk about developed and developing countries, unless we add an additional category: the under-developing countries or countries in a process of underdevelopment. This would be the category to fit most of the presently rich countries, where peoples' quality of life is deteriorating at an alarming speed. Take one extreme case. A recent study in an early October 1989 issue of the *Miami Herald* shows that in the United States, one in every five children lives below the poverty line. A projection warns about the possibility that by the year 2010, the proportion may rise to one in every three. And this in a country that has 6 percent of the world population and accounts for almost 55 percent of the world's total energy consumption.

Third, one of the most tragic conditions, for which humanity as a whole should feel pain as well as shame, is that we have managed to construct a world, as has been pointed out by UNICEF, where the majority of the poor are children and, even worse, where the majority of the children are poor. One thing should be clean: we cannot go on pretending that we can solve an unsustainable poverty through the im-

plementation of an unsustainable development.

The paradoxical issue, it seems to me, is that we know a lot; we probably know all we need to know, but we understand very little. Let me elaborate on this statement.

We tend to believe that once we have described something, and then have explained that something, we have understood that something. This is a mistake because, as observed in the foregoing chapter, describing plus explaining does not amount to understanding. Let me remind you of the example I have on page 106: You can never understand love, unless you fall in love. This is valid for every living system. You cannot attempt to understand something of which you are not a part. Hence, how can we understand a society, a world, a planet, a biosphere, detaching ourselves from it?

How many of us actually understand the problems we are trying to solve? Problem solving belongs to the realm of knowledge and requires fragmented thinking. In the realm of understanding problem posing and problem solving do not make sense, because we must deal with transformations that start with, and within, ourselves.

Future Scenarios

Now, what about the future? In this matter I would like to share with you the insight of my good friend, the distinguished Argentinean ecologist Dr. Gilberto Gallopin, who has proposed three possible scenarios.3

Scenario one, is the possibility of total or partial extinction of the human species. The most obvious way for this to come about would be a nuclear holocaust, which, as we know, is based on the principle of Mutually Assured Destruction. But apart from the nuclear holocaust there are a number of processes under way that may bring this scenario about: the deterioration of the environment, destruction of forests, destruction of genetic diversity, pollution of seas, lakes and rivers, asid rain, greenhouse effect, ozone layer depletion and so on.

Scenario two is the barbarianization of the world, a new way of turning humankind into barbarians. Characteristic will be the emergence of bubbles of enormous wealth, surrounded by barricades or fortresses to protect that wealth from the immense territories of poverty and misery extending beyond the barricades. It is interesting to note that this scenario appears more and more in the science fiction literature of the last decade. It is the sort of Mad Max atmosphere which the Australians have so brilliantly depicted in their films. Many of its symptoms are already found in mental attitudes and in the actual creation of isolated areas for the very rich who do not want to be contaminated by seeing, hearing or having anything whatsoever to do with poverty. Part of this scenario will be the resurgence of repressive regimes cooperating with the wealthy bubbles and imposing further hardships on the poor.

Scenario three presents the possibility of a great transition—the passing from a dominant rationality of blind economic competition and greed to a rationality based on the principles of sharing and solidarity. We might call it the passing from a Mutually Assured Destruction to an era of Mutually Assured Solidarity. But can we do it? Have we the tools, the will and the talent of constructing a mutually assured solidarity? Can we overcome the stupidity that keeps such a possibility out of our reach? I believe that we can, and that we have the capacity. But there may not be too much time let.

We want to change die world, but we are confronted with a great paradox. At this stage of my life, I have reached the conclusion that I lack the power to change the world or any significant part of it. I only have the power to change myself. And the fascinating thing is that if I decide to change myself, there is no police force in the world that can prevent me from doing so. It is just my decision and if I want to do it, I can do it. Now, the point is that if I change myself, something may happen as a consequence that may lead to a change in the world. But we are afraid of changing ourselves. It is always easier to try to change others. The dictum of Socrates was "Know thyself," for he knew how afraid human beings are to know themselves. We know a lot about our neighbors, but we know little about ourselves. So, if we simply manage to change ourselves, something fascinating may happen to the world.

I hope the day comes in which every one of us may be brave enough to be capable of saying in absolute honesty: "I am, and because I am, I have become a part of . . ." It seems to me that this is the right direction to follow if we want to put an end to a stupid way of life.

NOTES

1. The Schumacher Memorial Lecture, upon which this chapter is based, was delivered before the fall of Ceausescu's regime.

2. Vandana Shiva, *Staying Alive,* London: Zed Books, 1988.

3. Outlined in a private conversation with the author.

HUMAN SCALE DEVELOPMENT

As we embark on a new decade, Latin America and much of the Third World are in a state of crisis. This crisis is born out of the failure of both conventional state-directed development and neo-liberal market-oriented monetarism to meet vital needs of large and growing numbers of peoples. *Human Scale Development* sets forth another approach in confronting this crisis.

The approach presented in this book is focused on meeting freshly defined human needs, both material and non-material, through the self-reliant efforts of grassroots communities. The people thus became protagonists of their own future—subjects, rather than objects, of the development process, which must be conducted on a truly human scale. There is no possibility, the authors argue, for the active participation of the people—essential to sustained development—in gigantic systems where decisions flow from top to bottom.

Here is an imaginative and provocative contribution to the continuing debate on how to build more just and sustainable societies in both North and South. As such, it merits the attention not only of the international development community, but also of social activists, community leaders, government officials and scholars, teachers and students of economic, social and political change in industrialized countries as well as the Third World.