Università
Ca'Foscari
Venezia

Corso di Laurea Magistrale
in Relazioni Internazionali Comparate

Tesi di Laurea

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Do we still believe in sustainable development?

A comparison between two views of sustainability

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Anno Accademico
2011 / 2012

RINGRAZIAMENTI

Ora che finalmente questo lavoro è finito e che questo lungo percorso di cinque anni volge ormai al termine, non posso non rivolgere l'ultimo pensiero a coloro che hanno reso possibile tutto ciò. Nel corso di questi anni varie conoscenze e amicizie si sono susseguite, contribuendo più o meno tutte alla mia formazione universitaria e personale; tuttavia, mi rivolgo qui a chi merita i ringraziamenti più caldi.

Il ringraziamento più grande di tutti è quello per i miei genitori, che mi hanno sostenuto moralmente ed economicamente. Li ringrazio non solo per avermi sempre lasciato libera e indipendente nelle mie scelte, ma anche per averle poi sempre supportate. Inutile dire che senza di loro non sarei mai arrivata a questo punto.

L'altro grande grazie va a Mattia, per il suo sostegno costante e incondizionato. Non è di certo facile passare anni di fianco a uno studente universitario: la sua vita è estremamente irregolare e scandita da periodi di ozio alternati a periodi di studio matto e disperatissimo, gli impegni sono molto flessibili e c'è sempre un buon momento per mollare tutto e partire, c'è sempre qualche lavoretto improbabile che occupa serate o weekend, si è sempre squattrinati e c'è sempre qualche crisi di isteria di fronte agli insormontabili ostacoli della burocrazia e organizzazione universitaria. Mattia ha sempre sopportato tutto ciò con grande maestria,

spingendomi a cogliere ogni opportunità e ad approfittare di ogni momento, anche quando questo richiedeva dei sacrifici da parte sua.

Infine, riferendomi al presente lavoro di tesi, ringrazio il Prof. Soriani e il Prof. Trentin per avermi seguito in questi mesi. Ringrazio ugualmente il personale del Centre de Documentation Tiers Monde di Montpellier, che oltre a rendere il mio soggiorno in Francia più sereno e facile, mi ha spesso dato consigli e indicazioni utili durante le mie ricerche.

SINTESI INTRODUTTIVA

Il presente lavoro è stato avviato nel corso di uno stage della durata di tre mesi presso il Centre de Documentation Tiers Monde di Montpellier, Francia[1]. Si tratta di un centro di documentazione specializzato, che propone degli strumenti d'informazione, delle occasioni di dibattito e delle piste d'azione in ambito di solidarietà internazionale, diritti dell'uomo e dei popoli, sviluppo sostenibile e relazioni Nord-Sud. Il mio compito principale all'interno del centro è stato quello di realizzare una ricerca sul soggetto della decrescita (*décroissance*), da cui è stato poi tratto il testo disponibile on-line sul sito di Ritimo, una rete nazionale francese di centri d'informazione per lo sviluppo sostenibile e la solidarietà internazionale[2]. Il materiale disponibile nei centri membri di Ritimo è stato assolutamente fondamentale nel mio processo di documentazione per il presente lavoro.

La volontà di approfondire questa tematica ancora poco conosciuta è sorta dopo aver letto qua e là qualche accenno ad un movimento che mina le basi della nostra cultura e attacca i suoi prodotti, tra cui lo sviluppo sostenibile. L'anno 2012 si presenta poi come un'ottima occasione per questa riflessione sull'adeguatezza del concetto di sviluppo sostenibile, poiché quest'anno ha avuto luogo la Conferenza Rio +20, ossia il ventesimo anniversario dell'introduzione delle tematiche ambientali nei dibattiti e nelle politiche internazionali.

[1] Sito del Centre de Documentation Tiers Monde: http://www.cdtm34.org/

[2] Testo on-line in francese disponibile su: http://www.ritimo.org/dossiers_thematiques/developpement_durable/decroissance/decroissance_intro.html

Di fronte all'aggravarsi della situazione ambientale globale e all'aumentare delle diseguaglianze fra Paesi e al loro interno, sempre più spesso si proclama il fallimento delle politiche di sviluppo sostenibile. Esse sono accusate di essere inadatte in quanto assoggettate alle logiche capitalistiche e tese a perpetuare lo scopo di massimizzazione dei profitti e di sfruttamento. In questo contesto, la sostenibilità inizia ad essere concepita in due modi. In sintesi, da un lato la sostenibilità debole crede che la diminuzione del capitale naturale possa essere compensata da un aumento di capitale umano, per esempio grazie all'innovazione tecnologica; dall'altro, la sostenibilità forte insiste sulla necessità di mantenere un certo livello di capitale naturale per assicurare la sopravvivenza di una società globale che, proseguendo con questi ritmi di consumo e di distruzione ambientale, non può che andare verso l'autodistruzione. Da quest'ultima visione della sostituibilità si originano le critiche più radicali al sistema capitalistico, basato sull'economia di mercato e sulla società dei consumi. L'attenzione viene qui concentrata sul movimento della decrescita che, lungi dall'essere un appello per la semplice crescita economica negativa, invita alla costruzione di società basate su logiche molto diverse da quelle attuali nei Paesi del Nord: la ricchezza non dipende dai possessi materiali, la collettività risponde ai bisogni comunitari, si privilegiano le relazioni umane, si salvaguarda l'ambiente e l'uguaglianza tra popoli è prioritaria.

Apparentemente, all'interno dei grandi meeting internazionali e dei documenti in essi prodotti, non si registra una grande attenzione alla visione forte della sostenibilità. L'attaccamento alla nozione di crescita economica come

presupposto fondamentale del progresso non sembra essere minacciato, nonostante il riconoscimento della gravità della situazione ambientale globale. La domanda cui si cerca di rispondere con la presente ricerca è quella sul tipo di visibilità che riesce ad assumere a livello internazionale la concezione debole di sostenibilità e, in particolare, la decrescita. Non mancano le occasioni di critica radicale al sistema economico capitalista, come per esempio il World Social Forum, ma si vuole vedere se e in quale misura tali idee prendono piede presso le grandi istituzioni internazionali, che sono incaricate di coordinare le politiche ambientali e sociali globali.

Tradizionalmente, l'introduzione della questione ambientale nel dibattito pubblico è associata alla pubblicazione di *The limits to growth*, discutibilmente tradotto in italiano come *I limiti della crescita*, da parte del Club di Roma nel 1972. Qui, per la prima volta si auspica un'inversione di rotta da parte di una società che non può continuare a crescere in un mondo le cui risorse sono limitate. Queste preoccupazioni sono confermate dalla loro discussione in occasione della Conferenza delle Nazioni Unite a Stoccolma. Con la Conferenza di Rio nel 1992, lo sviluppo sostenibile è così entrato a far parte dell'immaginario comune, così com'è stato definito dal Rapporto Brundtland del 1987: esso è quello sviluppo che soddisfa i bisogni delle generazioni attuali senza compromettere la capacità delle generazioni future di soddisfare i loro.

Benché nella storia della politica ambientale si riscontri unicamente una visione debole della sostenibilità, i presupposti intellettuali di quella debole esistevano già da tempo. Per esempio, basti pensare alla teoria dell'economia di

stato stazionario, cioè un'economia relativamente stabile dove popolazione e consumo hanno arrestato la loro crescita prima di varcare il limite della capacità portante dell'ambiente. Anche il Movimento Anti-Utilitarista nelle Scienze Sociali [M.A.U.S.S.] merita di essere menzionato, visto che alcuni sui membri sono anche i principali teorici della decrescita. Questo tipo di movimenti e teorie producono una serie di concetti che si contrappongono nella loro logica alle dinamiche capitaliste dominanti; ne sono esempi le nozioni di sviluppo partecipato, *capabilities*, *empowerment* e microcredito. Alcuni studiosi propongono una distinzione tra le proposte di sviluppo alternativo e quelle di alternative allo sviluppo. La prima categoria raggrupperebbe le idee basate sulla convinzione che il presente ordine politico, sociale ed economico offra già gli strumenti necessari per risolvere i problemi; la seconda fa riferimento alle proposte più radicali, che si contrappongono alle dinamiche capitaliste e vedono una soluzione solo al di fuori di esse. La distinzione non è tuttavia sempre facile, poiché le due categorie sembrano avere ampi margini sovrapponibili.

Analizzare nello specifico la proposta della decrescita dimostra quanto sia difficile che idee tanto rivoluzionarie facciano presa sulla mentalità delle persone, nonostante ormai ognuno riconosca la gravità della condizione ambientale attuale e molti coltivino qualche dubbio sull'efficacia delle dinamiche capitaliste fermamente ancorate all'obiettivo di crescita economica. Lo sviluppo sostenibile, che rifiuta chiaramente di mettere in discussione la crescita economica come pilastro dello sviluppo di una società, fa parte ormai dell'immaginario comune e della mentalità delle popolazioni dei cosiddetti Stati del Nord, così come di molti Stati del Sud che

sono stati diretti verso la strada dello sviluppo "all'europea" grazie a quelle pratiche di politiche di aiuto allo sviluppo che vengono spesso accusate di essere nuove forme di colonialismo. Cambiare il modo di pensare delle persone è un compito ardito, perché tali cambiamenti vengono tendenzialmente percepiti come una perdita di identità.

La decrescita propone nuove concezioni di ricchezza che non hanno nulla a che vedere con la prosperità materiale, bensì con la molteplicità di rapporti interpersonali, con il piacere della vita comunitaria e la condivisione, tutte caratteristiche non compatibili con la società dei consumi. Per cambiare la definizione di ricchezza bisognerebbe innanzitutto smettere di valutare lo sviluppo e il benessere di una nazione in base al suo PIL. Le imperfezioni del PIL sono molte e spesso discusse; prima fra tutte, la sua indifferenza nei confronti di molte attività che indubbiamente contribuiscono al benessere di una società pur non essendo attività di mercato e quindi non generando profitti economici, come per esempio il lavoro volontario. La necessità di avere un indicatore di sviluppo più adeguato sfocia nell'elaborazione di indicatori alternativi sia a livello nazionale sia a livello internazionale. Tra le proposte più significative citiamo l'Indice di Sviluppo Umano elaborato dal Programma delle Nazioni Unite per lo Sviluppo e il Better Life Index lanciato dall'Organizzazione per la Cooperazione e lo Sviluppo Economico.

La decrescita e i movimenti affini si stanno sviluppando visibilmente negli ultimi anni, forse incentivati anche dalla crisi iniziata nel 2008. Tuttavia, i grandi appuntamenti internazionali di Johannesburg nel 2002, Cancún nel 2009 e Rio nel 2012 non mostrano alcuna intenzione di mettere in questione il concetto di sviluppo

sostenibile. Inoltre, si evidenzia una generalizzata difficoltà a produrre documenti giuridicamente vincolanti. Dall'altro lato, dal 2001 si tiene annualmente il World Social Forum, un'importante iniziativa controcorrente che raccoglie un insieme eterogeneo di gruppi intenzionati a fronteggiare il processo di globalizzazione innescato da interessi capitalisti. In quest'ambito trovano spazio anche idee rivoluzionarie come quelle della decrescita, cui si dedicano sempre più frequenti conferenze internazionali di cui l'ultima nel 2012 proprio a Venezia.

Se la teoria della decrescita sembra essere piuttosto sviluppata, altrettanto non si può dire delle sue proposte pratiche. Si è tuttavia osservata una certa sovrapposizione tra i temi della decrescita e le pratiche proposte dal movimento di origine italiana Slow Cities e da quello di origine anglosassone Transition Towns. Lo scopo di questi progetti è di cambiare la concezione di città attraverso pratiche quali la riduzione della dipendenza dal petrolio e la rilocalizzazione della produzione. La portata di queste iniziative sembra tuttavia essere ancora confinata alla dimensione locale, mettendo quindi in dubbio la loro capacità di produrre dei cambiamenti significativi a livello globale. Questa critica si aggiunge a quella del loro rifiuto della grande città, che resta comunque uno dei punti focali dell'organizzazione del mondo attuale e da cui ogni riflessione di questo tipo non può prescindere. Si esprime infine qualche perplessità di fronte alla volontà di agire esclusivamente secondo una logica locale. Ci si chiede se dei buoni obiettivi come quelli proposti dalla decrescita, da Slow Cities e Transition Towns saranno mai realizzati senza alcuna partecipazione da parte dei governi locali e delle istituzioni internazionali, senza introduzione nelle grandi discussioni che avvengono durante i

meeting internazionali e senza coinvolgimento delle autorità eccetto che per un ruolo di supporto.

CONTENTS

INTRODUCTION

Sustainable development is a concept that is deep-rooted in our culture and that is often perceived as "natural." Almost everybody is familiar with that expression and we are used to hearing it in the speeches of politicians and experts. However, sustainable development and development in general is "a concept which is supposed to command universal acceptance but which – as many have doubtless forgotten – was constructed within a particular history and culture" (Rist, 2008). Besides, sustainable development policies have largely proved to be a failure in most cases: the global environmental troubles have not been mitigated and social disparities between countries and within them have risen. That failure has laid the basis for the development of radical criticism to sustainable development, which is accused of being an umpteenth product of capitalist logics and therefore a way of misleading people through good intentions in order to keep pursuing capitalist interests of exploitation and accumulation of capitals.

In this context the controversial concept of sustainability can adopt two versions, which are called weak and strong sustainability. To be short, those who adopt the first view believe in some form of substitutability between human capital and natural capital, for example thanks to technologic innovation; on the other hand, those who believe in the second view think that stocks of natural capital need to be maintained constant in time, since it cannot be replaced by human capital. International institutions generally adopt the weak view of sustainability, even though the strong one is progressively gaining visibility also thanks to the

movement of degrowth, which wishes for a "change of mentality" and the abandon of the dominant model of economic growth and proposes a new definition of happiness and well-being, which can no longer be measured through GDP. But what kind of visibility does the weak view of sustainability have at the international level? Is it present in the great international meetings and the documents they produce? Or is it present only in some alternative international forums organized mainly in the South, for example in Porto Alegre? Finding an answer to those questions and going deep in the analysis of degrowth and its possible implications are the main purposes of the present work, which is organized as follows.

In the first chapter, an historical excursus traces the introduction of the environmental issues in the public debate. The origins of the present awareness about the environmental problems connected to economic growth are traditionally linked to the publication of *The Limits to Growth* by the Club of Rome in 1972. That report denounces the inevitability of a catastrophe when progress will meet environmental limits, if there is no change of route. In the same year, the first United Nations Conference about environmental issues, which takes place in Stockholm, marks the introduction of environmental policies into national agendas and international relations. Then, the birth of sustainable development is explored. First, the Brundtland Report in 1987 gives the first official definition; second, the Rio Conference in 1992 constitutes the definitive consecration of the concept of sustainable development. Then, a further definition of sustainable development is proposed through a triangular scheme whose pillars are represented by society,

economy and environment. Also, the contraposition between the weak and the strong view of sustainability is developed.

In the second chapter, the origins of the strong vision of sustainability are explored. The supposition of a steady state economy is presented through the eyes of its many theorists; basically, it can be defined as a relatively stable economy where population and consumption have stopped growing and have stabilized at or below the Earth's carrying capacity. Our attention is accorded in particular to the Movement Against Utilitarianism in Social Sciences [M.A.U.S.S.], which was created in 1981 in order to oppose the fact that social sciences were subordinate to a mercantilist view of social relations. Many components of this movement later developed their ideas into a new movement, namely degrowth. In the last part of the chapter we discuss the difference between the definition of alternative development and that of alternatives to development; the first one is based on the conviction that a new kind of development can be found within the present political, social and economic logics; the second one refers to all proposals denouncing the economic growth and capitalism and trying to find another society's mechanism. We briefly present some concepts that are used in new proposals, such as participative development, capabilities, empowerment, and microcredit.

In chapter three, degrowth is deeply analyzed starting from its intellectual sources and the environmental circumstances that help the development of such ideas. Degrowth partisans oppose sustainable development, which is considered an oxymoron: it is impossible to have an unlimited growth in a limited world. Sustainable development is just a weapon used by international diplomacy in order

to confirm the capitalist supremacy on the South through the imposition of a universal model of development. Modernism was characterized by a strong "belief in linear progress, absolute truths and rational planning" (Harvey, 1990), which made people justify the exportation of the modernization process to backward countries. As assessed by Rist (2008), "from 1949[3] onwards, often without realizing it, more than two billion inhabitants of the planet found themselves changing their name, being 'officially' regarded as they appeared in the eyes of others, called upon to deepen their Westernization by repudiating their own values." Far from being a simple economic degrowth, the priority is creating a society where happiness does not depend on the quantity of material wealth we possess, where solidarity is purchased through collective answers to the community's problems. *Being* is preferred to *having*, human relations to material goods, sharing to grabbing, and community to individuals; there is also a claim for equality between populations and respect for the environment and its resources for future generations. In the last part of the chapter, we list the major obstacles to the spread of this thinking, since it undermines the basis of our present culture, which is firmly anchored in capitalist mechanisms.

The fourth chapter is dedicated to definitions and measures of wealth and well-being, because our choice of indicators shows what is considered important by our society and what its goals are. Consequently, if the definition of wealth changes and it is no longer associated with economic well-being, indicators such as GDP are no longer suitable and new measurements need to be elaborated. GDP is largely

[3] In that year President Truman pronounced a speech containing the famous Point Four, which introduced the term "underdevelopment" and thus inaugurated a new way of conceiving North-South international relations.

criticized as a mirror of a society's development for many reasons. For example, it does not take into account some activities that contribute to well-being, such as voluntary work; it is regardless of the nature of production and of the distribution of wealth, and so on. Many proposals for new indexes are elaborated both at the international and the national level. Two examples of international proposals are the Human Development Index by the United Nations Development Program, and the Better Life Index by the Organization for Economic Co-operation and Development. As examples of national elaborations, it is here chosen to present some Italian and French proposals.

The fifth chapter is a roundup of the great international appointments after the signature of the Kyoto Protocol. The major steps are the conferences that were held in Johannesburg in 2002, in Copenhagen in 2009, in Cancún in 2010, and in Rio in 2012. Sustainable development keeps being the focus of attention; however, there is a great difficulty to produce a legally binding agreement after the debates due to three major obstacles. First, there is always an asymmetry in the participants' knowledge, since each country knows well its own situation and tries to take advantage of that. Second, there are many cases of *free-riding*, namely opportunistic behaviors. Third, *moral hazard* refers to the case in which countries adopt improper behaviors after accepting an agreement, which is relatively easy because such actions are rarely sanctioned.

Chapter six presents the World Social Forums, which have been held yearly since the first one in Porto Alegre in 2001. Those meetings are against the tide, since their aim is to stand in opposition to the process of globalization fostered by

capitalist stakeholders. Then, the major international conferences about degrowth are presented, from the first one in Paris in 2008 to the one in Venice in 2012.

The seventh and last chapter tries to explore how degrowth ideas can be translated into practice. Through the analysis of many practices, we have registered some coincidence between degrowth themes and practices proposed by the Italian Slow Movement and the Anglo-Saxon Transition Towns. To be precise, what they have in common is the project of creating a new conception of city and community life, for example through the reduction of dependence on oil and re-localisation of production. Those movements are growing and we try here to understand their significance, wondering if they have gained some attention by the great international actors or if they are only liked to the local dimension.

Then, we are going to end trying to put some order in the ideas and draw some conclusions of the whole work. What is going to be assessed in the final part are personal opinions, which are open to criticism and ready to be overturned by reality according to future progression of events.

CHAPTER 1

SUSTAINABLE DEVELOPMENT: THE "WEAK" POINT OF VIEW

1.1 *The Limits to Growth*: A turning point in theories and practices of development

The environmental issue was introduced in public debates thanks to the famous *The limits to growth*, which was a push towards the elaboration of a new concept of development breaking with the previous tradition of policies. In reality, the ideas contained in the report were not completely new, but they had been developed since the end of World War II in many "catastrophic works" (Blanchard, 2010). The concept of a global threat was born together with the creation of the atomic bomb, and overpopulation and pollution risks were widely discussed by the end of the 1960s (Blanchard, 2010). One of the most cited intellectual precursors of *The limits to growth* is Thomas Robert Malthus (1766-1834), who already in 1798 developed his thought about overpopulation. In his opinion, a growing population would inevitably cause food scarcity and economic recession. However, even though concerns about the environment had been sporadically expressed before, *The limits to growth* had a great and long-lasting influence on research approaches, on the diffusion of a new scientific discipline – ecology[4] - and on the spread of an

[4] Ecology: "a branch of biology that deals with the distribution, abundance and interactions of living organisms at the level of communities, populations, and ecosystems, as well as at the global scale" (Biology Online, 2009, "Ecology").

ecology opinion movement that grew in the last part of the 20th century (Bottazzi, 2009).

The vision of the world problems underlying *The limits to growth* were shaped to a great extent by the founder of the Club of Rome, the Italian humanist and industrialist Aurelio Peccei (1908-1984). He had a brilliant career as a manager of many multinational companies, but he was also very concerned about the general situation of the Earth: his business travels made him realize that in many parts of the world he met the same problems and those problems were growing in number and becoming more and more serious. He wanted to understand the interdependence of all those problems and to make people aware of them, which is the reason why in 1966 he started giving lectures around the world stressing the need of an international answer to global troubles (Hanekamp et al., 2005). He spoke about inequalities between countries and inside the poorest ones, where the benefits of industrialization were not equally distributed; he also expressed his concern about the technological gap between developed and underdeveloped countries, as well as between the United States and the other developed nations. Moreover, he was worried about the rapidity of technological development, which made it uncontrollable, and about the alliance between technology and military interests; nonetheless, he was still persuaded that the solution of the major world troubles could be solved thanks to technological achievements (Blanchard, 2010). The contradiction of calling for the elimination of the technological gap while expressing concern about the danger of uncontrolled technology was explained by Peccei himself (as cited in Blanchard, 2010), who admitted that in his works he had

dealt with the technological gap only to follow the dominant trends of that times. What he really thought (as cited in Greenwoord Onuf, 1983) was that "since man opened the Pandora's Box of new technologies, which then got out of hand, what happens here has repercussions nearly everywhere."

Peccei had the same concern about the world's fate as Alexander King, the OECD's Director-General for Scientific Affairs; that is why in April 1968 they gathered thirty European leaders in Rome, in order to discuss global problems. The meeting was a failure because no agreement could be found about a representation of the global problems and about the ways to deal with them; yet, a small group of people was able to agree on a certain conception of the issue and they created the Club of Rome in an informal and unplanned way. Immediately after the meeting, they decided to promote a study to analyze the world troubles; because of the will of using computer simulations of a mathematical model, that research was ordered to the Massachusetts Institute of Technology [MIT] and *The limits to growth* was written.

The limits to growth was published in 1972 by Donella H. Meadows, Dennis L. Meadows, Jørgen Randers, and William W. Behrens III. The report illustrates the results of a simulation study aiming at evaluating what could happen if some phenomena continued rising at the same pace as at the beginning of the 1970s. The main goals were to analyze and explain the interdependences linking all problems threatening mankind across the globe; Peccei's perception of an "interrelatedness and interdependence of everything in the human system" (as cited in Greenwood Onuf, 1983) led to the creation of the term *world problematique* (Hanekamp, Vera-

Navas, & Verstegen, 2005). Those global phenomena were the population growth, food production, industrial production, environmental pollution, and resource exploitation. The conclusion was that the Earth being a closed system, it would not be able to sustain the exponential growth of population, food and industrial production and the pollution caused by all of that. The overexploited land would not produce food enough for a growing population and the abuse of non-renewable resources would lead to their depletion. In the apocalyptic expectations of the report's authors, the future would be marked by famines, epidemic diseases and wars in order to get the few available resources before the definitive collapse of the system by 2100. The only solution proposed was then to put some limits to growth, which means to stop the traditional model of economic development and transform it into a completely new paradigm. The remedy was a steady state economy, or a zero growth economy. As observed by Bottazzi (2009), it is interesting to notice that *The limits to growth* was translated in Italian as *I limiti dello sviluppo*, which apparently is a simple imprecise translation; however, it may mean that the two terms were still considered synonyms at the time, or that the model of development based on economic growth had really come to an end.

The limits to growth had a great success: twelve million copies were sold in the world and it was published in 37 languages (Hanekam et al., 2005). That happened thanks to two main reasons (Bottazzi, 2009). First, it was written in a simple and popular style that could be easily read. Second, it was published in conjunction with some environmental catastrophes, like the sinking of the oiler Torrey Canyon in 1967 and oil shocks in the 1970s, which gave economic credence

and social support to the issues contained in the report (Hanekamp et al., 2005). Then, the work met the new concern about environmental conditions that was spreading within occidental societies.

Of course, such a shocking report was not spared by criticism (Bottazzi, 2009). First of all, its methodology was criticized because of the exaggerated results that were produced. Nowadays, we can confirm that some forecasts were too pessimistic: a population of 14 milliard inhabitants was foreseen by 2035, while present calculations are about 8 milliard people by the same year; the costs of technologies to reduce pollution were overestimated; natural resources, food, and energy were supposed to be scarce by the end of the 20th century. However, there was no reference to oil shortage, right so close to the oil shocks that characterized the 1970s. Also, attacks hit the fact that the world was considered a global entity, which was good because it underlined the necessity of thinking of global consequences of local action, and bad because it was neglectful of different levels of criticality characterizing territories (for example, population was not growing at the same pace everywhere). Finally, the major objection made to *The limits to growth* is about the solution proposed, namely the zero growth[5] (Bottazzi, 2009). This theory is based on the conviction that, in such a technological model of economic growth, any GDP increase unavoidably corresponds to an unbearable increase of pressure on environmental resources[6]. The zero growth soon appeared to be unworkable. The forecasts of growth made by *The limits to growth* did not

[5] Details about this economic theory are going to be developed in the next chapter.

[6] That perspective is later developed in the approach of degrowth, which is going to be fully analyzed below.

become true: after the oil crises and economic recession in the 1970s, the growth of many industrialized countries was really close to zero during many years. Nevertheless, pollution rates did not behave as they were expected to: instead of decreasing following a stable GDP rate, they kept increasing. In addition, the unemployment entailed by a weak economic growth was the main concern to the detriment of environmental preoccupations. Also, a zero growth was attacked because it looked like a condemnation to a perennial stagnation in South countries, with a risk of a worsening of their conditions, due to a still growing population.

Moreover, *The limits of growth* appears to be inconclusive: if natural resources and energy are limited and the Earth is a close system, a zero growth would only postpone their depletion and not solve the problem (Bottazzi, 2009). That conclusion was the departure point for the development of new ideas: the attention needed to be focused on renewable resources and energies, in order to make sure that their consumption did not prevent them from regeneration. That was the breeding ground of sustainable development.

1.2 Towards sustainable development: From Stockholm to Kyoto

By that time, the Earth's changes were evident; those changes concerned all essential cycles on the planet: water, the fundamental elements of the atmosphere, and minerals. The consequences hit the climate, which was becoming warmer and warmer; the seas, whose levels were becoming higher and higher; ecosystems, which were becoming poorer and poorer; and non renewable resources, which were

depleting as well as renewable ones, which were no longer able to regenerate due to the rhythms of human consumption (Ruellan, 1994). That were some of the phenomena that made men ask themselves how to deal with those great changes and how to prevent other dangerous damages to the environment, which is the necessary condition for human existence.

The first bases of the concept of sustainable development were put at the beginning of the 1970s, when people started developing a new awareness of the damages caused by economic activities to the close environment (waste, pollution by industries, water pollution…). In the 1980s, the attention was focused on other phenomena, which were more global and more dangerous: the ozone hole, acid rain, desertification, greenhouse effect, deforestation, and so on. At the same time, inequalities entailed by capitalist economic policies started being denounced (Association 4D, 2001, "Le développement durable: Un désir d'avenir", para. 1).

In the same year of the publication of *The limits to growth*, 1972, the United Nations Conference on the Human Environment was held in Stockholm; it marked a turning point in the era of environmental issues as a matter of international attention. It was the beginning of political and public awareness about the Earth's environmental troubles. The Conference originated a Declaration; despite the fact of being non-legally binding for UN members, it is extremely important for being the first of a long series of documents aimed at demonstrating the will of real action in the environmental field and not only a theoretical involvement.

For the first time in an international meeting, countries were addressed important recommendations in the environmental domain: a greater sense of

responsibility for the common good had to be developed; new international laws had to be elaborated, along with new means allowing a better management of global environmental problems; new financing had to be warranted in order to develop programs of international co-operation (United Nations Environment Program [UNEP], "Brief summary of the general debate"). The great importance of the Conference consists in the fact that even though that "that dialogue – and the interest it reflects – may yet vary from country to country, there is in every country a cadre of environmentally concerned and knowledgeable people; and this cadre is growing both in size and influence" (Strong, 1972). People become aware that choices they made would have consequences on following generations, too; in practice, the only possibility envisaged was the elaboration of a "rational global management of the finite resources of the Earth so that the many competing demands for their use are reconciled and the counter-productive side effects eliminated" (Strong, 1972). The political meaning of that Conference was then clear: an action by all segments of society and coordination by governments through the UN was considered necessary in order to produce coherent results at the global level (Kennet, 1972; Strong, 1972). Then, Stockholm 1972 produced a proposal for a new economic model compatible with social equity and ecological caution; institutions were also called to intervene in the resource management, the use of clean technologies, and the promotion of new models of consumption. All those high-flying goals were sometimes judged utopist in a world where the liberal credo reigned undisturbed and where South countries still did not understand the importance of environmental issues (Lévêque & Sciama, 2005).

In 1983 a resolution by the General Assembly of the UN created a World Commission on Environment and Development, which was leaded by the Norwegian Prime Minister, Gro Harlem Brundtland. There was a final Conference in Tokyo in 1987 and a final document entitled *Our common future* but better known as the Brundtland Report, which can be considered as the birth certificate of sustainable development. The Commission had to reconcile two conflicting concepts: they were aware of the impact of human activities on the environment, but in the meantime people who still did not live in decent conditions could not be prevented from development. That dilemma led to the production of the concept of sustainable development (Rist, 2008). There we can read the first official definition of sustainable development, which was quickly recognized worldwide: it is the particular form of "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (UN Department of Economic and Social Affairs-Division for Sustainable Development, 1987, "Our Common Future", p. 24). This definition is based on the basic principle that environment and economic development are not separated: economic development cannot exist without exploiting natural resources, as well as environmental protection cannot exist if economic growth does not take into account its side effect of environmental destruction (Bottazzi, 2009). However, the environmental component of sustainable development is not made explicit; the stress is put on the social dimension (meeting needs) and on equity between generations and within them (satisfying the present generation's needs without compromising future generations' possibility to satisfy their needs). In general, the Report was a warning to humankind: if we had not changed our way of living and

developing, we would have met unacceptable human sufferance and irreversible environmental degradation. There is no concrete proposal for change, "suggestions are limited to a series of (often reasonable enough) hopes […] or to solemn appeals for more efficient management of the available resources" (Rist, 2008).

After the Brundtland Report, international initiatives about various environmental aspects and phenomena proliferated. A great event was the United Nations Conference on Environment and Development or simply the Earth Summit, which took place in Rio de Janeiro in 1992. If the Brundtland report was the birth certificate of sustainable development, this Conference was its definitive consecration (Bottazzi, 2009). Rio 1992 was the result of a growing awareness of the necessity of turning to a new model of economic growth that did not destroy the environment and did not threaten human existence; in the 1990s the challenge was to implement this awareness in order to start a neat transition towards a sustainable form of existence and development (Keating, 1993). Rio gathered official representatives of 179 countries, as well as representatives of the UN, local collectivities, the business world, the scientific community, NGOs and other components of the civil society: it was a record of participants to a summit on environmental issues (Bottazzi, 2009; Keating, 1993).

The Earth Summit resulted in some important documents; despite being mainly non-legally binding documents, they were important signals of the will of including sustainable practices in national policies, contributing to the global application of sustainable development principles. First, the Rio Declaration on Environment and Development relaunched the Stockholm values through 27

principles stating rights and responsibilities of nations in the pursuit of sustainable development and well-being of populations; for example, the first principle claims that "human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature" (UN Conference on Environment and Development, 1992, "Rio Declaration on Environment and Development", principle 1). Second, there is the Non-Legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests, which have an important role in developing economy and maintaining all forms of life. Then, the Agenda 21 is an action plan inviting governments to adopt national strategies based on sustainable development: they are considered the first responsible for the change, but they must work in co-operation with international organizations, the business world, local and regional powers, NGOs, and citizen groups (Keating, 1993). Since the world had become a global village, societies' destinies were clearly interrelated and solutions to common problems had to be adopted at the national level but coordinated at the international one. One of the principal themes of the Agenda 21 is the necessity of eradicating poverty and giving everyone the access to resources in order to live in a sustainable way. By adopting this document, industrialized countries recognized their responsibility for the environmental conservation, because of their great contribution in its degradation. Richer countries accepted to finance poor countries in order to promote a form of development that respected the environment; they also accepted to transfer capacities and knowledge to those countries.

Besides, two important legally binding documents were produced: the Convention on Biological Diversity and the Framework Convention on Climate Change. The first one aimed at preserving the range of living beings and distributing benefits deriving from the use of biological resources in an equal way; the second one wanted to stabilize the level of emissions of greenhouse gases in order to allow equilibrium in the world climatic system.

The General Assembly of the UN met in New York in 1997 in order to take stock of the Earth Summit. The result was a relative failure: in five years the environment had never stopped degrading and there had not been any agreement between countries in order to start an active fight against that. The Assembly did nothing but reaffirm the principles adopted in Rio (Association 4D, 2001, "Le développement durable: Un désir d'avenir", para. 3). Nonetheless, sustainable development was progressively gaining consensus in consciousnesses and practices. International meetings used to issue only recommendations that could be adopted or not by countries, until a major event took place in 1997 in Kyoto: the Conference on Climate Change, which originated the Kyoto Protocol to the UN Framework Convention on Climate Change. The main difference between the Convention and the Protocol is that the first one encouraged industrialized countries to stabilize greenhouse gas emissions, while the Protocol commits them to do so (United Nations Framework Convention on Climate Change [UNFCCC], "Kyoto Protocol", para. 2). "The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing greenhouse gas emissions. These amount to an average of five per cent against 1990 levels over

the five-year period 2008-2012" (United Nations Framework Convention on Climate Change, "Kyoto Protocol", para. 1). The Protocol also recognizes that some countries were more responsible than others with respect to climate change, which is the reason why developed countries have a heavier burden (principle of common but differentiated responsibilities).

The Protocol works through three mechanisms. First, the emission trading, which is known as "the carbon market": countries that have spared emission units are allowed to sell them to countries that are likely to miss their target, since the general purpose of the Protocol is stabilizing the average level of world emissions. This should promote technological innovations in order to reduce pollution, if that becomes cheaper than buying emission units, whose price is supposed to increase. Second, the clean development mechanism, which allows countries with an emission reduction or limitation commitment (Annex B Party) to implement emission-reductions projects in developing countries. Those initiatives allow developed countries to gain more emission units for themselves. Third, the joint implementation, which corresponds to the previous mechanism if those initiatives are implemented in another Annex B Party.

The Protocol was signed in 1997, but entered into force in 2005 according to Article 23, which demands that not less than 55 Parties to the UNFCCC responsible for 55% of the total carbon dioxide emissions in 1990 ratify the Protocol. Initially, the reaction to the Protocol was one of skepticism, since the goals were perceived as unrealistic, since in 2005 emissions were much more than in 1990 and a reduction by roughly 5% on average was much more high-flying (Böhringer, 2003). Then, the

economic crisis lowered the level of industrial production and greenhouse gas emissions decreased; consequently, countries become more optimistic about the achievement of their targets, and some of them even set more pressing targets for themselves.

The Kyoto Protocol has always been celebrated as a milestone towards mitigating global warming. However, opponents do not agree with its mechanism, saying that setting targets for emission reductions cannot work because it is economically inefficient and politically impractical; what they do not take into account is that the Protocol's mechanism allows iterative adjustments and modification of goals, which is a flexible approach allowing policymakers to change their decisions according to new information and new needs (Böhringer, 2003). The Kyoto Protocol was the first example of a global environmental policy in order to deal with a global problem that concerns every state on the planet. However, the significance of this Protocol is doomed to relative inefficiency because a country that is responsible for a great part of global greenhouse gas emissions has not ratified the Protocol: the United States. Indeed, the US signed the Protocol, but in March 2001 President Bush declared its withdrawal because the costs to the US economy would be too high and exemption of developing countries from binding emission targets would not be acceptable (Böhringer & Vogt, 2003). That case is proof of contradictions and difficulties that are met by sustainable development. Despite being a matter of global concern, such decisions and initiatives are impeded by national egoisms, consolidated habits, and economic, social and political costs of their change (Bottazzi, 2009; Böhringer & Vogt, 2003).

Then, the Kyoto Protocol risks to be just like any other recommendation if it is not adopted and implemented by all countries, especially those with a greater responsibility in the environment pollution.

In any case, despite criticism "Kyoto is crucial for the further policy process of climate protection. It has established a broad-based international mechanism that provides a valuable starting point for efficient climate policies in the future" (Böhringer, 2003).

1.3 The triangular concept of sustainable development

Sustainable development is different from previous theories and practices of development, and from the zero growth approach. First, it differs from zero growth because it states the absolute necessity that economy keeps growing, since that is a necessary condition for the improvement of the situation in the South. Second, unlike previous models of development, this growth must observe some rules and limitations, in order to provide well-being for a greater number of people and to limit environmental damages for future generations. Third, it introduces a reference to human needs, while the traditional focus of attention was economic utility and material abundance; then, human needs become multidimensional, as they are not only material but also social, cultural, and so on (Bottazzi, 2009).

It is now opportune to go deeper into the definition of sustainable development as it emerges from the great international initiatives, in order to make clear that it is much more than a kind of development preserving the environment.

Meeting the needs of the future depends on how we take decisions about society, environment, and economy today. Consequently, sustainable development consists of three interacting dimensions, as shown by the puzzle provided by the World Bank ("What is sustainable development"):

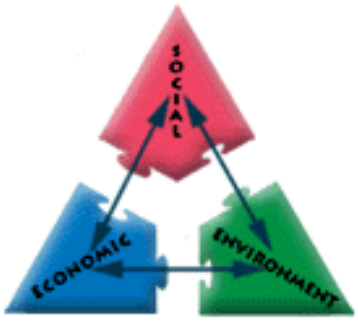

Figure 1. *Three dimensions of sustainable development.*

Each vertex of the triangle is composed of several particular objectives (Centre de Documentation Tiers Monde [CDTM34], 2008, "Le développement durable", para. 3-5). On the environmental plan, purchasing the goal of sustainable development means using natural resources and human knowledge in a sustainable way, maintaining great natural balances (climate, forests, oceans…), and dealing with non renewable energies in a responsible way. On the economic plan, sustainable development means mainly developing economy without damaging natural environments that provide us with basic resources (agriculture and fishing), changing international economic relations in order to promote fair trade and fair tourism, and putting South countries in the conditions of purchasing sustainability. Finally, social factors of sustainable development are the access to education, housing, food and medical care in order to meet basic needs of populations, fight

any form of exclusion of people, stabilize the population growth, and control urban growth and migratory fluxes.

In some versions of sustainable development, a fourth pillar is added to the scheme: participative democracy. Indeed, the goals in the environmental, economic, and social domain would not be possible without the participation of all citizens: sustainable development wants democracy and real participation to that democracy (CDTM34, 2008, "Le développement durable", para. 6). Citizens must be mobilized because they must participate in the decision process; they must participate in the projects in which they are concerned and they must work together to find socioeconomic partners and effective solutions, because development is a common vision of a future that must be built together (Association 4D, 2001, "Le développement durable: Un désir d'avenir", para. 7). Mobilizing all actors is linked to the preference accorded to a transversal strategy: multiple competencies are required instead of sectorial ones because a global approach taking into account all relations between the systems is privileged (Association 4D, 2001, "Le développement durable: Un désir d'avenir", para. 6).

To give a concise summary of the concept of sustainable development, we must say that it is a development that wants to be dissociated from the concept of growth. Growth is a quantitative phenomenon that can be measured through the growth of wealth entailed by marked exchanges, while development is a qualitative process referring to a transformation of structures of society in order to improve human well-being. The adjective "sustainable" implies that development must not create the social and environmental causes of its own end. Moreover, adopting a

sustainable approach to development makes our spatial and temporal horizons wider: the spatial one because everyone's well-being is taken into account, in the North, in the South, in the region and the city nearby; the temporal one because future generations are taken into account as well as present ones (Association 4D, 2001, "Le développement durable: Un désir d'avenir", para. 4-5).

Everybody agrees on the importance of the Earth Summit in 1992, but some criticism did not take long to arise. Already in 1994, Latouche expressed his opinion about the wrong basis of the concept of sustainable development. According to him, this new concept is claimed to be the solution to the antagonism between societies and Nature with a victory by societies. However, he sees sustainable development as the last of a long series of rhetoric innovations that want to legitimize once again the dominant paradigm of economic growth; political leaders refuse to make a proper diagnosis of the illness and try to hide the symptoms. Proposing sustainable development instead of development is like prolonging the patient's agony as long as possible keeping the virus alive. However, this kind of criticism developed in a coherent form some years later, thanks to the movement of degrowth in particular; we are going to analyze that movement later in this work.

1.4 Opposing two views of sustainability

A triangular scheme of sustainable development is used in order to show interdependence between the three dimensions and also to convey the meaning that

in practice one country can be more oriented towards one vertex than towards another, because some objectives could seem in conflict in the short term; for example, economic growth might contrast the preservation of natural resources (Bottazzi, 2009). However, in the long term this conflict must be solved in order to meet future generations' needs; for example, a responsible use of natural resources will ensure that industrial growth is possible for future generations, too. Since the three dimensions need to be balanced in a good sustainable approach, one could easily reach the conclusion that a country that is defecting in the environmental dimension can restore the balance through technological innovation. That means that natural capital (all natural resources) can be replaced by human capital (all goods that are artificially produced), which basically corresponds to a weak view of sustainability.

It is here necessary to go deeper into the difference between the weak and the strong views of sustainability. While the awareness about environmental troubles was progressively rising, two different feelings started developing. On one side, optimistic people have faith in the possibility of overcoming the crisis thanks to market and technology; on the other side, pessimistic people think that ecology and economy cannot be conciliated and the solution to environmental problems can be found only out of market logics. At the same time, two views of sustainability started emerging. According to the weak view, which is typical of sustainable development, natural and human capitals are fully interchangeable, as if artificial goods could meet human needs as well as natural ones (for example, plastic can replace wood in any use). However, that meaning of sustainability is opposed by

those who think that substitutability between the two capitals is only partial, which translates into a strong view of sustainability; this view corresponds to a pessimistic approach assessing that the dominant economic system is structurally inadequate to solve global problems such as climate change, since the economic time is very quick, while the ecosystems' time is slow. This view is at the basis of later approaches to development like degrowth, where the starting point is that the solution is exiting the consumerist society. At the end of the 20th century, no speech about development can choose not to consider the environmental dimension; also the seventh Millennium Development Goal approved in 2000 is "ensure environmental sustainability" (United Nations Development Program, "Eight goals for 2015"). According to this view there is a critical level of natural capital that has to be maintained if we do not want to put the human society's survival in danger. That level must be maintained through a reduction of resource consumption and emissions to a level that is suitable with the Earth's carrying capacity and that provides South countries with a certain amount of resources in order to develop (Tinacci Mossello, 2008). The real problem is that of recognizing which level is necessary for the Earth's survival: there is no measurement that allows verifying the criticality of the level of natural capital.

In the weak conception, technology, economy and market provide us with the tools that will solve the problems. Science and technology are useful in the energetic field and in the reduction of pollution. Another particular feature of this view is the attempt to give an economic value to nature. Here the problem is that the economic theory does not assign an economic value to environmental goods, which

are free common goods, for example air and water (Tinacci Mossello, 2008). They are called *Commons* and their status is maintained even when they belong to someone: according to private and public law, a property right on those goods is to be understood as a right to use them under certain conditions that specifically apply to those goods with an important role for the global equilibrium of the planet and humankind (for example, we can think about the global importance of the rainforest). The absence of economic evaluations of the Commons is probably a result of the past, when there were only a few economic activities and natural resources could be considered abundant and free. However, nowadays the demand for natural resources is so high that their scarcity has become tangible. Thus, an economic evaluation is necessary in order to develop socio-political decisions, control the exploitation, sanction the reprehensible behaviors, and so on. In that context a subfield of economics has developed with the aim of integrating the concept of limits whit the one of economic growth, as well as the concept of sustainability with the one of market. This branch of economics is particularly concerned with the economic evaluation of the Commons. Generally, the price of goods depends on supply and demand in a situation of equilibrium. Applying that mechanism to common goods leads to the so-called *shadow prices*, which are subjective evaluations aiming at rationalizing the exploitation of a natural resource that would otherwise be free, stimulating investments in that sector and protecting reproducibility times of that resource (Ecoage, "Prezzo ombra", para. 1-2).

A concept that needs to be presented at this point is that of Total Economic Value [TEV], which tries to include not only the use value of natural goods, but

also their intrinsic value. A graphic of the components of the TEV is provided by the Encyclopedia of Earth (Dziegielewska, 2008, "Total Economic Value", para. 1):

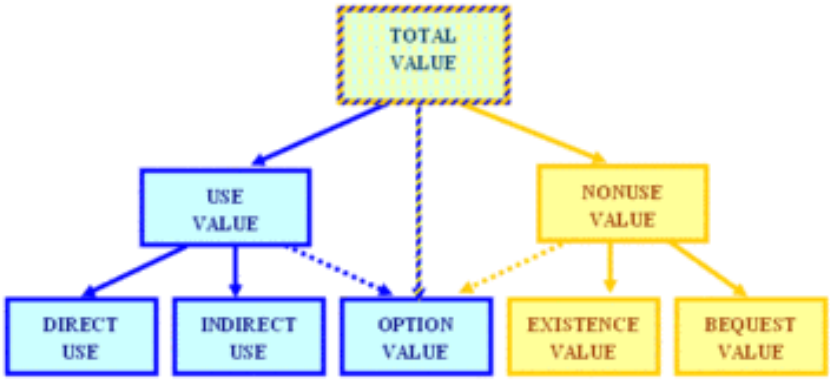

Figure 2. *Components of the Total Economic Value.*

Tinacci Mossello (2008) illustrates the meaning of such components. The use value is related to the real use of environmental goods, for example fishing; the non-use value is related to the use without consumption, for example having a walk in the countryside while admiring the panorama. Both direct and indirect uses create benefits for the user. The option value is a potential use of the environment, which makes economic actors concerned with preservation even when they are not directly using those goods. For example, people are generally willing to pay for preserving the biodiversity, as they understand the importance of having that good in the future. On the other hand, non-value uses are apart from the direct benefit obtained by users. The existence value is related to benefits of natural goods for other species; the bequest value is related to benefits for future generations. The importance of such a measurement is in the understanding that nature has a value depending not only on direct use and consumption, but also on their non-use and

simply their existence. However, this method does not gain universal consensus due to its subjectivity and imperfection.

Another example of the faith in economic tools when facing the need for sustainability is provided by the repartition of environmental costs through the well-known mechanism "if you pollute, you pay", which is one of the pillars of the Kyoto Protocol. That does not mean that all environmental costs must be faced by the producer, who can cushion them through higher prices of his product; it just means that goods produced through polluting processes are more expensive, because the cost of production is higher due to fiscal imposition or compulsory reparation with technologic investment (Tinacci Mossello, 2008). The effect of such a mechanism is that the demand for less-polluting cheaper goods rises and investments for a less-polluting technology is stimulated.

One last example of the economic accountability of the natural environment is provided by the green GDP, which is an adjusted GDP. Basically, environmental costs are subtracted from the traditional GDP. For example, an activity that repairs damages caused by another polluting activity traditionally increases the level of GDP; nevertheless, the level of the green GDP decreases.

The meaning of that discourse on the economic evaluation of the environment is meant to underline the fact that market and economy are essential pillars of the weak version of sustainability. That is the main point of disagreement between the two views. Indeed, in the strong vision of sustainability market and economy are among the basic causes of all problems; obviously, the solution cannot be found thanks to those elements that caused the problem. The only workable

attempts must be made out of any economic logic; of course this view is more radical that the other one, and the solution proposed are drastic and completely new, like the degrowth theory that is going to be analyzed in a further chapter.

Certainly, the prevailing view of sustainability has been the weak one, because optimism has spread thanks to rapid technologic innovation and to effective actions aiming at controlling pollution and recycling materials (Bottazzi, 2009). A great faith in a wide range of possibilities in order to fight our world's problems has made sustainable development become the mainstream of development theories.

CHAPTER 2

ALTERNATIVES TO DEVELOPMENT: THE "STRONG" POINT OF VIEW

2.1 Steady state economy

The concept of steady state economy opposes the belief in unlimited economic growth. As stated by Daly (1974), "our economy is a subsystem of the Earth […]. The subsystem cannot grow beyond the frontiers of the total system and, if it is not to disrupt the functioning of the latter, must at some much earlier point conform to the steady-state mode". This is exactly the model of economy that can be reached through a zero growth, which is the proposal by the Club of Rome in *The limits to growth.*

Already in 1776 the classical economist Adam Smith (1723-1790) recognized a limit to economic growth in his work *The wealth of nations*. He thought that a growing population would push wages down and natural resources would become scarce. He also predicted the possibility of growing during two hundred years, but then population stability would be necessary (Center for the Advancement of Steady State Economy, "Definition", para. 2). Also, Malthus (1766-1834)'s ideas followed the same reasoning, assessing the impossibility of an ever-growing population.

However, the first tangible roots of steady state economy can be found in the works by John Stuart Mill (1806-1873), who spoke of stationary state. He (1986)

assessed that "the increase of wealth is not boundless, that at the end of what they [political economists] term the progressive state lies the stationary state, that all progress in wealth is but a postponement of this, and that each step in advance is an approach to it." Stationary state had already been discussed before but it had always been presented as a great threat to well-being, while Mill believed that it would be a considerable improvement of people's conditions. For example, a population that stops growing was desirable even in a progressive state of economy, to prevent the increase of the number of people not benefiting from the increase of capital. The point in which population and capital stop growing was inevitable, but growth of productivity did not have to stop: welfare can continue to improve indefinitely, especially in non material terms (Mill, 1986).

Also John Maynard Keynes (1883-1946), one of the main economists of the 20th century, forecasted that one day society would need to focus on ends, such as happiness and well-being, instead of means, such as economic growth and material well-being. Nicholas Georgescu-Roegen (1906-1994) better developed those intuitions explaining the connection between physical laws and economic activity in 1971 in *The entropy law and the economic process*. He spoke about the entropy law, which determines the extent to which economic activities are possible. Once the limits to growth were generally accepted, some suggestions for alternative models to the neoclassical paradigm started being developed. For example, Ernst Friedrich Schumacher (1911-1977) proposed the so-called *Buddhist economics*, which is based on sufficiency of consumption, participation of people in useful and rewarding work, community life, peace, and cooperative events. Kenneth Boulding

(1910-1993) spoke of a shift from the *cowboy economy* to the *spaceman economy*: in the first one the priorities are quantity and speed of production and consumption, while in the second one the priorities are stock maintenance through less production and consumption. He developed the metaphor of the Earth-space capsule in those years when space explorations had a boom and artificial satellites were able to take some pictures of the blue isolated Earth in the middle of an empty space. His aim was to promote a way of life that is suitable to a closed system characterized by limitedness (Tinacci Mossello, 2008).

Georgescu-Roegen's student, Herman Daly (1938-), coined the expression "steady state economy" after combining studies on entropy, limits to growth, welfare, ecology, and sustainable development (Center for the Advancement of Steady State Economy, "Definition", para. 2). Later, ecological economics originated from Daly and his colleagues' works and became the branch of economics that better developed steady state economy ideas.

According to Daly (1974):

> A steady-state economy is defined by constant stocks of physical wealth (artifacts) and a constant population, each maintained at some chosen, desirable level by a low rate of throughput – i.e., by low birth rates equal to low death rates and by low physical production rates equal to low physical depreciation rates, so that longevity of people and durability of physical stocks are high. (p. 15)

Thus, a steady state economy is about a relatively stable economy where population and consumption have stopped growing and have stabilized at or below carrying

capacity[7]. The steady state economy occurs when there is a stop of economic growth, which is intended as an increase in the production and consumption of goods and services, but there is not a recession. Of course, all non-material elements of an economy, like knowledge, can grow indefinitely: only physical components (natural resources, population, and human capital) are subject to the laws of physics and to the world's limits. Reaching a level of steady state economy aims at establishing an optimal scale that allows sustainability, which is achieved when human activities do not exceed the capacity of the Earth's ecosystems. In the past, little economic activity was not a problem for ecosystems, but then the exponential growth of economic activities destroyed natural balances threatening the survival of the environment and humankind: that is the reason why we need to find the good scale again. However, that is not an easy task. It might be reached through a redistribution of resources or through degrowth; Adjusting the scale of the economy through accurate measurement of benefits and costs, through trial and error, through regulation of markets, and through political will to achieve sustainability is the great challenge of our times (Center for the Advancement of Steady State Economy, "Definition", para. 3). Daly (as cited by Kerschner, 2010) thinks that it would be better to establish a steady state economy before it becomes inevitable. That is why he purposes three institutions: "aggregate physical depletion quotas for stabilizing the stock of physical artifacts to keep throughput below ecological limits" (Kerschner, 2010); an institution that equitably share stocks in order to limit the degree of inequality; and population control in order to keep its size stable.

[7] The maximum size that can be indefinitely sustained by the environment according to the availability of food, water and other necessities.

The view of sustainability underlying the steady state economy is obviously a strong one. It is clear from the beginning that a stable economy is envisaged because economic growth has limits, which cannot be crossed even with technological innovation. Indeed, Daly (1974) explains that:

> Substitution is always of one form of low entropy matter-energy for another. There is no substitute for low entropy itself, and low entropy is scarce, both in its terrestrial source (finite stocks of concentrated fossil fuels and minerals) and in its solar source (a fixed rate if inflow of solar energy). (p. 17)

No new technology is considered able to solve resource scarcity, as it is subject to the entropy law. Moreover, there is sufficient proof of the fact that an increase in efficiency thanks to technologic innovation often causes a rise in production and consumption, compensating the positive effect obtained; that is the so-called rebound effect, which is going to be analyzed in the following sections of this work.

Just like many counter-current ideas, steady state economy does not gain much consensus, even when almost everybody agrees that economic growth cannot last forever. Why is it so difficult to accept new revolutionary ideas? Because it is very difficult to change a paradigm that is so deep-rooted in societies and where there are many deeply-ingrained values (Claxton, 2009, "A critique of Herman Daly's steady-state economy"). Daly's ironic explanation is quite direct in showing that difficulty (2009, "From a failed growth economy to a steady state economy"):

> I think the answer is distressingly simple. Without growth the only way to cure poverty is by sharing. But redistribution is anathema. Without growth to push the hope for demographic transition, the only way to cure overpopulation is by

> population control. A second anathema. Without growth the only way to increase funds to invest in environmental repair is by reducing current consumption. Anathema number three. Three anathemas and you are damned—go to hell!

Criticism towards steady-state economy, which corresponds to criticism towards *The limits to growth*, is mainly about the fact of being a Northern-centered theory reflecting Northern interests and Northern fears: it does not take into account the state of the South, where many years of positive growth would be necessary only to slightly improve living conditions (Claxton, 2009, "A critique of Herman Daly's steady-state economy").

2.2 The M.A.U.S.S. and radical criticism to capitalism

Recent criticism towards the dominant economic model was fueled by the great international financial crisis of 2008. Yet, its origins are not so recent. Criticism towards the myth of free markets, avidity, ethical indifference, and rational selfish individuals dates back to the beginning of capitalism itself, but it is here chosen to focus on criticism from the beginning of the 20th century. In 1924 Marcel Mauss (1872-1950) wrote *The gift*, where he stated that economy and utilitarianism were not the main purposes of human behavior. The notion of economy as the key for development was criticized, since other aspects such as solidarity, co-operation, well-being, etc. must be considered as well. Mauss identified two kinds of exchange. First, the gift exchange, where objects are always associated with the giver, the recipient, and their relationship. Thus, a gift exchange

is “the obligatory transfer of inalienable objects or services between related and mutually obligated transactors” (Carrier, 1991). Then, there are commodity transactions, where there is no relationship between the self-interested individuals involved and objects have only use value and exchange value. The second one is a typical exchange in industrialized societies. Mauss observed that in ancient times societies were not based on this second type of exchange: anthropologists show that goods were exchanged mainly as gifts and that economic rules were generosity and a refusal of calculating exactly who gave what to whom. Competitiveness was possible in those societies, but it was a kind of competitiveness that escapes to our understanding; for example, local leaders in British Columbia did not compete for accumulating more wealth, but for being more generous than the others and offering the most precious gifts (Graeber, “Donnez donc! Ou les nouveaux Maussquetaires”).

Also, Karl Polanyi (1886-1964) developed this kind of criticism towards the traditional conception of economy in *The great transformation*, which was published in 1944. To him, economy is not decoupled from social relations and it does not force people into a life of alienation. The focus of his work is the overturning of the liberal idea that market society is the natural landfall of human societies (Polanyi, 1974). Despite appearing as natural, independent and self-sufficient, economy is *embedded* in the same society and its institutional forms of regulation (Bottazzi, 2009). He also introduced the concept of reciprocity: when exchanges are regulated by reciprocity and not by utilitarianism, individuals and relations have a greater value, since the wealth is in the exchange and not in the real

value of the gift (Carrier, 1991). Indeed, he refuses the fact that every exchange takes place between independent and rational individuals always calculating costs and benefits.

From the 1980s on, these positions against the power of economy had a crescendo and started converging in real movements that join a general opposition to capitalism and liberalism to the particular criticism towards economy. In 1981, a group of French sociologists, economists, and anthropologists founded the M.A.U.S.S. (Movement Against Utilitarianism in Social Sciences) in Paris, in order to oppose the fact that social sciences were subordinate to a mere mercantilist view of social relations (Bottazzi, 2009). The reference to Marcel Mauss in the name of the movement is evident, as a tribute to the main intellectual referent. The M.A.U.S.S. publishes *La review du M.A.U.S.S*, which allows a great circulation of writings by great international experts. This movement is far from being homogeneous: there is great variety of research domains and a plurality of methods and approaches, too. However, all internal trends converge in the common effort of destroying idols such as economism, materialism, naturalism, and rationalism; their purpose is considering human action in its complexity and multidimensionality, since men are not simple rational beings aiming only at personal utility. A significant example is provided by the M.A.U.S.S. member Alain Caillé (1944-), who poses again Mauss's conviction that the economic model must be reshaped according to new social practices like the one of gift; that is not utopist, because men's natural disposition is not a selfish-one (Caillé, 2009).

The M.A.U.S.S. is only one of the counterpoint positions debating on development, or maybe it could be better considered a major pole that acts as a point of reference for all radical movements opposing the dominant economic model. It is not easy to give an overall view of all those different but similar views; this fragmentation of the debate may be seen as a typical postmodern multiplication of concepts and cultures in opposition to universalism of modernity; on the other hand, it may be considered as a reaction to the end of great ideologies and to the search for a new way to oppose the mainstream of global capitalism (Bottazzi, 2009). Mainstream development has been criticized in many ways: there can be a blind criticism towards the dominant paradigm no matter what the latter is; there can be a wide range of alternative proposals and alternative methods; and there can be a well structured alternative breaking with the mainstream development (Pieterse, 1998). From a theoretical point of view we could distinguish between theories for an alternative development and for an alternative *to* development. The first approaches are based on the conviction that new practices of development can be found within the present political, social, and economic context; the second ones aim at exiting the present model and denouncing economic growth and capitalism as the regulating mechanism of societies. They believe, just like Marx did (as cited in Harvey, 1990) that "the tendency towards over-accumulation can never be eliminated under capitalism." Latouche (1991) insists on the importance of distinguishing between alternative development and alternatives to development, since he considers "development" as a toxic word, which penetrates in our blood like a drug and corrupts our desire and obfuscates our ability to judge. The survival of people excluded from development depends on their ability to find a new logic. It

is not a new development, it is something completely different. It is post-development, because these trends emerge after the decline of the globalization of modernity. In Latouche's opinion (1991), there is always a risk that castaways of development go back to the ship of development; the sneakiest risk is that of alternative development, acting like the mermaids' singing for sailors.

Yet, in practice this distinction is not always easy, because the two options have wide overlapping margins (Bottazzi, 2009; Pieterse, 1998); moreover, there is disagreement with this distinction. First, nowadays the mainstream theory of development has included several features of alternative development, such as participation, sustainability, and equity; thus, speaking of alternative development when the relationship between the dominant theory and the new one is quite fluid does not make much sense (Pieterse, 1998). Second, post-development, or alternatives to development, are disappointing because they convey critique but no construction, there is no positive program; in addition, they attribute to "development" a single and univocal meaning, while it is a polysemic reality (Pieterse, 1998). All of those controversial theoretical disquisitions are the reason why here some ideas of both groups of theories are briefly presented in order to give an idea of the plurality of the points of view.

After the war, Gandhi's ideas of individuals as the starting point of any major change in the world spread out of India. The great infrastructural projects and macroeconomic policies by international organizations produced disappointing results in most cases; that made some people lose confidence in *top-down* strategies. Thus, they started thinking of *bottom-up* initiatives, which were small-scale

development strategies that allowed local population to take active part in the process. That is the so-called participative development, based on the need of deciding development policies together with local populations. The focus of attention shifts from great projects to subsistence farming, education, women's role, and heath (Bottazzi, 2009). The major theoretical reference here is Amartya Sen (1933-), and his new notion of *capabilities*. According to Sen (as cited in Dostaler, 2005), well-being does not depend only on material possessions, but also on the possibility to choose which path to follow in life. Being poor means not only lacking of material resources, but also lacking of capabilities, which are like potential choices. A rich person is one who is free to choose how to develop and how to be happy. Amartya Sen has also the merit of overturning the traditional relation between economic development and human development. In classical views of development, human development is the result of a process consisting of different stages. In practice, typical features of the economic growth in the 19th century help the development of some theories describing this process as a modernization based on the accumulation of capitals, economies of scale, consumerist societies and great infrastructures. Then, economic development is based on economic modernization (economies of scale), social modernization (creation of new social classes, such as the working class and the technical staff), and territorial modernization (development of big cities and depopulation of the countryside). This theory of stages of growth was mainly developed by Walt Whitman Rostow (1916-2003), who identified the main stages that mark the shift from a traditional society to the age of high mass consumption (Tai, 1991). One of the main corollaries of such a theory is that the European experience becomes the

basic criterion for evaluating development and underdevelopment; consequently, underdevelopment is seen as an initial stage that characterized Europe in the 15th and 16th centuries and that can be solved by other countries only following the European path of industrial development (Vanolo, 2010). This is the approach adopted in the famous Point Four of President Truman's speech on January 20th, 1949, which is considered the birth act of the word "underdevelopment" as a synonym of "economical backwardness" (Rist, 2008). Underdevelopment was described not as the opposite of development, but as its embryonic form; that condition could be changed through a reproduction of what happened in Europe in the 18th and 19th centuries (Rist, 2008). Thus, according to this vision economic development occurs first, then human development is allowed and societies deal with their rights and their capabilities. On the contrary, Sen claims that human development comes before the economic one: without capabilities there cannot be any economic development. The focus must be human development, which means improving education, social structures and so on, in order to make people *capable*; economic development will be a consequence of human development (Vanolo, 2010).

Another theoretical contribution to the approach of participative development is the one about the notion of *empowerment*. A definition is given by the World Bank in *Empowerment and poverty reduction, a source book*: empowerment is about providing poor people with material and non-material means that allow their participation, negotiation, and influence on institutions that take decisions about development (Calvès, 2009). However, this concept is widely used

but rarely defined; if it is defined, definitions vary from one institution to another. Thus, such a good concept risks being vague and impossible to be implemented, despite being present in the World Bank and other international institutions' documents (Calvès, 2009).

Another significant example of alternative practices of development is provided by microcredit. Microcredit was born thanks to Muhammad Yunus, an economist and then "special" banker in Bangladesh. In a village he observed people taking money from usurers and then losing the fruits of their hard labor. Being persuaded that those people were poor because of the lack of financial institutions, he lent 27 personal dollars to 42 people, who would give the money back without interests in an indeterminate future. Two years later, in 1976, he founded the Grameen Bank, which is a non-conventional bank in the sense that there is no need for collateral and that it is based on trust, accountability, participation, and creativity (Grameen Bank, 2011, "Introduction"). Those banks for the poor, which were also created out of Bangladesh, give small loans to very poor people who would never have the possibility of receiving a loan from traditional banks, because they do not have any collateral and because the amounts of money are so small that banks do not have an advantage in such a service (Bottazzi, 2009). This activity has produced many positive results that have been proved by many studies by external agencies and international organizations. It is surprising that 99% of the loans are repaid, while only 10% of the loans by the Bangladesh Industrial Development Bank are refunded (Bottazzi, 2009). Bangladesh did already receive money as international aids; the problem was that a great part of that money was spent in the

donor country, so that giving money to Bangladesh was a means for creating employment in the rich country and selling its production. The rest of the money was in the hands of a local élite that used it in order to buy import goods or transferred it to foreign bank accounts, without any benefit for local economy and population.

One of the most interesting members of the M.A.U.S.S. is Serge Latouche (1940-), a French economist and philosopher. He is one of the main supporters of the movement of degrowth, which is has progressively gained consensus in recent years. We wonder if this theory, which has been developed in some aspects and remains vague in others, will ever be strong enough to produce major changes in mentality and in development conceptions adopted by the great international organizations and by governments. Yet, before making predictions on the future of this kind of criticism towards the prevailing system, we had better start a deep analysis of degrowth.

CHAPTER 3

DEGROWHT: A GROWING IDEA

3.1 Origins of degrowth

Post-development studies cannot be collected in a coherent and homogeneous theory, but they all start from the point that development, when it is defined as the tendency of every society to reach the same level of consumption as in developed countries, is impossible. This kind of development should be abandoned because it has not been able to achieve its main targets; on the contrary, it has caused irreversible damages to the environment and to societies as well as it has raised inequalities among countries and within them. Development politics are seen as a new form of colonialism, since they hide the same violent mechanisms of control and submission under a mask of good intentions: interventions aiming at promoting development have often caused more hunger, more poverty, and more inequalities. Moreover, local balances and cultures have been destroyed because of the imposition of an occidental model that is often thought to be the only way towards development. Also, these theorists insist on the difference between *post-development* and *alternative development*, which is a point of view still rooted into the dominant ideology as it tries to find a new approach to development without realizing that only a way out of the capitalist model of productivity, market and development is possible (Bottazzi, 2009).

Within the whirlwind of post-development thoughts, a collection of ideas has recently evolved into the movement of degrowth. Even if the term "degrowth" is quite recent, intellectual degrowth origins date back to Bernard Charbonneau and Jacques Ellul's ideas. The first one writes *Le jardin de Babylone* (1969), in which he denounces the "gigantism" of big cities and big factories, the accumulation of capital, etc.; he also rages against technology, that is the object of Ellul's denunciations, too. In 1988 he writes *Le bluff technologique,* where he claims that technology has made the modern society an instrument of its own instrument (Martínez-Alier, Pascual, Vivien & Zaccai, 2010).

The history of degrowth principles is especially linked to the culturalist criticism to economics in the 1960s and to the ecological criticism in the 1970s (Latouche, 2007). The first criticism is about the neoclassical economic theory that reduces a person to a simple *homo economicus*, who is the man always adopting a rational behavior with the aim to maximize his own advantage thanks to all the available resources; the main point of culturalism, which corresponds to the MAUSS principles, is that men are contingent, depending on their own representations of the world (Mylondo, 2009). Irrational behaviors often occur and social preferences may win over personal advantage; understanding that men are social beings before economical beings is the most important step towards the demolition of capitalistic pillars. It was exactly when the general failure of development policies in the South became evident that the consumerist society and its pillars (progress, science and technology) began to be questioned. Ivan Illich's contribution to culturalist criticism needs to be acknowledged here: he strongly

criticizes modern institutions because they create barriers to people's freedom and promotes the idea of a post-development society in which people are not dependant on market and technology (Martínez-Alier et al., 2010). Particular attention should be accorded to the fact that degrowth initially emerges as a reaction to a widespread disappointment with development, since people have everything but keep feeling dissatisfied, and to its inequality, since it makes a few people rich and a lot of people poor. The globalization of the world is described as general, radical and irreversible like an occidental road roller by Serge Latouche (1991). In 1989 he writes *L'occidentalisation du monde: Essai sur la signification, la portée et les limites de l'uniformisation planétaire*, where he denounces the triumph of the West and suggests the possibility of another world. Later, in 1991, he writes *La planète des naufragés: Essai sur l'après-développement*, where he explores the contradictions of the globalized world and proposes a new one. He metaphorically speaks of a shipwreck of the modernized world. François Partant (as cited in Latouche, 1991) uses the same evocative image: after the shipwreck of the ship of development, the castaways are on a desert island where nobody is coming to rescue them. They must organize their survival: they make an inventory and they establish each one's tasks. They start cultivating, but their aim is not to be more competitive than other countries, but to produce enough bread for each inhabitant of the island. Latouche (1991) compares the history of globalization to the history of Robinson Crusoe by Daniel Defoe. Robinson is the typical *homo economicus*: he is extremely rational and uses any available mean in order to exploit nature as much as possible. He is the prototype of the capitalist chief and the representative of occidental countries. On the other side, Friday is the prototype of the employee in a

capitalist enterprise and the representative of South countries: he collaborates to his chief's victory in order to avoid his own defeat. Castaways of development are not like Robinson, but like a betrayed, deceived and abandoned Friday, who left alone by his chief and tries to organize his life according to new logics.

In the meantime, a new awareness about environmental problems started spreading all around thanks for example to works by Jacques Grinevald and André Gorz, but we have to wait some years to have ecological issues integrated into economics. In addition to the culturalist and the ecological criticisms, Flipo (2007, "Voyage dans la galaxie décroissante", para. 18) and Mylondo (2009) identify three other sources of the ideas of degrowth. The first one is democratic, meaning that degrowth ideals hope to make people aware of the fact that another society organization is possible and that we can create a more democratic world thanks to a new view of economic sciences. The present economic system is no longer considered democratic, since its expansion has created more inequalities and has failed at its mission of rising standards of life worldwide. The second source is the crisis of industrial societies, due to the loss of spirituality and of other values that are fundamental for individual and collective life satisfaction. Pierre Rahbi (as cited in Mylondo, 2009) needs to be mentioned here: following Gandhi's ideas, he states the nonsense of a life spent with the only purpose of cumulating more money and more objects, while harmony with nature, other men and other living beings can be reached only through meditation and listening. An inner revolution, that consists in a change of mentality for degrowth partisans, is the first step towards the solution of present global troubles and the reestablishment of a real progress, which cannot be

reduced to the blind technological progress. The last source of degrowth is bio-economics, defined as "a progressive brunch of social science that seeks to integrate the disciplines of economics and biology for the sole purpose of creating theories that do a better job of explaining economic events using a biological basis and vice versa" (Investopedia, "Bioeconomics", par.1).

Nicholas Georgescu-Roegen is the founder of bio-economics and is often considered the father of degrowth, since he assesses the ineluctability of degrowth in order to reduce the impact of economic activities on the Earth. In 1971 *The entropy law and the economic process* is published. The author strongly criticizes the neoclassic economic model since it is based on a Newtonian mechanics; in short, traditional economics claims to be an exact science like mathematics, with a deductive reasoning and exact measures of defined phenomena, while his own view of economics is about a dialectical reasoning dealing with phenomena that are difficult to measure and concepts that sometimes are difficult even to define (Bottazzi, 2009). Moreover, neoclassic economics does not take into account the second law of thermodynamics or entropy law, which was first formulated in 1865 by Clausius, who had studied Sadi Carnot's remarks about the impossibility of a spontaneous passage of heat from a hot body to a cold one (Tinacci Mossello, 2008). Basically, energy can be found in two states: free energy, which can be used my men and bound energy, which is not available for men's use. Every economic activity exploits the Earth's resources of energy and materials (free energy); according to the first principle of thermodynamics, which states that energy may not be created nor destroyed but may be changed from one form to another, this should

mean that the quantity of production is absolutely equivalent to the quantity of energy or materials used. However, Georgescu-Roegen (as cited in Bottazzi, 2009) underlines that the quality of the product obtained is quite different, being composed of three parts: matter dissipated that is no longer useful for men, heat dissipated that is not useful for men and harmful for the environment (greenhouse effect) and waste that can have an economic-energetic value but that in the long term will turn into matter and heat dissipated (bound energy). Consequently, in a closed system like the Earth, any economic activity leads to an unavoidable degradation of energy and matter, which corresponds to an increase in entropy. That explains the phenomenon of irreversibility in nature: our environment is limited and this implies the loss of useful resources, which cannot be stopped through sustainable development and technological innovations. In his minimal bioeconomic program, Georgescu-Roegen also gives some suggestions for changing our view of economics: the production of armaments should be prohibited in order to stop massacres and to free productive force for international aid without lowering living standards in those countries; underdeveloped nations should be helped in order to reach good living standards[8]; world population should lower in order to by fed only by organic agriculture[9]; the consumerist mentality should be removed in order to produce merely goods and services satisfying only real needs

[8] This point is not completely agreed by degrowth thinkers, since international aid policies are often qualified as forms of neocolonialism and imposition of the occidental ideology.

[9] Also this assessment by Georgescu-Roegen disappears in degrowth arguments; for example, Latouche (2007) claims that focusing on the number of inhabitants of the world diverts our attention from the real problem, which is the loose living promoted by the dominant economic model. If we solve the real problem through a change of paradigm, the issue of world population will be seen in less traumatic terms: we had better ask ourselves how we intend to live, because the point is not whether we can handle overpopulation but whether we can share resources and wealth with equity.

and being durable thanks to the possibility of reparations; the pace of our lives should slow down, because spending leisure time in a constructive way is a fundamental component of a good level of life (Cleveland, 2007, "Energy and economics myths", para. 3).

Georgescu-Roegen's studies on thermodynamics and on the Earth's physical limits are developed before the introduction of climate change in public discussions and in international negotiations; nonetheless, this Romanian economist has not been understood for a long time and his view of economics has been considered a minor theory. This is the consequence of the fact that bio-economics challenges the ancient pillars of the occidental culture: the entropy law is a great revolution of occidental natural philosophy including physics, chemistry, biology and the vision of the society organization. In the traditional view, time does not change anything because it is the reversible and chronometrical time of Newtonian and celestial mechanics: we can reverse the movement of the planets but their equations do not change (Grinevald, 2006). On the contrary, the entropy law introduces an irreversible time, which is the reason why environmental changes cannot be overturned.

Georgescu-Roegen's theories are often criticized by those who point at his theories as unscientific. In particular they claim that the law of entropy is built on wrong bases, as the Earth is not a closed system: "energy from the Sun is like a giant power generator powering life on the Earth" (Princehouse, 2005, "Enropy in muffins"). Energy from the Sun has so many implications for life that we cannot forget it and just consider the Earth a closed system, but Georgescu-Roegen is not

unaware of that. He just remarks that human action on the Earth interrupts the natural cycle that would otherwise work thanks to the Sun: if we use resources too quickly they do not have time to regenerate, and energy from the Sun has no power on that. Moreover, men and their technologies are not able to take full advantage of solar energy in order to fill the shortage of other resources.

It is worth spending the last few words about Georgecu-Roegen reminding that he used to refer to sustainable development as a toxic concept (Tinacci Mossello, 2008). Development has always been associated to some form of economic growth, and hardly anybody is ready to abandon that conception. However, putting the adjective "sustainable" next to "development" does not mean a conscious choice in a new direction; it is just an impression of change, which will hardly solve the problem. Just like Latouche says (1993), sustainable development is a drug that makes us incapable of judging things the right way and gives a distorted vision of reality.

Because of his particular attention to a new organization of individuals and collectivities through voluntary simplicity, Gandhi is often considered an intellectual precursor of degrowth. He is also the political personage who embodies degrowth ideals in the most faithful way. Gandhi's remarks on the spiritual level aim at denouncing the ideology of economic growth as an avatar of a materialist and consumerist world, which reduces a person to a *homo economicus* thinking only of egoistic purposes in the short term. In fact, Gandhian economics wishes an India composed of a great number of self-sufficient small communities living in harmony; the key point in order to end poverty is self-sufficiency at the village level

thanks to improvements in agriculture and small-scale cottage industries (Kumar, 1999, "La lezione di Gandhi", para. 2). Self-sufficiency is one of the available options in order to achieve voluntary simplicity, which is a way of life allowing individuals to be satisfied when they get what they need rather than what they want (or what they *think* they want, since the consumerist society is able to create new needs through advertizing). Simple living is a key concept for degrowth thinkers, because it is seen as a new model of society organization allowing to exit the risk of annihilation of mankind because of a growth model that is impossible in a world limited in its resources and energy. Voluntary simplicity is a stance against the dangerous "always more" promoted by capitalism: the issue of "having" is important below a certain level of material well-being since basic needs must be warranted, but then it makes us victims of what Gandhi calls *desire for possession*, which works like a drug: having more money and more possessions makes us think we have solved our problems, but when the effects vanish we realize how many damages we have caused to our environment and society (Viveret, 2004, "Pour une nouvelle approche de la richesse").

Those were the theoretical references that laid the basis for the development of degrowth ideas, but we also need to ask ourselves why those remarks have found a rich soil to grow right in recent years. The main reason for the recent development of these theories is the fact that environmental troubles have reached an alarming level that make an action by all humankind urgent. The general failure of all previous attempts is quite clear if we have a look at resource depletion and ecological footprint data, as an example of the state of health of our planet.

If economy is growing, the need for resources is growing, too. But some resources are non-renewable and they will be depleted. Also renewable resources can be depleted if they are extracted at unsustainable rates over long periods. The indicator of resource depletion is defined as follows by The World Bank ("Adjusted savings: Natural resources depletion"):

> Natural resource depletion is the sum of net forest depletion, energy depletion, and mineral depletion. Net forest depletion is unit resource rents times the excess of roundwood harvest over natural growth. Energy depletion is the ratio of the value of the stock of energy resources to the remaining reserve lifetime (capped at 25 years). It covers coal, crude oil, and natural gas. Mineral depletion is the ratio of the value of the stock of mineral resources to the remaining reserve lifetime (capped at 25 years). It covers tin, gold, lead, zinc, iron, copper, nickel, silver, bauxite, and phosphate.

The World Bank also provides a map of the world, recording the state of natural resource depletion in the years 2007-2011:

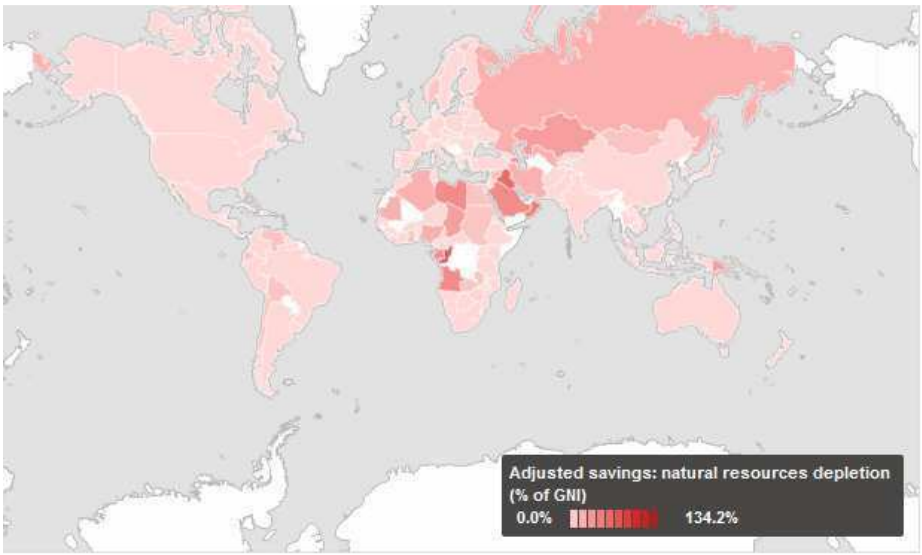

Figure 3. *Adjusted savings: natural resources depletion (% of GNI).*

In order to deal with decreasing supplies, many believe that technologies can provide replacements for depleted resources but degrowth theorists claim that decreasing demand is the only solution to the demand gap. Demand for renewable resources must also decrease, in order to prevent their depletion. For example, we must find a way out of dependence on oil, which is one of the main concerns for those trying to enter the transition towards another kind of society. However, we should remember that degrowth is not just a matter of reduction of consumption and production, since it is also about changing a mentality and reestablishing values like social and ecological ones.

The other alarm bell that awakes our minds is Ecological Footprint, which is defined by the Global Footprint Network (2011, "Footprint basics - overview") "as the world's premier measure of humanity's demand on nature. It measures how much land and water area a human population requires to produce the resource it consumes and to absorb its carbon dioxide emissions, using prevailing technology." Measuring the Footprint at different levels (individual, city, nation or even humanity) allows estimating our pressure on the planet, which can be used as a guideline for our action supporting a way of life respecting the environment and its rhythms. The Ecological Footprint is not an instrument of analysis, but a model aiming at creating critical awareness in front of an everlasting economic expansion on a limited planet and promoting the necessary political measures (Tinacci Mossello, 2008). The Global Footprint Network (2011, "Footprint basics - overview") estimates that "since the 1970s, humanity has been in ecological overshoot with annual demand on resources exceeding what Earth can

regenerate each year. It now takes the Earth one year and six months to regenerate what we use in a year." The following table about Ecological Footprint and Biocapacity has been elaborated in 2010 according to data of more than one hundred countries[10] (Global Footprint Network, 2011, "Data and results"):

	1961	1965	1970	1975	1980	1985	1990	1995	2000	2005	2007
Global Population (billion)	3,1	3,3	3,7	4,1	4,4	4,8	5,3	5,7	6,1	6,5	6,7
Total Ecological Footprint	2,4	2,5	2,8	2,8	2,8	2,6	2,7	2,6	2,5	2,7	2,7
Cropland Footprint	1,1	1,1	1,0	0,9	0,8	0,8	0,7	0,7	0,6	0,6	0,6
Grazing Land Footprint	0,4	0,4	0,3	0,3	0,3	0,2	0,2	0,2	0,2	0,2	0,2
Forest Footprint	0,4	0,4	0,4	0,4	0,4	0,3	0,3	0,3	0,3	0,3	0,3
Fishing Ground Footprint	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1
Carbon Footprint	0,3	0,5	0,9	1,0	1,1	1,1	1,2	1,2	1,2	1,4	1,4
Built-up Land	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1
Total Biocapacity	3,7	3,5	3,1	2,9	2,6	2,4	2,3	2,1	2,0	1,8	1,8
Ecological Footprint to Biocapacity ratio	0,63	0,73	0,88	0,97	1,06	1,07	1,18	1,24	1,29	1,45	1,51

Figure 4. *Humanity's ecological and biological footprint through time (global hectares per capita).*

As we can see in the last line of the table, human demand on the biosphere has more than doubled in the last fifty years. This growth in ecological overshoot is largely attributable to the carbon footprint, which has increased from 0.3 in 1961 to 1.4 in 2007. However, not every human community has the same footprint and there are great differences between countries, particularly those at different economic levels and levels of development (WWF, "Living Planet Report 2010: Biodiversity, biocapacity and development"). For example, we can compare two graphs elaborated by the Global Footprint Network (2010, "United States" and "Bangladesh"):

[10] Data are from 2007, the most recent year for which source data are available.

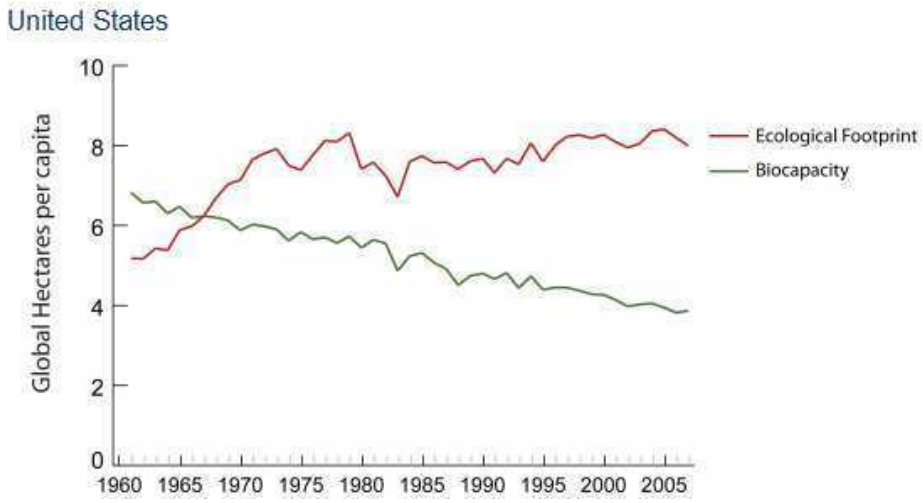

Figure 5. *Ecological Footprint and biocapacity in the US through time.*

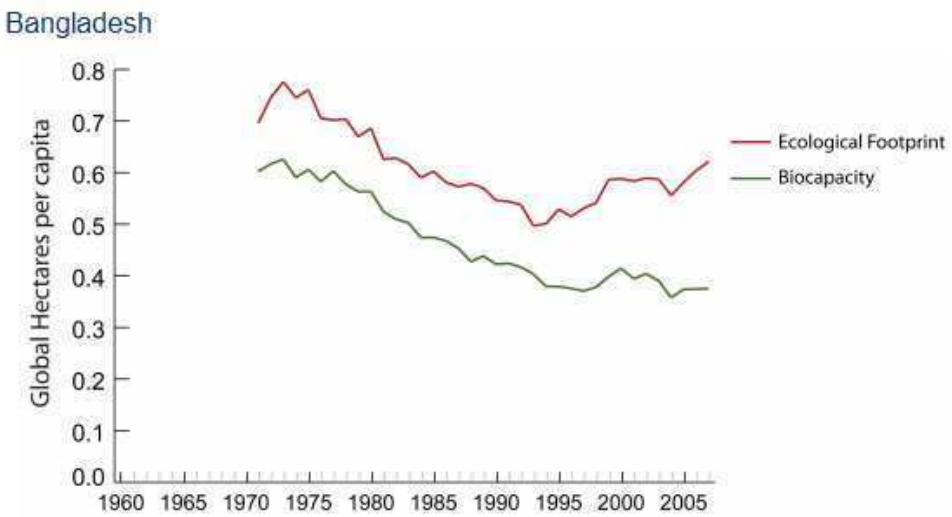

Figure 6. *Ecological Footprint and biocapacity in Bangladesh through time.*

The two figures track per capita resource demand (Ecological Footprint) and compare it with resource supply (Biocapacity) in the US and Bangladesh since 1961. We can notice not only that there is a great difference between the numbers of hectares needed, but also that, though there is always a serious gap between the two lines, the gap between Ecological Footprint and Biocapacity is growing more in the US than in Bangladesh. It is then clear that rich nations must find a way of living

that is compatible with the environment we live in, in order to reduce their footprint. Moreover, emerging economies and any country must choose a new model of development allowing an improvement of well-being without posing a threat on the Earth's condition. This awareness raises fundamental questions about how adapting our ways of living and our definition of development; degrowth answers in the most radical way, claiming the need of a complete change of logic of life and of the conception of economy and wealth.

3.2 Against the concept of sustainable development

The present dominant economic system is strongly criticized by both sustainable development and degrowth. But what is the difference between the two, if they agree on the main point? *The Limits to Growth* by The Club of Rome in 1972 is the point of departure of both schools of thought: ecology needs to be integrated into economics, since the current environmental situation is serious and energy and resource consumption need to decrease. The divergence is about the measures that we should adopt in order to solve the problem. On one hand, sustainable development adepts think that new technologies enable to grow economically with less need of energy, so production and consumption do not have to decrease (Centre d'Information Inter-Peuples [CIIP], 2011, "La décroissance: Une idée à forte croissance!"); on the other hand, degrowth thinkers believe that economic growth is an idol of occidental societies and that sustainable development is an international economic weapon imposing occidental supremacy all over the

world, supposing that the only way towards development is the one they have followed (Adéquations, 2009, "Introduction à la décroissance").

Degrowth immediately presents itself as the fighter against sustainable development, which is considered an oxymoron, a figure of speech consisting of the combination of two opposite words. Thus, sustainable development would be an imposture because it gives the impression that environmental issues are finally taken into account, but in reality it is only a new proposal of the old unlimited growth. It is just a way of changing words and maintaining existing methods of production and consumption, which are legitimized once again thanks to the proclamation of good theories that are almost never translated into good practices (Lavignotte, 2009). On the other side, there is also who claims that the other risk of the expression *sustainable development* is the one of being perceived as a pleonasm, which is quite the opposite of oxymoron: they consider useless to combine these two words since there cannot be development without sustainability, otherwise we are not talking about development (Harribey & Peebles Vlahovich, 2007). Anyway, aside from criticism on the formal level of words, all degrowth partisans reject the concept of weak sustainability that is contained in the concept of sustainable development, because it shows economic growth as the solution of the problem, though in reality it is the cause: it would allow humankind to develop research and technological capital needed to face environmental problems, without needing to cast doubt on our habits of production and consumption (Cheynet, 2003).

A *green economy* would be the result of the application of the concept of sustainable development: traditional capitalism recognizes as capital only money

and production, while there are two other kinds of capital, the human and the natural ones. According to this new natural capitalism, our methods of production and commerce should be modified by the augmentation of natural resource productivity in order to stop resource waste, by the introductions of new models of economy based more on services than on quantities produced and by reinvestment on natural capital. In short, enterprises must care of the Earth's ecosystems in order to gain more money while contributing to general well-being now and in the future: individualism and greed are still prevailing. According to degrowth thinkers, the problem is that this kind of discourse is nothing more than *greenwashing* (Sinaï, 2009): they just put a green label on political and commercial messages, which makes consumers feel less guilty when they pretend to care about the environment even if they buy products produced on the other side of the globe. The impossibility of a green economy based on weak sustainability is quite clear if we look at the following example about computers, which are a technology that has become fundamental in all aspects of our life. The production and transportation of a standard PC pours in the environment 1.3 tons of CO_2; in a sustainable world, a per capita emission rate would be 1.7 or 1.8 tons/year (1.2 in 2050, when there will be 9 milliard people on the Earth). Then, buying a PC means using three fourths of our emission rights: observing the rules of a green economy is a physical impossibility, which is a clear sign that we need to find an alternative to an ever-growing economy based on advanced technology (Gadrey, 2012).

Degrowth thinkers also reject other products of sustainable development, such as the *immaterial growth*, which is about the growth of services, and the *grey*

growth, which is about the growth of knowledge. It is often claimed that growing services and knowledge instead of agriculture and industry allows an unlimited growth with low ecologic pressure; nonetheless, data show that countries where services are an important part of economy and employment have the highest rates of consumption per capita, because long-distance relationships and easy communication lead to countless movements of people and to the building of many structures in order to host technologies (Gadrey, 2012).

The real problem is that capitalism is so deeply rooted in our society that any change of paradigm is automatically contrasted: economy is no longer a means but it has become the purpose, the economic science has become a religion with the Stock Exchange as a temple and economists as priests (Cheynet, 2003). So, our minds are trapped in the system and we hardly manage to think of another possible pattern. Sustainable development is only another example of poisoned word that allows people to avoid upsetting evaluations about our economic model. It is so charged of good meanings that hardly anybody can express disagreement. However, it is another product of capitalism that sneaky inhibits our ability to think: it promises an economic growth for the present and the future, as if putting "sustainable" next to "development" could transform it into a good concept, legitimizing once again economic growth and giving the illusion that it can last forever. It is just an example of the so-called politically correct concepts, which are imposed as dogmas that we never call into question, creating a barrier to difficult urgent decisions (Llena, 2011, "Le développement peut-il être durable?").

When traditional economists claim that degrowth is a quantitative concept while sustainable development is a qualitative one, they simply make the most common mistake of understanding degrowth as an economic degrowth and not considering that it is also a great change of society organization; sometimes they even understand the deep meaning of degrowth, but they consider it utopian and unrealistic and confirm their faith in sustainable development, because it is a concept that is already rooted in our society and so it has more possibilities to work (Latouche & Lipietz, 2005). Moreover, as Cheynet states (2008), sustainable development confirms Rostow's stages-of-growth model, which promotes the idea that any developed country will be a capitalist-like country. Consequently, sustainable development is seen by degrowth theorists like a silent violence on minds of consumerist societies, because it gives the illusion that nothing needs to be changed, and on developing countries, since it is a new form of colonialism allowing the imposition of the occidental model to any country.

At the beginning sustainable development was acclaimed with great enthusiasm because it was the proof of a rising consciousness about environmental and social troubles. However, as time passed by the concept was deprived of all meaning, since the concern for social inequalities were completely abandoned; sustainable development has become a poetic image made of praiseworthy intentions that remain on the theoretical level. Bayon, Flipo, and Schneider (2010) make an example of this progressive impoverishment of the concept of sustainable development reminding of the French President Chirac's speech at Johannesburg in 2002, in which he considers every country equally responsible for pollution; this is

in contrast to the principle of Common but Differentiated Responsibility, which is one of the cornerstones of sustainable development. It was explicitly formulated in Rio in 1992, claiming that countries have played different roles in global environmental degradation and that "the developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command" (Rio Declaration on environment and development, 1992, principle 7). In addition to this loss of basic concepts, sustainable development appears to be quite easy to manipulate: thanks to the fact that it is such a nebulous idea, we can always find a way to define as sustainable any activity somehow linked to ecology and society, which is particularly in behalf of capitalist enterprises (Bayon et al., 2010).

The other reproach to sustainable development is about its social pillar: growth does not reduce poverty and inequalities in the world because capitalist growth is inherently unfair, since it keeps itself alive thanks to the exploitation of inequalities in order to create frustrations and new needs. The capitalist economy is built on an ever-growing market, which is warranted by many mechanisms like advertizing. Advertizing makes people desire what they do not have and disdain what they have, creating constant dissatisfaction and frustration. The importance of this activity is shown by the amount of money spent on it: advertising is placed second in the list of the biggest world budgets immediately after armaments, with more than 500 milliard Euros spent every year and a colossal amount of material, visual, mental and spiritual pollution (Latouche, 2007, "Le territoire de la

décroissance", para. 4). The metaphor used by Cheynet (2004, "Sortir du développement durable", para. 3) is quite effective to explain how capitalism behaves towards inequalities in developing countries: if the Earth was a cake divided into ten pieces for ten people, there would be two people eating eight pieces and trying to have the other two. In order to obtain a larger portion, they would explain that the other eight people can eat thanks to the crumbs left by the two big eaters. Thus, they would tell the others that in order to eat more crumbs they just need to let the two eat more. But any overconsumption by one is done at the others' expenses! Reducing inequalities is not the aim of capitalist supporters and the most radical opponents claim even that the Stone Age was the only period of abundance in our history, because primary needs were satisfied by the collectivity and artificial needs like the ones induced by advertizing did not exist (Rodhain & Llena, 2006). Maybe in those times there was poverty, but not misery: the lack of material goods does not correspond to poverty, since there can be relational, spiritual and social wealth. This kind of wealth is immediately endangered when capitalist logics enter these societies: new needs are induced and only a few people can have access to them, while the others will feel excluded on the economic level and then on the social and relational ones. These people are the ones who are going to experience misery (Rodhain & Llena, 2006).

The notion of sustainable development becomes an important tool for public policies after the Earth Summit in 1992, but twenty years after we are forced to admit a general failure of the engagements taken in Rio, which is the pivotal point for those aiming at a new definition of development: the level of greenhouse gas

emissions is growing, international negotiations do not change the existing methods of production and consumption, development aid does not achieve the wished results. Critics always emphasize the inconsistence of the ideas of sustainable development: of course, there have been some positive actions in some fields like renewable energies, but on the general level there has been an international and national lack of capacity by human societies and of will by political power of finding a way to implement global goals. Many international conferences congratulate Rio on the formal elaboration of sustainable development, but none of them takes the risk of giving an exact definition. In conclusion, sustainable development seems to be an umpteenth expression that well reflects the dominant ideology of omnipotence of science and technology, which make us hope that we do not need to doubt about our untouchable logic of growth. That is one of the reasons explaining the rise of some anti-global groups proposing another view of development and another economic model, just like degrowth does.

3.3 The rebound effect

The misleading character of the substitutability between natural capital and human capital is proved by the so-called *rebound effect*, which is supposed to give an explanation to the fact that our environment is in such a dangerous situation despite our great scientific progress and our clean technologies. Unfortunately, this concept is not considered important by the great majority of economists, or maybe it is just qualified of irrelevant because of its potential danger of undermining many

pillars of the dominant economic model, such as economic growth. Basically, the rebound effect can be defined as the growth of quantities produced that compensates the positive effects of a new technology saving materials or energy. Technology is supposed to allow us to maintain or even increase our present standard of life using less energy and resources. As Binswanger states (2001):

> These concepts rest on the idea that an increase in efficiency by 1% will, more or less, also lead to a decrease in resource use by 1%. However, this is usually not the case because technological improvements evoke behavioral responses. Often an increase in efficiency by 1% will cause a reduction in resource use that is far below 1% or, sometimes, it can even cause an increase in resource use. (p. 120)

This happens because technological progress allows producing the same quantity of goods or services with less energy, but the amount of goods and services usually do not stay the same. Since saving energy means that the cost per unit of product or service falls, the demand for that product or service increases and the wished positive effect becomes then useless or even harmful. That immediately makes us wonder if an ever-growing economy can be sustainable and if we should think of reversing the growth tendency. In fact, for a great number of degrowth thinkers this rebound effect is systematic: every progress in technology and every improvement in the production process leads to a growing consumption and then a growing production. For example, the coming of informatics and Internet made us think that less paper would have been wasted, while in reality paper producers recorded a growing demand for paper because people tended to print every e-mail or information they could obtain thanks to computers. When these new technologies

started spreading also in emerging countries entering the consumerist society, the rebound effect was even more evident. Similarly, there have been important innovations in the automotive industry and nowadays we can produce less polluting vehicles; however, when a car needs less fuel it means that it is less expensive and the result is that we buy more cars to drive more and longer distances, with an enormous increase of pollution! The increase in consumption does not forcedly concern the same product or service whose production has been innovated; for example, a better insulated house allows less spending on heating and the money can be reinvested in a new car (Schneider, 2003).

The case of time-saving innovations appears to be particularly interesting (Binswanger, 2001). Sometimes technological innovations, like time-saving innovations, do not aim at saving energy but they have an impact on energy use. For example, e-commerce allows saving shopping time, internet allows finding information quickly, e-mail allows not spending time on writing and sending letters. However, the first problem is that time-saving devices often require more energy, as demonstrated by faster modes of transport and the second one is that there is also a rebound effect with respect to time that is similar to the rebound effect with respect to energy. That means that saving time increases the demand for saving-time technologies: the paradox is that we succeed in saving time, but we do not save time at all because we immediately invest it demanding more of that product or service, or substituting it with another product or service, which happens mainly where wages are high and energy prices are low, as is the case in many industrialized countries. The result is that all those time-saving technologies increase energy use,

which is the reason why the rebound effect should not be so neglected in the discussion of sustainable development. Resource and energy-saving technologies are necessary, but they are not enough because of the bad feedback in energy and resource demand.

François Schneider (2003) assesses that a bad rebound effect occurs even when the conditions of our local environment improve: consumption increases because the consequences are not directly perceived by the population. Saving money thanks to new technologies makes the global level of consumption increase and ecological benefits are compensated. That is the reason why he attacks ecologists about their faith in technology that will increase efficiency and then will allow a solution of all environmental problems within a context of economic growth. In order to fight the rebound effect, Schneider (2003) introduces the concept of *effet débond*, which promotes the acceptation of a new way of life according to the degrowth principles of voluntary simplicity and frugality. What is saved thanks to an efficiency gain should be reinvested in non-consumerist activities in order to break the rebound effect that increases consumption. The examples in the two following tables compare how the main innovations can lead either to rebound effects or to degrowth effects according to the type of economic organization underlying society:

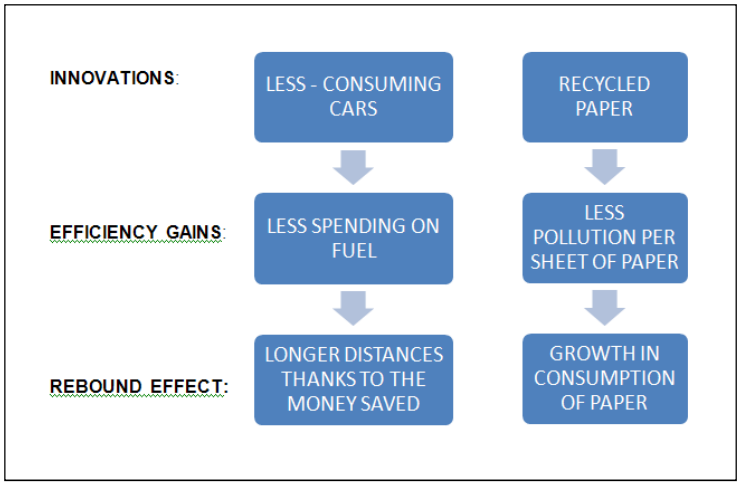

Figure 7. *Rebound effect.* Freely adapted from Scheider (2003).

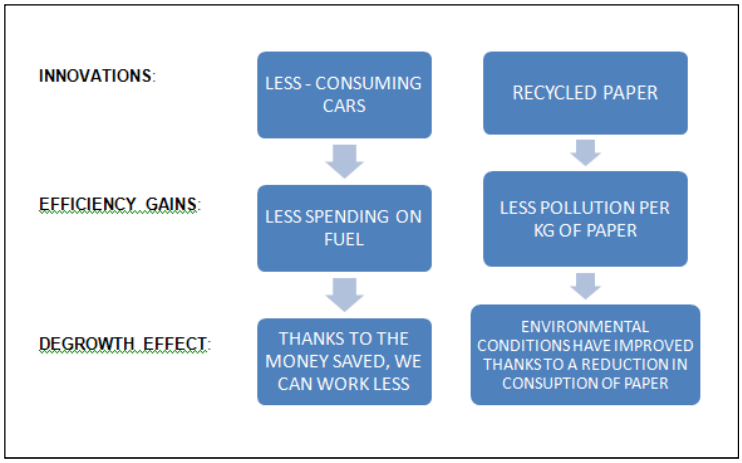

Figure 8. *Degrowth effect.* Freely adapted from Scheider (2003).

Talking about the rebound effect leads to a few considerations about degrowth partisans' attitude towards technological innovation in general. We can say that degrowth positions on the subject follow Jacques Ellul's thoughts, which are expressed for the first time with *La technique ou l'enjeu du siècle*, published in France in 1954 and in the United States in 1962 as *The technological society*. He

defines technology as a set of mechanisms aiming at improving efficiency of all human activities, from politics to art; it is extremely rational, not creative nor spontaneous. It makes the world artificial and it is progressively replacing nature as the environment surrounding men, who believe in the myth of technological progress without realizing they have become slaves (Lavignotte, 2010). Men's blindness is so deep that they think to solve the problems thanks to other technologies, namely green technologies, which have proved their inefficacy as environmental problems have not be solved and in some cases have been increased because of collateral effects, as shown by the rebound effect. As a consequence, degrowth promotes not only a sober consumption but also a sober innovation through the production of simple goods that are sustainable and recyclable; in addition, we should stop trying to handle environmental troubles through technological macro-systems that spread globalization and multiply problems.

3.4 Much more than economic degrowth

Sustainable development can be criticized, but it must be recognized that the Earth Summit in Rio in 1992 has produced major changes in our perception of environmental troubles. Since then, the environment has been a matter of international discussion. As stated by Peternotte (2007), the problem is that Rio has also led to a new kind of arrogance by humankind: an army of engineers and scientists has fixed minimum and maximum levels of reproduction, consumption and pollution. They have also decided which animal and vegetal species must be

protected and which ones can disappear; in practice, they have defined the extent to which humans can endanger other species without experiencing too bad repercussions. In front of the inefficacy of this approach, degrowth theorists invite us to make a choice: being the limitedness of the world evident, we can either ask scientists to determine to which extent we can consume and stop only when that level is reached, or keep at a safety distance from the precipice (Peternotte, 2007). Of course, degrowth theorists wish that we voluntarily fix our own consumption limits and create a convivial society as the only possibility to keep safe far from the precipice.

At first, degrowth ideas were born as an antithesis with the dominant economic thought, that is the reason why it is here proposed a definition of degrowth starting with what it is not and then moving to what it is. As stated below, degrowth opposes the economic rule that has been the dominant system since the beginning of the industrial era. Consequently, it opposes sustainable development that is defined as a sustainable growth of material and marketable production and of financial goods and values. A society that needs an ever-growing quantity of resources is going to face the lack of vital resources: according to degrowth thinkers, development can be sustainable in a limited world only if it goes beyond a continuous material growth and it promotes a common growth of life quality, pleasure, knowledge and culture. Sometimes in degrowth writings we find the expression *sustainable degrowth*, which refers to sustainable development in order to call to mind its real purpose of a "development that meets the needs of the present without compromising the ability of future generations to meet their own

needs", as defined in the Brundtland Report of 1987 (EarthSummit2012, "The Brundtland Report 'Our common future'"). *Sustainable degrowth* is an expression aiming at specifying that "the main problem with the idea of sustainable development is not with the idea of sustainability but with that of development itself" (Martínez-Alier et al., 2010), since sustainability can be reached only if the dominant idea of development is modified. Degrowth partisans highlight that, in a situation where sustainability limits have already been crossed, this aim can be achieved only thanks to a diminution of individual and collective ecological footprint, which is directly connected to a social reorganization in more fair terms. Indeed, degrowth is wished not only because of ecological reasons, but also because economic growth increases inequality and injustice, spreading a well-being that is essentially illusory.

Basically, degrowth proposes a concept of happiness as frugal abundance in a society of solidarity in order to exit the paradigm of economic growth that has failed in the attempt to bring well-being to everyone. "Frugal abundance" may be perceived as an oxymoron just like "sustainable development", but Latouche (2011) explains that this expression is meant to be a provocation: if we exit the logic of productivity and consumerism we can see that frugality is the condition for abundance, just like in the Stone Age, when consumerism did not exist and only real needs had to be satisfied. The main goal of degrowth is abandoning the aim of unlimited growth that is fed by capitalist mechanisms always looking for profits, with catastrophic consequences on the environment and then on humankind (Latouche, 2007). Consequently, it should be clear that "recession" and "degrowth"

are not synonyms: the first one refers to a period of shock we want to quit as soon as possible, while the second one is about a conscious choice of changing a community's logic of life, of exiting the consumerist society based on advertizing creating artificial needs, on money allowing to satisfy them and on programmed obsolescence of products renewing them (Lavignotte, 2009). Degrowth is not a negative economic growth, which is an expression that well reflects the supremacy of growth in our mentality: whenever economic growth rates slow down or even stop, alarm bells start ringing and we immediately speak of unemployment and abandon of social programs, since there is nothing worse than a growth-based society without growth (Latouche, 2007, "Le territoire de la decroissance", para. 2). This is the reason we cannot envisage degrowth in a society that has not voluntary chosen the new view of economics after freeing itself from the traditional economic paradigm. Latouche (2007) thinks that in theory we would rather have speak about *a-croissance* instead of *dé-croissance*, just like we speak about a-theism for example, because it is about abandoning the religion of economics, progress and growth. Degrowth is not a concept, nor a clear theory, but a sort of flag leading all those criticizing consumerism and capitalism in a radical way. However, "degrowth" is used as a slogan aiming at provoking those who still believe in economic growth and we are warned not to reduce it to a simple economic degrowth. Cheynet (2008) assesses that the term "degrowth" has a communicative power: it presents itself as an economic concept in order to focus our attention, as economics is an important domain in our lives; then it aims at destroying the same traditional economic model. On the other end, the bad aspect of this term is the risk

of being reductive and negative, while it should convey a significance that is much more than negative economic growth.

As Illich suggests (as cited in Latouche, 2007), a degrowth society must understand the wisdom of the snail: it carefully builds its shell by the superimposition of one layer to the other, then it abruptly stops and starts building decreasing layers. It knows that one extra layer would enlarge the dimension of the shell by sixteen times, which would be a problem instead of contributing to its well-being. This awareness of limits is what is needed in our society: we have started perceiving the damages created to our environment and our life only when it was too late. The snail is often used by degrowth theorists as a symbol of the desired slowness, too: the fast pace that characterizes industrialized societies has not allowed an equal cultural enrichment, but has made all population alike following the dominant model (Cheynet, 2008).

After having entered the snail's logic of life, a degrowth society presupposes a social and economic life that is completely different from the one prevailing nowadays. Still there is not a well defined model to follow, but it is clear that it is about a general turnabout in comparison to the prevailing model of economic growth. The new society needs to return economy to its place, since it is a means for human life and not the only objective: we need to conceive a society organization where economic values are no longer the main ones, or the only ones. Even a great economist who has nothing to do with anti-capitalism like Keynes (as cited in Gadrey, 2012) in 1930 writes that in an era dominated by material abundance, it is time for men to invest their energy in purposes that are not economic ones.

Moreover, consumption to excess must be abandoned, because we are conscious that it leads to environmental and moral disaster. These great changes correspond to a decolonization of our minds, which are so deeply affected by capitalist logics of accumulation; degrowth thinkers claim that it is necessary to choose voluntarily this conversion to a new paradigm; otherwise, it will be imposed violently by the situation itself. We must start watching things from a new point of view in order to make the change possible, so that new original solutions can be thought: it is about placing new significances at the center of human life in order to define society goals that no longer correspond to the expansion of production and consumption (Latouche, "Manifesto del doposviluppo", para. 2). The first steps towards the decolonization of minds are to be done by individuals, who must change their lifestyle according to the principle that we can consume less, local and better. For occidental people, it is particularly difficult to make such a change; they should think that the great majority of the people of the globe lives without cars, fridges and telephones (Leloup, 2003, "La "décroissance soutenable": Décroitre ou mourir?", para. 5). Renouncing to those devices, cultivating a piece of a common garden, riding a bike instead of driving a car, traveling by train and not by plane are all elements of a sober existence that is already practiced in many parts of the world and that must be adopted also by occidental societies. What is urgent is raising people's awareness in order to make them no longer prisoners of concepts like the one of sustainable development: asking questions, doubting the present economic order and having a multidisciplinary and interdisciplinary approach are the basis for a new world order (Llena, 2011, "Le développement peut-il être durable?", para. 4).

Talking about a decolonization of mind may lead us once again to some dissatisfaction with the term "degrowth", which contains the word "growth": the debate between growth and degrowth is badly presented, since it still uses old categories that are criticized and rejected. In short, degrowth proposes new revolutionary ideas using words and concepts that belong to the old rejected paradigm. The problem is that those categories are the only ones we know and we need to use them in order to express understandable ideas; at the moment, other words that better fit the degrowth discourse do not exist but degrowth thinkers are trying to invent new categories in order to replace those of growth, degrowth and development (Flipo, 2004).

Degrowth tries to make us conscious about the objective reality of the present model of development: it is like an enterprise aiming at transforming relations among men and between men and nature into marketable products (Latouche, "Manifesto del doposviluppo", para. 3). The key point of degrowth is abandoning traditional values underlying this economic conception of development, which is leading humankind to a catastrophe; putting nice adjectives like "sustainable" next to "development" is a fake change, since it is just giving birth to conceptual innovation trying to integrate a piece of consciousness into the capitalist reality and producing changes only at the formal linguistic level. Being aware of that is the first step towards a new view of development, which can be defined in different ways depending on the context, for example *swadeshi-sarvo-dava* (improvement of everyone's social conditions) as Gandhi said or *bamtaare* (getting along well with the others) as Toucouleur people say (Latouche, "Manifesto del

doposviluppo", para. 5). In other words, creating a society based on degrowth means rebuilding original cultures in the perspective of breaking any relation with the destructive ideology called development or globalization. Organizing degrowth means understanding that *more* is not necessarily *better*; happiness and well-being can be brought by convivial social relationships, by voluntary simplicity and moderation. The main focus for degrowth is not a growing capital, but a new balance between individuals, as well as between human societies and nature. Degrowth ideas challenge the traditional concept of marketization as purpose of all human relations, which is central in the classical political philosophy. Traditional economics sees the world as a set of inactive means that productivity must optimize; degrowth considers the world as a set of twisted balances, where people have an important role and where equilibrium must be preserved in order to prevent the whole system from collapse (Flipo, 2004). Choosing a new way of living is not a restriction of people's freedom: it means becoming aware of the fact that human beings' survival is inevitably linked to our planet's survival. Societies seem to have forgotten who has the power, as if they had total control on Nature thanks to science and technology. What is necessary now is realizing that there is not only an economic crisis, but also a general crisis of the economic domination of the world: an economic analysis of what happens in the world has never been sufficient and at the moment it is even more inappropriate, since this system has failed in its attempt to create justice, solidarity and survival for humankind (Trégon, 2011, "Sur la finitude du monde: Entretien avec Geneviève Azam").

Degrowth societies presuppose a new organization where leisure time is valorized instead of work and social relations prevail over production and consumption of useless and harmful products. More pragmatically, degrowth can be envisaged through eight interdependent principles, Latouche's "8 Rs" (Latouche, 2007): *re-evaluating* what matters in our lives; *re-conceptualizing* our view of reality in order to replace "values" like egoism with altruism, competition with cooperation, work with leisure, global with local, material with relational and so on; *restructuring* our productive apparatus and social relations according to the new values; *redistributing* wealth and access to natural resources in a fair way among countries and within them; *relocalizing* production and consumption in order to reduce ecological footprint; *reducing* production, consumption, mass tourism in order to have a less harmful impact on the environment and working hours in order to ensure a job for everyone and to reestablish the importance of leisure time in our lives; *re-use* products and *recycle* waste thanks to the abandon of the creation of artificial needs and of the programmed obsolescence. Elaborating new proposals within the domain of traditional theories has proved to be insufficient, since the notion of growth is not criticized and the solutions have created new problems (rebound effect): nothing has been changed remaining in the logic of profit. What is needed is a real change in our mind; the consumerist society has invaded large portions of Earth and we all have stopped thinking about the consequences of our actions. We must find our sensitivity again and start thinking of real needs and impact on the environment: one liter of water for personal hygiene should be cheaper than one liter of water for a private swimming pool, just like using a little energy should be cheaper than using a lot of it, while the dominant logic at the

moment is "take three pay two" (Eloy & Lindgaard, 2010). The key point for degrowth militants is the reorganization of society rather than the recourse to new technologies: transition scenarios must be elaborated[11], the circulation of goods must be reduced, common transports must be promoted, and local currencies with a value linked to real exchanges and not to speculation must be used (Sïnai, 2009).

With his "8 Rs", Latouche keeps himself far from precise political engagements, since he does not consider degrowth as a specific program. However, many other approaches to degrowth practices exist. In general, the proposals can be different, from positions refusing any political mediation to positions promoting a radical transformation of public institutions and a reduction of their importance in the life of society, but still recognizing their essential functions of mediation. For example, Paul Ariès (as cited in Bayon et al., 2010) proposes a strategy on three levels: voluntary simplicity as a practice of alternative initiatives and a cure of detoxification, local experiments that create a network of initiatives and political programmes mainly presented at local elections. An example of proposals in occasion of local elections is the programme elaborated by Cheynet, who was a candidate in the legislative elections in the French department of Rhône in 2007: dismantlement of advertising agencies, relocalization of production thanks to duties and quality norms, promotion of local trains, fixation of maximal revenues, promotion of research in ecological and humanitarian domains, dismantlement of multinationals et cetera (Cheynet, 2008). The Conference "Economic Degrowth Today", which took place in Barcelona in 2010, proposes a series of radical

[11] An example is provided by Transition Towns, which is going to be analyzed in the last part of the present research.

interventions: local currencies not linked to interest rates, a working week of three days, reduction of advertising, cohabitation, fixation of maximal revenues and so on (Bayon et al., 2010). André Gorz and others have some political positions, too: the revenue must allow a proper life not depending on the hours of work, working time per capita must be reduced, particular spaces allowing the relocalization of production and community life must be built (Bayon et al., 2010; Jackson, 2011). Relocalizing is the key action for the great majority of degrowth proposers; however, it is worth underlying that even that apparently good initiative need a deeper reflection. It is good being aware that the environmental impact of our alimentation choices varies depending on the distance covered by the food from the land to our table and on the means of transport used, but it would be naïve to think that any environmental trouble caused by the journeys of foodstuffs can be solved thanks to relocalization of production and consumption. Relocalizing is good, but we must take into account the fact that transportation is only one of the reasons of environmental impact caused by our way of alimentation: in each stage of the production and transformation of food there can be serious consequences caused for example by water consumption, pesticides, polluting emissions, waste and so on. For example, greenhouse agriculture demands such an amount of energy that it is convenient to transport that agricultural production in order to have a lower environmental impact (CIIP, 2011, "La décroissance: Une idée à forte croissance!"). Moreover, building a greenhouse needs a lot of plastic, which is a polluting material; using glass instead of plastic is a solution that easily comes to our mind, but we forget that producing glass demands a great amount of energy. These examples show that degrowth is not automatic and easy to put in place,

because many calculations and complicated reasoning must be done: degrowth experts must guide societies across progressive and well-organized actions (Nutchey, 2003).

Since the relocalization of economy is one of the main points, we immediately understand that degrowth ideas have a global importance but a local realization, which may be associated to the ecologists' slogan "think globally, act locally" (Latouche, 2007). Latouche's degrowth strategy is focused on self-sufficient, politically autonomous bioregions[12] that trade ideas but few material goods or capital, where food, energy and money should be mostly locally produced. Wishing especially local initiatives could be criticized as lacking of an overall view, as promoting individualistic behaviors within geographically limited regions; indeed, the risk of many dissident initiatives is the one of remaining closed in the small niche they have found without envisaging an expansion towards a stronger autonomous society on the fringes of the dominant economic system. However, local realities envisaged by Latouche and his colleagues are not closed microcosms, but junction points in a network of transversal relations of solidarity cooperating in the fight against capitalistic models. Just they do not propose an unambiguous model, preferring to realize in theory and in practice a global coherence of these initiatives (Latouche, "Manifesto del doposviluppo", para. 7).

In the North, there are many examples of voluntary plans for the construction of different worlds. Some individuals, who totally or partially refuse the world they live in, try to implement alternative initiatives. Very often degrowth

[12] A bioregion or ecoregion is a coherent geographical entity with its own geographical, historical and social reality (Latouche, 2007).

is considered quite unavoidable: circumstances make clear that we no longer have a choice between growth and degrowth, but that we can only decide if we want to approach degrowth voluntarily or to wait until it is relentlessly imposed by the world itself. Just to make an example of practical changes towards degrowth in the North, the case of Greece can be useful. After the recent crisis in Greece, degrowth has been met by a growing number of people; some of them feel forced to such a choice, others are fierce partisans looking at degrowth as a reaction to the crisis and as an opportunity to find a way of living fitting the present economic and financial situation. Razemon and Salles (2012) trace in Greece some recent degrowth initiatives gaining popularity in Athens, like a couple teaching to a growing public how to use solar energy and wind power thanks to easy handmade systems, how to cultivate seasonal fruit and vegetables in one's own garden, how to take care of health through gymnastics and natural medicines. Moreover, in Athens we can find a shop in which money is not used because objects can only be exchanged and Time Banks, where people gain hours in their time account whenever they offer a service and lose hours if they ask for somebody else's services, no matter what kind of service since one hour worked by a doctor is equal to one hour worked by a cleaning lady.

With regard to the implementation of degrowth practices, it is worth having a look at the political dimension of the degrowth movement. Nowadays, degrowth partisans are a minority and within them only a few wish for an introduction of degrowth into the political sphere. Many people adhere to this movement because they feel it is a means of expressing their refusal of our society, so it is more about

displaying a malaise than about proposing a clear alternative plan to citizens (Vasseur, F., Dupin, É., Wittmann, C., & Coudrette, T., 2011). Creating a party that participates in the competition at the political level is not desired by many degrowth experts, since political power is always limited by influence groups and lobbies (Latouche, 2011). Those people refuse any contact with politics, any mediation and any institution but others think that refusing to enter the political debate means making degrowth ideas sterile. Introducing degrowth into the public debate could help it gain visibility; in addition, facing other political parties representing other ideological convictions is the only way to prove the strength of the new ideas (Vasseur, et al., 2011). In Italy, for example, the degrowth movement is quite developed thanks to movements like Slow Food, Città Slow and No Tav, and many enterprises adopt a behavior that well follows degrowth lessons; nevertheless, on the political level this sensitivity is nonexistent. Only some catholic groups are open to degrowth ideas and offer some occasions for public debate (Cheynet & Clémentin, 2011). The absence of a political party for degrowth may be caused by the existence of some disagreements within the movement; however, according to Maurizio Pallante (as cited in Cheynet & Clémentin, 2011), it is good to have some different points of view in such an initial stage of a new ideology because they represent a source of wealth in the elaboration of ideas.

Degrowth thinkers have often been asked if they feel closer to the right or to the left political ideas. Most of them agree with Latouche (2011), who gives three main reasons for feeling closer to the left. First, degrowth is radically in contrast with liberalism as a system of values sustaining the consumerist society: it promotes

a revision of values, a more equal distribution of the access to natural resources between North and South as well as within societies. Second, degrowth revitalizes socialism through its criticism to industrialization. Third, there is opposition to capitalism, which is based on the accumulation of capital. However, there is a great part of degrowth partisans who do not want to choose a political alignment even though they want degrowth to enter the public scene, because they feel that degrowth has an universalistic and transversal vocation, and it must follow its own path without being forced into a sector and absorbing the most various trends (Cheynet, 2008).

Exploring the political side of degrowth makes us wonder about what is the logic desired by degrowth partisans in order to start the changing of society organization. Because of the dissatisfaction with political forces that are deep-rooted into the dominant paradigm, bottom-up initiatives seem to be preferred by degrowth thinkers; however, in South countries the first steps may be more effective if taken at the government level, as explained in the following paragraph.

3.5 Degrowth in the South

Much thornier is the fact of referring degrowth to the South. How can North countries ask South countries not to follow the model that has leaded us to "progress"? What does degrowth mean for populations experiencing only bad effects of economic growth? What solutions do degrowth theorists offer to the South? The impact of degrowth on South countries is very important because our

conception of relations between North and South may take a different form, including our view of history (slavery, colonization…), our present attitude (natural resource exploitation…), and our concept of development.

Growth objectors always underline that economic growth and inequality are the two sides of the same medal: economic growth has largely proved to be always coupled with a growth of inequalities between the North and the South as well as within countries. Nevertheless, growth adepts still believe that a growing economy in the North has positive fallouts on the South, which would be indirectly dragged into the race for development. According to marketing theories, this is the so-called *trickle-down effect*, which has been trusted by the World Bank and the International Monetary Fund for a long time. This trend affects many consumer goods: initially new products are so expensive that only wealthy people can afford them, but then prices fall until general public can buy those products. Consequently, if rich people become richer, poor people will always benefit from that sooner or later. However, this marketing phenomenon applied to countries' level of wealth could be trusted when raw materials were abundant, environmental troubles were unimportant and upper classes were less crowded and less wealthy; nowadays, our world's limits prevent lower classes and poor countries from benefiting from upper classes and rich countries' enrichment. There is no longer the material possibility that everybody becomes wealthy with no sacrifice: the only way towards the reduction of inequalities is redistribution (Bayon et al., 2010). Moreover, degrowth theorists are accused of preventing South countries from development, even if the transposition of the occidental model on the global level has proved to be a nearly

massive failure. Indeed, even though a few segments of humankind have reached a certain level of material wealth, at the global level we record only annihilation of local cultures, uprooting of peasant farmers, wild urbanization, destruction of subsistence means, shanty towns, pillage of the environment and new forms of inequality in general. For those victims of development, the only choice is to organize themselves according to a new logic. They must invent another system, another life.

Of course degrowth militants do not propose the same degrowth actions in all countries, and least of all they ask economic degrowth regardless of living standards. Degrowth theorists have never stated that resource consumption must decrease to the same extent everywhere; on the contrary, they have always declared that the most urgent change is the reduction of inequalities and defended political and cultural autonomy of populations (Bayon et al., 2010). Equality being the main purpose, basic needs must be satisfied in the South; if that entails a GDP growth, so an economic growth, because new schools or hospitals are built, degrowth thinkers do not make objections. The point is that we tend to confuse the two concepts of economic growth and development; the last term can still be used in its meaning of access to drinkable water, food, medical care, education and democracy. Claiming that every population has the right to satisfy its own primary needs does not mean legitimating the domination of the occidental culture: development can be reached thanks to models that differ from the occidental one. Referring degrowth to South countries basically means that they must decolonize their minds and break their economic and cultural dependence from the North. The urgency is restoring the

state of things as it was before the invasion of colonization, development and globalization and before the introduction of capitalist principles, with its peculiar products, values and practices. In short, degrowth in the South is the realization of the fact that economic growth, which is worshipped by capitalist countries, has almost nothing to do with the possibility of development.

However, with regard to strategic indications for the South, almost nobody dares to be clear in the suggestion of initiatives. In general terms, what they should do is removing all obstacles placed by the North, in order to be free in the research of a new development (Latouche, 2004). There can be a reduction of the cultivation designed for exportation, or it could be necessary to increase cultivation for alimentary use; we could think of abandoning capitalist agriculture in order to restore soils and nutritional qualities, or we could suggest agrarian reforms and promotion of crafts (Latouche, "Manifesto del doposviluppo", para. 6). Anyway, how to build degrowth societies is up to South countries, which must choose what direction they want to take towards a new paradigm. Indeed, Degrowth theorists refuse to elaborate a practical plan of actions, because they want to avoid the risk of a new imposition of values and practices that demand to be universal, which would be again a form of colonization. The South must raise consciousness by its own and find a personalized way towards degrowth, but this can be very difficult where occidental values have deeply penetrated into South mentalities. The capitalist system has often colonized minds to the point that South societies believe that economic growth is the way out of poverty, while it is its cause; considering

capitalism as the solution makes the problem worse, which is why making those societies open to degrowth ideas is particularly hard.

Despite resistance by colonized minds, some South countries have seen the dawn of some interesting initiatives; their unexpected voice has arisen in order to open a new way towards a new possible world. Even though they do not refer to those actions as degrowth ones, we can find many degrowth elements in them. We can cite as examples some movements that have taken shape in Latin America, as described by Latouche (2010). In Chiapas (Mexico), on January 1st 1994 an army, which was composed of those Indians we often consider part of the past history, occupied seven towns in the region and proclaimed them autonomous, introduced a new economic model and a local currency. In some cases, people taking power in Latin America are indigenous (for example Evo Morales in Bolivia in 2006) or have strong ideas of ethnic claim (for example Rafael Correa in Ecuador in 2007). In Ecuador and Bolivia nature has been recognized as a subject of law, which hinders big foreign enterprises' interests that exploit local natural resources; water has been declared common good as well as soil and biodiversity. All of these initiatives deserve our attention because refusing the occidental model of development is the very first step towards the decolonization of our minds from the dominant standard and the exit from the present economic model. Since the 1980s, many indigenous movements have developed in Latin America and have pushed their governments to a new legislation allowing the survival and the reestablishment of collective property of village communities. For example, the Bolivian President Evo Morales wanted an agrarian reform breaking with the tradition of the individualistic

principle of exclusive property on land, which had led to a multiplication of small not so fruitful properties; in his opinion, only common management of lands and resources allow all components of the rural society to live properly (Homs, 2006, "La destruction du système agraire indien en Amérique Latine, ou l'histoire écocidaire du développement", para. 4). This idea is proved by the fact that in the pre-Columbian era, when private property did not exist and land was governed through collective rights in Indian peasant communities, agriculture was florid especially in the Andes. When the colonial era began in 1492, a new system based on direct and personal private property was introduced and the subsistence agriculture aiming at satisfying local needs was transformed into a trade agriculture aiming at satisfying the needs of far and abstract markets. The bad effects of colonialism on local communities are well known and do not need to be listed again; the important point here is acknowledging that the invention of economy is only the continuation of war by other means (Homs, 2006, "La destruction du système agraire indien en Amérique Latine, ou l'histoire écocidaire du développement", para. 2). Even worse was the situation after independence, because the members of the independence movements belonged to westernized sectors of local bourgeoisie who reinforced the system introduced by colonialism: they divided collective lands among Indians, who became owners and exploiters. The result was the accentuation of inequalities among big land owners, small land owners and the mass of peasant workers; this is the kind of inequality that is being fought by new movements aiming at abandoning occidental-like systems, just like degrowth theorists wish for South countries.

To summarize, degrowth in countries that have not experienced real economic growth has nothing to do with the will of barring their chances of development. Those claiming the contrary are still anchored in the belief that economic growth is the only way of reaching development, while it has largely been proved that economic growth does not correspond to development. Degrowth theorists believe that development for those countries *is* possible, but only after abandoning the religion of economic growth inculcated by industrialized countries: they have to find a synthesis between the lost tradition and the impossible economic growth that is supposed to be the modernity (Latouche, 2004) and that is a drug poisoning whole societies instead. This new attitude by South countries is part of the great general plan of reestablishing equilibrium on the globe, of exiting the dominant ideology of power and strength and entering an era of life together that Gandhi called *dharma*, namely the universal religion, or the ethical order underlying all religions and considering a person much more than a *homo economicus* (Bayon et al., 2010). Degrowth is not a concept nor a theory, but a slogan by those who want to exit the dominant economic model; it is not a single alternative, but a reference frame authorizing many proposals. Degrowth militants always defend variety against any kind of standardization, like the one promoted by the occidental system: resistance must be organized through personalized local initiatives with a global significance (Bayon et al., 2010).

3.6 Main obstacles to the new thinking

All politicians from right to left have economic growth as one of their main concern, since it is one of the pillars of the capitalist culture as a whole. Occidental societies are all reliant on economic growth and are scared of abandoning this purpose; however, surveys show that common people are aware of the world's physical limits and they are in favor of degrowth" general ideas (Cheynet, 2008). What are then the barriers preventing degrowth from being the popular great alternative that could stop our planet's fall towards collapse? According to some pessimistic opinions like Viveret's one (2002, "Reconsidérer la richesse: rapport final de la mission 'nouveaux facteurs de richesse'", para. 14), the problem is that who wants to make a change does not have the means; social, cultural and political forces keep acting within the traditional economic model; who has the means allowing the change has strong interests in maintaining the status quo. Also Rist (2008) says more or less the same things:

> It is hard to see how such measures could be accepted by political circles as well as public opinion at large: not only because those who might take them have no interest in doing so, while those who wish for them have no power to ensure that they are taken, but more generally because downscaling appears threatening to our creature comforts. (p. 242)

The first barrier to the internalization of the new paradigm may be the fact that "degrowth" has become an *obese term* (Perrot, 2010), meaning that at the same time it designates some real facts of the environmental situation, a seductive but still rhetoric plan, a slightly vague philosophy and a set of initiatives implemented

according to personal opinions and not to clear programs. Such a rich word risks to be too difficult to be understood in a practical way; in fact, many people disagree with degrowth only because they focalize on a single component of it, namely the economic one. If it is reduced to a simple economic degrowth, everyone will be scared of such an idea of lowering our standard of life, of going back to an era of underdevelopment, of losing our well-being. Yet, we know that degrowth is not a prevention from development and well-being, but an incentive to a redefinition of those concepts in a way that is suitable to the present environmental circumstances. The problem is that the religion of economic growth is so deep-rooted in our minds that degrowth is felt like an amputation, nearly a loss of identity (Ariès, 2003). The great power of the dominant system has been the fact of making growth appear natural while men's nature is much more than economic, and the fact of establishing a dummy connection between economic growth and personal fulfillment (Ariès, 2003). That way, what was naturally perceived as sacred (values like freedom, equality, brotherhood…) has become profane, while what was profane (technology, money, economic growth…) has become sacred: degrowth tries to show that we must put things back to their original rank, which is quite different from a return to uncivilized times. Degrowth is not a return to an era of backwardness; it is about doing better with a lower consumption of natural resources, thanks to a new organization of society and to wiser choices about production processes and technological innovations. Accepting degrowth is not taking a step backward, but taking a step aside (Latouche, 2011): trying to look at our system of living from an external point of view can help realize that great changes are necessary, even if that demands an enormous effort of changing a whole mentality. It is important to

understand that values promoted by the dominant ideology are not natural, because they have been imposed: following Latouche's examples (2011), we see that modernity has exalted some vices like ambition, avidity, envy and selfishness, which were rejected by other societies (for example, in the Ancient Greece those who committed the sin of loose living were punished by Destiny).

Disquisition on the term "degrowth" apart, there are other reasons for the opposition to the new ideas. Among the most frequent attacks to degrowth there is the one about its presumed incompatibility with democracy: according to the critics of degrowth, free market and free enterprises cannot be separated from democracy. In their opinion, degrowth measures seem to be feasible only if imposed by totalitarian governments, since it is unlikely that people will choose them spontaneously. Moreover, it is not politically correct to ask some countries to accept that they will never know the same standard of living as in the North and other countries that they have to lower their level of well-being. Degrowth thinkers, like Cheynet (2008), defend themselves through the citation of Abraham Lincoln's definition of democracy as a "government of the people, by the people and for the people", which has nothing to do with GDP growth. We should also notice that there were and there are many kinds of totalitarianisms that promoted economic growth, for example Nazism or the regime in Saudi Arabia, so we cannot support the idea of an indissoluble relation between democracy and this dominant economic model (Cheynet, 2008). Physical limits of our world will necessarily take us towards a recession and if now we decide to ignore this evidence and not to walk spontaneously down the path of degrowth, then we will really risk chaos, failure of

democracy and barbarity. Since degrowth is unavoidable, degrowth thinkers insist on the necessity of choosing it in order to make it less dangerous; they propose to think of it as an opportunity of backtracking given by Nature (Méheust, Rive & Ridoux, 2011). Anyway, degrowth thinkers are aware of the risk to go back from democracy to a new social injustice reproducing what happened when the occidental system was imposed worldwide: a self-proclaimed avant-garde convinced of having the only good formula for the future takes possession of the mission of creating the mankind's happiness through imposition. In order to reduce world inequalities in a pacific and democratic framework, degrowth thinkers do not want to take from the North and give to the South; they refuse to impose degrowth through violence, but they confide in their capacity of convincing people of choosing voluntary simplicity (Duval, 2004, "Décroissance ou développement durable?", para. 5).

Besides, it is reproached to degrowth to be only a new pretext hiding a will to prevent countries in the South from development, as if the North, which represents 20% of the world guests, tried to keep eating 80% of the cake. Here we are back to the problem of a consumerist world, that is the fact that economic growth has never posed the question of an equal repartition of the cake (Latouche, 2011): one of the purposes of degrowth is just solving the problem of world inequality and that can be done through a GDP growth in some cases where it is necessary to satisfy primary needs like the constructions of hospitals or schools in order to fight diseases and analphabetism. Redistribution is the key in order to erase inequalities and exiting the paradigm of economic growth makes us understand that

identifying real needs does not exclude abundance and that other forms of wealth are possible. Material poverty and some kind of sobriety were values for a long time before the coming of economism, which created misery (Latouche, 2011).

Some people fear that degrowth could create unemployment in developed countries, but growth objectors reply that getting rid of technologies can create new jobs and they assure that no "bad" activity will be suppressed before being replaced by another activity that is "more useful" for our society. For example, not using polluting technologies in agriculture would create new posts; moreover, the end if an era of cheap oil is welcomed by degrowth thinkers, since that leads to a slowing mechanization that creates jobs (Latouche, 2011). According to degrowth militants, the reduction of working time is necessary not only to exit this obsession for economic growth, but also to provide a job for everyone and to save resources and energy. Also stopping the exploitation of the South would oblige to work more in order to maintain the same level of production, just like relocalizing production would create employment. It is also underlined that even though economic growth is supposed to create employment, this is not always evident in practice (Cheynet, 2008); this would be a further signal pushing to a radical change, to the experimentation of a completely new receipt instead of the modification of the old one.

Degrowth militants are also accused of being unrealistic, since changing a whole mentality is much more ambitious than creating new technologies. Those who think like that prefer following the path of sustainable development because it is the only workable way of achieving some practical results. However, degrowth

theorists accept to be considered utopists if that means that they have strong ideals opposing the dominant ones: they consider themselves to be the only ones who still have confidence in human beings: the society must be placed back at the center of attention. For them, an individual is not the abstract individual who is a simple resource just like raw materials and capitals, but the individual who has a personal history and who creates a lot of personal relations much more valuable than economic relations (Méheust et al., 2011).

Sometimes degrowth is opposed because of its presumed claim for a population reduction. Many argue that the main cause of the ecological crisis is overpopulation. This is quite a thorny issue, since any possible measure contrasting overpopulation appears to be inhuman: immigration ban, compulsory abortion and infanticide in case of handicap, death for aged people in desperate conditions. Obviously, none of those repulsive suggestions belongs to degrowth thinkers. Of course, they do not agree with those excessively optimistic people convinced that there is room for an unlimited number of people, because in a certain lapse of time the world population multiplied by six and at the same time productive forces multiplied by many hundred times; nevertheless, in some cases like in Italy, there was a population decline that did not entail an improvement of environmental and social conditions. To degrowth thinkers, it is obvious that a limited planet cannot be populated by an ever-growing number of people, but overpopulation is a problem subordinate to that of a religion of economic growth (Latouche, 2011). The issue should be approached not from a quantitative point of view, but from a qualitative one: it is not a matter of *how many* we can be, but of *how* we intend to live. We

should not wonder if we will be able to deal with overpopulation, but if we will be able to distribute resources with fairness and equity.

CHAPTER 4

WEALTH AND WELL-BEING: NEW DEFINITIONS AND NEW MEASURES

4.1 Indicators as a mirror of societies' goals

The issue of changing our conception of wealth and well-being, which should no longer be identified with economic growth, is directly connected to the issue of changing our indicators of wealth and well-being. Indeed, our present representation of wealth worsens the situation and makes the necessary change even more difficult. Paradoxically, environmental catastrophes are a blessing for our GDP, a magical number whose progress is described by a word that resumes the great purpose of our materially developed and ethically underdeveloped countries: economic growth (Viveret, 2002, "Reconsidérer la richesse: rapport final de la mission 'nouveaux facteurs de richesse'", para. 1). For example, an oiler that sinks pouring oil into the sea entails a GDP increase because of all marketable activities needed to limit damages, while voluntary workers cleaning beaches are not considered by GDP. Some remarks about indicators of well-being are a fundamental part of a broader discourse about criticism towards sustainable development and the dominant paradigm in general. Recognizing the inadequacy of the identification of development with economic growth immediately leads to the dissatisfaction with indicators like GDP or GNP. GDP measures the mere economic growth, which is *not* development. Once the multidimensional nature of the concept of development is clear, the urge for new more appropriate indicators emerges. A wide range of new

indicators have been elaborated in order to give an appropriate evaluation of development that takes into account all of its components. When development is redefined and economic growth loses its hegemony, we are clearly moving within the domain of criticism towards capitalist rules, which is namely the domain of degrowth.

It should be clear that the issue of indicators chosen by a society is not separated from the issue of that society's ultimate goals: we measure what we consider important and what is not measured is clearly not a matter of significance for us. Choosing an indicator of well-being reflects a particular attitude towards the world, showing what is considered important in order to achieve happiness and satisfaction in life. The present world's situation creates the necessary conditions for a new awareness of the faults of the dominant economic system, with his indicators measuring its performance according to its goals; but how did economism become that important in our societies' life?

Viveret (2002, "Reconsidérer la richesse: rapport final de la mission 'nouveaux facteurs de richesse'", para. 2) helps in a short historical excursus that is useful in order to understand where our economic system comes from, which is a prerequisite for understanding why it no longer works. In ancient times economy had a secondary role, and during the Middle Ages the main purpose of human beings was preparing themselves for the world after death; only in the XVIIth century the new law of economy started emerging, and in the XVIIIth, XIXth, and XXth century it has progressively assumed a leading role. Three major revolutions are responsible for this change: the intellectual and cultural one, inventing

individuals and autonomy of thought; the political one, basing power on citizens' general will and not on God's decisions; the technological and scientific one, making Progress and History the new purposes of personal and collective life.

Three authors of the 19th century can be taken as an evidence of the great changing entailed by those revolutions. First, Malthus (1766-1834), who gives a definition of wealth aiming at promoting material and marketable activities instead of any other activity and at giving a status of objective science to economics; in Malthus we find some contradictions that are still present nowadays, such as the fact of taking into account only activities that can be measured with money or the fact of refusing to consider domestic work productive. Second, Jean-Baptiste Say (1767-1832) and his definition of utility as a characteristic of certain things of satisfying human needs; the key point is that desires caused by vanity or passions are classed among needs. Third, August Walras (1801-1866), who is indifferent in front of the distinction between morals, which considers useful only objects satisfying real needs, and political economics, which considers useful any object desired by men. The two main consequences to this upheaval have been the liberal and the Marxist traditions, and both forget to consider the same aspects: the ecological one, since Nature is perceived merely as a productive factor; the ethic one, since all human desires have an economic value; the political one, since the State is never completely independent from economic logics; the anthropologic one, since men are considered economic beings instead of multidimensional beings.

In particular, the national account systems and GDP were born after World War II, even though the basis had been put since the 1930s, in tandem with the

development of macroeconomics. After 1945, the priority was of course the reconstruction and modernization of North countries; the major powers focused their attention on events involving political relations in Europe, while events in the South were not given much interest (Rist, 2008). After the war, the U.S. considered Europe as "a tabula rasa on which can be written the terms of a democratic new order" (Maier, 1978). It was the U.S.'s chance to shape the international economic order according to their ideal of capitalist expansionism, which put efficiency and productivity before equality. Maier (1978) defines the post-war Western economy as a consensual American hegemony. It was a hegemony because Washington was able to make the West to follow its policies; it was a consensual one, because European leaders needed economic and security assistance and therefore accepted the U.S. leadership. In those circumstances, economic growth was a synonym of national power and material well-being, and also of higher levels of education, life-expectancy, and social inclusion, as an increasing GDP rate was in a strict relation with an increasing employment (Moatti, 2009). In a context characterized by a mass production and consumption of highly standardized goods, an increasing GDP rate was perceived as the main sign of success of societies (Fremeaux & Toubal, 2001). If an increasing GDP means a better satisfaction of everyone's needs, it is clear that it quickly becomes a synonym of progress and happiness; that's how an economy of well-being has become an economy of material abundance and lack of moderation.

4.2 A new definition of wealth

Economic growth, expressed by means of GDP, is defined as "an increase in the capacity of an economy to produce goods and services, compared from one period of time to another" (Investopedia, "Economic growth", para. 1); we should remark that it is about the quantity produced, while the quality is not taken into account. In order to calculate GDP, we make an addition of the contributions by any economic agent to the production of wealth; any contribution needs to be expressed in a monetary form. The key role of this indicator is immediately clear when we realize that each level of GDP determines a country's rank into the hierarchy of nations. GDP variations, even when they are simply foreseen, influence politicians, entrepreneurs, and householders' behaviors. GDP is not a simple number, but a concept that makes us slaves, a source of competition, an obsession for nations (Dacrema, 2007). If GDP is so powerful, it is because also the notion of wealth has been polluted and monopolized by occidental materialism and spreading economism. In a limited world, if we want to keep growing, we must find a new definition of wealth that has nothing to do with quantitative approaches. It is all about quality: health, freedom, equality between men and women, preservation of the environment, quality of urbanism, access to public services, spare time, etc. are not less important than material comfort. If we are capable of producing all those common goods, our wealth increases even though GDP does not show the same variation, which is the reason why we need new indicators.

According to neoclassical economics, people are extremely rational and selfish; however, as stated above, people are social beings before economic ones,

and often act in irrational ways, against his own interest, and not with the purpose of material enrichment. What is then the relation between economy and happiness? On one hand, it is well known that material poverty makes life difficult; on the other hand, the abundance of material means does not necessarily lead to happiness and life satisfaction. On the contrary, it may lead to an impoverishment of human relations. Thus, economy affects happiness only in an indirect way: money can buy a meal but not conviviality, a service but not friendship, a book but not knowledge (Llena, 2008). As people being social creatures, social relations should be the core of the concept of wealth instead of economic relations, as proven by Llena's socio-economic studies in Montpellier (France). Llena (2008) reports the example of an elderly woman selling ice-cream in the poor area of Paul-Valery; she does that in order to gain some money that is added to her low retirement pension, but also to gain some human relations. The money received by the State is a cold income coming from impersonal institutions, while the money from her informal activity comes with social relations linked to the fact that she knows almost everyone in the area and that people are kind to her.

Our everyday life is full of practices that allow the satisfaction of our need for social relations. The informal sector can be defined in many ways, but to be short we can say that it consists of activities that are not officially known by the State, since there is neither formal constitution, nor fiscal imposition. The informal sector is the embryo of a new society (Latouche, 1991): like economic activities in general, the informal sector contributes to the satisfaction of some human needs, but its underlying logic is quite a different one. Indeed, the attention is focused on

people and not on money; social relations are privileged instead of goods; decisions are taken by those who are more personally involved and not by capital owners; there is a strong relation between producer and consumer, who is not a simple customer (Llena, 2009, "Les pratiques autonomisantes des acteurs de l'économie populaire comme terreau de l'ESS et de la décroissance conviviale", para. 1). There is a great variety of informal activities and all of them escape to rational efficiency, since the dominant logic is not that of profits but that of human beings, whose main cause of well-being is finding their role within societies.

Traditional economics usually underestimates this kind of satisfaction of human needs, which do not demand only marketable products. Human relations allow people to create a surrounding area where they can express their identity and build their existence (Llena, 2008). The value of social relations has been hidden by mere economic analysis of human behavior in occidental cultures, but is still evident in South countries. Studying their systems of living immediately reveals that even though there is material poverty, those populations have what is essential for human life, namely happiness of living together.

Latouche's society of castaways is based on the return to the real happiness, whose meaning has been obfuscated by the present globalization: there has been an utilitarian reduction of happiness to pleasure, of pleasure to the satisfaction of needs, of the needs to the *quantum* of consumption (1991). Thus, happiness has been confused with its measurement, namely money. Moreover, happiness as the goal of every society cannot be the sum of each one's pleasure, gained at each other's expenses; it is something more complex, depending more on what you are

than on what you have. Those issues may appear a little philosophic, or too abstract when dealing with economics. However, they are supposed to be a little stimulus for reflection on the necessity of putting the individual and his real needs again at the center of attention, which is a degrowth partisans' desire, too. When we aim at changing our concept of development and wealth, when we want a radical change of a society's mentality just like degrowth does, one of the first steps is finding new units of measurement that better fit our purposes. As stated by the former French President Sarkozy, "we will not change our behavior unless we change the ways we measure our economic performance. […] This revolution will only be fully completed if it is first of all a revolution in our minds, in the way we think, in our mind-sets and values" (Stiglitz, Sen, & Fitoussi, 2010). Some think that this theoretical problem is subordinate to practical changes for example at institution level; however, changing our representations of reality is fundamental in order to guide policies and all actions in general (Falque, 2011).

4.3. Limits of GDP as a measure of development

On March 18th, 1968 Robert Kennedy gave one of his most famous speeches at the University of Kansas, during his run for election. We report here a significant extract of that speech (John F. Kennedy Presidential Library and

Museum, "Remarks of Robert F. Kennedy at the University of Kansas, March 18, 1968"):

> […] Too much and for too long, we seemed to have surrendered personal excellence and community values in the mere accumulation of material things. Our Gross National Product, now, is over $800 billion dollars a year, but that Gross National Product—if we judge the United States of America by that—that Gross National Product counts air pollution and cigarette advertising, and ambulances to clear our highways of carnage. It counts special locks for our doors and the jails for the people who break them. It counts the destruction of the redwood and the loss of our natural wonder in chaotic sprawl. It counts napalm and counts nuclear warheads and armored cars for the police to fight the riots in our cities. It counts Whitman's rifle and Speck's knife, and the television programs that glorify violence in order to sell toys to our children. Yet the gross national product does not allow for the health of our children, the quality of their education or the joy of their play. It does not include the beauty of our poetry or the strength of our marriages, the intelligence of our public debate or the integrity of our public officials. It measures neither our wit nor our courage, neither our wisdom nor our learning, neither our compassion nor our devotion to our country, it measures everything in short, except that which makes life worthwhile […].

In 1974 Professor Richard Easterlin defined the so-called Easterlin Paradox. He was studying the reasons of the limited spread of economic growth in the world, and he observed that people's happiness does not depend very much on their income and wealth variations. In particular, when income and economical well-being increase, human happiness increases only to a certain extent and then starts

declining, like an overturned U-curve. That means that a growing GDP may not be perceived as an increasing well-being by individuals (Bayon, Flipo, & Schneider, 2011; Speroni, 2010). That is shown by the following table presented in the report *The Happy Planet Index*[13] *2.0: Why good lives don't have to cost the Earth*, first published in July 2009:

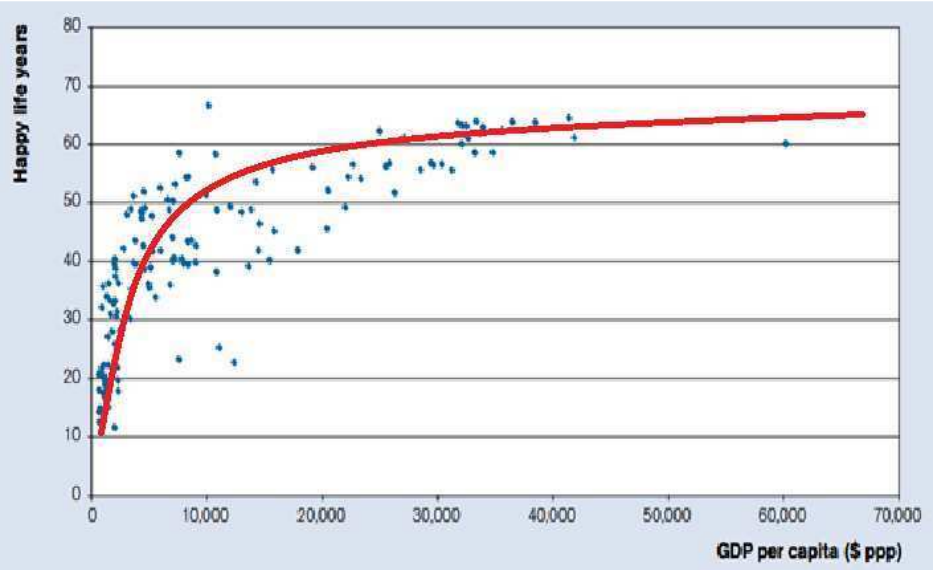

Figure 9. *Scatter plot of happy life years vs. GDP per capita, by country.*

It is true that richer countries have a higher well-being, but the wealth increase of a country is associated with a weakening increase of life satisfaction. The most important gains occur over the first 10,000/15,000 dollars of GDP distribution, while beyond that there is little systematic difference between nations (The Happy Planet Index, 2006, "The Happy Planet Index 2.0: Why good lives don't have to

[13] "The Happy Planet Index (HPI) is an innovative measure that shows the ecological efficiency with which human well-being is delivered around the world. It is the first ever index to combine environmental impact with well-being to measure the environmental efficiency with which country by country, people live long and happy lives" (The Happy Planet Index 2.0, "About the Happy Planet Index", para. 1). The HPI incorporates three indicators: life-satisfaction, life-expectancy and ecological footprint.

cost the Earth", para. 5). Tables like this one can be useful to convey general ideas, but they should not be taken as objective: we must not immediately jump to the conclusion that economic growth does not buy happiness beyond a certain level of well-being, because the interpretation of life satisfaction data and other subjective data is quite tricky, mainly because social norms of well-being change over time and space (Gadrey, 2009).

According to Gadrey (2009), looking at other components of a happy life, such as education and life-expectancy, and drawing their graphics would lead to the same remarks: there is a correlation between them and GDP below a certain level of GDP, but beyond it there is no interrelation. However, those variables of progress do not consider sustainability of progress, namely the possibility of warranting that future generations will have the same resources we have in order to build their own well-being. If we have a look at ecological durability, we observe a strict linear correlation between GDP and carbon dioxide emissions. Consequently, we can assess that the occidental model of growth can no longer be trusted in order to pursue a sustainable development and well-being (Gadrey, 2009).

Experts have always warned people not to consider GDP as an indicator of well-being but developed societies have always tended to use it in order to express judgments about progress; however, from the 1970s some criticism towards GDP's power has started developing with regard to the fact that economic growth does not necessarily mean social progress and that it leads to the destruction of non-renewable resources (Gadrey & Jany-Catrice, 2003). But what is GDP reproached for, exactly?

First of all, GDP is a reductive indicator, since it considers only monetary gains coming from production and consumption (Dacrema, 2007; Fremeaux & Toubal, 2001; Gadrey, 2012; Gadrey & Méda, 2011; Moatti, 2006; Quinet, 2010; Weiler, 2011). It does not take into account some activities that are fundamental for the survival of societies, such as voluntary work, housework, political activities, and so on. Those activities are not paid, but they obviously create wealth and well-being within societies. In addition, GDP does not say anything about social and environmental conditions: not only does it hide some activities that are essential for individual and collective well-being, but it also gives visibility only to a certain progress – that of a growing quantity of goods and services produced and consumed – and not all the damages caused to material or immaterial heritage that is the basis for any other progress (Thornhill, 2009).

Second, GDP is indifferent to the nature of goods and services produced, since it measures anything that creates a surplus value in economic activities, no matter if it is about the construction of a hospital or the consequences of an airplane crash (Bovy et al., 2007; Dacrema, 2007; Fremeaux & Toubal, 2001; Latouche, 1994; Quinet, 2010; Thornhill, 2009). Many examples could be done in order to show these paradoxes of GDP: water pollution is good since it forces people to buy bottles of water instead of drinking tap water (Moatti, 2006), just like traffic jams are good because they increase fuel consumption and accidents demand services by hospitals and mechanics (Fremeaux & Toubal, 2001). Similarly, an increase of sales in armaments, antidepressants, and therapeutic services connected to a boom of cancers are good for GDP (Gadrey & Méda, 2011). Maybe, one of the most

effective examples of the absurdities generated by a mechanist evaluation of economy based on the addition of goods and services produced is provided by Thornhill (2009): medical care is evaluated by income and not by what is really produced, namely by the sale of medical services and medications and not by the number of people in a good state of health. Paradoxically, the conclusion would be that the "economic champion" is someone suffering from a terminal illness, who pays for expensive medical treatments and even better if he is involved in a long divorce procedure, too!

Also, GDP is indifferent to the distribution of wealth, since prices do not always correspond to use value of goods and services: for example, one hundred euro is more useful to poor people than to rich people, even though it is always one hundred euro (Dacrema, 2007; Gadrey, 2012; Moatti, 2006; Thornhill, 2009). Moreover, a GDP increase can go with an increase of wealth for certain people and a decrease for others (Quinet, 2010). It is important for a country to pay attention to equity: benefits of wealth should reach all social classes, because population is the major resource for a country and if a part of it cannot use its potentiality because it is malnourished or not educated, the country itself cannot use its potentiality (Stiglitz, 2006).

Finally, not only have economic growth and GDP nothing to do with well-being, but also they hide to us some signals that could allow us to act in time and prevent some major crisis (Gadrey, 2012). For example, the present crisis has shown that the American growth in the last decade, which was presented as a model to follow worldwide, was nothing but a mirage; Stiglitz (as cited in Gadrey &

Méda, 2011) assesses that the American growth was neither sustainable at the economic and financial level nor at the social one, since the great part of American people has known only stagnation or even decline. In addition, it was not sustainable at the environmental level, since the main environmental indicators show that alert thresholds have been crossed.

In conclusion, if GDP is no longer suitable for a society getting more and more interested in quality of life, if it does not take into account some necessary free services, if it does not consider damages on the environment and distracts our attention from them… must we definitely throw it away? Some authors (Thornhill, 2009; Moatti, 2009) assign to GDP some qualities, too. First, its accurate method makes clear what is included and what is excluded. Second, it is based on objective prices and we can easily make a comparison between two countries; being based on a unity of measurement like money gives to it a concise character that somehow resumes the complexity of reality with a number. Moreover, it is indispensable for any economic analysis, even though some additional analyses appear to be necessary in order to complete the evaluation. Consequently, GDP must not be forgotten once and for all. It is needed in some studies, for example those aiming at understanding the evolution of employment or those measuring the leeway of public policies (Moatti, 2006). GDP must just be put back to its place of mere economic indicator, since what is criticized is the excessive usage of economic growth when speaking of development, especially by politicians and the media.

Once acknowledged GDP's limitations, new questions arise about what needs to be done: should we somehow correct GDP? Or should we complete it with

other indicators? The Stiglitz Report[14] is considered to be a good example in order to give an idea of the international debate. This report was published in 2009 by the Commission on the Measurement of Economic Performance and Social Progress, which was leaded by the chairman Joseph Stiglitz, the advisor Amartya Sen and the coordinator Jean-Paul Fitoussi. The Commission was founded in 2008 on the French government's initiative; President Sarkozy wanted it because he had realized that there was an increasing concern about the adequacy of current measures of economic performance, in particular about GDP as a measure of well-being and economic, environmental and social sustainability (The Commission on the Measurement of Economic Performance and Social Progress, "Welcome to the website of the Commission on the Measurement of Economic Performance and Social Progress", para. 2). Then, the purposes of the Commission's work are: giving a new meaning to statistics that are built on averages and often give a fake representation of reality, in particular when inequalities increase, as Fitoussi says (as cited in Moatti, 2009); facing the environmental emergency; giving proper measure instruments to political classes in order to guide their public action (Thornhill, 2009).

The Report insists on the correlation between wealth and sustainability, since the key point is the repartition of the cake between generations in order to bequeath a world that is at least in the same conditions as when we received it. However, someone (Harribey, 2010) attacks the Commission because their definition of sustainability does not express the necessity of an equitable repartition,

[14] The uncut text is available on:
http://www.stiglitz-sen-fitoussi.fr/documents/rapport_anglais.pdf

nor the necessity of caring about a certain quality of the piece of cake assigned. The Commission's work is also criticized because it tries to renovate the indicator of economic performances and social progress without exiting the dominant economic model's basis. That is proved by the fact that throughout the Report the hypothesis of sustainability between natural capital and human capital is always accepted (Harribey, 2010). One of the acknowledged merits of this Report is that of giving an official status to the debate about an adequate indicator completing or substituting GDP; however, criticism towards GDP has existed since the 1970s and even its creators were aware of its limitations. Another reproach is that the Commission is composed exclusively of economists, while the multidimensional nature of a subject like social progress would rather require attention by psychologists, sociologists, philosophers, historians, and doctors, too (Quinet, 2010). Also, civil society should have been involved in those studies, since it is the first to be involved when speaking about criteria for an equal repartition of wealth, methods aiming at warranting well-being to future generations, and social progress (Quinet, 2010).

After citing all the limitations of GDP, the Stiglitz Commission wonders how to elaborate new indicators. There are two possibilities: adjusting the present GDP in order to include all the dimensions contributing to well-being of societies, or inventing new indicators going further than a corrected GDP, since one of the Report conclusions is that economic and social progress are multidimensional concepts that cannot be expressed through a single indicator (Quinet, 2010; Fremeaux & Tubal, 2001). Well-being is also relative in space and time, because its definition by people may change in different areas and different periods (Fremeaux

& Tubal, 2001). Indeed, one of the most controversial issues is the definition of a set of constituents of well-being, because opinion polls are considered too subjective instruments by many economists; nonetheless, other experts like Amartya Sen (as cited in Thornhill, 2009) assess that economists and psychologists should work together in order to understand what people think and how they act in common life, instead of considering their behavior as a result of a mere rational reasoning. That is confirmed by Gadrey (as cited in Moatti, 2009), who claims that the problem of finding new indicators is not a scientific, methodological, or statistical one, but a politic one, and it is up to civil society to solve it. He insists on the necessity of involving societies in the choice of new indicators, since they are the first to be concerned by that.

According to the Commission, three tracks are possible in order to evaluate progress. First, it can be done through objective indicators like health, life-expectancy, and education, or through opinion indicators. Second, the attention is drawn on the possibilities that are offered to individuals by public organizations; this definition of progress corresponds to Amartya Sen's idea of *capability*. To him, well-being depends not only on what is possessed by an individual, but also on his freedom in choosing what path to follow in his life; then, the role of institutions would be that of warranting a multiplication of possibilities and choices to people (Dostaler, 2005). Finally, progress can be evaluated according to sustainability, which corresponds to an analysis of the heritage, in particular the environmental one; this estimation is quite problematic because of the difficulty of expressing it in monetary terms.

Before the Stiglitz Commission's work, the necessity of going beyond GDP was expressed in a formal way in June 2007, in occasion of the second OECD World Forum on "Statistics, Knowledge and Policy". About the different studies and propositions for new indicators, we can read in the Istanbul Declaration:

> Although these initiatives are based on different methodologies, cultural and intellectual paradigms, and degrees of involvement of key stakeholders, they reveal an emerging consensus on the need to undertake the measurement of societal progress in every country, going beyond conventional economic measures such as GDP per capita.

Therefore, more or less all countries agree on the fact that GDP must no longer be the center of attention of economics, politics and media. Nevertheless, the agreement is not so unanimous when we need to decide what indicator is a good substitute to GDP (Moatti, 2009). What are we supposed to measure? Well-being? Progress? Life quality? Sustainability? In particular, who is going to decide?

Public statistics is particularly reticent to a change in such a rigorous method that has taken so long to be elaborated and established at the international level. Adjusting GDP by the inclusion of non-marketed activities and environmental costs is seen as a loss of reliability despite a gain in completeness (Moatti, 2009). What is easier to accept is the elaboration of satellite accounts in different domains (health, education, transport, accommodation, etc.); the problem is that data collection does not progress quickly and that these accounts remain subordinate to GDP accounts.

The list of propositions is long and continuously extended. To name a few examples, we can cite the Gross National Happiness[15], the Adjusted Net Saving[16], the Ecological Footprint[17], the Genuine Progress Indicator[18], the Index of Social Health[19], and so on. The point is that indicators make sense only if they are recognized worldwide; their institutionalization may depend on a transparent process of elaboration, a regular official accountability and some stability in the presentation framework and calculation methods.

[15] The term was coined in 1972 by Bhutan's fourth Dragon King, Jigme Singye Wangchuck, attempting to define an indicator that measures quality of life or social progress in more holistic and psychological terms than GDP (Stiglitz, 2006).

[16] It is a sustainability indicator elaborated by the World Bank in order to express variations of economic, human and natural capital. Starting from Gross Domestic Saving, there are four kinds of adjustment: deduction of fixed capital, addition of investments on human capital, deduction of natural resources consumed, addition of damages produced by pollution (Moatti, 2009).

[17] See previous chapter for details.

[18] It "takes everything the GDP uses into account, but also adds other figures that represent the cost of the negative effects related to economic activity, such as the cost of crime, cost of ozone depletion and cost of resource depletion, among others" (Investopedia, "Genuine Progress Indicator - GPI'", para. 1)

[19] By "looking at social problems that affect Americans at each stage of life—childhood, youth, adulthood, and the elderly—as well as problems that affect all ages, the Index seeks to provide a comprehensive view of the social health of the nation" (Institute for Innovation in Social Policy, "The Index of Social Heath", para. 3). It is composed of sixteen variables that are associated to age categories: children (infant mortality, child abuse, child poverty), teenagers (teenage suicide, teenage drug abuse, high school dropouts), adults (unemployment, weekly wages, health insurance coverage), elderly people (poverty among the elderly, out-of-pocket health costs among the elderly), any age (homicides, alcohol-related traffic fatalities, food insecurity, affordable housing, and income inequality).

4.4 International proposals for new indexes: Human Development Index and Better Life Index

Do we already have some instruments allowing complex and multidimensional evaluations of progress? Yes, we do. From the 1990s on, some social and environmental indicators have started gaining popularity in the intellectual world. And no, we do not. Indeed, none of these new indicators has reached a sufficient level of consensus and legitimacy to be politically active. It is here chosen to analyze the two international proposals that seem to have more success in the debate for a new indicator, even though they are far from being universally accepted: the United Nations Development Program (UNDP)'s Human Development Index (HDI) and the Organization for Economic Co-operation and Development (OECD)'s Better Life Index.

Since 1990, the UNPD has published a Human Development Report every year and the HDI has been the most spectacular element of its success. This Report has "the single goal of putting people back at the center of the development process in terms of economic debate, policy and advocacy" (UNDP, "Human Development Report 1990: Concept and measurement of human development", para. 1). Clearly, the general aim is going beyond GDP when assessing the level of people well-being. The Report states that economic growth often fails to translate into human development, which is measured through a new composite index called Human Development Index. This index suggests that people and their capabilities should be used in order to assess a level of development in a country instead of economic growth. This concept directly comes from the notion of development as an

enlargement of human capabilities, formulated by Amartya Sen on the basis of John Rawls's studies stating that people must have the possibility to pursue different goals and all those goals must be possible (Sanahuja, 2007). The HDI results can question national policy choices, asking for example why two countries with extremely different levels of Gross National Income (GNI) per capita have such different levels of HDI, as shown by the following graphic provided by the UNDP ("What does the Human Development Index (HDI) tell us?"):

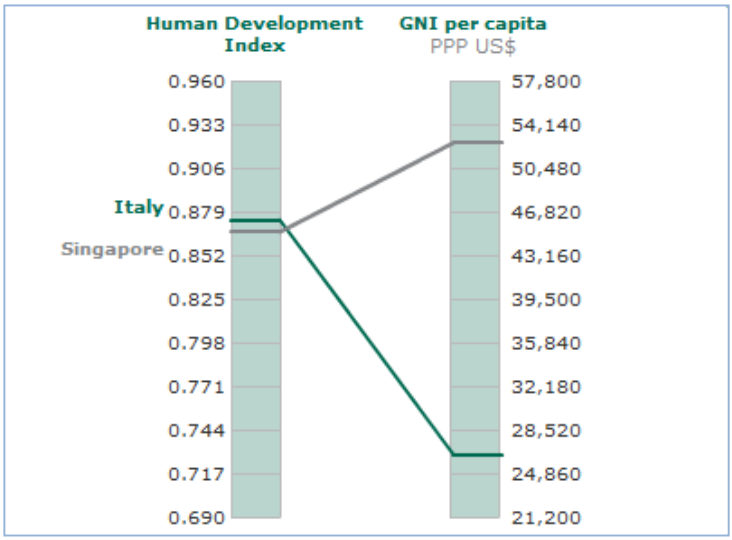

Figure 10. *Two different stories: From human development to income.*

There are also regional and national reports, aiming at setting human development as a priority in the national political agenda. "They are tools for policy analysis reflecting people's priorities, strengthening national capacities, engaging national partners, identifying inequities and measuring progress" (UNDP, "Regional, national and local Human Development Reports, para. 2). Those Reports have the merit of introducing the human development concept into national policy dialogues,

creating public debates, mobilizing support for action and change, and making people think about their priorities.

The HDI was launched in the first Human Development Report, inaugurating a new way of measuring development in a country by combining three basic dimensions of human development, such as a long and healthy life (health), access to knowledge (education), and a decent standard of living (income), as shown by the table provided by the UNDP ("Human Development Index-HDI", para. 1):

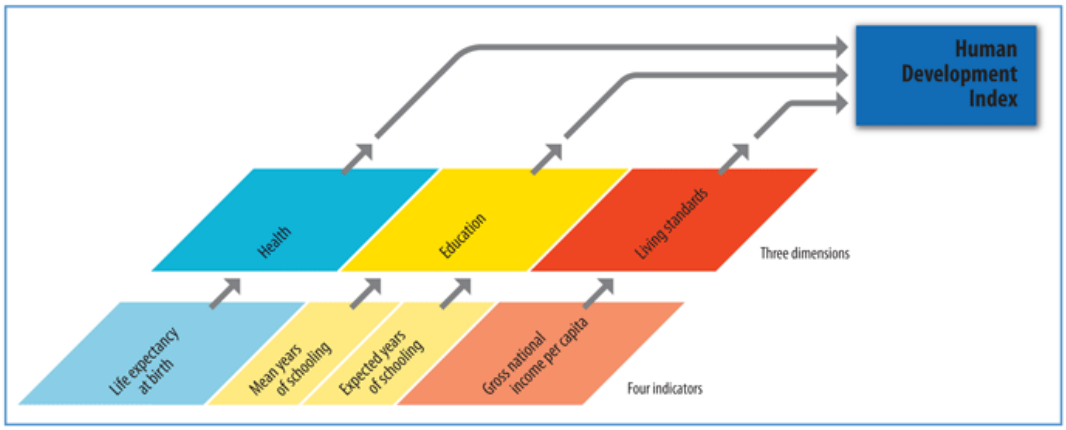

Figure 11. *Components of Human Development Index.*

The HDI is expressed as a value between 0 and 1. The education component is a geometric mean of two indices, one for the years of schooling for adults aged 25 years and one for the expected years of schooling for children of school entering age. The life-expectancy at birth is calculated using a minimum value of 20 years and a maximum value of 83.4 years, which is the maximum value observed

between 1980 and 2010. GDP per capita is expressed in purchasing power parity[20] (Gadrey & Jany-Catrice, 2003; Fremeaux & Toubal, 2001).

In the 2006 Report, the HDI was improved through disaggregation, as a consequence of the remark that different groups within a country can have different levels of human development. Groups can be defined by different criteria: income, geographical regions, gender, ethnicity, etc.; then, the HDI is calculated for each of them. The disaggregated HDI is important in order to highlight disparities among regions, between sexes, and so on; therefore, the HDI can be an important tool for leading policies aiming at fighting inequalities (UNDP, "Human Development Index-HDI", para. 2).

A further step forwards in the elaboration of the HDI was taken in 2010, when the Inequality-adjusted HDI (IHDI) was introduced. In the hypothesis of equality, the IHDI is equal to the HDI, but it falls if there is inequality. Therefore "the IHDI is the actual level of human development (taking into account inequality), while the HDI can be viewed as an index of the potential human development that could be achieved if there is no inequality" (UNDP, "Inequality-adjusted Human Development Index-IHDI", para. 1). The following graphic provides an example of the considerable difference between the original version of the HDI and the adjusted one (UNDP, "Inequality-adjusted Human Development Index-IHDI"):

[20] Purchasing Power Parity [PPP]: "an economic theory that estimates the amount of adjustment needed on the exchange rate between countries in order for the exchange to be equivalent to each currency's purchasing power" (Investopedia, "Purchasing Power Parity-PPP", para. 1). In short, the exchange rate is in equilibrium when the same good in two different countries has the same price if expressed in the same currency.

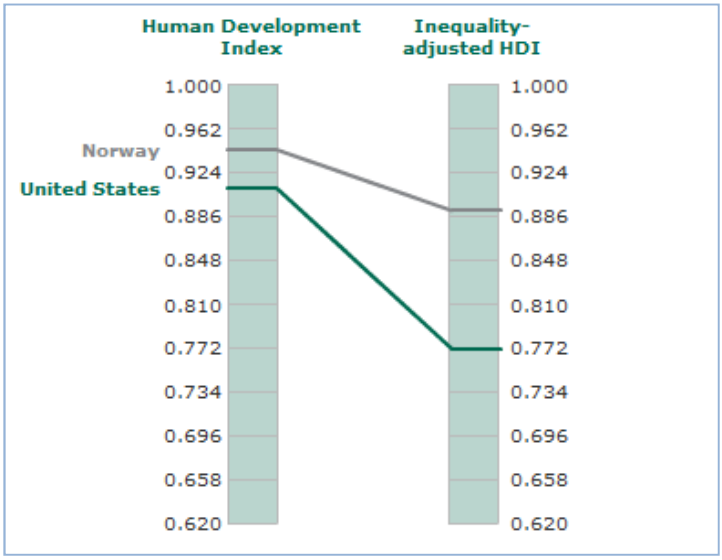

Figure 12. *How inequalities affect HDI achievement.*

In addition, the old HDI was based on an arithmetic mean, while the new one is based on a geometrical one. Now a bad performance in one dimension is directly reflected in the new HDI, which means that there is low substitutability between dimensions: a low level in one dimension can no longer be compensated by high levels of other dimensions (Harribey, 2010, "Le Rapport PNUD 2010: Un cru millésimé?", para. 5).

It is interesting to name two other indexes elaborated by the PNUD, which could be considered as a supplement to HDI. The Gender Inequality Index (GII) reports inequality between men and women, since "all too often, women and girls are discriminated against in health, education and the labour market, with negative repercussions for their freedoms" (UNDP, "Gender Inequality Index"). The Multidimensional Poverty Index (MPI), which supplanted the Human Poverty Index (HPI), takes into account that poverty is multidimensional, just like development. It identifies deprivations across the same three dimensions as the HDI, for example

"living standards" is composed of evaluations with respect to cooking fuel, water, electricity, etc. (UNDP, "Multidimensional Poverty Index-MPI").

The HDI has a great importance in the fight against GDP as a major tool for measuring development, as it underlines that the way countries spend their wealth, not the wealth itself, is crucial. In addition, being obsessed with the creation of material abundance may distract from the real goal of enriching human lives. The misleading character of GDP is proven by the fact that high GDP rates may be associated with low HDI levels, and vice versa. However, not everybody agrees that the HDI can be the right indicator we have been looking for. Criticism towards the HDI is about the imperfection of some data, arbitrary methods of calculation, and exaggerated concern for the South countries, which does not produce significant gaps between North countries (Gadrey & Jany-Catrice, 2003). In addition, when we try to evaluate the quality of life, there are always some subjective components that are taken into account. Indicators like the HDI are essential in order to underline some social issues that are not included into GDP; they can also influence some political decisions. However, a composite index will always be arbitrary, because it depends on the relative importance accorded to its components, which is the reason why it is not considered a worthy substitute of GDP (Thornhill, 2009; Jeanneau, 2011). Also, there are components of the quality of life that are not considered by the HDI, namely those regarding the quality of the political system, such as public freedom and democracy, corruption, stability of institutions, and so on (Fremeaux & Toubal, 2001). The problem is that it is difficult to measure things like human freedom; in 1991 the PNUD tried to define an index of human freedom, but that

aroused such a bitter controversy that the experiment was abandoned (Sanahuja, 2007).

Another remarkable alternative to GDP is the Better Life Index elaborated by the OECD. This new index was launched during the 50th Anniversary Week in 2011, along with the Better Life Initiative promoting an evaluation of life "by measuring eleven key aspects of life: not just income and jobs but their housing, environment, social network, work-life balance, personal security, education, health, whether they feel part of the democratic process and their level of satisfaction with life in general" (OECD, 2011, "Beyond GDP: Better ways to measure better lives", para. 6). On the website dedicated to the Better Life Index[21], everyone can rank the eleven elements according to his personal opinion and see what matters to his county and to other countries. Surprisingly, we all seem to agree about the three most important elements in life: health, education and life satisfaction are the top three fundamental dimensions across the countries where an Index has been created (OECD, 2011, "Beyond GDP: Better ways to measure better lives", para. 7). The last version of the Index also integrates data about gender and inequality.

The great innovation of this Index is that ordinary people are directly involved: giving people the possibility of assessing their own well-being is a "new way of empowering and educating everyone who cares about building a stronger, cleaner and fairer world" (OECD Observer, 2011, "Better measures for better lives", para. 9). The Index data are presented in such a simple way that they can be

[21] www.oecdbetterlifeindex.org

understood and interpreted by anyone, even by those who are not experts. Each country is represented by a flower, where the size of each one of the eleven petals tells us about the country's performance in that dimension (for example green is the color for the environmental dimension); the length of the stem depends on the country's overall performance, so the taller the flower, the better the country is performing. Here below, the Better Life Index of Italy is reported as an example of this ingenious representation (OECD Better Life Index, "Italy"):

Figure 13. *Italy: Better Life Index.*

However, the Better Life Index is not clear from blame, just like other new indexes. Distrust is caused mainly by the incompleteness of the indicators; for example, with respect to the environmental dimension, the only variables taken into account are air pollution (Jeanneau, 2011) and water pollution, which cannot be considered as representative of overall environmental conditions. In addition, some indicators, such as rooms per person, household income, and household financial wealth are directly linked to the level of income, which makes the general level of Better Life Index still dependent on GDP. At least, those eleven variables should not have the same weight, because available rooms are not as important as a healthy environment for our well-being (Gadrey, 2011, "L'indicateur du 'mieux-vivre' de

l'OCDE", para. 5). The arbitrary choice of the eleven indicators compensates the good idea of letting people creating their own Index according to personal preferences; to Gadrey, that reflects an individualist and Anglo-American conception of personal well-being (2011, "L'indicateur du 'mieux-vivre' de l'OCDE", para. 3).

IDH, Better Life Index and all other indicators that are not analyzed here aim at redefining the concept of progress, proving that economic growth and an increasing GDP rate are not a certainty of well-being. Many people refuse to adopt them because they are new and not well developed, but also GDP took from ten to fifteen years to gain consensus, and because they have many faults, but so does GDP (Moatti, 2006). Therefore, there is no reason for thinking that those proposals will never be fully legitimized or will never become the guideline for public policies, which can happen if GDP is put back to its place of mere economic indicator and is used together with these new indicators in order to have a more complete view. In particular, we should take into account the surprisingly fast circulation of degrowth ideas in the last years; promoting a new concept of wealth that is not linked to economic growth is directly connected to a push towards new indicators that are more suitable to the new elements needing to be measured.

4.5 National proposals: the examples of Italy and France

The Stiglitz Commission states that "at the national level, round-tables should be established, with the involvement of stakeholders, to identify and

prioritize those indicators that carry to potential for a shared view of how social progress is happening and how it can be sustained over time" (Stiglitz, Sen, & Fitoussi, 2010). In Italy as well as in other countries that was the occasion for taking a step forwards in the debate about new indicators of well-being.

On October 17th, 2009 the Vice-President of the Senate Emma Bonino and Elisabetta Zamparutti from the Commissione Ambiente in Montecitorio asked the Parliament to use the Stiglitz Report in order to start a debate about what the population's well-being consists of. However, the request did not produce any results and the debate was transferred to another place (Speroni, 2010). On January 14th, 2010 Aspen Institute Italia and Istat organized a debate in Rome, which was entitled *Beyond GDP: The quality of growth*; the conclusion was that GDP is not enough, but it is still necessary. Thanks to that debate, the Minister Giulio Tremonti could introduce a series of indicators elaborated by the economist Marco Fortis. Those indicators place Italy in better positions than the one in the ranking of GDP: for example, among G20 countries Italy has the lowest family debt, the highest number of cars and telephone subscriptions for one thousand inhabitants. On the other side, with respect to research and development, basic infrastructures, and energetic self-sufficiency Italy performs worse than in GDP (Fortis, 2010, "Tutti gli assi dell'Italia al tavolo del G-20"). However, indicators like the one about cars are peremptorily attacked by those remarking that the reason why Italians need so many cars is not considered: public transports do not perform as they are supposed to do, there are few investments on urban mobility, and local trains are regularly late (Boeri, 2010, "Ma il PIL non è così irrilevante"). Tremonti is also accused of

looking for an expedient in order to avoid Italian political accountability, just like a student that cannot answer his professor's questions and asks to be evaluated on his punctuality and not on his knowledge (Boeri, 2010, "Ma il PIL non è così irrilevante").

On April 13th, 2010 the President of Istat Enrico Giovannini spoke about the need of choosing which dimensions are effectively part of progress, which indicators can measure them and which are the most efficient forms to communicate them to the population; the obstacle is that a neutral place for comparing different proposals is needed in order to avoid the risk of being suspected of political influences on indicators (Speroni, 2007). On November 4th, 2011 Giovannini and the President of Cnel Antonio Marzano presented the results of a committee that was charged of developing a multidimensional approach to equal and sustainable well-being (Istat, 2011, "Cnel e Istat insieme per misurare il benessere della società italiana: Individuate le dodici dimensioni del benessere", para. 2). Twelve domains are identified as the most relevant: environment, health, economic well-being, education, work-life balance, social relations, safety, subjective well-being, landscape and cultural heritage, research and innovation, quality of services, politics and institutions. These dimensions need to be publicly discussed by experts, civil society and single citizens in order to assess each dimension's importance for Italian people.

It is interesting to spend a few words on an initiative that is taking place in our Italian region, Veneto; even though it is a study at regional level, there can be

repercussions at national and international level. This project called *Oltre il PIL*[22], was created in October 2009 by Unioncamere Veneto and Camera di Commercio of Venezia, in collaboration with Regione Veneto, University Ca' Foscari of Venice and Centro Studi Sintesi. Their goal is to revise traditional measurements of well-being by the identification of new indicators that can support strategic choices by economic and institutional actors formulating sustainable policies in the social, economic, fiscal, and environmental fields. The indicators proposed in order to give a more complete analysis of reality are: material well-being, health, education, work and free time, public administration, personal and social relations, environment, physical and financial insecurity, which basically correspond to the domains identified by the Stiglitz Commission.

On December 12th, 2011 the conference *Oltre il PIL: Dal dire al fare. Misurare il progresso per orientare l'azione politica in tempo di crisi*[23] was held in Venice[24], where the first results of the application of new indicators at regional level were presented. Data allow making evaluations of single regions, comparing them with other regions' results and analyzing their variations in time. For example, the following graphic compares levels of each indicator in Veneto with the level of the most performable region in that domain and shows which components of well-being need to be developed (Oltreilpil, 2011, "Efficienza significa benessere? Valutare il progresso in tempo di crisi", p. 19):

[22] Beyond GDP.
[23] Beyond GDP: from theory to practice. Measuring progress in order to guide political action in crisis times.
[24] Materials on the conference are available on: ilfattoquotidiano.it.

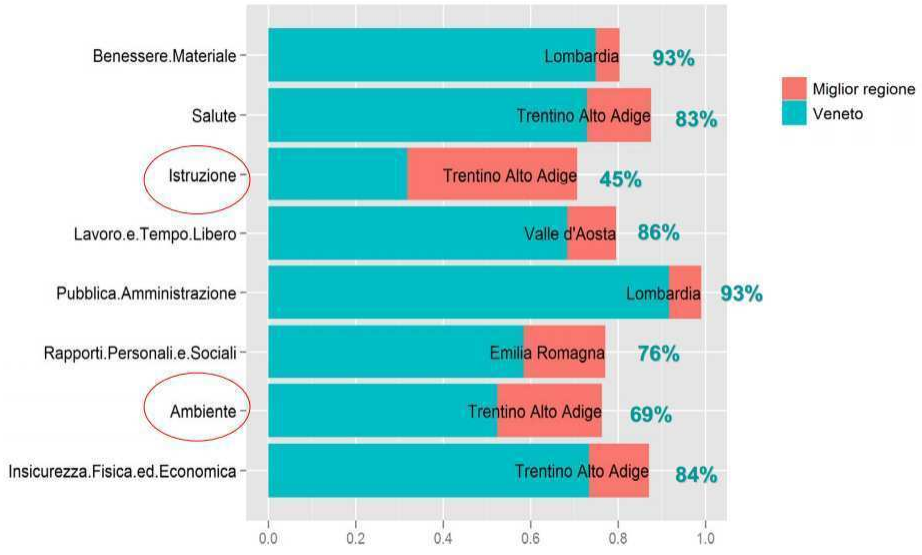

Figure 14. *Veneto and the most performing region in each domain.*

One of the most interesting outcomes of those studies is the fact that the average level of well-being has not changed despite the recent crisis. There have been negative variations only within the material well-being and insecurity areas, while other performances have remained stable or have increased; that means that Italian families have compensated material problems by focusing on other kinds of wealth, cushioning the crisis. Also, it is extremely interesting to compare two maps of Italy, one representing GDP levels and the other representing well-being levels (Oltreilpil, 2011, "Efficienza significa benessere? Valutare il progresso in tempo di crisi", p. 12-13):

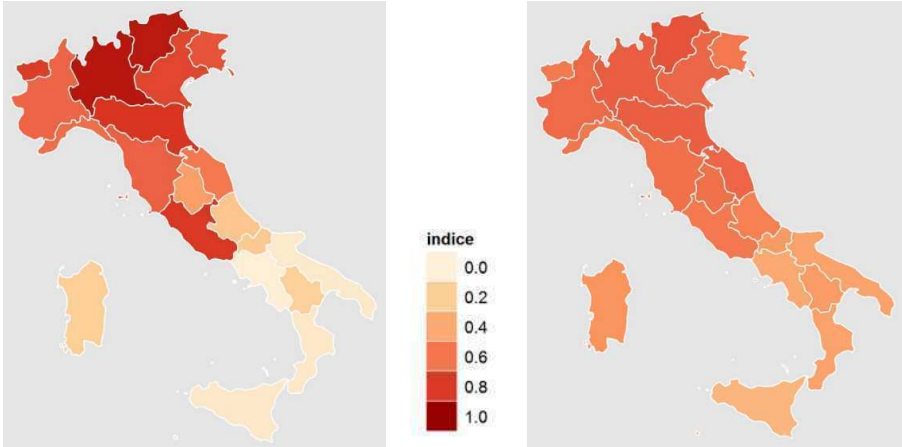

Figure 15. *GDP levels vs. well-being levels in Italy.*

What is surprising is that on the second map there is much more territorial homogeneity, which leads once again to the conclusion that GDP is not strictly linked to the level of well-being.

The experts are aware of the weak points of this kind of studies: there is also a subjective component in the choice of indicators and their weight, and a synthetic indicator risks not to be exhaustive. Nevertheless, the merit of a synthetic indicator is that of being extremely effective in the communication of its meaning thanks to its summarizing power. Future goals of *Oltre il PIL* are introducing inequality indicators, sustainability and efficiency indicators, and subjective indicators ("happiness" is the term used when referring to personal perception of well-being), as well as directly involving stakeholders like citizens.

In order to report another country's experience, the example of France has been chosen. There, in 2002 the Barometer of Inequalities and Poverty (BIP 40) was launched by the collective Réseau d'Alerte sur les Inégalités. That indicator followed the method of the Index of Social Health, which was created in 1996 by

Marc and Marque-Lisa Miringoff in order to catch the attention on the great problems of the American society. The purpose of the new indicator is to give a better account of the evolution of inequalities and poverty by considering much more than the only monetary component. The BIP 40 is offered as an alternative to the measure of poverty used in France, in the European Union and in many other countries, which is a relative poverty rate. According to this method, "the poverty rate corresponds to the proportion of individuals (or households) whose standard of living is lower in a given year than a set threshold, called the poverty line. […]. In Europe the threshold of 60 % of the median standard of living is privileged" (National Institute of Statistics and Economic Studies, "Poverty rate").

In order to be more exhaustive, the new Index is composed of six dimensions with a value ranging from 0 to 10: work, income, housing, education, health and justice (Weiler, 2011), as if it was a sort of summary of the contemporary great social problems (Gadrey & Jany-Catrice, 2003). The BIP 40 has no particular significance in itself, but its variation has a great importance, showing that inequalities have almost always increased in France in recent years, as proved by the following graph (BIP 40, 2008, "Évolutions des inégalités depuis 1980"):

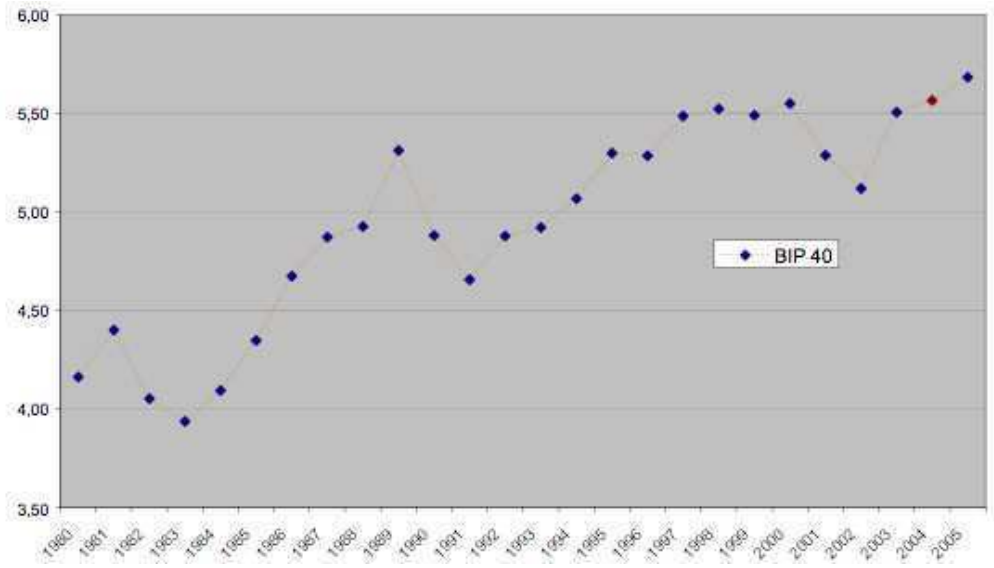

Figure 16. *BIP 40: Evolution of inequalities in France since 1980.*

What is interesting is that in the same period GDP has almost always increased, showing not only that GDP does not bring development, but also that it can be coupled with a decreasing progress.

Just like the other indexes we have explored above, the BIP 40 suffers from some subjectivity in the choice of indicators and their weight. Moreover, some polls can have a confusing character; for example, an increasing number of people receiving state aids may mean that the government can help more people who need it, or that poverty is growing (BIP 40, 2008, "Le BIP 40, un baromètre pour faire pression", para. 2). Some people are also mistrustful with respect to the French statistic system, which does not provide sufficient data about poverty and inequality (BIP 40, 2008, "Le BIP 40, un baromètre pour faire pression", para. 3); consequently they think that BIP 40 is built on inaccurate basis.

However, the merits of such initiatives cannot be denied; this kind of indexes has a fundamental role in public debates, because they make the dominant

monetary indexes relative and make people conscious of the necessity of reorienting our mentality. Furthermore, the new proposals for a better measure of wealth do not have the intention of replacing GDP; they just want to be an aid for a more coherent analysis of a complex reality like the one we live in. A merely economic analysis has never been sufficient, and least of all nowadays. The economic and financial crisis has shown the faults of a system based on a mere economic mechanism and oriented to economic growth as the only purpose. All the dominant economic beliefs have been shaken to their foundations and that could be an occasion for investing on change (Jackson, 2011). The economic model must be fixed in a new way that is not based on the inexorable growth of production and consumption; social logics must place the man at the center of attention, inequalities must be reduced and new values must be purchased by societies. In short, a transition towards a new organization of societies must be started.

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CHAPTER 5

THE GREAT INTERNATIONAL MEETINGS AFTER KYOTO

The United Nations Framework Convention on Climate Change is considered the most important instrument coordinating international efforts for fighting climate change. It was the great result of the Stockholm Conference and the Brundtland Report and it gave great hopes for the junction of economic growth with social and environmental aspects. Ten years after Rio, in 2002, a new meeting was organized in Johannesburg in order to draw the conclusions of achievements in the environmental fields. However, the overall evaluation was not how it was supposed to be. Of course, the merit of introducing environmental issues in international debates had to be acknowledged. But preparatory documents, as resumed by Martin (2002), show that the environmental situation was still worsening. Every year 15 million hectares of tropical forests disappeared and 6 million were transformed into desert, one fourth mammals would disappear by thirty years, the greenhouse effect would worsen by one third by 2020, and OECD countries would increase their consumption of energy by 30%. In general, the consumption of resources had decreased in relation to GDP, but the amount of production and exchanges had increased; moreover, social justice, which is the third pillar of sustainable development, had not improved, as 20% of the population possessed 80% of global wealth and one person each five lived with less than one dollar a day. Differently from the summit in Rio, the one in Johannesburg did not produce important documents. Participants wanted to define some concrete actions, such as

preservation of biodiversity; however, the United States refused to take significant engagements. Also, a Plan of Implementation of the World Summit on Sustainable Development was produced, but it has been criticized for being rather vague and without time limits for the achievement of goals.

Adopting the Kyoto Protocol, governments agreed to reduce their green house gas emissions of 5.2 % with respect to their emissions in 1990. This task was meant to be achieved between 2008 and 2012. Parties to the Kyoto Protocol met in December 2009 in Copenhagen, in order to define new tasks for the period after 2012, which is the reason why we speak of post-Kyoto or post-2012. The meeting originated an Agreement exhorting countries to keep global temperature rising below 2 degrees. That is considered necessary in order to avoid the tipping point that entails the collapse of whole ecosystems. However, the task seems to be unachievable and probably the threshold will be brought down to 1.5 degrees (Arduino, "Cambiamento climatico: Dopo Kyoto e oltre Copenaghen", para. 3). Moreover, the Copenhagen Green Climate Fund was created in order to start actions aiming at educating people to non-polluting practices, stopping deforestation and reducing emissions in developing countries. The Copenhagen Agreement is not legally binding and has been accepted by the great part of governments, but not the totality. Nevertheless, this event had a vast international importance because of the greater number of participants in the history of UN meetings (Trevors & Saier, 2010) and the mobilization of civil society. Even though there was no binding decision, the debate had a great visibility and captured much attention on topics that were preparatory to the meeting in Cancún, in December 2010. Another merit of the

Conference was that for the first time some countries accepted to list their national actions on the international scene and to subject them to some form of international supervision. The principle of common but differentiated responsibilities is present but, unlike the Kyoto Protocol, it stresses more the common than the differentiated aspect of the responsibility; for the first time the major developing countries (Brazil, China, India, and South Africa) accepted to report their actions and achievement in international communications and accepted an international scrutiny (Trevors & Saier, 2010). Yet, criticism towards the Conference in Copenhagen is not absent: nations' delegations were accused of lacking of preparation and sufficient knowledge on the issue, of lacking of a long-term view on the Earth and mankind's future, and of being concerned only about environmental troubles that entailed particular problems to their nation's economy and well-being (Trevors & Saier, 2010).

Another important stage of the post-Kyoto period was the sixteenth session of the Conference of Parties to the UNFCCC in Cancún, Mexico, in December 2010. The Agreements represent an important step forwards in a co-operative and long-term action for a reduction of greenhouse gas emissions and for a real help to developing nations to implement their own sustainable initiatives. Basically, what had been discussed in Copenhagen was developed and formalized, but the Cancún meeting was much more successful because of some tangible advances. Emission reductions targets were set for some major economies including China, the United States, India, Brazil, and the European Union, that have signed to reduce emissions by 2020. The target of keeping global warming below 2 degrees was reaffirmed, but

this time nations formally accepted the goals, which had not happened in Copenhagen (Stavens, 2010, "Why Cancún trumped Copenhagen: Warmer relations on rising temperatures", para. 2). Another difference from Copenhagen is that the distinction between industrialized countries and developing ones is no longer fundamental, which is considered as an important achieved by those wanting to destroy the North-South logic that no longer makes sense since more than fifty countries that were considered developing in the Kyoto Protocol now have higher per capita incomes than some countries with emission-reduction commitments (Stavens, 2010, "Why Cancún trumped Copenhagen: Warmer relations on rising temperatures", para. 3). One cause of success may be that expectations for Cancún were lower than for Copenhagen: in 2009 there was an expectation of a final climate treaty, but there was only a political agreement that was considered a failure (Podesta & Light, 2010, "Key pact in global warming fight"). In Cancún, may be thanks to all the work done in Copenhagen, some agreement could be found and that was labeled as a small success. Results in Cancún may seem modest mainly because once again there were no legally binding documents, but what is important is that "international negotiations on climate change are progressing slowly but surely" (Coulomb, 2011).

One may wonder why it is so difficult to reach an agreement in the environmental field and to implement such a consolidated concept like sustainable development. Difficulties in negotiations and the global dimension of the issue have pushed international politics to a quest for a wide solution involving as many countries as possible. However, this approach has been quite unfulfilling, because

many conferences have originated non-legally binding documents, which means they are politically relevant only for countries where political institutions consider them important. Lanza (1997) identifies three main reasons for this difficulty. First, when national delegations meet in international conferences, there is always asymmetry in knowledge and information on the debated issue. Each county knows well and is particularly interested in its own situation and could take advantage of that. The second aspect, which is called *free-riding*, is the opportunistic behavior. For example, a country adheres to the agreement about gas emission reduction, but in practice it does nothing to implement its engagement. If other countries are fairer and take practical measures to implement the agreement, the first country has at least two advantages: it enjoys the gas reduction by other states since what matters is the global reduction, and it becomes more competitive since it has not gone to great expenses in order to reduce pollution. Finally, another problem is the so-called *moral hazard*. This expression was born in the insurance field to design those people who adopt a different behavior after signing a policy (for example, one tends to drive less carefully if there is the "protection" of a policy); in our field, it indicates countries that adopt improper behaviors after accepting an agreement, which is relatively easy because such actions are rarely sanctioned. Those observations lead Lanza (1997) to the conclusion that bilateral and local agreements are more effective that global ones, where the number of participants is really high and then instability and disagreement are high, too; nevertheless, most experts agree that global problems require global answers and are optimistic about an evolution in more legally binding terms in great international meetings.

In June 2012, Rio de Janeiro hosted another UN Conference on Sustainable Development, to mark the 20th anniversary of Rio 1992 and the 10th of Johannesburg 2002. Rio +20, the short name for this Conference, "is a chance to move away from business-as-usual and to act to end poverty, address environmental destruction and build a bridge to the future" (United Nations Conference on Sustainable Development, "About Rio+20"). Two main themes were focus on: how to build an economy based on sustainable development and poverty fight, including support for developing countries, and how to improve international co-ordination for sustainable development (United Nations Conference on Sustainable Development, "About Rio+20"). Seven matters of priority discussion were identified: decent jobs, energy, sustainable cities, food security and sustainable agriculture, water, oceans, and disaster readiness. The impact of such an initiative is not limited at the international level; for example, the Italian Ministry of the Environment has taken this opportunity to start a series of national meetings in order to promote a transition towards sustainable models of consumption and production aiming at an economic growth that better cares of social and environmental issues (Ministero dell'Ambiente e della Tutela del Territorio e del Mare, "Conferenza Rio +20: Una sfida importante", para. 3).

Was Rio +20 influenced by ideas about degrowth and alternatives to development that have spread everywhere in the last years? Was there something new in the approach? We can read on the internet many commentaries on the event by different institutions and groups. One example is that "what was transformative at Rio+20 is that the world increasingly knows how to beat hunger and under-

nutrition in ways that also drive economic growth, promote social inclusion and protect the environment" (United Nations World Food Program, 2012, "Results from Rio +20", para. 1). Every institution makes specific comments on their own interest area, which is world hunger in the example above, but our interest is to underline that "economic growth" is always present as something that must not be stopped by any other initiative.

To make some final remarks about the great international meetings, almost everyone acknowledges to Rio 1992 the merit of introducing environmental issues into the international political debate. The process inaugurated in Rio has shown much progress, but the results are often disappointing. That pushes many groups of people towards a strong criticism towards the dominant paradigm. The weak view of sustainability is considered insufficient in front of the complexity of environmental issues. They are persuaded that the ineffectiveness of the measures depends on the supremacy accorded to market, technology and liberalism, which should be considered the major causes of all problems. Moreover, the international diplomacy keeps considering economic growth as an unavoidable element, which prevents degrowth ideas from being debated on the international stage and being openly presented to the world society. However, some occasions for the spread of this new thinking are offered by some alternative forums, which present non-conventional ideas and radical proposals such as the ones of degrowth. The most significant example of those forums is the World Social Forum, which is going to be discussed in the next chapter.

CHAPTER 6

AGAINST THE TIDE

6.1 The example of Porto Alegre: the World Social Forum

Many international meetings congratulate for adopting sustainable development as a guideline for new policies, but a clear definition of this concept is hardly ever proposed. This is the reason why sustainable development is criticized for being a nice expression that easily gains everybody's consensus but that is not well defined in practical terms and then is difficult to implement. Sustainable development is like a big bag that everybody can fill with whatever according to their personal opinion, or maybe their own interests. That can partially explain the rise of a new anti-globalization movement that gained visibility in 1999 in Seattle, Unites States, in occasion of the World Trade Organization [WTO] Ministerial Conference (Martin, 2002). A definition and a univocal name have never been given to this movement because of the great heterogeneity of different groups, organizations, associations and individuals joining this critique to the present neoliberal economic system. Thus, the movement protests against globalization of economic processes that are consolidated by agreements on international trade by governments, the WTO, the International Monetary Fund, and the World Bank.

The WSFs starting in 2001 have many origins in the 1990s: the peripheral NGOs' fora at many UN conferences, the solidarity encounters of Mexico's internationalist Zapatistas, the rich social ferment of continuing protests in Brazil,

and the protests against Neo-liberalism of the major global agencies of capitalist globalization (Waterman, 2002). In those years an increasing number of arenas attracted organizations and individuals to express disagreement with the dominant logic of globalization; the arenas were highly heterogeneous according to political orientation and organizational design (Teivainen, 2002). However, most of them were focused on defensive measures, being against something without proposing an alternative. Something new happened in Seattle: opponents of neoliberal globalization realized that a global problem needed a global answer in a practical way (De Filippis, 2001, "Porto Alegre: L'internationale citoyenne en gestation", para. 1). In 2001 this movement for another world gave birth to the World Social Forum [WSF] in Porto Alegre, which occurred in the same period as the World Economic Forum [WEF][25], which was taking place as every year in Davos, Switzerland. Since 2001, the WSF has organized yearly alternative forums in occasion of international summits and has gained a growing attention by the media. In addition, the WSF has promoted the organization of many regional social forums, such as the Americas Social Forum, the European Social Forum, the Asian Social Forum, the Mediterranean Social Forum and the Southern Africa Social Forum. Also, national and local social forums exist, such as the Italian Social Forum. Most of them adhere to the WSF Charter of Principles.

[25] The first informal meeting in Davos occurred in January 1971 with the name of European Management Forum. Since 1982, the Davos gathering has attracted world economic leaders every year. Since 1987, it has been called WEF.

The municipal government of Porto Alegre and the state government of Rio Grande do Sul were both controlled by the Partido dos Trabalhadores[26] [PT], which met the idea of the WSF with great enthusiasm. Porto Alegre was then chosen for its symbolic meaning as an important pole for the PT and because both municipal and state governments wanted to allocate material and human resources for the event (Teivainen, 2002). In Porto Alegre, concerns about genetic manipulation, globalization of markets, and growing inequalities between North and South were expressed in opposition to neoliberal ideas that dominated in Davos. In particular, the environmental crisis was associated to a deep crisis of institutions in industrial societies and to some disenchantment about the culture of progress in the service of industrial development; the WSF was about the possibility that development really becomes sustainable, which means breaking with economic growth, market expansion, progress at any price, and quest for profits (Martin, 2002). As stated in the WSF Charter of Principles (Fórum Social Mundial, 2002, "World Social Forum Charter of Principles", principle 4):

> The alternatives proposed at the World Social Forum stand in opposition to a process of globalization commanded by the large multinational corporations and by the governments and international institutions at the service of those corporations' interests, with the complicity of national governments. They are designed to ensure that globalization in solidarity will prevail as a new stage in world history. This will respect universal human rights, and those of all citizens - men and women - of all nations and the environment and will rest on democratic international systems and institutions at the service of social justice, equality and the sovereignty of peoples.

[26] The Workers Party.

Moreover, in the first WSF held outside Brazil, in India in January 2004, there was an expansion of the concerns from economic globalization to war, patriarchy, caste, and religious fundamentalism, too (Sen, 2007). In Porto Alegre there was an effort to go from a simple refusal of the dominant paradigm to the proposition of an alternative to Neoliberalism, which had not existed since the end of the Soviet Union. Criticizing is never enough, new proposals are needed; indeed, Porto Alegre announces the quest for another world (De Filippis, 2001, "Porto Alegre: L'internationale citoyenne en gestation", para. 1; Teivainen, 2002). The WSF slogan 'Another world is possible!' emphasizes the shift from general opposition specific alternative proposals for a new global political and economic system (Sen, 2007). According to Morin (as cited in De Filippis, 2001, "Porto Alegre: L'internationale citoyenne en gestation", para. 2), in addition to the techno-economic globalization that is firmly opposed, there is a second positive globalization that creates an worldwide civil society feeling part of an only country, the Earth. This awareness is raised by the WSF and other similar initiatives.

Criticism about the WSF is not absent, even though the importance of such an initiative opposing the dominant logic is not threatened. Like many other anti-globalization initiatives, the WSF goes too far in the anti-imperialist pathos and often marginalizes criticism about development (Latouche, 2010). In addition, such a heterogeneous mixture is interesting but very problematic because of complex and sometimes contradictory manifestations (Latouche, 2010). For example, the first WSF was marked by some internal controversies due to gender and especially racial tensions (Teivainen, 2002). Yet, the biggest problem is that even if those forums

take place in the South, they are often made of opponents from the North and some opponents from the South who act like partners of the first ones; most of the victims of globalization are not interested in those Northern initiatives and if they have some plans for the resistance, they follow a completely different mental scheme (Latouche, 2010; Teivainen, 2002).

The role of the WSF is still being debated. On one hand, some think that it is an emerging institution and then it will become an independent actor on the international stage; on the other hand, the WSF is seen as a space for actors trying to construct global and local democratic projects. In any case, it is clear that until now the most important impact has been the one of allowing a great number of encounters between different groups and activists (Sen, 2007; Teivainen, 2002). The WSF was not created as an organization or a movement, but as a space where different views and initiatives can meet, exchange ideas, and work together at local, national, and global level; this space was supposed to be available as widely as possible (Sen, 2007). A remarkable step forwards in the history of the WSF was taken in 2004, when a WSF meeting was held outside Brazil, namely in Mumbai, India; it was a demonstration of the will to enlarge the WSF's boundaries and to include other cultures. Then, in 2005 a participatory process of formulating the themes for the world meetings was introduced. Before 2005, themes were formulated in a conventional way by a Committee established by the International Council. That change was important because a wider range of themes could be proposed for debates (Sen, 2007). Another important improvement was done in 2006, when three WSFs were simultaneously organized in three parts of the world,

namely on the three continents of the South (Latin America, Asia, and Africa): in Bamako, Mali; in Karachi, Pakistan; and in Caracas, Venezuela (Sen, 2007). The WSF moved from single-centric fora to polycentric ones, but the collectivity was still referred to as the WSF for the year.

The WSF has a great success for many reasons (Sen, 2007). First of all, for alternative voices there exists no public space like this one in the world. This space is different, because it is not like NGOs spaces that often mirror the dominant power structure of the globalized world: the WSF is open to a great variety of groups snd there are no binding structures that would somehow limit any debate and action (Allahwala & Keil, 2005). Second, it is more long-lasting than isolated protests like the one in Seattle, since it takes place every year; if we consider the WSF as a process instead of a single event, and we take into account all national, regional, and local events related to it, we could says that the WSF occurs many times a year (Allahwala & Keil, 2005). In addition, these characteristics allow the WSF to create and spread a certain preference for horizontal social relations and politics.

6.2 Conferences about degrowth

After the development of movements for a “sustainable degrowth” mainly in France and Italy, researchers started wondering if the abandon economic growth was the only way to stop ecological degradation, since technologic improvements and sustainable development appeared to have failed. Many questions needed to be

answered. Was degrowth possible in such an industrialized context? What were the social and institutional requirements for implementing degrowth? What changes would be produced by degrowth? (Economic De-growth for Ecological Sustainability and Social Equity, "Economic De-growth for Ecological Sustainability and Social Equity", para. 1). An answer to those questions was the goal of the First International Conference on Economic De-growth for Ecological Sustainability and Social Equity, which took place in Paris, France, in April 18th-19th, 2008. The conference was conceived as a starting point for further debate; its aim was to produce a Declaration containing not only the participants' points of view, but also a broader vision by the *Décroissance* movement. Degrowth was defined in the Declaration (Research and Degrowth, 2010):

> […] as a voluntary transition towards a just, participatory, and ecologically sustainable society. […] The objectives of degrowth are to meet basic human needs and ensure a high quality of life, while reducing the ecological impact of the global economy to a sustainable level, equitably distributed between nations.

The Second International Conference on Economic De-growth for Ecological Sustainability and Social Equity was held in Barcelona, Spain, in March 26th-29th, 2010. The aim of this conference was to define policy proposals and strategies for actions of degrowth, in addition to develop a research agenda in order to find an answer to open questions. What was particularly important in this conference was the participatory process that was adopted in order to build proposals for degrowth and the interaction between scientists and civil society. Through this methodology a list of topics was elaborated by experts (for example:

cities and degrowth, work-sharing, indicators for degrowth, and so on); they were supposed to serve as starting points for discussion and they were called stirring papers. Then, working groups were formed to discuss each topic (The Second International Conference on Economic De-growth for Ecological Sustainability and Social Equity, "Working groups methodology", para. 1). Working groups were composed of 15-20 participants: the small size was preferred because it required an active participation of each member. Every group was supposed to discuss one topic related to degrowth and to develop proposals and research questions that were reported to a general assembly. In those assemblies all groups gathered to present their results and to collect other groups' reactions to their proposals: a representative of each group had 2 minutes to present and then all participants to the assembly could write down thoughts, concerns and questions, which were put in the working group's mail-box. Those notes were used in another working group session that allowed an eventual adjustment of proposals. The final proposals were presented again in an assembly and the conference declaration was discussed in separate sessions with representatives of each group.

The path followed by the conferences in Paris and Barcelona was also followed by the De-growth Conference in Vancouver, Canada, in April 29th-May 2nd, 2010. The aim was to explore "what a viable economic, social and ecological system will look like" (O'Keefe, 2010, "The degrowth movement is growing", para. 1).

Another remarkable meeting was the International Conference on Degrowth in the Americas, which was held in Montreal, Canada, in May 13th-19th, 2012. In

advance oF Rio +20, this conference wanted to challenge the concept of sustainable development and to show the necessity of going beyond it; degrowth was proposed as a perspective helping to build a future that will not turn against humankind. Taking the major conferences in Paris and Barcelona as examples, this conference focused on the Americas in order to answer specific questions: what were the strategies for degrowth in a continent with so many geographical, cultural, social, and economic diversities? What was degrowth for indigenous people and their aspirations for people and land? How could degrowth be understood and accepted by rich North Americans? (Degrowth in the Americas, "Degrowth in the Americas"). Five main areas about degrowth were identified: damages to ecosystems and human communities because of human activities; the refusal of substitutability between natural capital and human capital; the relation between men and between men and Nature; the refusal of the necessity of economic growth and technologic innovation in order to deal with ecological troubles; inequalities in the distribution of wealth and resources. To facilitate the debate, six sub-themes were proposed. Thematic working groups were asked to work on one of them, then to work with other groups on the same topic, and then to participate in a panel composed of participants of each group before a cross-theme plenary discussion (Degrowth in the Americas, "Conference themes").

The 3rd International Conference on Degrowth for Ecological Sustainability and Social Equity is going to take place in Venice, Italy, in September 19th-23rd, 2012. The theme that was chosen was "The great transition: Degrowth as a passage of civilization", because this is a moment marked by the necessity of a change and

that demands to discuss every sphere of everyday life that would be affected by the news (work, education, citizenship, and so on). All those different issues need to be approached through a cross-disciplinary look allowing paying attention to connections and interactions (The Third International Conference on Degrowth for Ecological Sustainability and Social Equity, "The conference"). Some features of the two previous editions are going to be maintained: the interaction between scientists and activists, the involvement of local stakeholders, and the valorization of different points of view. However, some goals are new: attention to daily life of people, transformation of good theories in good practices through a stronger participation of local actors, attention to the political and institutional dimensions of the change (The Third International Conference on Degrowth for Ecological Sustainability and Social Equity, "Past editions"). The conference is going to be organized around three thematic axes: degrowth and commons, degrowth and work, and degrowth and democracy (The Third International Conference on Degrowth for Ecological Sustainability and Social Equity. "The great transition: Degrowth as a passage of civilization"). The first axis is about a transition towards a sustainable model of ownership, management, protection, and use of goods and resources. "Commons" are goods, knowledge, services, tools, infrastructures, social norms and institutions that need to be out of any logic of property and to be universally accessible. The second axis is about creating a fairer model of production, work, social security and welfare. As stated in the website of the conference ("The great transition: Degrowth as a passage of civilization"):

> Work in a degrowth perspective should be limited and shared. It should return satisfaction to those who perform well, creating conditions of mutual, creative and

> loving partnership between all those who, in one way or another, contribute to the achievement of the works, and then offer the others works and services to help improve conditions of life on this planet. (para. 2)

The third axis concerns how degrowth tries to reformulate the concept of democracy in a deeper social and ecological awareness; degrowth criticizes the dependence of present democratic institutions from economic growth and capitalist logics. Moreover, three specific key terms are proposed to promote an ethical concept of sustainability: change, justice, and documentation (The Third International Conference on Degrowth for Ecological Sustainability and Social Equity, "Sustainability budget", para. 1). "Change" has to do with personal responsibility in any kind of change and with the awareness that any change of behavior can be a possible basis for a greater change. "Justice" is a concept that needs to be reviewed in order to put equity back to the center of attention. "Documentation" means that measuring and accounting changes is indispensable to verify their suitability with the proposed goals and to adjust them if needed.

CHAPTER 7

THE LOCAL LEVEL: "TRANSITION TOWNS" AND "SLOW CITIES"

7.1 History and purposes of the Transition concept

The consumerist society is leading the Earth and humanity to a grievous collapse. However, despite a growing awareness about that, dismantling the present dominant system is not an easy task, since such a change could lead us towards a quicker end. The present economic crisis is often seen as a unique occasion for investing on change. But where are we supposed to start from? Jackson (2012) is persuaded that there are two ways to achieve such a change. One is a revolution, which is a sharp break with capitalism, globalization, enterprises, and institutions. According to him, this method is too risky, because in a world affected by resource scarcity, climate change, and economic instability it would be too difficult to maintain a civil society with no institutional structure. Thus, according to most experts, the preferable solution is a slow and gradual change following a bottom-up logic. Progressive steps need to be taken at the local level, then coordinated between different local levels and finally transmitted to upper levels. The progressive process of change is defined *Transition*, and there can be Transition in all domains of everyday life. There are a growing number of Transition initiatives, especially at the local level. Too often they do not gain much visibility because there is no co-ordination between them, but they are becoming more and more popular despite being oppressed by the context of globalization dominated by the

capitalist ideology. To provide an example, we are going to speak of Transition Towns, but before that we are going to go deeper in the concept of transition.

Generally speaking, degrowth represents a transition towards a new society based on common goods, relations, and reciprocity instead of market and liberalism. Nowadays, we know that we consume too much and that we produce too much waste and pollution, but we are still reticent to accept that an unlimited growth in a limited world is only a mirage. Transition societies are societies where there is a growing awareness that we need to change, where projects and practices breaking with consumerist logics are developed. The first steps of a Transition could be for example: establishing limits for the use of renewable and non-renewable resources and elaborating mechanisms that check their respect in developed and developing countries; developing an economic model taking into account the environment and society via the enhancement of financial prudence, the elaboration of indicators better than GDP, etc.; changing social logics via the reduction of working time, the fight against inequalities, the strengthening of social capital, the dismantlement of consumerist culture, etc. (Jackson, 2011).

One of the key foundations of the Transition concept is Permaculture, which was originally conceived during the oil shocks in the 1970s with reference to an agriculture moving away from annual cropping and monoculture to multi-layered systems taking advantage of useful trees and perennial plants. Then, the concept moved from the agriculture domain to a broader field, since sustainability in food was linked to other elements of a society, such as economy, energy, and so on. “In essence, it is a design system for the creation of sustainable human settlements”

(Hopkins, 2009), in order to assemble in an efficient way social, economic, cultural, and technical aspects of societies. “Key principles of Permaculture are care of people, care of the Earth and distribution of surplus” (Connors, 2011).

The main theoretical reference for the transition concept is Rob Hopkins’s *The transition handbook: From oil dependency to local resilience*, published in 2008. There is one simple starting point of this book: the so-called Age of Cheap Oil is coming to an end and that means a shocking change for a society that is dependent on oil for most of its activities; however, a society with less oil could be preferable to the present one, if a transition is planned in advance with creativity and optimism (Hopkins, 2009). Oil has allowed our society to create extraordinary technologies, cultures, and discoveries; nevertheless, it is a finite material and the faster we consume it, the faster it will be depleted. Because of its increasing scarcity, it will become more and more expensive. According to Hopkins (2009), becoming aware of that makes us similar to Asterix and Obelix feeling bad after realizing that there is only one cauldron of potion left. But what is exactly the peak oil?

According to the peak oil theory, any finite resource like oil has a beginning, middle, and an end of production. At some point production reaches a maximum level, which occurs when approximately half of the material has been extracted. After that point, oil becomes more and more difficult and expensive to extract (Peak Oil News and Message Boards, “What is peak oil?”). There are many contrasting predictions about when world oil production may peak: they range from “it has already happened” to an unrealistic “it will never happen”; the problem is that the

information needed to make a good prediction is not publicly available, since national oil companies controlling 80% of world oil can keep their reserves data secret (Hopkins, 2009). We report here a graph reported on the website *Villes en Transition*, the French version of the movement for Transition Towns (Mathieu, "Pic pétrolier et transition"):

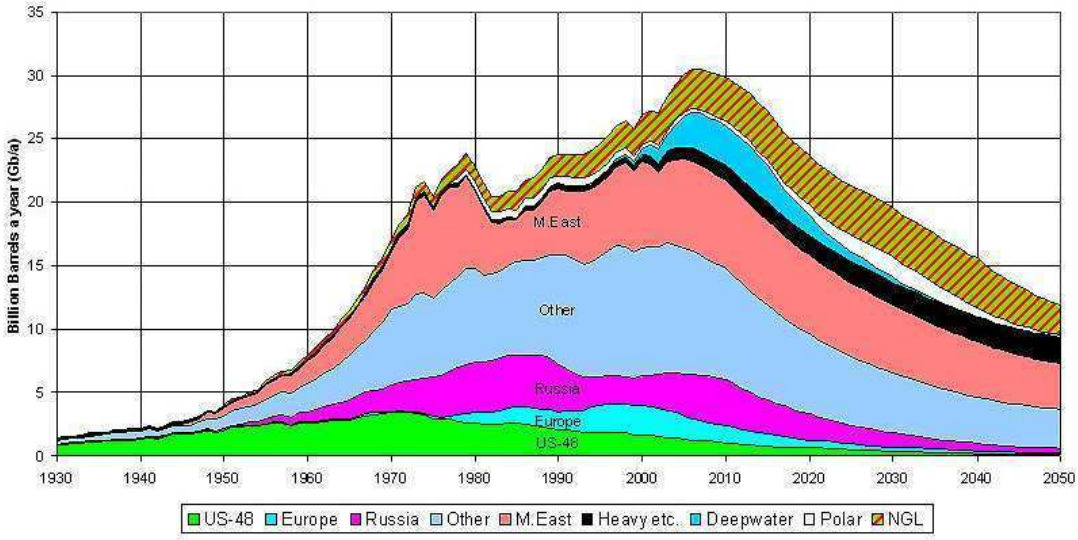

Figure 16. *The peak oil.*

The consequence of peak oil is the beginning of a structural change in the world economic system. A transition phase towards a new system needs to be started and in some places it has already been started, as we are going to see below. The climate change cannot be ignored: the global climate is warming, ice-sheets are melting, droughts are increasing, hurricanes and typhoons are more recurring and more violent than ever. Hopkins (2009) is against apocalyptic scare tactics, but thinks that we need to be realistic about the present and ambitious about the future: the worst effects of what is happening to our planet can be avoided "if we are collectively able to engage with the issue."

In addition to peak oil, another concept is central in Hopkins's theories and in transition initiatives, too: resilience. Resilience is about "the ability of a system, from individual people to whole economies, to hold together and maintain their ability to function in the face of change and shocks from the outside" (Hopkins, 2009). With respect to communities, it relates to their ability not to collapse immediately in case of oil scarcity and to their ability to adapt to the disturbance. Resilience is not the same as sustainability (Hopkins, 2009). For example, if a community collects all plastic waste for recycling, that is sustainable. However, it is not resilient, since collecting and sending away recyclable waste does not make the community stronger, because it is not able to respond creatively to the shock. It would be a resilient community if they developed other uses for plastic waste, such as compressed building blocks or an insulating product. Hopkins (2009) identifies three features that make a system able to reorganize itself after external shocks. First, diversity. Diversity related to the number of different elements building a system, to their interconnections, to their different functions and to the number of potential responses to challenges; it also refers to diversity between systems, because each system has its own characteristics that demand for personalized solutions and tools. Second, systems must be modular: different constituents must establish more internal connections in order to reduce vulnerability to shocks. Third, tightness of feedbacks refers to how quickly and strongly consequences in one part of a system are experienced in other parts; tightening feedback means bringing consequences of our actions closer in order to rise our awareness.

Thus, building resilient communities able to deal with an after-peak oil period is the goal of transition initiatives. It is happening in many different communities across the globe, and many initiatives are registered on the Transition Network Website[27]. There, new local projects about food, transport, energy, education, housing, waste, etc. have been developed in order to deal with global problems of climate change, economic hard times and depleting resources. Each local community finds its own particular model of transition depending on its resources and its goals: the Transition model only provides a coherent but not compulsory framework. Generally speaking, these towns are transitioning away from a way of living based on high levels of energy consumption, high carbon emissions, and massive environmental impact; and they are transitioning towards happier, fairer and stronger communities able to deal with ecological, energetic and economic shocks caused by the changing world (Transition Network, "What is transition?", para. 2-3).

The Transition movement was born in Great Britain in September 2006, in the small town of Totnes, Davon. The Professor of Permaculture Rob Hopkins and his students had created the Transition model one year before in Kingsale, Ireland. Everything began with an event called "Local Money, Local Skills, Local Power", which gathered 160 people in the small church of the town. Totnes already had a strong ecological understanding that was shared by the local population, local businesses and local institutions; given this background, it is not surprising that an initiative like Transition Towns was born there (Connors, 2011). To give an

[27] http://www.transitionnetwork.org/initiatives/map

example of what happened in Totnes, we can cite the initiative of a local currency, the Totnes Pound, which is a physical local currency that is accepted in more that seventy businesses in the town. The aim of this initiative is to make sure that wealth stays in the community and is used in a good way to build resilience. However, this is only the first Transition initiative, many other towns are transitioning and others are willing to. But where do we start from in order to implement Transition? The instructions to implement a Transition project, which are summarized in the next section, are widely explained in the manual by Rob Hopkins (2009) and in the general Transition Network website[28], which is the reference point for all national and local Transition websites and blogs, like the French Villes en Transition[29] or the Italian Transition Italia[30].

7.2 Transition initiatives in practice

At the basis of any Transition action we can identify six distinctive principles. Apart from resilience that has already been discussed, the first feature of Transition is the ability of visioning: we can only realize something if it is clear in our minds how it will be. Then, inclusion is fundamental: there can be no remarkable action without dialogue and discussion between different groups within the same society. It is also essential to start with the assumption that nobody knows about this subject: awareness must be risen from the beginning, since people are constantly exposed to mixed and contrasting messages by the media and they could

[28] http://www.transitionnetwork.org/
[29] http://villesentransition.net/
[30] http://transitionitalia.wordpress.com/

be rather confused and perplexed. Being aware that people tend not to act because they feel powerless in front of environmental issues, the Transition movement uses psychological insights through the construction of positive visions, the creation of spaces for debate, and the affirmation of steps taken by people. Finally, another feature is the construction of credible and appropriate solutions. People tend to conceive only two scales of action, which are individuals acting in their home and governments acting for the nation; however, Transition models acts at a midway level, which is the community level.

An important issue that needs to be explored before implementing a Transition initiative is that of the ideal scale. Market towns are always considered to be the perfect scale for starting a Transition because they are historically defined as areas where local products were sold and not transported to other towns; also islands are a good scale, due to their clearly defined boundaries. In more general terms, the ideal scale is one over which Transition promoters feel they can have an influence, which hardly corresponds to a large territory. Indeed, too ambitious projects like Transition Yorkshire or Transition Scotland have not produced the wished results. As usual, Transition instructions do not give exact directions, but provide general guidelines and leave free to choose a personalized solution. With respect to the relation between Transition initiatives and politics, it should already be clear that local communities must act for bottom-up initiatives, because “they know better that the state what they need” (Hopkins, 2009): the role of local authorities in this process is to support, not to guide.

Many reasons are listed by those who still are skeptical about the possibility of achieving positive results in the present situation. Transition supporters dissipate people's doubts before proposing their own model. First of all, funding is not really necessary for starting a Transition project, since enthusiasm and community involvement are sufficient in the first stages; in addition, having funders may be problematic because they always demand a measure of control and try to profit from the initiatives. There must be no fear of being impeded by people in positions of power, because many of them will be interested just like other people, who may just need to be pushed; there must be no feeling that one extra group caring for the future of the Earth is useless, since a new Transition group may become a reference point for all other people, whose actions may be reinvigorated. No qualifications are required, as caring about the planet, feeling the need to act, and working for engaging other people are sufficient personal features; also, being positive, being good with people and having a little knowledge of the place and influent people of the town may be useful. Not much energy is needed; yes, there is a lot of complex work, but other people will help soon.

If one really wants to get engaged the first thing to do is gathering some like-minded souls in order to form a strong group with a common goal, which can start from raising awareness within the local community; any concept or notion should be taken for granted because it is important to make sure that people are informed. For example, in Totnes nearly one year was spent giving talks, film screenings, going into schools, and writing articles in the local newspaper. Networking with existing groups and activists within a society – official and

semiofficial organizations, as well as informal groups – makes clear that Transition wants to support and collaborate, not to impose its process. When all of that is done, a Great Unleashing event must be organized to celebrate the moment in which the Transition initiative is pushed towards a new phase: "it marks the arrival of the project, and it is a celebration of the community's desire to act" (Hopkins, 2009). This is the moment that will always be considered as the event where it all started, as it was for that evening in September 2006 in Totnes. The initiative must be promoted thanks to working groups focusing on specific issues, open space technologies, and practical manifestations; above all, a positive relationship with local authorities must be built in order to give a future to the initiative. In addition, people's feeling of powerlessness must be fought through an action of re-skilling, which means providing training in many skills that our grandparents mastered "by nature". We can learn a lot about skills that can be useful in a Transition society if we listen to elders' tales about times when very little food was imported, people did not live in huge apartments, everyone gardened, and there was a great sense of community.

After giving a general overview of Transition in theory and in practice, we would like to spend a few words about the relation between degrowth and Transition Towns, if there is one. The issue was discussed even during the Second Conference on Economic Degrowth for Ecological Sustainability and Social Equity in Barcelona, in 2010. Apparently there is no direct consanguinity between the two of them, since none of the two movements formally cites the other as a reference; nonetheless, after analyzing them it is quite natural to observe some correspondence

of concepts and goals. Transition Towns may appear as a direct application of degrowth theories, as if one was the theory and the other one the derived practices. Clearly, even though Transition Towns focus on peak oil and climate change and degrowth on a wider range of problems, both movements aim at creating a new society that better suits the Earth's current situation; we may call it Transition society or convivial degrowth, but the basic concept does not seem to be very different. With regard to the strategy, degrowth adopts a politico-communicative strategy aiming at generating public debate about development, but there is no clear translation of theory into practice; on the other hand, Transition Towns want to engage people and we must acknowledge their great ability to create cohesive and resolute groups (Second Conference on Economic Degrowth for Ecological Sustainability and Social Equity. Transition Towns and degrowth: What's the relation?, para. 6). With no doubts the two movements were born independently one from the other, but they are both sons of a time when some people start developing a new awareness of the need of radical changes that create a new society able to survive to damages created by the previous one. What we hope for the future, is that the two of them can join their forces and become complementary, in order to make their achievements even more feasible.

7.3 Cittaslow: an Italian example

We want to devote the last part of this work to an introduction to one of the most significant examples of great change in our country, Italy. We hope that showing what Cittaslow (or Slow Cities) has been able to do will move people from a state of powerlessness and pessimism in front of the present situation of our planet to a state of renewed will to act, creativity, positivity, and trust in human possibilities.

Just like Transition Towns, Slow Cities is an initiative that is no directly connected to degrowth, but the common points are evident (Cheynet & Clémentin, 2011). Slow Cities is about a new way of conceiving cities and life together; however, it originates from the movement Slow Food, which deserves a few words. It was started in 1986 by an Italian food writer who was disappointed with the opening of a McDonald's in Piazza di Spagna, Rome. He wanted to preserve the traditional food products that were threatened by unscrupulous food multinationals spreading all around the world, to raise the pleasures of eating together, and to pay attention to agricultural methods (Mayer & Knox, 2006). The growing use of chemical products deriving from oil (fertilizers, pesticides, etc.) and traditional practices in the food sector have causes several problems to the environment, biodiversity, and so on. Slow Food promotes a "less-vision", which is why it is connected to degrowth: a capitalist logic in the food processing sector has proven to be unsustainable for the environment, unequal for the society and tasteless (Mylondo, 2009). Basic principles of Slow Food are a refuse of standardization, a strengthening of the animal and vegetal heritage, a protection of biodiversity, a fight

against the abandon of old methods of production that are less dangerous for the environment and biodiversity. The concept of territory is central for Slow Food: local distinctiveness is conveyed by the connection to a specific place, which is evident in traditional food and traditional ways to produce it (Mayer & Knox, 2006). Therefore, Slow Food is favorable to the short supply chain, which makes producers much closer to consumers, in order to achieve social and environmental results (Mylondo, 2009). First, producers do not have to share their earnings with intermediaries and consumers can buy more genuine products at good prices; for example, this is the case of milk dispensers in Italy. Second, short or even local supply chains are not so harmful for the environment; in Italy a growing number of restaurants that are sensible to environmental issues propose a *menù a chilometro zero*, that are menus cooked only with local products (Mayer & Knox, 2006; Mylondo, 2009). Thus, the present structure of the food processing sector in not able to provide a sufficient quantity of food for everyone without damaging the environment and managing non-renewable resources in a sustainable way. The task of every actor in the chain, especially consumers, is to raise their own awareness and to move for changing the system. The approach is the one of degrowth: a sustainable and equal world, but not an unhappy one.

Thanks to the success of Slow Food, a new movement was organized with a new focus on cities. Slow Cities promote a slow way of life against the fast, homogenized world that characterizes many cities in the world (Slow Movement, "Slow cities and Slow movement"). The two apparently objective concepts of time and space began to be questioned. There is no "natural" way to define time and

space, because they are always produced by a specific social context (Harvey, 1990). The perception of time is important because it shapes all our activities; since the present dominant model is characterized by a fast pace that has dehumanized our world through globalization, this movement proposes slow time instead of fast time, collective time instead of individual time, qualitative time instead of quantitative time, and so on (Ariès, 2005). We also need to reestablish natural rhythms: if seasons, days and nights are reintegrated, that will produce positive effect on the environment, for example through savings in public lighting or air-conditioners. Also spaces need to be reintegrated: the Slow movement is against those spaces that are everywhere and nowhere, such as big international airports or big shopping malls. New ways of enhancing cities are proposed: restructuring existing buildings instead of building new ones, recycling, creating new pedestrian areas and parks, preserving local traditions and products, and so on (Ariès, 2005). Harvey (1990) refers to this typical phenomenon of postmodern times as *space-time compression*; the reduction of distances for people and commodities, the quick access to information and other consequences of this compression are the cause of the precarious condition of postmodern societies.

The aim of the first four Italian Slow Cities (Greve in Chianti, Orvieto, Bra, and Positano) is resistance to globalization in order to preserve their identity and invent a new future; the movement then gained international visibility until 1999, when a network of Slow Cities was created by Paolo Saturnini, the mayor of Greve in Chianti, Tuscany (Ariès, 2005). The network now includes 150 cities in 25 countries of the world (Cittaslow, “Cittaslow list”). “The main goal of Cittaslow,

was and still is today, to enlarge the philosophy of Slow Food to local communities and to government of towns, applying the concepts of eco-gastronomy at practices of everyday life" (Cittaslow, "About Cittaslow organization"). Frenzy and speed are banned from these cities, which want to be more human, concerned about the environment and present and future generations. What they are trying to build is (Cittaslow, "Philiosphy"):

> […] towns where men are still curious of the old times, towns rich of theatres, squares, cafes, workshops, restaurants and spiritual places, towns with untouched landscapes and charming craftsman where people are still able to recognize the slow course of the Seasons and their genuine products respecting tastes, health and spontaneous customs […]. (para. 2)

No big city can become a Slow City, this movement being against all products of globalization, such as a big metropolis that alike any other metropolis in the world. To become a Slow City and use the snail logo – another element that traces a connection with degrowth – a city is evaluated for its environmental policy, infrastructure, quality of urban fabric, encouragement of local production, hospitality and community, and Cittaslow awareness; if all criteria are fulfilled and the brand is accorded, the city is going to be regularly checked by inspectors to make sure that the required standards are maintained (Slow Movement, "Slow cities and Slow movement").

CONCLUSION

Transition Towns and Slow Cities are examples of important actions that could be taken at a local level that is very close to us and allows a direct experience. However, we think that the first steps for a major change should be taken at a lower level, which is the individual one. We should stop being passive consumers and start thinking that there is a strict correlation between our behavior and environmental and social problems. For example, buying a certain product may have polluting consequences depending on the place where it is produced and on the means of transport that bring it to our supermarket; besides, there can be social consequences depending on exploiting methods adopted by big enterprises on workers. Capitalism and liberalism have used any means to induce new needs and to increase production indefinitely; as a consequence, individuals have lost their feeling of belonging to a community and have replaced it with purchasing power and individualistic behaviors (CIIP, 2011, "La décroissance: une idée à forte croissance!", pp. 37-38). If human societies become aware of that, if they give birth to such important initiatives as Cittaslow and Transition Towns, which gain more and more consensus and mobilize a growing number of activists throughout the globe, there is a real hope that a major change will occur and help the Earth and mankind deal with the irreversible illness of the environment and societies, which was caused by the capitalist system. The major risk is that populations are overwhelmed by the sense of powerlessness that makes people motionless in front of great challenges, but the number of active movements and their importance may

be a positive sign. However, these initiatives are still anchored to the local level and seem not to wish for a real involvement at the institutional level. Then, the real question is whether their goals will ever be achieved with no active participation of national and international institutions, no introduction of such concepts into the great meetings that seem to decide the destiny of the world, and no involvement of authorities apart from the supporting role.

To make a few conclusions of this work, we should start from the objective point that the Conference in Rio in 1992 had the merit of introducing environmental issues in international debates. After a process that began with the Conference in Stockholm and the denunciation by the Club of Rome in 1972, the international arena became aware of the necessity of coordinating policies and actions in order to solve the global problem of environmental and social degradation. The approach adopted in that context was that of sustainable development, defined by the Brundtland Report as the "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." That Conference was the beginning of a process that has led to good results; however, those results are often considered inadequate and slow and the attitude underlying sustainable development – the weak view of sustainability – was attacked in its blind faith in economy, market and technology. Indeed, it happened that an important achievement did not produce the wished results, or it was mitigated by further evolutions. For example, the idea of the limits of the environment was stressed in Rio, but it was not present in the Johannesburg debates; perhaps, the cause of that is in the fact that in that period some GATT negotiations were taking

place in order to regulate international trade. That process ended with the Uruguay Round in 1995, which gave birth to the World Trade Organization. Probably, those negotiations caught more attention by international actors than environmental regulations (Tinacci Mossello, 2008).

That pessimistic view of the achievements of sustainable development was at the basis of the birth of a strong view of sustainability, whose foundations were laid a long time ago by personalities like, for example, John Stuart Mill. Radical reactions to the mainstream view of development are all gathered into the post-development wave. This category collects a great number of different thoughts and movements, which cannot be easily classified in a homogeneous way; nevertheless, they all share the conviction that the form of development promoted by capitalist exponents is not achievable worldwide. History shows that development has failed in its target of spreading well-being; of course, some countries have become richer, but the environment has been damaged in an irreversible way and inequalities between countries and within them have risen.

One of the most radical revolts against sustainable development and other dogmas imposed by the capitalist credo is the degrowth movement. Georgescu-Roegen was the first who wished for a society organized according to new rules in harmony with nature, after having abandoned the obsession for economic growth and the faith in sustainable development, which is too vague and too anchored in capitalist principles. In the 1980s, the M.A.U.S.S. fostered the criticism towards a form of development creating benefits for an élite of countries and leaving the others like castaways on desert islands. Many partisans of degrowth are members of

the M.A.U.S.S., too. The aim of degrowth is not directly the protection of the environment, but the retrieval of societies' happiness out of economic growth, capitalist economy and consumerist logics; the new society would be *convivial*, based on interpersonal relations, redefinitions of time and space, and cooperative attitudes. Degrowth is neither an appeal for a negative economic growth, but for an abandon of the obsession for economic growth through the reevaluation of other forms of wealth, nor a return to an era of backwardness, but just a push to think about our real needs and those created by capitalist mechanisms. Degrowth partisans are against the measurement of a country's well-being through GDP, which corresponds to the capitalist logic of considering economic growth as the expression of wealth. This is the reason why new indicators are elaborated in order to give account of other components of a society's well-being; for example, the Human Development Index is based not only on material wealth, but also on life expectancy and education.

Degrowth and other radical movements have honorable purposes, but they all face the problem of implementing their projects. The main obstacle is created by those who have strong interests in maintaining the status quo, like capitalist multinationals, and by those who are consumerism-addicted, like whole populations in high-income countries. Then, we could say that the entire system is against the spread of degrowth ideas, which remain almost unknown or misunderstood by the great majority of people. A proof of that could be the fact that handbooks about development theories hardly consecrate a few pages to degrowth and even Italian libraries do not offer many resources; literature about that topic is abundant only in

radical journals and magazines, and among materials proposed by anti-capitalist groups. Degrowth is also accused of preventing the South from development, while its purpose in those countries is to promote the self-organization of societies and local economies through fair alternative practices that are economically and culturally independent from the North and are based on the re-appropriation of traditional knowledge and identity.

Ideas like those proposed by degrowth are often criticized for being only "negative", which means that they are clear in what they want to destroy but they are vague and confusing in what they want to build. Theories and Conferences against the dominant paradigm are progressively gaining attention, but a coherent set of practical choices and behaviors needs to be adopted. Those choices cannot be individual ones, because they would be useless, nor the instructions can stay at a general level, because they would be too vague and far for giving real support. To give an example of how those theories can be translated into practice, it was here chosen to present the initiatives of Transition Towns and Slow Cities.

Such initiatives are built on good principles and are theoretically irreproachable. However, reading the description of the ideal city proposed mainly by Cittaslow can easily leave people quite puzzled. The description reported in the last chapter makes us think of a gentrified district in the North, or a bucolic representation aiming at attracting rich tourists; in any case, such a city appears as a fairy place which is quite unrealistic in the present context. Moreover, no big city has the possibility of becoming a Slow city; we could object that small country towns acquiring the snail logo have no considerable impact. Perhaps, the attention

should rather be focused on the creation of such communities within big cities; that would gain more visibility and would show that another kind of logic is a real possibility and not a dream. Big cities are junctions that build the network of globalization: there we find multinationals, international institutions, financial centers, governments, political powers and also cultural engines. If we are looking for a solution to present global troubles we cannot simply refuse to face the issue of such cities and decide to act only in reference to small towns; big cities are an integral part of our present existence and workable solutions must be elaborated taking into account their role in the present context.

Thus, Transition and Slow initiatives are judged good if they are not an end in themselves, but the beginning of a broader project. Most of all, we think that the involvement of governments and international actors is essential; no participation of national and international institutions would hardly produce significant results. We think that information and education are fundamental in order to arouse people's awareness. Then, degrowth or other initiatives should gain support of local governances; local governances should then be coordinated at the international level, which is necessary in order to give a global answer to a global problem. Local and international levels should be in constant interaction.

To conclude, one thing is sure: the weakening of sustainable development has given the opportunity to other theories, such as degrowth, to emerge. At the beginning, it was said that sustainable development had not produced the wished results because much time was needed, but now, twenty years later, there are reasons to speak of failure. Also, the crisis that began in 2008 may have been an

occasion for thinking of new possibilities and new mentalities. Harvey (1990) claims that crises of capitalistic structures open possibilities for great changes, because the grasp of ideology is loosened. However, the problem is that international debates and proposals are firmly anchored in the faith in sustainable development. The analysis developed in this work has shown that the great international actors keep considering economic growth essential, while degrowth and other brave revolutionary ideas keep being confined in alternative meetings, such as the World Social Forums. Degrowth ideas may have a bright future, but not before solving some problems. First, there are few and messy practical proposals. Then, a coherent theoretical platform gathering all movements should be created; the term "degrowth" should be clearly defined, in order not to create confusion and misunderstanding. Unfortunately, degrowth has the disadvantage of counterpoising the dominant culture, which was not the case of sustainable development that did not threaten the faith in the dominant scheme. As Rist (2008) says, "the most difficult task, however, is to ensure that knowledge triumphs over faith – and to persuade ourselves that there is a life after 'development'."

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