

The Foundation Theory

I) Introduction

In previous studies¹ we highlighted that necessity for degrowth can first derive from a theoretical evidence of the economic analysis – rather than for ecological-related motivations – by deepening the concept of *utility* and the *functions of utility* expressed by different societies or cultures. In this sense, the fundamental observation was done in the early sixties by the great Rumanian economist, father of bioeconomics, Nicholas Georgescu-Roegen. He explained how in rural and small communities individual utility could be expressed in the following terms (1):

$$U_h = F(Y_h; Y_s)$$

which means that the individual's utility *b* is function of its income “*Y_b*”, as assumed by mainstream economy². But it is also function of the so called *social variable* “*Y_s*” that represents “the specific criteria with which the individual considers the welfare of its community”³.

Georgescu-Roegen, however, noted that as the size of the studied community increases the second term tends to disappear – the “prolonged eclipse of the social variable” -, to the extent of justifying the elimination of the function. It thus returned within the prevalent theory whose analytical framework has not changed up to this day⁴. As known, the Rumanian economist did not go deeper in this formulation, shifting to an observation based on physical elements, thermodynamic and ecology. This brought him to open a new field of study, extremely relevant for the modern degrowth theories.

Our attention, instead, was caught by the verification of the social variable, and its behaviour, mindful of the schumpeterian rule according to which “if between two phenomenon we can find a *causal* relation, our task is absolved when the phenomenon that in this relation has the role of *cause* it is not of economic nature”⁵. There are reasons to believe that “the Eclipse of the social variable” cannot be considered as the non-economic cause according to which is licit to stop describing, also and above all due to a fundamental reason.

The utility function attributable to a social group describes *what* makes the average individual of a society feel rich. This *something* is considered the engine of the economic action, in the sense that from the specific type of wealth pursued by people it generally follows a certain general economic activity: that one and not another. In the moment in which changing the general economic model should be deemed necessary, as in the case of degrowth studies, it could be interesting to start thinking on the dynamics concerning the function of utility and see whether it is possible to intervene in a favourable way for our purpose. This kind of action, once it was efficiently developed, would produce a knock-on

¹ This note and the relative bibliographical references have been deliberately omitted by the authors according to the anonym submission's criteria. The same has been done in other similar cases all along the document.

² Tresch, R., *Public Finance*, Academic Press, Boston, 2007, p. 104.

³ Gowdy, J. & Mesner, S., *The Evolution of Georgescu-Roegen's Bioeconomics*, “Review of Social Economy”, Vol. LVI, N°2, 1998, p. 144.

⁴ Ibid. p. 131.

⁵ Schumpeter, J. A., *Teoria dello Sviluppo Economico (Theory of economic development)*, Rizzoli, Milano, 2002, p. 2. (italics are from the author).

effect on the general economic activity, insofar as it would spontaneously be harmonized with the new idea of wealth characteristic of the population. If such an idea is close to degrowth's sensitivity and requests, the result of the effective reshaping of the activities can be achieved with less use of measures aimed at limiting the effects of a mistaken dynamic, prohibitions, bans, but rather harmoniously, which perhaps is the only truly imaginable way. Our contribution in this sense is to show how this revolutionary process, or if one prefers this paradigm shift, can be seen, explained and described through the tools of economic theory.

II) Analytical framework

Being the utility function of wealth (2):

$$U=F(W),$$

the definition of wealth becomes the fundamental object of analysis. The mainstream theory assumes that (3):

$$W= Y,$$

or rather that wealth means money (the income), and thus (4):

$$U=F(Y),$$

the utility is function only of the income. After years of study we have instead convened the following expression of the concept of wealth (5):

$$W_t= Y_t + (Y_t \cdot \Phi_t \cdot \Psi_t),$$

what, in plain language, means that an average individual's wealth "W" in moment "t" depends on his income "Yt", on the contingent conditions in which the income can be converted in something real – which we measure through the concept of *economic power*, "Φt" –, as well as on the importance that the individual gives to this aspect "Ψt", that we call *awareness variable*, and that we will address below.

The economic power is the qualitative measurement of economics. It measures the capacity of money to be turned into true wealth depending on the availability and the price in a certain place of a goods and services able to satisfy more or less relevant needs – obviously including among goods those *free utilities* "not resulting from work, not appropriated, not exchanged"⁶, such as the natural grace and beauty of the world and the art of living developed by people. In previous analysis we proved that in every interval between *t* and *t+1*, since circumstances change, a balance between the forces that deteriorate the economic power (*damage*) and those that strengthen it (*improvement*) is always assumable. This balance indeed seems to be constantly negative, at least over the last forty years.

Technically, given the structure of (5), the values of economic power Φ can vary between -1 and 0 (6):

$$-1 \leq \Phi \leq 0,$$

⁶ Nicholson, J. S., *Principi di Economia Politica (Principles of Political Economy)*, Utet, Torino, 1908, p. 27.

where “0” corresponds to the situation in which there is no prevalence of damage over improvement, while in “-1” “money has no value” (in Chernobyl the day after the explosion). It is worth noting that the former case ($\Phi=0$) is conducive to the annulment of the second term of (5), so to fall back into the mainstream assumption outlined in (3). Generally the real values swing between the two extremes⁷.

The term Ψ represents the extent to which the dynamic of the economic power is noticed by the average individual, since there are several cases in which it cannot be perceived – at least due to a lack of information. More frequently is the constant reshaping of likes and sensitivities what causes mutation in the hierarchy of needs, which is necessary to prevent the perception of the economic power’s loss in spite of damage’s prevalence over improvement. In this way we have a *real wealth* and a *perceived wealth*, which is felt as the real one by individuals.

Values of Ψ oscillate between 0 and 1 (7):

$$0 \leq \Psi \leq 1,$$

where 0 is the situation in which there is no perception of Φ , and 1 is the case of full awareness. It is worth noting that in the former case, as with Φ , the second term of (5) disappears. It thus falls back again to the mainstream description of (3) but noticing the situation in a different way, because in this case it is hard to talk about the so called *consumer sovereignty*. We are not denying that the function of utility described in (4) often corresponds to reality, but for a reason other than the stated by the mainstream theory⁸.

The two terms Φ and Ψ are linked in the following way (8):

$$\Phi_t = F(\Psi_{t-1}) + \epsilon\Phi, \quad \Psi_t = F(\Phi_{t-1}; \underline{Y}_{t-1}) + \epsilon\Psi,$$

what means that the trend of the economic power’s dynamic Φ in a specific period depends on the level of Ψ in the beginning of that period. This is, it depends on the attention generally paid to the mentioned dynamic ($\epsilon\Phi$ represents all the other factors affecting Φ and that are here deemed as negligible). On the other hand, the so called *awareness* Ψ is inversely proportional to the income (since in periods of “growth” the average individual tends not to perceive the damage produced by the dynamic that is enriching it in terms of income), while it is directly proportional to the economic power of the previous year (the abovementioned reasoning applies also to $\epsilon\Psi$). This is because if in the period preceding the one object of analysis the economic power has decreased, the forces that have produced such a development are the same that have interest in the average individual not being aware of the dynamic, in order not to undermine his assent to the successive process of development⁹. Schematically, thus (9):

$$\text{if } Y \uparrow, \text{ then } \Psi \downarrow; \quad \text{if } \Phi \downarrow, \text{ then } \Psi \downarrow;$$

we can see that periods of both growth and loss of economic power are the worst for the awareness variable Ψ (as the case of the eighties), and since an awakening of the awareness is needed in order to have a recovering of the economic power, it cannot be positively affected by the economic power, which we have actually seen how it has been declining over time. Therefore, the only case in which a recovering of Ψ is likely to happen would be a recession (10):

⁷ As for note n.1.

⁸ Ibid.

⁹ Ibid.

if $Y \downarrow$ and $\Phi \downarrow$, then $\Psi \uparrow$;

likewise, even assuming a drop of the economic power, a recession (decrease in income) can be enough for the awakening of Ψ . But unknowing the relation between Φ and Y , we cannot know the intensity of the recession needed for it to be determinant. Maybe it must be strong enough to make the matter tautological: *the dominant market system can interrupt the deleterious action over the economic power and the awareness if it ceases to exist.*

This description evidences how the currently dominant economic system has determined over the past decades such an evolution (see following figure):

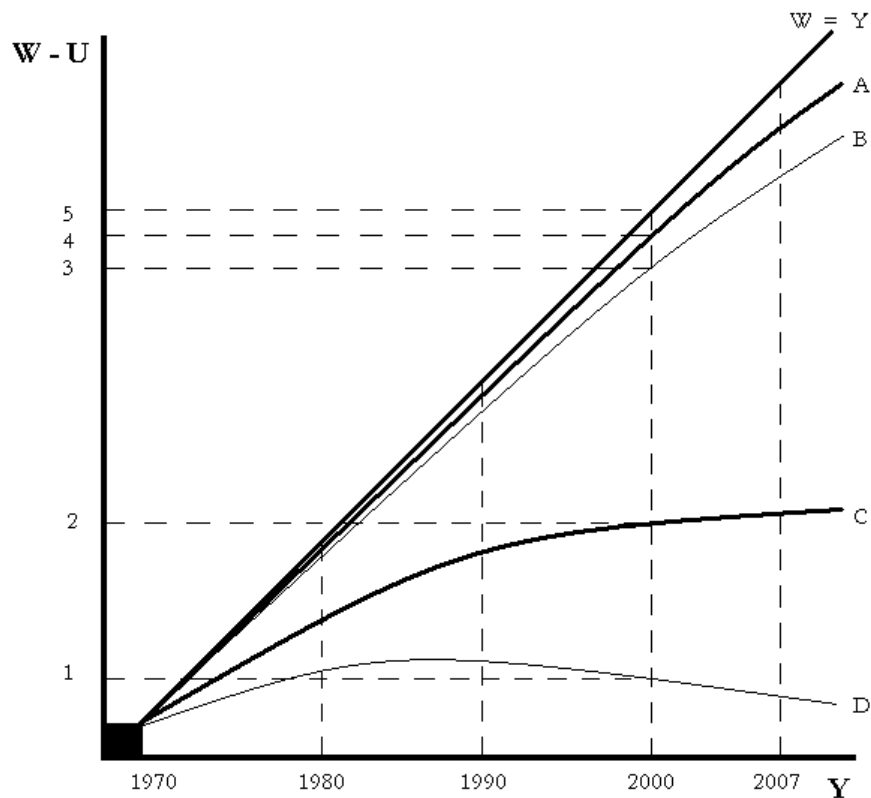


Figure 1

Displayed on the x-axis is the income Y , and on the y-axis the wealth W and the utility U . The lines A and C respectively correspond to the levels of W by probable values of Ψ , this is tending to 0, and of $\Psi=1$, considering the distinction between *perceived wealth* A and *real wealth* C.

Lines B and D describe a similar trend concerning utility, which is defined as follows (11):

$$U_t = F(W_t; \underline{Y}_t); \quad \text{s.t. } \max U_t: W_t = Y_t,$$

$$\text{if } W_n > W_m, \text{ coeteris paribus, then } U_n > U_m; n, m, \dots \in (t)$$

$$U_t = W_t - [(Y_t - W_t) \cdot W_t / Y_t].$$

For comments on these relations we refer to our previous studies. What is important here is to see how utility is positively affected by wealth W and negatively by income Y . The average income Y is a measure of the *effort*, as a fraction of GDP. An increase in GDP (and thus in income Y) could more or less correspond to an increase of wealth W : if the relation is perfectly proportional the utility is maximized, the wider is the gap between income and wealth the greater is the contraction of utility: the more effort is needed to achieve the same outcome, the lesser will be the utility that the outcome will be able to give¹⁰. In Figure 1 we see that line $W = Y$ corresponds to the case in which utility is maximized¹¹.

We see also that in face of the average income doubled (GDP's growth) in the 40 years period under review, the perceived wealth has increased almost as the income and also the perceived utility. Instead, real wealth does not grow anymore for years now (although the income continued to grow until a few years ago) and real utility has been descending. The graphic shows also how the single individual who increases his awareness Ψ discovers himself to be in 1 and 2, not anymore in 3 or 4. He will therefore feel much poorer than before. This lack of awareness boosting – which is instead the engine of the economic power's recovery – , since nobody wants to feel poor, makes the described system a vicious circle: the dominant economic system fosters low individual awareness to the detriment of Φ , that again declines Ψ , and so on. Society, even if richer in monetary terms, is always less satisfied. Utility does not grow anymore along with the average income. On the contrary it declines, but the trend is to ignore it.

III) Theory of Foundation: generalities

From this analytical framework, elaborated between 2007 and 2009, it clearly emerged that degrowth, understood as a mere reduction of the average income, is the advisable direction for the general economic system due to several reasons. The possibility to express any indication on the fulfilment of such an objective and its modalities did not seem possible to us. The reason was that, as previously shown, we assumed that the current trend was not modifiable at all. But in 2010, partly thanks to the continued observation of the reality through our model's lens and to the crisis – which for economists is always an excellent test to proof the value of theories –, it came up a theoretical solution unmistakable until now. It is substantially a logical consequence of the presented analytical framework. This theory, that we call *Theory of Foundation*, has been elaborated between 2010 and 2012, and it is now starting its implementation in the Italian region of Liguria, lead by an association named *Che l'inse!*.

From the relations of (8) it appears that if in a given economy (therefore in a certain *territory*) a theoretical economic actor, that we call Foundation, has a positive effect on the economic power Φ , a virtuous cycle could be generated since (12)

$$\text{if } \Phi \uparrow, \text{ then } \Psi \uparrow.$$

This case had not been considered in our previous analysis since it is indeed an “uneconomic behaviour”: it must in fact be supposed the existence and operability of an entity willing to place a given quantity of money into the economy, knowing that it will

¹⁰ For example if $W_t = 90$, and $Y = 100$; then $U_t = 81$.

¹¹ For the data concerning the values of Y of Italy: OECD, Economic Outlook 2007, No.83.

certainly be lost. As an investment bank funding unsustainable activities (and therefore often inexistent) but necessary to shift from the current economic system to a different one: in order for it to produce an economic *slowdown*.

The aim is to (re)bring at a marginal level the place of economy in people's life at least for those who wish it, which constitute the majority. Those whose natural inclination is to be actively involved in traffics and who would like also in a degrowth reality to continue to work with "the outside"(at the prevalent pace and rules), should have the possibility to do it. Moreover, their role should be made available for the community, the majority of which would be content with the fulfilment of the basic needs in exchange for the time and calm necessary to understand the marvel and mystery of life – each one according to his modalities¹².

This statement is ethologically¹³ truer and generally the validity of our analytical indications are more precise as more reference is made to the reality of the northern Mediterranean coast, which presents economies ripe enough to start the path towards degrowth as well as favourable populations and geography. Is worth reminding that degrowth cannot begin within societies that have recently started a growth path, at least until it becomes mainstream (what could also never happen).

The Theory of Foundation describes the possibility of a given territory to get away from the current trend. Thus, until the success of such an attempt generates a chain effect, it is not a "universal salvation" theory, not even of *generalized degrowth*. Our believing is that "is preferable that the process starts somewhere, rather than trying to make it start everywhere but at the cost of never seeing it".

Therefore, as an economic entity able to exert influence (and thus to interfere) over Φ , the Foundation should be big enough in relation to the respective economy. In order to understand what interfere over Φ means, it is worth defining it as the balance between *improvement* and *damage*, the typology of the latter being:

- i) the rarity of certain types of goods and services, and its consequent price increase,
- ii) the disappearance of some typologies of goods and services,
- iii) the need to pay for goods and services that were previously free,

while *improvement* includes:

- i) grater purchase possibilities (invention or recovery of goods and services),
- ii) lower prices of goods and services, deriving from technical, commercial and administrative innovation.

¹² "Economists, from the beginning of 20th century, noted that the majority of workers were satisfied with earning the necessary amount to provide for their basic needs and a few luxuries, after which they preferred increased leisure time over additional work hours and extra income. According to economists of the day like Stanley Trevor and John Bates Clark, as people's income and affluence increase, a diminishing utility of returns sets in, making each increment in wealth less desirable". Rifkin, J., *The End of Work*, Penguin, New York, 2005, p. 19, 20.

¹³ J. Stuart Mill around the middle of 19th century considered that the "the main social science was psychology, the study of human mind laws. Related to this, a new science that Mill called ethology (...). The closest contemporary equivalent seems to be social psychology"; according to the English philosopher, only after economic speculation could begin. From the introduction by Donald Winch to: Mill, J. S., *Principles of Political Economy*, Penguin, Harmondsworth, 1970, p. 25.

We have to notice that most of the new possibilities of purchase arisen in the considered period often incorporate also a necessity to buy or, to put it differently, the very fact of not having those goods negatively influences the utility (let's think about mobile technologies). This statement further confirms the assumption (6).

The Foundation can influence these dynamics to improve the economic power, taking into account that each specific change on Φ affects in a different way Ψ . To put it differently, there are aspects of the economic power more and less related to awareness. An example will help clarifying this statement.

It is known that eggs within EU present a code printed in the eggshell. The first number of the code indicates the farming method for laying hens: 3 in cage systems, 2 kept on the floor, 1 free-range, 0 organic. From those, only the last two categories can be considered natural, since the other come from animals living an artificial life (they live less than the time needed by a normal hen to start laying an egg!). The shift from the normal eggs to the industrial ones can be considered as a damage of type i), since the natural have become, relatively speaking, much more expensive in the period under analysis.

Generally, eggs 2 and 3 are half the price of 1 and 0. This price difference makes the former more purchased than the latter and the production of the good "egg" directed thus in a given way, certainly not according to degrowth sensitivity. The Foundation is the entity that would pay for the difference in the given territory in order for eggs 1 and 0 to cost as the other (a cent cheaper), what associated with the elemental information that "these eggs are better" would easily bring to the exclusion from the market of the industrial eggs. The consequence is that the good "egg" in that economy would be produced now with degrowth mechanisms (slower, more ecologic, more human).

Once industrial eggs would have disappeared, the support given to prices by the Foundation would end, because: 1) if there is no longer a touchstone, we cannot talk anymore about *more expensive* or *less expensive*, 2) having tested, first hand, for a period the truth of the natural product and knowing the horror we were relieved from, the previous regime could hardly return, even if the industrial products were in the market again. Actually a series of such actions could generate a *knock-on* effect because if Ψ has increased in relation with the theme "food" (and it has increased because Φ has artificially made it increase), it expands now its general positive effects. Without the action over Φ the awakening of Ψ cannot be pretended. That is, the massive abandonment of a cheaper product of "poorer quality, harmful, etc." cannot be achieved only with information about the "better quality" of a more expensive one. Generally, there where the degrowth practice requires an economic effort or an effort in terms of time, the Foundation is the entity that pays for this effort, whether remunerating time (salaries, jobs) or changing the unfavourable price conditions.

This example is useful for modelling the action of the Foundation. Different elements can be deduced. The first one is the need to reason about the dimension of the territory where is to be applied, because it is clear that if we think for example about Corsica (around 300,000 inhabitants) the cost for the operation is one, whereas in Italy (more than 60 millions) is different, and in the USA another one. The second point is the testing of the abstraction level that a hypothesis such as the influence on the eggs price requires -a hypothesis chosen as a model among many conceivable. To verify whether the proposal is plausible, possible, feasible. It is clear that these points are partly related, and in order to face the issue in a reasonable way a consideration that comes from game theory should be addressed.

IV) Leader and Follower

Game Theory tells us that a game between two players is called game between *follower and leader* if, in power parity of moves, one of the two players starts with an advantage move. This – that can be assimilated to the idea that the first player decides some *rules of the game*- implies that only the move of the first can be qualified as *action*, whereas the subsequent as *reaction*, since he will start having to calculate in a situation interfered by the move taken. The trend created by the interaction between these two forces is due to the action of the leader influenced by the follower's reaction, but as direction – that cannot simultaneously be one and another – it represents what animates the *leader*, his aspiration, the “place” to which is directed.

The noticed trend is what shapes the leader, and in our case, having noticed a prevalence of *damage* over *improvement*, it can be assumed that the set of forces pushing towards an increasing of damage constitute the leader of the game. Follower can be understood as the set of forces that in some way try to fight against the detrimental action of economic power. He will need to cope with the fact that the confrontation rules (substantially: *prices*) are already established, and settled. Having to accept the current price system whatever activity, even the more enlightened, is nothing other than a reaction: every time the follower will have moved, the leader will reaffirm with his move the direction on his side. That is why at no time of the game the follower will have the occasion to redress the direction in his favour.

For a broader picture of this process one can imagine two progressively increasing sand piles: one represents the damage (the action of the leader), the other the improvement (the reaction of the follower). It is true that looking at the improvement some progress can be seen, but this does not mean that the overall situation is better, if considering the other pile, as the graphic shows:

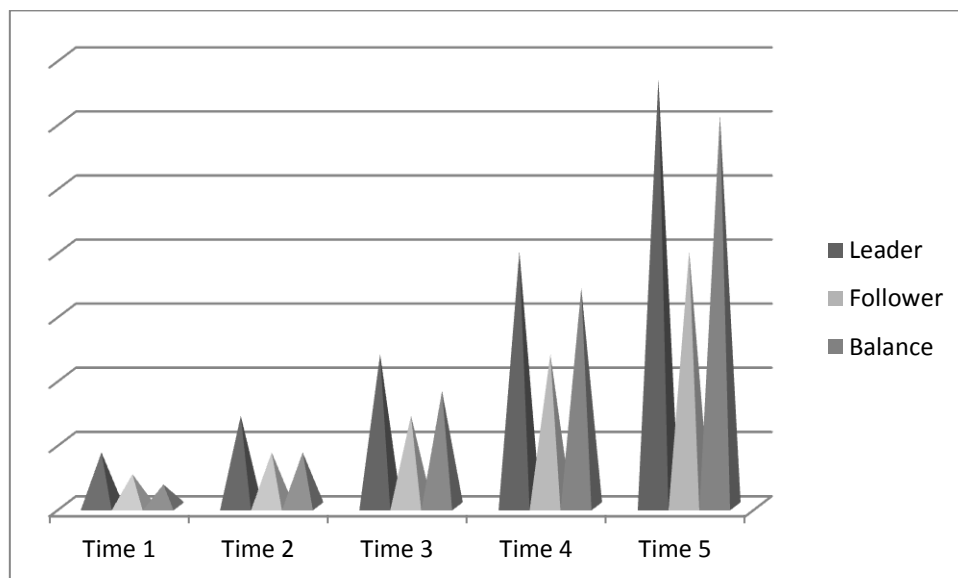


Figure 2

The light grey columns (the improvement) progressively increase (increase as much as to match the precedent damage), but the variance produced from the dark grey ones (the damage) makes the accumulated balance (medium-grey) to continuously grow.

The intensity of the reaction will be function of the previous action. The action that will arise from this reaction will be function of the latter. So the greater the reaction, the stronger will be the successive action.

Game Theory teaches us that there is no way to reverse this dynamic when among the litigants a leader and a follower can be found¹⁴.

Even if our intention is to show a theoretical procedure, a practical example can help getting the idea.

After the great medical and scientific discoveries of the XX century, in some cases the use of chemical medicines has been abusive, consumed in an unbalanced way in relation to the benefits they can produce and the harm that certainly entail. For instance, it is known that toothpaste contains antibiotics, or that analgesics have damaging effects on the liver, and they are too carelessly consumed – as the leader suggests so. Therefore trends calling for natural medicine, herbs, etc. have recently appeared. In conformity with what has been argued up to here, we shall qualify the first situation as “action”, and the second one as “reaction”. But then, being the rules fixed by the leader, this fair impulse of the follower is immediately reabsorbed because the “natural medicines” need to be produced on an industrial scale anyway through the market price system, accordingly thus to the rules of work imposed by the leader: to consume energy, to be packaged in plastic, to travel, to pollute. They often request an extensive cultivation, with procedures that overall make damage prevail over improvement, despite the initial impulse was coming from forces wishing the latter.

Given the described typology of dynamic, whatever reaction to the dominant trend, since it is within the dynamic (substantially by accepting the price system) will end being reabsorbed by it, and thus will produce more damage than the auspicate improvement. In other words, there is an improvement at the expense of an extra damage higher than the improvement¹⁵.

This rule applies as long as the reaction comes from an economic actor performing as a follower. It is different if this reaction comes from another subject: a leader. This is what the Foundation should be. And now we come back to the two points left unexplored: the territorial dimension and the feasibility of the Foundation’s action.

V) Practice of the Foundation

In order to be able to act as a leader, the Foundation needs to work in a referral economy which is proportionate to its financial capacities, or rather in a limited territory. Two different stages can be distinguished within the formative action (we define like this the action of the Foundation): a *preparatory* and an *effective* one.

¹⁴ Our graphics are necessarily limited to a finite number of moves, but if one were to represent the whole social change indefinitely expanded graphics should be imagined (which however would not change the dynamic).

¹⁵ The same thesis is expressed from an ethological point of view by Morris, D., *The Human Zoo*, Kodansha America, 1996 [1969]. See also the so called “rebound effect”, the “Jevons’ paradox” or the “Khazzoom-Brokes postulate”, that give effect to the same statement: the technological improvements that increase the efficiency with which a resource is used often increase the total consumption of that resource, rather than decrease it. The increased efficiency is normally translated into a cost reduction that, in general, increases consumption.

To the preparatory phase corresponds the diffusion of the idea and the gathering under the same ideological spectrum of the social networks already existent in the region, each one of which pursues a limited aim, whether territorially (since it actively works in a neighbourhood, in a city, etc.) or objectively. Measures as the creation of an alternative currency (first embryo of the parallel economy that the Foundation will become) are needed from the very beginning and also the collection of savings as soon as possible. The collected savings, as soon as they achieve a volume enough to allow the operation, need to be managed by efficient speculative bankers, who will operate in external markets (usually virtual), will obtain annual profits, and will bring in the economy of the territory the resources taken from the financial economy. One needs only to look at the big speculative banks' balance sheets to realise that an annual benefit of 100% corresponding to the capital invested is nothing extraordinary, as long as this capital runs to few hundred million euros. The main obstacle, in this sense, is to harmonize the justice drives of those that work for overcoming the system with the banker that is able to produce the needed profits: several "degrowthers" will consider it wrong to finance the paradigm shift through the worst aspect of the contemporary economy (finances), and some other bankers will not collaborate in the creation of a system where prospectively finances have a decisively different role. We will come back to this point later, trying to suggest some solutions. It is however necessary to accept this contrast in name of the will to overcome the current *status quo*: accept, at least in the beginning, producing further disturbances to the outside (as always occurs by empowering finances) so to build up an internal order.

Once the spending capacity of the Foundation reaches the 1% of GDP of the territory, the effective phase of the foundative action begins. (This means that in an economy with a GDP of 25 billion, the Foundation needs to be able to annually invest 250 million for some years). The strategic difference between the two stages is that in the preparatory one the main purpose is to find the capital, which in order to be so consistent needs to be supported by some big economic entities, whether private funders, companies or financial institutions. It should thus adopt inclusive ideological terms. Whereas in the effective phase the foundative action is focused on the revival of Ψ , according to the described modalities.

The Foundation being constituted, it starts performing there where its economic superiority cannot be put under discussion; this is in rural zones of the territory, in depressed areas and in small inhabited centres. Let's take the Italian region of Liguria (1.6 million inhabitants) as an example since it represents a dimension that is compatible with our assumptions. In the capital of the region (Genoa), with its 600,000 inhabitants, the economic power of the Foundation could be negligible. It is however not the case in the hinterland small villages (which rarely exceed 2,000 inhabitants) where an investment of some millions, or even some hundreds of thousands Euros, would produce an effect of accession and of diffused sympathy towards the entity carrying the new wealth. In other words the reality in which to play as leader must be chosen. Thus, influencing Φ also has an influence on Ψ and the population naturally adopts the *new idea of wealth*, in the beginning for convenience, then by consensus, and after as a matter of conviction. In this way the "economic liberation" of different areas of the region starts.

The Foundation uses its own funds primarily to finance activities that have a direct influence on Φ , by offering jobs aimed at the creation of wealth according with high Ψ values. In practice, in a rural reality, this will mean ecological recovery and a proper usability of the territory, what in a mountain reality as the Ligurian implies a lot of physical work; recovery of traditional knowledge, if they were the best response to the territorial needs and possibilities, as is often the case with food but also with a series of *old trades* that are out of the market because they are not competitive in the modern economy. Generally, support is offered to the community in order to recover awareness in terms of being

masters of the own destiny, promoting thus self-government spirit. It could be an idea to choose the temporal sequence of the areas in which to intervene according to the administrative electoral deadlines, so that the “economically liberated” towns would join also politically (at the beginning informally) the Foundation.

The remaining part of the funds is spent on the acquisition of funds, properties and productive activities for different purposes and uses. In some cases to reallocate them, in other to remove them momentarily from the market, and in some other to eliminate them (think about the landscape horrors). These property investments influence Φ indirectly, since a further step becomes necessary to exert the influence. But it is a fundamental point for the overall action of the Foundation, which must soon become the “first owner” of the region.

With such an impressive and dangerous program, the activities of the Foundation should be as much informal as possible: to favour oral agreements (“handshake”) if allowed by law, and divide the overall activity in an indented network of small institutes of private law without formally having a link with the Foundation. To give an example, if in a village where there are no stores anymore due to the economic unsustainability resulted from the partial depopulation, a grocer’s shop is opened with the support of the Foundation, it would be opened in the name of a cooperative of the town’s residents that receives an annual funding from another entity (whether it is a commercial company, a charitable organization, or other) that does not already have direct links with the Foundation, this invisible hand but consciously manipulated. The shop would become economically sustainable once the town would have attract new population due to the investments and the “new wind” breathed, thus the external support would not be necessary anymore. This last point is also very important.

The foundative action, no matter how much drastically intervenes in the population’s life by creating jobs, new possibilities etc., *should not create dependency indefinitely in time*. It should aim at creating virtuous mechanisms according to the scheme above presented regarding the interaction between Φ and Ψ . As the awareness is awakened, stimulated by the recovering of the economic power, an economy that tends to be in line with this new conception of wealth emerges. The first incentive must be external. But once the results in terms of Ψ have been achieved, the system tends to be spontaneously self-regulating towards a degrowth direction. This is fundamental in order to remove the resources from one place and redirect them to others that still wait and need the “economic liberation” through an encircling action from the periphery to larger inhabited centres. The capital of the region comes last and in accordance with slightly different modalities due to the different dimension of its economy. It would be obviously necessary to work at a neighbourhood level and starting from those that are in marginal, peripheral and disadvantaged conditions.

This entity that for some years brings a constant and huge share of investments in the region aimed at recovering Φ , generates a widespread sympathy that in many cases could drive to an open support of the recipient population. Is worth assuming that when a son has found a job, another relative a house, etc. thanks to the Foundation, even those that have not personally taken advantage of it will be ready to support it according to their possibilities and tendencies. It would not be daring to suppose that the Foundation at some point will be attacked by the ruling power despite the precautions in terms of informality and mimicry adopted over time. In case it happens in a rather advanced moment of the foundative action, when a consistent number of the population (better if majority) has been involved, the clash could be transferred to an open ground through the political competition. Then, and only then, the liberation process that started on the economic front

shifts in the political field, when it already has the possibility to success. *It is true that most of the economy of the region is still in the hands of entities different from the Foundation. But the smaller part represents a larger number of people that can influence with their votes and wield power given the democratic system.*

A region is not a state (actually there are few states the dimension of which is appropriated for the application of this theory) and it thus does not have the capacity to build its own socio-economic future independently from the state it is part of. The interested region should then have a drive for *independence* aimed at leaving the state it is part of, not for a matter of nationalism but in order to have the possibility to build a new society. If this drive doesn't exist, it should be stimulated by the Foundation. The occasion of the creation of a new state dissociated from the deals that linked the state with the existing economic and political realities is the only possibility to achieve degrowth in a specific territorial reality. Accession in the preparatory stage, as previously pointed out, of professionals of speculation and of some groups of power (financials) is facilitated by leveraging an ambitious prospective that brings honour and prestige once carried out. On the other hand, to drive social attention towards identity aspects, traditions (and thus of the adaptation of traditions into contemporaneity) and citizenship that are linked to independence already means to detract it from chrematistic economy, which is favourable for the degrowth process. At this context a significant effort for the use (and maybe recover) of the local language could be included. Local language often coincides with the ancient political configuration of the region and allows communicating more sincerely and frankly as well as talking about real and concrete things in contrast to the "national language", which is the language of power and therefore is evanescent, false, distant, though having a greater prestige. The rediscovery of the specificity of "this people" together with the willingness of redefining the concept of citizenship including the foreign elements that have settled in the territory over time, constitute a very strong element of cohesion as well as a catalyst for social attention able to embody energies that otherwise would be dispersed (the current case of Catalonia is a clear example).

With the Foundation now constituted into a political party for the need, having won the elections and having the region constituted a new degrowth state according to the principles that guided the formative action over time, it ceases its direct action tending to dissolve within the society that is already permeated with its presence and influence. The new state will have its proper institutions according to citizens' criteria, which will not be now addressed. The same argument fits the monetary system that will be dealt in a successive study.

It is worth addressing instead the economic-chrematistic sustainability of the new state, which despite being an issue that should be overcome, must be taken into account by the leaders of the process in order to succeed. In this sense, the interested region should be economically strong or should have enough resources to ensure a balanced exchange with the outside (since degrowth does not mean end of exchanges). In the Ligurian case, the port system, which nowadays annually generates 4 billion of customs duty (integrally diverted to Rome), it is almost enough to sustain the systemic shift given the low population. Generally, whether in this first stage or at ideological level, we must think on a society in which the majority is liberated from the economic bother, satisfied with the fundamental needs and not following the secondary ones that are not induced anymore by the perverse mechanisms of scarcity creation. At the same time, a small part (a proportion of 1:20) which is naturally inclined to dynamism, works at a rate and according to the modalities of the outside, perhaps being physically settled abroad. This small group of citizens for whom life conditions have not change that much after the change of regime, make chrematistically sustainable the project of the degrowth state by producing the kind

of wealth that represents the bargaining chip with the outside. In this way is how the diverse human nature should be satisfied, the majority of which is quiet and fulfilled by quietness. It however always maintains dynamic impetus that should not be repressed, as it happened in the communist project, but rather put at the disposal of the common purpose. Within the degrowth state, even with a series of economic aspects subtracted from the market and with more links on the creation of needs in relation to the current situation, the freedom of economic initiative is not abolished.

At the beginning, when people's habitudes have not yet radically changed, it is worth supposing an external dependence due to the lack of raw or processed materials, which should inevitably be imported by using internationally accepted money (that produces, *coeteris paribus*, an unfavourable trade balance); thus the need of external investment. It seems therefore reasonable to suppose the constitution of a *sovereign wealth fund*, which invests abroad on behalf of the state, and that returns the earnings to the state (in external currency), for the purpose of financing the internal degrowth project. As the degrowth state takes shape, on the one hand it harmonises the citizens' needs with the resources of the territory. On the other, it cannot be excluded a knock-on effect that produces a paradigm shift in other regions culturally similar, since these populations are willing to emancipate too having perceived the positive effects of degrowth. This eventually simplifies the task of the first degrowth state in terms of external relationships and it is also the only possible path to spread the model.

V) Conclusion

We are aware of the criticism that our proposal could receive and of the huge difficulties that represents. Nevertheless we believe that the fact of having mapped out a possible path for the realization of a different economy and society, however hard, is much more than nothing. We would like now to dwell, before concluding, on the main difficulty that this path presents and on the more evident criticism that it could receive, in order for the scholars to put their attention in other aspects, which may have escaped us.

The greater difficulty of the theory of Foundation is the human element able to achieve it: the leading group of the Foundation and the agents, the former made up of a dozen and the latter of about a thousand. A group of persons who act at the same time as economists, politicians, revolutionists, of high ethical standing and able to bring both at technical level and to common people the purpose of the Foundation. Persons deeply linked to the territory – as to know the ancient language, the “dialect” – but who have known the contemporaneity's centres dynamism; who know how to move between the required informality, mimesis, and are able to be exposed to information bodies; immune to personal ambitions but ready to sacrifice their careers for the ideal in their most productive years. Persons who preserve pragmatism though working for a revolutionary change. Actually it is not easy to find a dozen of persons like these. They shall also have all the emotional features necessary to inspire trust both to those who at a certain point will finance the operation as well as to the ones who will become *agents* of the Foundation, thus accepting to restructure the own lives earlier than the territory. Once these exceptional persons are constituted as a *directive unity*, becomes relatively easier to find a thousand of agents, the characteristics of whom are more generally limited to honesty, to sharing the foundative purposes, and to the capacity to influence reality concerning their tasks assigned according to their competences.

The criticisms that could more easily appear are of three types:

- 1) vertical structure of the Foundation;

- 2) need for substantial capital;
- 3) risk of international isolation.

The first criticism, if justified, could be shared. But it can be overcome by thinking under an organic approach rather than under a mechanistic one, as it used to be in the old conception of the state. It is true that in an organism the brain takes the decisions, but every element is fundamental for its functioning, and for its own existence. It is about ensuring that everyone is in the right place. A restricted directive core has been consciously chosen not only because it allows a faster decision-taking but also due to the difficulty of finding persons who have the required overall vision. It is however obvious that the Foundation, according with its purposes and though having this structure, would foster the widest autonomy of decision.

There is also substance to the second kind of criticism but we believe it is more idealistic than pragmatic and like it or not, in this real world operations should be done in accordance with the reality of facts. Voluntary participation of the population can be stimulated to the limit, but is clear (it is an underpinning of this theory) that change can only happen if the revolutionary work is rewarded. Whoever may succeed in improving this plan omitting the reasoning around the need for the Foundation's capital would be very welcome!

The third criticism is instead unjustified for two reasons: in first place because if risks are not taken, then we stuck within the *status quo*. Secondly because it is worth supposing that, even if focused on a territory, the formative action is reflected in neighbouring or culturally very close areas. Thus in practice the economic liberation, even if it occurs first in a territory than another, would produce a certain knock-on effect. So it wouldn't be about crushing an attempt of a small area of some millions of inhabitants, but standing against a part of the European population. It is true that it is now hard to imagine a perspective of exit from the common European market and from the WTO. A common movement, however, towards this direction could appear in the future and new supranational organizations supporting a new economy and society could be created. It is actually the movement in what we are working on and to which this analytical effort is devoted.

References

- Gowdy, J. & Mesner, S., *The Evolution of Georgescu-Roegen's Bioeconomics*, "Review of Social Economy", Vol. LVI, No.2, 1998.
- Mill, J. S., *Principles of Political Economy*, Penguin, Harmondsworth, 1970.
- Morris, D., *Lo zoo umano*, Mondadori, Milano, 1970.
- Nicholson, J. S., *Principi di Economia Politica*, Utet, Torino, 1908.
- Rifkin, J., *The End of Work*, Penguin, New York, 2005.
- Schumpeter, J. A., *Teoria dello Sviluppo Economico*, Rizzoli, Milano, 2002.
- Tresch, R., *Public Finance*, Academic Press, Boston, 2007.