

The Theory of Redemption and

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The Theory of Redemption (Rebour, 2000) explains how economic mechanisms govern the development of societies and their place on the Earth's surface. This deterministic issue also applies to the process of urbanisation (Rebour, 2011).

The following text summarises the main contributions of this theory.

1. Economic laws in the historical development of societies

1.1. The Theory of Redemption, in line with the Theory of Urban Form

The Theory of Redemption is part of a broader theoretical framework: Structural Geography (Desmarais, Ritchot, 2000), based on the Theory of Urban Form. According to this theory, the material reality we experience is organised by underlying abstract structures, which can be represented as stacked in increasingly deeper levels. Underlying the organisation of our spatial practices are the objects of analysis of the Theory of Redemption: economic processes, themselves constrained by a deeper structure of land prices, the latter being modelled by an abstract structure of positions in space, sought after for the advantages ("externalities") that we believe we can derive from them. The limits of the field of Redemption Theory lie at this economic level. Urban Form Theory descends further, to political levels: property rules, political and social control of mobility, anthropological values inspiring the actions of social groups.

The Theory of Redemption takes up a law from the Theory of Urban Form: spatial disparities pre-exist their economic valorisation (this postulate is found

in the issue of externalities).

1.2. Redemption: the law of unbalanced growth

Throughout history, places in the ecumene have been endowed with symbolic values of varying degrees of importance (this is where we find the Theory of Urban Form). In the past, land was either forbidden, such as sacred sites, or monopolised by the powerful (feudal estates, for example). By extension, all land and capital kept out of the market is placed in the "space of value".

This "space of Value" was coveted for various reasons, more anthropological than economic (Rebour, 2000, chap. VIII). Then a stage in history was reached that lifted the "taboo". The "repurchase" of land, in this case through monetary payment, transferred it to the "space of Wealth" and transformed it into a factor of production.

In the early days of the monetised economy, the first capitalist entrepreneurs (initially individuals) began a process of buying back (initially through leasing) land that had previously been off the market. To do this, they first had to generate a surplus by increasing their productivity. This additional productivity was made possible by an act of money creation, in other words, a loan, used to pay the rent and to be repaid from the future proceeds of the purchased land, once it had become a factor of production, during an initial economic cycle. But during the purchase, after advance payment of the rent, before the new land had been used, the landowner, ahead of the production cycle that was taking shape, spent his rent on the goods market. The economic circuit therefore sees an influx of new "exogenous" demand, ahead of production. Prices rise, ahead of the income of other factors, which lag behind. As a result, the economy grows in imbalance. The increase in production in the following cycle (thanks to the newly cultivated land) tends to restore balance, but new purchases take place... and an inflationary growth *trend* may continue, in which entrepreneurs' profits and rents support each other. Yields are increasing (which made it possible, during the Trente Glorieuses, for example, but in fact from the end of the Ancien Régime onwards, to maintain a good level of wages). Let us add that this *trend* is prolonged by exports, which replace domestic income for the purchase of products, in an "imperialist" perspective, in the sense of Rosa Luxembourg.

1.3. Historical *trends* in land acquisition, "external substitution" and urbanisation

In Europe, the privatisation of land was therefore the key factor in the economic take-off of the Middle Ages and Modern Times: thus, the enclosure movement, followed by the sale of "national property", brought land onto the market that had previously been excluded from it. It should be noted, however, that in the latter case, most of these national assets returned to the market when they were restored to immigrant nobles returning during the Restoration. But the great historical movement of land being dumped on the market was accelerated. However, it was not until the Trente Glorieuses that full ownership buybacks took place.

Furthermore, since the end of the Middle Ages, a major centuries-long movement of "external substitution" shifted value from the countryside to the cities, as increased agricultural productivity made famines less frequent and the need for subsistence less pressing. The basic necessities after food (clothing, textiles, energy for heating, means of transport, etc.), initially produced in the countryside when it was valuable, within the framework of the *Verlagsystem*, were now produced, processed or packaged in the city, thus following the substitution of externalities that transferred value from the countryside to the cities. This spatial transfer was accompanied by a vast movement of concentration of craftsmanship, then industry. As a result, urbanisation developed. This process of "externalities substitution" is one of the laws of the Theory of Redemption. Since, at a given moment in history, value can be considered as a stock of a given and constant volume, a substitution of externalities that increases the value of one place necessarily decreases the value of another (principle of conservation of value).

It is important to note the theoretical difference between externalities (in the strong sense of the term) correlated with the presence of the abstract structure of Value in a place, and externalities (in the weak sense), which can be described as "simple", referring only to the amenities of a place that make it attractive for social and economic activity, thus justifying a "location rent"; the two cases often occurring together.

During the Industrial Revolution, urban externalities increased, and industry was a powerful factor in urbanisation. Large estates that were still outside the market could be subdivided, and on this occasion, some sections of the working and middle classes were able to participate in the buy-back. After 1945, the middle classes, with their increased salaries, were largely involved in the buy-back of land or housing that had not yet been put on the market.

Since the 1990s, emerging countries have owed their growth either to the purchase of previously collectively owned land by social groups that have found the means to do so, or, in the absence of a purchase process, to exports to developed countries.

Another fundamental law: historical *trends* in capitalism are punctuated, across different continents, by the dynamics of Redemption. Countries where Redemption is waning (due to a lack of Value to redeem, or a lack of means to do so) are seeing the economic multiplier loops that fuelled their economies die out. These countries enter into a long depression (as has been the case in Europe since the 1970s) and have still not found the momentum for a new Redemption that would put them back on an upward *trend*.

This prolonged depression, which we call "the Crisis", begins at the "Nodal Point". In theory, this occurs when all land is on the market. But this last point implies a balance that the Redemption itself prohibits. In the reality of unbalanced economies, the Nodal Point, in other words, the blockage of the repurchase system, occurs as soon as more than half of the stock of value has been repurchased, and Wealth (production in the monetised economy, equal to factor prices) becomes greater than it. As the prices of goods are no longer stimulated by the influx of value into the market, they tend to stagnate, and with them the profits linked to inflation (and the lag between wages and prices). To restore the rise in prices and profits for capital holders, a destruction of Wealth and a recreation

correlative value are essential; in other words, a decline in production volumes is necessary to support prices, according to the law of supply and demand. Production, or at least productivity, must therefore decline in order to stimulate inflation again. Yields then become diminishing, and economic growth slows down. Entrepreneurs restore their profits on short, segmented production runs, always to maintain a certain price level, while purchasing power tends to decline. The economy becomes a zero-sum, if not negative-sum, game, accompanied by capital destruction or devaluation for the same reasons.

However, the substitution of externalities in a shrinking economy favours metropolitan areas, which retain some core values and a certain potential for externalities, and respond to global demand that stimulates them. However, metropolitan land premiums are not so much due to the persistence of buybacks as to the geographical and sectoral (economic) polarisation of demand.

At the nodal point, only supply and demand and speculation remain to determine prices and the level of land rent, which is no longer associated with a mechanism for generating new wealth.

2. The spatial effects of land buy-backs and urbanisation

2.1. The reversible law of concentration/dispersion

In neoclassical economics, returns are necessarily decreasing (they may be constant in the short term). The geographical consequences of this are the equal distribution of factors in space, i.e. a certain degree of dispersion.

- which does not occur in reality (Starrett, 1978). In neoclassical economic equilibrium, theoretically, factor mobility corrects productivity imbalances between areas and makes them more homogeneous (Aydalot, 1980). In contrast to neoclassical economic theory, the situation of increasing returns, used to explain geographical polarisation, is "heterodox"; but it is recognised, under certain conditions (see above), by the Theory of Repurchase, and also by New Economic Geography (NEG) (Combes, Mayer, Thisse, 2006; Bourdeau-Lepage, Huriot, 2009); and let us not forget that it is validated by historical reality, which is admitted by almost all the "great" neoclassical economists, who consider diminishing returns to be nothing more than a mathematical convenience, necessary for calculating derivatives, without which equilibrium cannot be demonstrated.

The Theory of Repurchase explains spatial dynamics through economically based laws. Increasing returns encourage factors of production to cluster together and, conversely, this clustering provides them with positive externalities that further increase returns and facilitate transactions. Surplus generation and increasing returns are the keys to urbanisation, which is the result of centripetal geographical flows. But in the Theory of Repurchase, in particular, simple externalities are not the fundamental and sufficient explanation for urbanisation: what matters are the deterministic processes of an economy in disequilibrium, in a growth *trend*. Externalities merely provide the spatial anchor points, mobile in time and space, on which

economic imbalances occur. In a positive (imbalanced) *trend*, it is not so much demand that drives up land rents as the existence of externalities in the strong sense, i.e. cores of value: we can then say that land is in demand because it is expensive; land rent is therefore not the result of supply and demand (or, at best, is only marginally so).

At the nodal point, in a situation of diminishing returns, dynamics become centrifugal. Production factors become dispersed, as spatial accumulation is no longer necessary for profit generation. It should be added that new segmented production facilities are located as close as possible to their local markets and that land rents in peripheral areas are lower, which is another factor hindering growth.

Geographical space reflects the economic imbalances that have shaped it; in turn, these asymmetrical structures and material discontinuities in space hinder both a possible return to equilibrium and the emergence of new dynamics.

2.2. Urban hierarchies; the law of the regulatory role of rent

Urbanisation spreads across territories a network of cities arranged according to a hierarchy of sizes. The "rank-size rule" is supposed to explain the statistical distribution of cities in their ranking by size, at the risk of being nothing more than a "game with numbers" (Christaller, 1933), basing reality on random processes, which does not explain much; a rule that H. Le Bras (1994), even more harshly, likened to a "mathematical reification (...) with allegorical and non-scientific content". The Theory of Redemption, for its part, introduces deterministic processes into these analyses in the economic sphere through the role of land rent (Rebour, 2011), and draws on the work of other researchers: Kingsley Davis (1976) and François Moriconi-Ebrard (1998).

The rank-size distribution in the countries studied (Rebour, 2011) is represented by a curve showing three sub-sections: the base (the smallest agglomerations), which is relatively atrophied; the top (the metropolises), which is relatively hypertrophied; and the middle section (medium-sized to large cities), which is relatively balanced.

F. Moriconi-Ebrard has mathematically formulated metropolitan hypertrophy, which he calls the "law of metropolisation".

Kingsley Davis's work shows that, in the middle of the rank-size curve, there is a geometric progression governed by the factor 2 of a "harmonic function": the population of the city ranked 1st is equal to the sum of the next two (ranked 2nd and 3rd), which is equal to that of the next four (ranked 4th to 7th), and so on. For example, if city 1 has a million inhabitants, the next two have 500,000 each, the next four have 250,000, the next eight have 125,000, and so on.

The Theory of Redemption offers a general explanation. Rent creates discontinuities in space. It is highest in the most productive areas. Part of the wealth created in the market, which can be estimated at approximately half of this wealth (including all rents: land, housing, factories, raw materials, etc.), pays the rent. In a growth *trend*, capital and rent balance each other out and neutralise each other. Places where the productivity potential is the

stronger, with increasing yields, pay the highest rent; this therefore depends on the size of the towns. Land value is correlated with the size of urban areas. Rent determines a harmonically balanced hierarchical structure (over most of the rank-size curve), blocking the growth of cities in proportion to their size, while factors for which rent is too high fall back to the lower levels of the hierarchy. In this sense, it can be said that the land market rebalances space by exerting constraints on production factors, whose aggregation is regulated, which determines the shape of the urban hierarchy. However, this land constraint can be neutralised by spatial capital flows.

In metropolitan areas, centripetal capital flows increase the intensity (overproductivity) of capital and successfully combat the constraints of rent. This surplus capital appears in the urban landscape in the form of taller buildings (fixed capital). Economic inequalities linked to increasing returns cause wealth to accumulate in clusters within geographical areas: these "clusters" of capital are at the origin of metropolitan areas.

But this additional capital in metropolitan areas must be drawn from somewhere: from rural areas and small towns, whose very appearance reveals this lack of capital, and therefore of buildings. As a negative corollary to metropolitan over-accumulation, the atrophy of smaller towns, villages and rural areas feeds the hypertrophy of metropolitan areas in terms of both population and capital. The base of the rank-size curves is a victim of the laws of substitution of externalities (§1.3), which reinforce metropolitan areas. The very low level of agricultural prices is another indicator of the transfer of value from rural areas to metropolitan areas. To be exhaustive, we should add that the mobility of production factors corresponding to the substitution of externalities can also take place from the world's least developed cities to the most dynamic metropolises, in the context of a globalised economy.

2.3. The "trimorphy of geographical space"

In any case, the "trimorphy of geographical space" (Rebour, 2011) recognises three types of space:

- Metropolitan areas, where capital intensity successfully overcomes the obstacles that land rents usually impose on urbanisation. In concrete terms, this "metropolisation" is revealed by the height of buildings, which is both a sign of this wealth in capital and of the reduction in land constraints, through the multiplication of living space.
- Urban areas: where rent and capital are in balance. Rent blocks the growth of cities in proportion to their size, hence the harmonic rank-size function.
- Rural areas: where low income blocks even lower capital; areas impoverished by capital drain to metropolitan areas, the absence of which explains the impossibility of building, at the very origin of rural landscapes. The more agriculture modernises, the more value can be transferred to metropolitan areas; the size and wealth of the latter are therefore necessarily determined by the level of agricultural productivity, since metropolitan areas cannot draw infinitely on the countryside: farmers must be left with enough to live on.

This last point sheds light on F. Moriconi-Ebrard's "law" of metropolisation, whereby the metropolitan population is a function of the urban population: it has long been known that the rate of urbanisation is a function of agricultural productivity, but since we have just demonstrated that the same is true of the rate of metropolisation, it follows that urbanisation and metropolisation are *ultimately* determined by the level of agricultural productivity, hence their interdependence as expressed by Moriconi-Ebrard's "law". However, this pattern has been changing since the economy reached its nodal point (which coincides with the physical congestion of metropolitan areas). Not only is urban growth drying up as a result of the centrifugal dynamics of activities and inhabitants (peri-urbanisation), but metropolitan over-productivity itself is being affected by the crisis (see §1.3, below) and is becoming more selective. Correlatively, the peripheries, at all scales, are being revitalised, which is akin to a veritable spatial reversal of an ancient centripetal dynamic that has lasted for almost a millennium. The public authorities, which have little understanding of these developments, are now financing costly and futile development plans, attempting to promote the transfer of externalities to "multipolar" areas. While space does indeed reflect this new economic dynamic, attempting to rebalance it in a context of increasingly restrictive economic policies More unequal societies are like trying to fill the Danaids' barrel.

3. Geographical forms and their construction - The laws of spatial morphology

The Theory of Redemption explains the links between the economy on the one hand, and urban, metropolitan, peri-urban and rural forms and landscapes on the other. It draws on the two main types of forms recognised in urban geography.

- "Centred" forms: agglomerated, concentric.
- "Eccentric" forms: "sectoral", linear, axial.

The Theory of Redemption associates these forms with the spatial dynamics of capital and labour that construct them: either centripetal or centrifugal. These mobilities can also be either controlled or endured. Finally, these spatial dynamics play out in positive, upward economic cycles or, conversely, in periods of depression and crisis.

Determinisms in action, in time and space, lead to dominant or secondary spatial processes that complement the former.

3.1. Centred forms

3.1.1. In a society with high purchasing power: circular forms

In this context, the economic situation is declining or stagnating, with the exception of the period known as the Trente Glorieuses (the thirty glorious years), when the sharp rise in production and productivity – linked to the buy-to-let market, which introduced colossal amounts of value into the market – led to an increase in real wages during a period of economic growth. It was indeed the centuries-long countercyclical movement of these wages until the end of the 19th century, and more specifically their increase, that determined the existence of these centred forms. Cities are home to populations with high purchasing power, polarising the economy. Capital follows this trend, attracted by these urban markets. The population

The affluent control their mobility, which can be centripetal (gathering in cities with externalities) or centrifugal (escaping), according to Gilles Ritchot's categories of spatial dynamics (1985). This overall situation is described as "parasitic" because consumption takes precedence over investment (the reverse is not without its drawbacks either, as will be explained later). The climax of the situation is the "parasitic crisis", already encountered in history (medieval decline, 1300-1450; the reign of Louis XIV, etc.). However, at the lowest point of *the depressionary trend*, recovery manages to kick in again, driven by the consumption potential of real wages, which are paradoxically very high, and expansion then follows the crisis.

The economic situation of the "Trente Glorieuses" (the thirty glorious years) is, as we have seen, a special case in history, with the combination of high growth rates and high purchasing power; rural exodus then fuelled urban growth, according to a centripetal dynamic, even if the suburbs grew through an indirect centrifugal movement (density and rents too high in city centres to accommodate these centripetal migratory flows).

In these societies with high purchasing power, spatial attractors take on a specific form, that of the markets where this purchasing power is exercised, generating a circular shape for agglomerations and a concentric organisation of space. Similarly, in rural areas, "cluster villages" and circular finages develop, which break down into squat plots resulting from the natural division of the circle.

This circular or concentric arrangement is similar to the models developed by Alonso and Burgess, with rent decreasing from the centre towards the periphery. Von Thünen's concentric model is also relevant to the location of productive activities and the organisation of urban and rural landscapes.

3.1.2. The urban network of centred forms

The analysis of urban networks belonging to the circular model introduces (at the urban network level) discontinuities – in other words, distances between cities – which have a remarkable property: their equidistance, which minimises and equalises transport costs between these cities. This spatial structure seems to echo a famous model in geography: that of "central places", conceived by Walter Christaller in 1933, which August Lösch attempted to formalise in 1940. However, there is one key difference between the "parasitic" networks of the Theory of Redemption (imbalance model) and those of Lösch and Christaller (equilibrium model). In the Theory of Redemption, it is the equidistance between cities that characterises parasitic urban networks, whereas the urban hierarchies that fit into them are based on a different causal order: they stem from the spatial structure of land rents and the economic and spatial dynamics that give rise to them (Rebour 2011; above: §2.2). In Lösch and Christaller's work, on the contrary, hierarchical structures are inherent to the model; they are a fundamental feature linked to the concepts of the "range" of a good (the distance over which that good can be sold before transport costs cancel out the profit) and the "threshold" (the quantity of goods that needs to be produced in order to generate sufficient income). Thus, Christaller's networks of "central places" are organised on the one hand by catchment areas, which create regular spacing between hierarchical urban centres, and on the other hand by urban externalities (presence of the market; economies of scale favouring producer groupings). Each city is

placed at the centre of the area of influence corresponding to its hierarchical level, and a partial spatial balance determines general equidistances between cities. Trade is maximised in a central market or in equidistant secondary markets, thus optimising sales to the local population.

Furthermore, spatial equilibrium, a fundamental concept for Lösch and his many followers, is only a special case (wages equal to marginal labour productivity, which is unrealistic) of the Repurchase Theory, in which any area where wages are higher than this productivity (see §3.1.1) also generates networks of equidistant cities. In short, the "parasitic" urban networks of the Theory of Redemption do not stem from the same causes, nor, above all, from the same paradigm as those of Christaller. The Theory of Redemption also reveals the contradictions in Lösch's theory, which (necessarily) introduces increasing returns to explain urbanisation, even though they are incompatible with the spatial equilibrium of neoclassical theory (Aydalot, 1980), to which Lösch nevertheless attempts to link Christaller's central places.

Curiously, the Theory of Redemption can "fall back" on forms identified by Christaller, but explains them in a completely different way; while the dynamics of economies of scale ("increasing returns") come into full force, as we shall soon see, in a long-term "perverse" situation that differs from the "parasitic" dynamics described in this paragraph. In this way, the urban network model of the Theory of Redemption avoids the criticism frequently levelled at that of Lösch and Christaller, namely its static nature, since (like any spatial structure) these networks are organised differently, according to the trends of the long-term economic situation. Thus, while economic imbalances produce centred forms in a "parasitic" regime, linked to productivity/wage differentials favourable to workers (Rebour, 2000, chapter XI), conversely, during a *period* of inflationary growth (see §1.2), in a "perverse" regime, the opposite imbalances, which favour capital holders, greatly increase inequalities and thus alter the shape of agglomerations and their networks, which become decentralised.

3.2. Decentralised urban forms

3.2.1. A powerful economic determinism

Let us consider a situation where yields and production are growing. Economic and social imbalances are also growing: demand (rentiers, investors) is ahead of production, and profits are ahead of wages. This situation, where inflation inflates profits and erodes wages, is known as "perverse". This type of growth encourages agglomeration (§2.1). Spatial dynamics are centripetal, and urbanisation is in full swing. Cities are expanding, with a flood of immigrants often rejected to the periphery, but with a distortion of the old circular organisation.

Historically, periods such as the "beautiful" Middle Ages, the Renaissance and, above all, the Industrial Revolution produced strong economic growth, but also profound social inequalities. These dynamics are reflected in the organisation of cities: industrial neighbourhoods and affluent neighbourhoods divide the urban fabric.

into cardinal sectors (since 1939, Hoyt's model has reflected this organisation). Given the low purchasing power of employees, it becomes necessary for productive urban areas to export the portion of production, sometimes the majority, that is not consumed locally. This is why, in such a situation, spatial attractors now become axial, in order to maximise export potential and minimise transport costs. It is therefore transport links that guide the growth of these new "peripheral" neighbourhoods and determine intra-urban sectoral structures. Towns and villages spread out along transport links to facilitate dominant exports. Urban networks of central locations are also logically deconstructed.

3.2.2. Networks of "peripheral centres"

Goods and capital circulate on a larger scale within urban networks. The towns and cities located along their routes are strengthened and revitalised, while outlying neighbourhoods emerge. The pre-existing Christallerian network is thus distorted by this circulation of "perverse flows". Examples include the Paris-Rouen-Le Havre and Paris-Lyon-Marseille axes, and the industrial basins of the north and east. Outside these axes of national or even regional importance, the former parasitic centres, the central locations of the previous period, are in decline. Only central locations also situated on the new growth axes see their growth continue. It is probably in these cities, located both in central locations and as outlying centres, that we should look for the origins of metropolises. They grow continuously, regardless of the economic situation: parasitic growth in times of crisis and perverse growth in times of economic expansion. This is not the case for certain local administrative centres, which are, on the contrary, the main victims of these externalities. For example, Draguignan, a small administrative centre chosen by the Revolution for its central position in the Var department, was eventually stripped of its status as a prefecture in favour of Toulon, a port located on the perverse Mediterranean coastal axis. The same is true of many small sub-prefectures that have disappeared, swept away by the perverse flows of economic growth.

of the 19th and early 20th centuries.

Powerful substitutions of externalities, as the economy changes scale, are thus reorganising geographical space. It should be noted, however, that urban networks are highly inertial and can sometimes remain unchanged even when economic conditions have changed, particularly in larger cities, which represent significant markets. But as we have seen, most metropolises are both central locations – at the heart of nested hexagons – and decentralised hubs – on major axes – such as Paris, London and Moscow, to take examples from the European continent.

The arrival at the nodal point profoundly changes the situation.

3.3. Urban forms at the nodal point and centrifugal de-urbanisation

The economy has lost its capacity for growth. The Long Crisis is characterised by diminishing returns and depression, with a decline in real wages. This is why

we see certain "perverse" mechanisms explained above. Masses of capital seeking employment struggle to find investment opportunities and stimulate demand, which is already deficient. This is why large-scale urban planning and development projects, with the support of public authorities, are often their lifeline.

3.3.1. Urban forms in sectors, but centrifugal

Growing social inequalities confirm the contrasts between key urban sectors.

Companies are venturing into distant markets, hence the importance of locations along outward-looking transport routes. Innovative entrepreneurs are adopting a certain degree of dispersion, staying close to local markets that are increasingly segmented by growing inequalities, which they have been able to identify.

Large numbers of low-income households and unprofitable businesses are moving to urban peripheries with lower property costs, particularly in blind spots far from commercial hubs.

The spatial dynamics are therefore centrifugal. Urban sprawl and peri-urbanisation are spreading. The city is breaking down: the process can be called "de-urbanisation" (Ferrier, Guiessse, Rebour, 2010), because historically, urbanisation has always been based on centripetal flows.

3.3.2. The "Centre/Periphery" forms of the Crisis

The power of centrifugal flows is such that enlarged "centrifugal-circular" forms are emerging. These are the sprawling halos of near and distant peri-urbanisation, which end in impoverished countryside. The urban agglomerations of the crisis can therefore also give rise to circular patterns, depending on differences in wealth within the space, the understanding of which requires extending the analysis to rural areas.

These halos are all the more apparent as the linear forms supported by export axes only develop from areas that are still dynamic, which currently tend to feed only metropolitan networks. However, "perverse structures" appear to be superimposed - insofar as trade, particularly imports, is far from negligible - by particularly dense and/or highly valued axes, and blind spots where impoverished peri-urban populations are relegated, trapped by the cost of their compulsory journeys to distant jobs and supermarkets that can only be reached by car. These living conditions, made precarious by the spatial organisation of the nodal point, are particularly reflected in the map of "radical" and protest votes.

3.3.3. Multi-scale centrifugal dynamics, spatial inversions and metropolisation

Metropolisation is part of a large economic and geographical zero-sum, if not negative-sum, game. It is not a process of urbanisation, but a profound upheaval of geographical space during the crisis, which pits territories against each other on several scales. The metropolitan hypertrophy analysed above is the

geographical form of a "nodal point" economy with diminishing returns, which can no longer sustain the entire social body and territories. The neglected peripheries are impoverished urban neighbourhoods, rural areas, small towns and also medium-sized towns. Globalisation and metropolisation are creating an urban archipelago of segregation, with no other purpose than the survival of fictitious (speculative) capital.

The centrifugal dynamics of the crisis, and the accompanying substitutions of externalities, can even lead to a reversal of spatial hierarchies, particularly at the regional level. The crisis leads to the destruction of wealth in old industrial regions (former "decentralised centres") and transfers part of the corresponding value to the former peripheries. Thus, "the South" takes off, develops and regains a degree of autonomy that had previously been confiscated by "the North". In industrialised countries, the decline spares some of the metropolises – but not all – while in the "South", the resurgence of development affects the entire area, even if rural exodus – which, unlike in developed countries, has not disappeared – favours cities.

Overall, it is indeed a new centrifugal dynamic, at all levels, that has been the norm for more than forty years in the major developed countries, favouring the peripheries and downgrading the centres, contrary to a thousand years of history: peri-urbanisation at the regional level, the reversal of old divisions at the national level, and globalisation at the international level, where the "new industrial countries" are on the verge of, if not supplanting, at least threatening the Triad in terms of economic dynamism and capital flows.

The Theory of Redemption places the organisation of society and geographical space back into their historical context, within the development of productive forces, whose organisation and financing have reached their limits – at least in today's industrialised countries.

It remains to be seen, amid the proliferation of initiatives that are nevertheless flourishing on the peripheries, whether there are any avenues for a possible new beginning... for a new form of Redemption?

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