

## LANDSCAPE AND SOCIETY

Since the appearance of man on the surface of the earth, one can say that the essence of his history lies in the modifications he has gradually introduced into the landscape. Destruction, change and construction: these three elements showed themselves very early on in man's history and, with its development, have taken on an ever clearer and more marked character. If the action of a single man on the environment is already important, then that of a larger number can have modifying and absolutely determinative consequences.

But to reduce the formation of landscape to the simple direct action of man on nature can be too simple a way of considering the problem. For in fact this action is neither simple nor unilinear. Even on the most (relatively) elementary level of landscape it is possible to identify a whole host of agents having reciprocal actions: man's defiance towards nature does not alone "build" landscapes; nature's answer to this defiance also contributes to their construction. An answer in the form of constructions determined by the *relief*, the *nature* of the soil and the climate. In another respect, even man's defiance is never simple: it is in turn conditioned by psychological factors, religious elements, tech-

Translated by Simon Pleasance.

niques of culture, judicial customs, the relation between groups and individuals, the conditions of the market, the network of roads, and lastly the influence of urban structures which vary quite distinctly. All this is well known and Lucio Gambi has recently made a fascinating synthesis of it.<sup>1</sup>

Need we really insist once more on the relation between landscape and rural population<sup>2</sup> or stress the relation between landscape and the technical tools used to help agricultural work?<sup>3</sup> The role of the town as an agent of modification of agrarian landscapes has already been sufficiently brought to light.<sup>4</sup>

There certainly still remains enough matter to study the mechanism of landscape formation; the shaded areas are still numerous and historians and geographers have still a lot of work to do together to finish their task. A century after the first attempt by G. P. Marsh in 1864, one can however say that the study of human landscapes has considerably improved: the names of Lucien Febvre,<sup>6</sup> Marc Bloch,<sup>7</sup> Roger Dion,<sup>8</sup> H. Björkvik,<sup>9</sup> A. Meynier,<sup>10</sup> M. Sorre,<sup>11</sup> H. Lautensach,<sup>12</sup> G. Schwarz,<sup>13</sup> E. Sereni<sup>14</sup> and many others are the proof.

<sup>1</sup> L. Gambi, "Critica ai concetti geografici di paesaggio umano," in *Questioni di geografia*, Napoli, 1964, pp. 133-145.

<sup>2</sup> R. Romano - J. Le Goff, "Paysages et peuplement rural en Europe après le XI<sup>e</sup> siècle," in *Etudes Rurales*, 1965, No. 17.

<sup>3</sup> Cf. C. Vivanti, *La campagna del Mantovano nell'età delle riforme*, Milano, 1959, pp. 132-133.

<sup>4</sup> For example cf. C. Darby, "The changing English Landscape," in *The Geographical Journal*, 1951, 4.

<sup>5</sup> G.P. Marsh, *The Earth as Modified by Human Action*, New York, 1864.

<sup>6</sup> L. Febvre, *Pour une histoire à part entière*, Paris, 1962, pp. 7-179.

<sup>7</sup> M. Bloch, "Les paysages agraires: essai de mise au point," in *Annales d'Histoire Economique et Sociale*, VIII (1936).

<sup>8</sup> R. Dion, *Essai sur la formation du paysage rural français*, Tours, 1934.

<sup>9</sup> H. Björkvik, "The Farm Territories: Habitation and Field Systems, Boundaries and Common Ownership," in *The Scandinavian Economic History Review*, IV (1956).

<sup>10</sup> A. Meynier, *Les paysages agraires*, Paris, 1958.

<sup>11</sup> M. Sorre, *L'homme et la terre*, Paris, 1961.

<sup>12</sup> H. Lautensach, "Der geographische Formenwandel: Studien zur Landschaftssystematik," in *Colloquium Geographicum*, vol. III, Bonn, 1952.

<sup>13</sup> G. Schwarz, *Allgemeine Siedlungsgeographie*, Berlin, 1959.

<sup>14</sup> E. Sereni, *Storia del paesaggio agrario italiano*, Bari, 1961.

While in no way intending to contest the interest in continuing this line of fundamental research, it seems possible to try (no more than try) to follow the path which, without being *different*, might show the relations that are established between landscape and society. Rather than show the influences of social positions on landscapes, I should like to follow the “reverse shocks.” Landscape is of course a human and thus a social fact, but, once created by man, it does not stay fixed, paralysed in turn; it acts on the social structures that contributed to its creation. This is a dialectic that has been studied essentially in only one direction. For a moment it will perhaps be worthwhile to consider it in the other.

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The first section of my demonstration: the forests.

Man, as an individual or a group, was quick to attack the forests. His act of destruction has given rise to phenomena of deforestation with impressive consequences: soil erosion, increase of evaporation, (to which we shall have to return later), radical landscape transformation, all have been determined by these deforestations. It may be interesting to follow two examples closely, to grasp the immense social, economical and political consequences of the phenomenon.

As any historian of economics knows, I know that the forest is always present in the economical life of Europe before the industrial revolution. Naval constructions, building, glass manufacture, mineral exploitation, heating, packing... this is an initial list of wood-consumers. For a historian concerned with the military and merchant navies of Venice in the XVIth and XVIIth centuries, nothing is more evident than the importance of the role of wood in this principal sector of the economic life of the “Serenissima.” The *grosso modo* needs for the construction of a galley are well known:

- 1) Oak: 300 curved beams for the sides, prow and stern-post, 8½ to 10 feet long and 4 to 5 feet in circumference (Venetian feet);
- 2) 150 straight beams for the keel, floorplate, upper girdle supporting beams, deck beams etc., 24 to 29 feet long and 4 feet in circumference;

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3) 280 planks for the outside bulwarks,  $\frac{1}{4}$  foot thick (?), sawn into 24 foot trunks 4 to 5 feet in circumference;

4) Larch: 35 beams for the gangways (*corsia*), the apostis and interior girdle supporting beams, 40 feet long and a foot and a hand in circumference;

5) Larch or pine: 18 beams for the deck;

6) Pine: 50 smaller pieces for deck-equipment, 300 planks for the interior or the deck.<sup>15</sup>

When one thinks that the Venetian fleet, towards the middle of the XVIth century, numbers some 150 units and that the average life of each unit is roughly ten years (but with important and frequent refittings), it is easy to understand the enormous effort necessary to provide the Arsenal of the "Serenissima" with wood. In the Alpi forest, between ten and twenty thousand beeches were cut down at the same time to make the oars for the galleys (each galley having some 200 oars, that is 200 beeches).

This evidence is banal. The extreme care always shown by the Republic for the forests derives of course from this: a care which finds concrete expression in the great legislation that Venice set up in favor of its forest patrimony.

But this Venetian effort to secure *continuous, independent and integrated* wood-supplies shows numerous implications that go way beyond the unilinear arsenal-wood relation.

The arsenal needs wood: this is a primary truth. It needs wood continuously. It must be sure of the independence of these supplies which must never run out, especially in times of tension or war. And it needs integrated supplies because it is obvious that maritime constructions require not only the best essences and the most beautiful specimens of trees, but also different "types" in almost fixed proportions, which cannot be replaced. If one of these types is missing, the whole cycle of construction is interrupted... Analyses of this sort in fact often figure in essays devoted to the history of the naval constructions in Venice. This is the normal liaison between the history of forests and economical history.

But here I should perhaps insist once more on one point, always

<sup>15</sup> F.C. Lane, *Navires et constructeurs à Venise pendant la Renaissance*, Paris, 1965, p. 204, n. 2. Cf. also R.G. Albion, *Forests and Sea Power. The Timber Problem of the Royal Navy, 1652-1862*, Cambridge (Mass.), 1926.

stressing the fact that I am criticising no one but myself and my essays on the problems of naval construction at Venice...

The “normal” relation between the history of forests and economical history needs to be enlarged. The establishment of a direct relation between the Venetian forests and the naval constructions in that city cannot in fact lead us very far. It must be completed by the considerations relative to the orders for wood made by building, glass manufacture and heating... For building, how is it possible to forget that, according to the incomplete lists published by O. Mothes,<sup>16</sup> a census of 109 constructions can be made in the XIVth century, 241 in the XVth, 423 in the XVIth, 137 in the XVIIth...? I say incomplete list because one document—most probably complete—indicates 175 new constructions for the period 1539-1559 alone...<sup>17</sup>

Firewood: without recourse to statistic elements, suffice it to remember that the historian Sabellico (XVth century) talks of the existence of a *ripa* (today called *Riva dell'Olio*) frequented by “naves onerariae venalibus lignis onustae.” In another respect it is the importance of the firewood trade that leads, in 1533, to the creation of an *ad hoc* magistracy (the *Magistrato alle legne*). Wood for glass manufacture: there are numerous allusions, in several documents, to the impressive quantities of wood burnt in the furnaces of Murano.

It would clearly be easy to say that the points I am trying to make here about firewood and the wood used for building with regard to naval constructions are exaggerated, because, in fact, the wood destined for these two uses is completely different (at least for firewood) from that used by the arsenal. This is true. But it must quickly be stressed that this is true only at the level of consumption and use, and not on the production level. Here, at least in the Venetian case, the problem as a whole is general. In fact the exploitation of forests useful for the arsenal means, for the people living in the places on which the “Patroni et Provveditori all'arsenale” have cast their eye, a whole series of forced labour and slavery from which they want to be free. And one

<sup>16</sup> O. Mothes, *Geschichte der Baukunst und Bildhauerei Venedigs*, Leipzig, 1859, pp. 377-406.

<sup>17</sup> State Archives - Venice, *Giudici del Piovego, Licenze di Costruzione*, b. 21.

of the best ways to be rid of these things is to deforest... even if it is to re-forest afterwards with essences that are not coveted by the sailors... To this first element, which unifies—with production—the different types of wood, one should add others. But I do not want to linger too long on this point. On the contrary I must try to show how the relation between the history of forests and economical history can be developed, enlarged, and made articulate, and thus lead to the social aspect, and even to politics.

The social aspect: the exploitation of a forested area, in the Venetian case which I have studied—but not only in the Venetian case—always introduced great modifications into group social relations. The arrival of officers of the Arsenal in a forested area always represents a big rupture: the end of a communal autonomy, if the forest belongs to the commune; the reduction of a knight's power in the case of a private property. In any event, considerable complications for the life of the peasants of that region: it is they, in any case, who will bear the weight of the transport as far as navigable waters, in the form of labour, carts and animals... But it is not only this aspect that must be considered. What in fact is important is that the organising presence of these officers represents the substitution of an old concept of profitability (which very often means, essentially, wastage) for a more complex concept of future profitability.

It is clearly apparent here how “politics,” or “political organization” and the welcome or refusal of political organization can have a determinative influence on the landscape of an area and how, by “reverse shocks,” other landscape modifications—in the same area or elsewhere, even far away (as we shall see later)—can come about.

But this is not all. I have indicated above that the Venice Arsenal needed to secure its wood-supplies on the spot—that is to say within the Venetian State—, even if it could get supplies from the Venetian possessions of Istria and Dalmatia; it is normal that this military organism should have concerned itself about having sure, on-the-spot supplies of a strategic material as important as wood, in such way that there would be no risk in times of war, the moment when there would be the greatest need of wood. Naturally the Arsenal of the “Serenissima” did not fail to get supplies from afar, from as far off as possible, but—I repeat—

the preoccupation which I have just indicated never stopped appearing. Such a preoccupation was, in return, foreign to merchant shipowners. For these latter, the question presented itself in quite different terms, which can be summed up by the elementary principle that private shipowners wanted to buy their wood wherever it was cheapest. To purchase wood far off and transport it to Venice increased its price considerably and did away with the interest in the purchase. Wood thus had to be bought far away and worked on the spot. This was a simple principle, but one bound to conflict with the general policy of Venice, who was keen to defend the activities of her craftsmen. The opposition was irreducible and in reality went even beyond this particular question—however important it may have been—of naval construction and ended up by affecting the general principle of Venetian economic politics, which centralised all possible activities in the lagoon. Thus an important question. However, faced with the pressure exercised by private interests and the need to keep the maximum of the local resources of wood for the navy, Venice had, in the first place, to accept that ships arrive unfinished: at Venice the third deck, sails and all the rigging were added. Before long it was accepted that ships were completely built outside the lagoon... but in Venetian possessions. From this point the process could only be widened and the “naturalization,” pure and simple, of ships built entirely abroad is reached: in the Black Sea, at Constantinople and Rotterdam.

I hope I have thus shown, in a sufficiently clear manner, the complete process: a certain social structure, essentially mercantile and maritime, considerably modifies the landscape of an inland area. It modifies it in two ways: by the complete destruction of certain forests and the creation of forests with different essences. This is the first aspect of the problem. These landscape modifications—especially the first, more radical ones—determine social changes, unforeseen and unforeseeable constructions of great importance which manage to influence the basic structure—mercantile and maritime—which had determined the first landscape modification, in a serious manner.

After the Venetian case, I should like to present another quite different case—not only from the geographical viewpoint: the mineral exploitation in Spanish America at the time of its col-

onization.<sup>18</sup> Once again, one can start from a very simple statement: mines consume a lot of wood; one cannot make inroads underground without strengthening the tunnels, and strengthening tunnels in the XVIth, XVIIth and XVIIIth centuries means wood. Once the ore is extracted, it must be refined to extract the metal: once more wood is needed. One has only to read one of the numerous reports on Potosi to see the thousand flames of the furnaces (the *guairas*) blazing in the night. It is certain that the process of amalgam by mercury, introduced into America as early as the middle of the XVIth century, permitted a considerable reduction in wood-consumption. But amalgam did not completely eliminate it because, for the richest ore, the process of fusion was still used for centuries.

Thus, in this case too, the direct link between wood and the economic activity under consideration is extremely clear.

But here again it seems possible to go further. The interest of the course to be followed, in this case, seems to me to reside above all in the fact that we are faced with a general economic context completely different from the European context. This is a colonial context, with its own laws, servitudes and "freedom." To grasp the whole problem of wood in relation to the impressive exploitation of the mines in huge Spanish America is certainly an impossible undertaking in the limited frame of an article. I shall therefore have to choose one example, and the most significant seems to me to be the comparison between Huancavelica and Potosi.

First, Huancavelica. From 1564 onwards its mercury mines were an extraordinarily important element in the development of the extraction of silver in the whole Andean region. At the time of the discovery, the Huancavelica region was covered by a fairly thick blanket of forest. But hardly five years after the beginning of its exploitation the region is laid bare, the landscape has changed. The situation threatens to become tragic. It is saved by the use of a shrub—*icho* ("*stipa ichu*") a sort of esparto—which, rich in sulphur and nitrate, is sufficient to bring mercury ore to its point of sublimation. The problem is thus solved by a sub-

<sup>18</sup> I hope to publish an essay on this subject soon. In the meantime cf. M. Bargallo, *La minería y la metalurgia en la América Española durante la época colonial*, México, 1965.



stitute. But it does not all end here. At least two facts must be pointed out:

1) Firstly that wood was still lacking for supporting the tunnels of the Huancavelica mines. This lack explains—among other reasons—the numerous landslides that occurred there, which often caused considerable difficulties in production.

2) The use of the *icho* brought with it not only technical and economic, but also social consequences. It is the latter that I shall have to discuss. But I must first briefly recall the Potosi case. The extraordinary story of the “*cerro*” of Potosi is well known. We know, for example, that the activity of the mine which developed there consumed wood. We also know that from 1572 onwards the process of amalgam, made possible not only by a technological discovery but also by the concrete fact of the production of mercury at Huancavelica, permitted a great reduction in the consumption of fuel. But—after, as before, 1572—the problem of fuel at Potosi was always a dramatic one. Situated about 4,000 meters up, it is a “*tierra muy frígida y desabrida y tan esteril, que si no es a doce leguas, lo mas cerca, no se produce fruto de sementeras ni de árboles*” (an extremely cold and merciless place, so sterile that the first cereals and trees grow at least twelve leagues away), says a text dated 1573. The fact remains that even after the introduction of the process of amalgam, the wood needed to strengthen the tunnels and the wood which, nevertheless, is still used for the fusion of the ore, had to be brought from far away... No substitute, no *icho* can help out here. At the start, then, Huancavelica and Potosi present two similar situations. But the final situation is different.

We know that the use of the *mita* (the labour that the Indians must provide in the two mining areas) was far heavier at Potosi than at Huancavelica. Naturally the “dimensions” (in both senses) of the two centers are different: Potosi has a far greater “weight” than Huancavelica. But one can, as I see it, point out that this difference of “dimensions” and “weight” is *also* determined by the infinitely greater need of wood, proportionately, at Potosi than at Huancavelica. To give some idea of the mass of manual labour used for the provision of fuel in the Potosi mines over long distances, it is enough to recall that, in 1603, this work involved 3,700 indians out of a total of some 30,000 people employed

by the mines overall. The importance of this ratio is glaring. To this one must add a significant number of animals (*llamas* in particular, and mules) used to transport the wood. The capital of human and animal energy used in this sector is thus immense. But the problem of the quantity is not the real problem: there are all the dramatic human and social realities of the Potosine *mita*, the “reasons” for which are reinforced by the need to provide the mines with wood.

The examples given up to now refer to situations before the industrial revolution. I now want to present an actual, even future, case...

We know that forests have always been considered important in stopping soil-erosion and thereby in preventing floods. In addition, one has tended to consider forests as important for checking water evaporation. Now, it has been shown that, in this last point, there is no question of their importance: “it has been proved that areas covered with forests lose more water by transpiration than areas covered by some other type of vegetation.”<sup>19</sup> The problem—as far as can be seen—is extremely important: in a world such as ours, in which, in the next thirty years, one can foresee the need for water being doubled, it is difficult, if not impossible, to put such a problem on one side. There will have to be a choice, in terms of economic profitability.

It is obvious that I am not competent to give the smallest piece of advice with regard to this choice. But, whatever the future may be, this problem considerably enlarges the question which interests me here. Take the green English plains with flocks of sheep grazing peacefully on them. For the most part these pastures have been made from the XIVth century onwards, from the time of the great crisis of economic and social deconstructurization of the XIVth century. The process of the change of landscape was accelerated in the XVth century and reached its extreme limits at the beginning of the XVIth century, when Thomas More denounced it with the still famous sentence: “the sheep are devouring man.” The landscape modifications expressed in those words were enormous and they go beyond the simple problem of the “agrarian

<sup>19</sup> A.J. Rutter, “L'évaporation dans les forêts,” in *Endeavour*, XXVI (1967), No. 97, p. 39.

landscape.” One is in fact faced with not only the transformations of forests (and fields) into pastureland; hundreds of thousands of people were ousted from the country and pushed into the towns; whole villages, thousands of villages (without exaggerating)<sup>20</sup> disappeared beneath the green cloak of vegetation for sheep. Old medieval England, producer of corn, was transformed into a producer of wool, and, later, of the magnificent cloth which was to be the basis of her future power (a global and not just mercantile power).

One might think, therefore, that this process had reached a sort of point of crystallization: not more than a few years ago the die seemed cast once and for all. But for some time now “silviculture has a chance of reaping greater rewards than sheep rearing.”<sup>21</sup> Should one then re-forest? Here we come to the considerations I presented at the beginning of this paragraph: the problem of evaporation. To stop it, it seems—but it only seems, and any conclusion would be premature—that it is preferable to turn to low vegetations. Shall we then see a preservation of pastureland or the introduction of low cultivation? Or will there be a return (even if only relative) to the forest?

The question is put brutally and I do not know—I do not have the necessary knowledge to know—what the future modifications will be. But, in any event, it seems to me to be important even if there are no changes... The fact remains that one asks oneself the question. It is dictated by men; by a society which must make a difficult choice between three elements: sheep (i.e. wool), wood and water. Direct and immediate profits; more remote profits; long-term profits; which will have repercussions not on one person or a group of people but on a whole collectivity. The decisions, of course, will be taken after scientific calculations and lucid selection: but there will also remain a margin of action for the struggle between private, traditional interests on the one hand and social interests on the other. As I see it, this is how the modification (or stability) of a certain type of landscape expresses the social system and the structure of society as a whole.

<sup>20</sup> M. Beresford, *The Lost Villages of England*, London, 1954.

<sup>21</sup> A.J. Rutter, *art. cit.*, p. 39.

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Another field in which the interference between social structure and landscape appears very clearly is revealed by the bias of the frontier problem. The "frontier," in the American meaning of the word as formulated in the famous book by Frederick J. Turner,<sup>22</sup> can help us to reconsider, on a new basis, the problem of landscape in relation to society. Since ancient times, frontier changes—understood as a moving rather than a steady line—have introduced deep mutations. Let us leave aside the "frontier" struggles of ancient times between farmers and nomads—between Cain and Abel<sup>23</sup>—because the elements of the problem are lost in myth and reason. But from the moment when "frontier" facts become historical, many aspects are brilliantly clarified. Medieval Germany<sup>24</sup> and Spanish America<sup>25</sup> have already been examined.

But precisely with regard to this latter, I should like to put forward one or two considerations. Here we have two different civilizations and societies (European and American) in contact. The first changes: in America corn takes the place of maize; the mule the place of the *llama*; where there were immense empty areas, cultivation appears. There are "reverse shocks": maize and potatoes arrive in Europe. Landscapes change on the scale of two continents. But all this—which I have indicated only very rapidly—is well known. The directly "visual" facts are evidently the first to attract attention. No matter how important they are, others must also attract our attention. In my opinion, the most interesting problem is not to know if where there was maize one day there is corn the next. A landscape can change in its real depths even beyond these external modifications. An example: I do not think that, in the central area of Peru, the visual external changes have been considerable between, let us say, the XVth and XVIIIth centuries. In some areas, indeed, we have seen

<sup>22</sup> F.J. Turner, *The Frontier in American History*, New York, 1953. Cf. also W.P. Webb, *The Great Frontier*, Boston, 1952.

<sup>23</sup> Cf. G. Haussmann, *La Terra e l'uomo; saggio sui principi di agricoltura generale*, Torino, 1964, p. 139.

<sup>24</sup> J.W. Thompson, "Profitable Fields of Investigation in Medieval History," in *American Historical Review*, XVIII (1913), 3.

<sup>25</sup> V. Bellaude, in *American Historical Review*, XXVIII (1922-23).

phenomena of impressive deforestation: I have alluded to this above. But I think that the traditional cultivations—maize, potatoes, coca—have remained preponderant. In spite of this the landscape has changed. It has changed because the structure of the system of production and possession of land has changed. The cultivation of the same product in a Red Indian community and a big Spanish-type property does not give the same landscape: a thousand things change, from the road-network to the irrigation-network. Other modifications are represented by the change of the type of habitation or by the dimensions—increased or reduced—of the preceding centers of population. Thus behind the frontier lines which move, advance and conquer, there are furrows to mark opposition, contrasts and resistance. It is these, moreover, which influence other further modifications. It is by starting from these particular landscape changes—determined by the introduction not of “products” but of new general “conditions”—that one can grasp and gauge, in their entire real thickness, the limits of what are a little too quickly called “acculturations,”<sup>26</sup> to better understand, on the contrary, the destructurizations and incomprehensions. These are qualitative aspects. But the quantitative aspects are also apparent. Mining was not unknown to the people of America before Europeans arrived<sup>27</sup> but the action of the Spanish in the mining sectors was incomparably violent. The landscape changes, however, introduced by mineral exploitation, do not consist only in the immense wounds inflicted in the mountain sides or in the slag-heaps that pile up at the entrances to the tunnels or in the deforestation. A mine which becomes more and more important in an isolated area—this is the case, for example, of the mining district of Parral—sets in motion a rather complex process. First of all, people arrive from the most remote places and settle there (well or not so well, and usually not so well). Roads are opened up, hostile populations are ousted (as in the case of the nomadic Indians in the Grand Chichimeca in the north of Mexico) and

<sup>26</sup> On the problem of acculturation see the authoritative essay of A. Dupront, “De l'acculturation,” in *XII<sup>e</sup> Congrès International des Sciences Historiques*, vol. I, *Rapports*, Wien, 1965, pp. 7-36 (particularly recommended, the enlarged and completed Italian edition: A. Dupront, *L'acculturazione. Per un nuovo rapporto tra ricerca storica e scienze umane*, Torino, 1966).

<sup>27</sup> P. Rivet - H. Arsandaux, *La métallurgie en Amérique précolombienne*, Paris, 1949.

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destroyed. And these sedentary newcomers need to feed themselves; thus agriculture develops round their mining center.<sup>28</sup> An entire region can thus change face: fragile, aleatory changes linked to the duration of the lodes... Houses collapse, roads are obliterated, cultivation disappears or is at least considerably reduced.

This is how landscapes are arranged and affirmed (either definitively or temporarily); how they express and sometimes even create new situations: *phantasmata* (in the Greek sense of appearance) and reality at the same time.

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But man in society is not content just to create, modify or destroy landscapes. He sometimes comes to refuse the real landscape and the creation of the image of a non-existent and stereotyped landscape. This refusal never takes place on the individual scale, but always on the group scale, and it finds its most obvious expression in the artistic landscape. The painter, of course, does not need to give a real, sensitive representation of landscape: his expression must—and in fact often does—remain absolutely free. But it often happens that this freedom is freedom in relation to physical reality, not in relation to a social “schema” that imposes itself on the painter in a thousand ways. One needs only to think of the whole tradition of the bucolic genre of the XVIIIth century. Do we not witness there a rejection, by a *certain* society, of a *certain* contemporary agrarian landscape, and, beyond the landscape, of an agricultural reality of the times?<sup>29</sup> We must place on a similar plane the creation of a certain tropical landscape as presented by the cinema (a certain cinema) in which only the positive elements (colors, the density of the flowers and fruit, the softness of the natural lines: rivers and coasts) are offered us, and all dramatic aspects excluded. In these false landscapes, real representation gives way to a symbolic representation with dubious values. The symbolic value of landscapes tends, in addition, to affirm itself more and more. But it is a question of a symbol which is transform-

<sup>28</sup> R.C. West, *The Mining Community in Northern New Spain: The Parral Mining District*, Berkeley, 1949, pp. 57-76.

<sup>29</sup> For the problem of landscape in art, cf. K. Clark, *Landscape into Art*, London, 1949.

ed fairly quickly into stereotype: the mere fact of uttering the words: United States, evokes landscapes full of skyscrapers; Paris is the Eiffel Tower; Rome, the Coliseum. These are sterile social stereotypes in themselves, and society tends constantly to reinforce them. It seems to me useful to react to these “models” imposed from without, if one wants to grasp, in the landscape, the most important fact of man’s history: work, as a creation *within* nature, consciously modifying nature.