

The floods in the Po valley and the confused debate on their causes and on the responsibility of bodies and entities that have not known how to carry out the defense, with all the nauseating mutual reproach of "speculations" on the misfortune, call into question one of the most widespread false opinions common to all the contenders: the contemporary capitalist society, with the correlative development of science, technology and production, puts the human species in the best conditions to fight against the difficulties of the natural environment. Hence the contingent *guilt* of the government and of party A and B in not knowing how to exploit this magnificent potential at their disposal, in the mistaken and guilty administrative and political measures. Hence the no less classic: you get out of there, I want to get in.

While it is true that the industrial and economic potential of the capitalist world is increasing rather than decreasing, it is equally true that the greater its virulence, the worse are the living conditions of the human masses in the face of natural and historical cataclysms. Unlike the periodic rise of rivers, the rise of the frenetic accumulation of capitalism does not have as its perspective the "decrease" of a *descending curve* of the hydrometer readings, but the catastrophe of rupture.

YESTERDAY

Close is the relationship between the millenary development of man's working technique and his relationship with the natural environment. The primitive man, like the animal, gathers and consumes the spontaneous fruits by means of a simple prehensile operation and, like the animal, flees without control before the explosion of a natural phenomenon that threatens his life. Just as the artificial production of products for consumption and the accumulation of stocks of these same products and utensils obliges him to establish himself, so it obliges him to defend himself against the threats of meteors and natural upheavals. Such a defense, which is no different from that against other groups competing for the best seat, or against the predators of the accumulated stock, can only be collective. From these collective demands, as we have so often seen, comes class division and exploitation by the dominators.

In Marx (Capital, Section V), *"This mode [capitalism] is based on the dominion of man over nature"*. This also implies the war of nature against man. An excessively generous and prodigal nature would not be a favorable environment for the rise of capitalism: *"It is not the mere fertility of the soil, but the differentiation of the soil, the variety of its natural products, the changes of the seasons, which form the physical basis for the social division of labour (...). It is the necessity of bringing a natural force under the control of society, of economising, of appropriating or subduing it on a large scale by the work of man's hand, that first plays the decisive part in the history of industry. Examples are, the irrigation works in Egypt, Lombardy, Holland, or in India and Persia where irrigation by means of artificial canals, not only supplies the soil with the water indispensable to it, but also carries down to it, in the shape of sediment from the hills, mineral fertilisers. The secret of the flourishing state of industry in Spain and Sicily under the dominion of the Arabs lay in their irrigation works. One of the material bases of the power of the state over the small disconnected producing organisms in India, was the regulation of the water supply. The Mahometan rulers of India understood this better than their English successors. It is enough to recall to mind the famine of 1866, which cost the lives*

of more than a million Hindus in the district of Orissa, in the Bengal presidency." It is well known that the overkill of similar shortages is very recent, despite the immense world capitalist potential... The struggle against nature generates *industry*, and man lives on two sacred Dantesque elements: *nature and art* (the third is God). Capitalism generates the exploitation of man with industry. The bourgeois will not abhor violence against God, nature and art.

The high modern *late capitalism* marks serious points of retreat in the struggle of defense against the aggressions of the natural forces to the human species, and the reasons are strictly social and class, to the point of reversing the advantage deriving from the progress of theoretical and applied science. We hope even to accuse it of having exasperated with atomic explosions the intensity of meteoric rains, or tomorrow, of "mocking" nature to the point of risking to make the earth and its atmosphere uninhabitable, and perhaps, to burst its very skeleton for having triggered "chain reactions" in the nuclear complexes of all the elements. For the time being, we establish an economic and social law of parallelism between their greater efficiency in exploiting the work and life of men, and the less and less rational defense against the natural environment, understood in its broadest sense.

The earth's crust is modified by geological processes that man learns to understand better and better, and to attribute less and less to the mysterious wills of resentful powers, and that within certain limits he learns to correct and control. When, in prehistoric times, the Po valley was an immense lagoon in which the Adriatic wet the feet of the Alps, the first inhabitants, who evidently did not have the good fortune to be able to lament the interested charity of America and the "amphibious means", occupied dwellings built on stilt houses rising out of the water. It was the civilization of the "Terramare", of which Venice is a distant development, it was all too easy to base "reconstruction business" and timber supply contracts on it! With the rising of the water the dwelling on stilts did not collapse: modern houses with walls collapse: and yet, what means would be available today to build houses, roads and hanging railroads! These would be enough to guarantee the integrity of the population. Utopia! The economic calculations do not add up, but it does add up to two hundred billion in repair and reconstruction works.

In historical times, the first dikes on the Po date back to no less than the Etruscans. For centuries and centuries, the natural process of degradation of the mountain slopes and the transport in alluvium of the materials suspended in the flowing waters had formed the immense and fertile plains, and it was necessary to ensure the permanence of the agricultural populations there. The successive populations and regimes continued to raise high dikes on the sides of the great river, but this was not enough to prevent the immense cataclysms with which it changed its course. And since the 5th century that the leap from the bed of the Po, near Guastalla takes a new route, which was then that of the last stretch of the Oglio, left tributary. In the thirteenth century, in the stretch towards the mouth, the great river leaves the southern branch of the vast delta, the current secondary "Po of Volano", and takes the current bed of Pontelagoscuro to the sea. These terrifying "leaps" always occur from south to north. A general law wants to attribute to all the rivers of the planet this tendency to move towards the pole, for geophysical reasons. But for the Po, the law is evident, due to the very different nature of the left and

right tributaries. The former come from the Alps and are clear water courses, as they stop in the great lakes, and because their maximum floods do not correspond to torrential rains, but to the spring melting of the glaciers. Therefore, these tributaries, in principle, do not contribute turbidity and sand deposits to the main river bed. Instead, from the south, from the Apennines, the short, torrential tributaries from the right, with huge differences between flood and drought inflow, spill the debris of mountain erosion and bury them in the right side of the Po bed, which from time to time escapes the obstacle and flows further north. One does not need chauvinism to know that from this problem was born the fluvial hydraulic science, which for centuries has raised the problem of the usefulness and function of dikes, and relates it to that of the distribution of irrigation water in canals, and then to river navigation. After the Roman works, we have news of the first canals in the Po valley since 1037. After the victory of Legnano, the Milanese brought the Grand Canal (Naviglio Grande) as far as Abbiategrasso, which became navigable in 1271. Thus arose capitalist agriculture, the first in Europe, and the great hydraulic works were carried out by the state powers: from the lock canals studied by the genius of Leonardo, who also dictated rules for the fluvial regime, to the Cavour canal begun in 1860.

The construction of dikes to contain the rivers posed a major problem: that of the overhanging rivers. While alpine rivers, such as the Ticino and the Adda, are for most of their course embedded between natural banks, the tributaries of the right and the Po starting from Cremona are hanging. This means that not only the water level, but also the riverbed, is higher than the surrounding fields. Dikes prevent these from being submerged, and a drainage channel running parallel to the river collects the local waters and returns them downstream to the river itself: these are the great hydrological land improvements; and as they approach the sea the transfer is done by mechanical means, until they maintain dry alluvial plains that are at a lower elevation not only than the river but also than the sea itself. The entire Polesine is an immense low-lying area: Adria is 4 meters above sea level; Rovigo is 5; at its height the bed of the Po is higher, and that of the Adige even higher. It is obvious that a breakage of the dikes would turn the entire province of Rovigo into a huge lake.

One of the great debates among river hydraulic engineers is whether the rise of the bed of such rivers is progressive. This was stated by French hydraulic engineers a century ago, with the opposition of the masters of Italian hydraulics, and it is still debated at congresses today.

It cannot be denied, however, that the turbidity of the river, with its deposition, pushes away the mouth, extending it towards the sea, even if it does not stop in the last stretches of the riverbed. As a result of such an incessant process, the slope of the river bed and the water surface cannot but decrease, and by hydraulic law the speed of the current at equal flow capacity: therefore, the need to raise the dikes appears historically indefinite and inexorable, and progressive, also the disastrous nature of the eventual ruptures.

In this field, the availability of modern mechanical means has contributed to the diffusion of the method of exploitation of large tracts of very fertile land, maintaining it by continuous dry drainage. The risk of occupants and workers relatively worrying to an economy of profit, and the damage of the possible destruction of works is counterbalanced, on the one hand, by the fertilization that follows the silt invasions, and on the other hand, by the economic factor: making works is always a capitalist *business*.

In modern times, the classic *filling* reclamations were

extended along the entire Italian coastline in the lowlands: alternatively, the waters of the rivers were allowed to overflow into large storage basins whose level rose slowly, with the double advantage of not letting the useful and fertile land flow into the sea, and of protecting larger and larger areas from floods and future diseases. Such a rational system proved too slow for the demands of capital investment. Another tendentious argument was and is that drawn from the ever-increasing population density, which does not permit the loss of useful soil. Thus, almost all the old hydrological land improvements studied with patient and exact leveling by the hydraulic engineers of the Austrian, Tuscan, Bourbon, etc. regimes were destroyed.

It is clear that in having to decide today between the various radical solutions to the problems, not only is capitalism's inability to look at the long term influenced by the transmission of facilities from generation to generation, but there are also strong local interests of agricultural producers and industrialists who have an interest in not affecting certain areas, and leverage on the attachment of the miserable populations to their inhospitable places. Solutions to create "diversions" from the Po have long been advocated. A study of this type is always very difficult because of the uncertainty of the results with respect to the forecasts, which is a great nuisance in the business climate. One solution, to the right, consists of a cut from Pontelagoscuro to the valleys or lagoons of Comacchio: the corresponding artificial channel would reduce by about one third the length of the current channel to the sea. Such a solution clashes with the large investments in the hydrological improvements of Ferrarese lands and the fish farming industry, and would meet with resistance. However, there would be no less resistance to solutions with a longer vision, and perhaps more in line with the natural process, towards the union of the courses of the Po and the Adige, between which the lower Polesana develops, creating in the valley of the latter, today crossed by a network of small watercourses, a large collector, and perhaps in the future a diversion of one of the two rivers, if not both.

In the bourgeois era, such a study would not lead to positive research, but to two "policies", *right* and *left*, with respect to the Po, with the corresponding conflict of speculation groups.

TODAY

It is debated whether the current catastrophe, in which some already see the natural formation of a large stable marsh, and the displacement of the bed of the Po with the total dismemberment of the north dike, derives from an exceptional densification of rainfall and other participation of natural causes, or from the negligence and fault of men and administrators. It is indisputable that the succession of wars and crises has led to the neglect for decades of the difficult services of technical supervision and maintenance of the dikes, of dredging of the channels, when necessary, as well as the arrangement of the high mountain basins, whose deforestation causes a greater and faster collection of rainwater in floods and a greater influx of suspended material in the lower courses.

With today's trend in science and official technical organization, it is also difficult to collect and compare udometric (amount of rainfall in several days in the basin that feeds the river) and hydrometric (water heights in the hydrometers, maximum flow of the watercourse) data with those of the past. Today, respected offices and scientists issue their verdicts according to political requirements and the reason of State, i.e., according to the effect they will have, and the figures are subject to all kinds of trainings. On the other hand, one can perfectly believe what the

current of criticism says, that the observation stations destroyed by the war have not even been reconstructed; and one can also believe that our present technical bureaucracy works on old maps that are passed from copy to copy; and they crawl on the tables of dependent and listless technical personnel; and it does not update the surveys and the difficult levelings and geodetic operations of precision that allow to connect the various data of the phenomenon: this one lives in all areas of maps that respond to the paraphernalia of the leaflet in format and colors, but that have nothing to do with the physical reality. The figures given here and there in the general press cannot be followed: it is easy to blame journalists who know everything and know nothing. Therefore, it remains to be seen - and the movements with large means and large bases could well try - whether the intensity of the rains was really greater than that of a century of observations: it is legitimate to doubt it. The same is true of the hydrometric readings of the maximum water level reached and of the maximum flow: it is easy to say that the historically known maximum at Pontelagoscuro, of 11 thousand cubic meters per second, has risen to 13 thousand in the last few days. In 1917 and 1926 there were very high floods, also in spring, with incomparably lesser consequences, and in Piacenza they reached 13,800 meters per second.

Without going on too long, let us assume that the rains were not of an intensity never seen before, and that the disaster was determined mainly by the long lack of necessary services and the omission of maintenance and improvement works, in relation to the smaller sums that the public administration allocated for these purposes and the way they were used, compared to the past.

It is a matter of giving these facts a cause, which must be and is social and historical, and which it is puerile to trace back to "false maneuvers" of those who were or are today at the levers of the Italian state machine. Moreover, this is not an exclusively Italian phenomenon, but of all countries: administrative disorder, theft and business perversions in the decisions of the public machine have now been denounced by conservatives themselves, and in America they have also been linked to public disasters: even there, very modern cities in Kansas and Missouri have been incredibly battered by poorly regulated rivers.

There are two misconceptions underlying the criticism we have highlighted: one is that the struggle to return from the fascist dictatorship *within* the bourgeoisie (the dictatorship of the bourgeoisie has always been there since it won its *freedom*) to the outside multi-party democracy was aimed at better administration; whereas it was clear that it should lead and has led to worse administration. And this is the common fault of ALL the colors of the great bloc of the national liberation committees. The other erroneous idea is that of believing that the totalitarian form of the capitalist regime (of which Italian fascism was the first great test) has as its content an excessive power of the state bureaucracy as opposed to the autonomous initiatives of entrepreneurship and private speculation. This form is, instead, at a certain stage, a condition for the survival of capitalism and of the power of the bourgeois class, which concentrates in the State machine anti-revolutionary forces, but makes the administrative machine weaker and more manipulable by speculative interests.

Here it is necessary to take a look at the history of the machinery of the Italian administration since the time of national unity. At first it worked well and had strong powers. All the favorable circumstances were present. The young bourgeoisie, in order to come to power and sustain its interests, had to go through a heroic phase and face sacrifices, so individual elements were still willing to lavish themselves, being less attracted by

immediate profit not ostensible in the sunlight. Additional compact enthusiasm was needed to liquidate the resistance of the old powers and the rusty state machines of the various parts into which the country was previously divided politically. There was no perceptible division in parties, the single party of the liberal revolution (virgin at the time of 1860, prostituted in 1943) ruled, with the evident acquiescence of the few republicans themselves, and without the workers' movement having yet arisen. The wheeling and dealing had to begin with the bipartisan *transformism* of 1876. The skeleton of the bureaucracy coming from Piedmont, in essence behind the military occupation forces, enjoyed a real dictatorship over the local elements, and autocratic or clerical opponents were in practice under the weight of exceptional laws... since they were guilty of illiberalism. Under these conditions, a young, conscientious and honest administrative machine was built.

As the capitalist system developed in depth and breadth, the bureaucracy suffered a double assault on its uncorrupted hegemony. In the economic sphere, the big businessmen of the public works and state-assisted production sectors raised their heads. At the same time, in the political sphere, the spread of corruption in parliamentary practice meant that every day the "representatives of the people" intervened to influence the decisions of the executive and general administrative machinery, which until then had functioned with strict impersonality and impartiality.

Public works, which used to be studied by the best experts, naively happy to have their bread and butter as government officials, and completely independent in their judgments and opinions, begin to be imposed by the executors: these are the classic "monkey business" that begin to circulate. The state spending machine becomes less useful to the community the more costly it is.

This process was important during the Giolittian period, however, the situation of improving economic prosperity made the damage less evident. This system, and herein lies the political masterpiece, slowly entangles the emerging workers' party. Precisely because in Italy labor abounds and capital is scarce, the State is invoked everywhere as an employer, and the deputy who wants the votes of the industrial or agricultural constituency climbs the stairs of the ministries in the hunt for the panacea: public works!

After the first great war, although it was "won", the Italian bourgeoisie saw all the rosy conditions of the heroic times changed too much, and fascism was born. The concentration of the police force of the State, together with the concentration of the control of almost all sectors of the economy, allows at the same time to avoid the outbreak of radical movements of the masses and to assure to the wealthy class free speculative maneuvers, on condition that it equips itself with a single class center, which frames its government policy. All the medium and small businessmen are forced to make the reformist concessions invoked in the long struggle by the workers' organizations, which (as always) are destroyed by stealing their program; with all this, while favoring the high capitalist concentration, the internal situation is pacified. The totalitarian form allows capital to put into practice the reformist deception of the previous decades, going towards the class collaboration foreseen by the traitors of the revolutionary party.

The maneuvering of the state machine and the same overflowing special legislation are put at the shameless service of entrepreneurial initiatives. From a technical law - to return to our original subject, which dealt with rivers - which had had some real

masterpieces around 1865, it became a veritable cesspool of nonsense open to all maneuvers, and the civil servant was reduced to a puppet of big business. The hydrological services are precisely among those which kick against the ideal of the famous *private initiative*. They demand a unitary system and full power: they had very relevant traditions. Jacini wrote in 1857: *the civil reasoning of water found in Giandomenico Romagnosi an immortal treatise writer*. In short, bourgeois administration and technique had class objectives even then, but they were a serious matter: today they are a trifle.

From this derives the tendency that has led to the degeneration, rather than progress, of the hydraulic defense system in the Padano Valley: from a process that does not concern a single party or a single nation, but the secular vicissitudes of a class regime.

To put it simply, if once the bureaucracy - independent, if not omnipotent - studied its projects on the drawing board and then called for bids from the public procurement "companies" and, denying them even cups of coffee, forced them to carry out their work rigorously, so that in principle the choice of works to which funds were allocated was made according to general criteria; today the relationship is reversed. Weak and servile, the technical bureaucracy receives the projects drawn up by the companies themselves and passes them on without hardly looking at them, and the companies obviously choose those works that offer benefits, and leave aside the delicate works that imply a serious commitment and less repeatable expense.

It is not that the moral fact underlies all this, nor that as a rule the civil servant succumbs to the corruption of high gratuities. It is that, if a civil servant resists, not only does his work become ten times heavier, but the interests with which he clashes mobilize against him decisive partisan influences in the high circles of the ministries on which he depends. In the past, it was the most skilled technician who made progress, today it is the one who is best able to move within this network.

When the Fascist one-party system gave way to a multi-party system unknown to Giolittian Italy itself, to an England model of constitutionalism, and so on (since we have never had ten declared parties willing to govern in the constitution, but at most two or three) the evil worsened. The allied armies were to bring back the experts and the honest! What a foolish expectation that of so many and so many: the new change of guard has given the worst of the *guards*, as in the Padanian dikes.

It is very symptomatic for the diagnosis of the present phase of the capitalist regime that a high official of the Superior Council of Public Works has let himself go and said that the flood guards have deserted at the right time: the only purpose for which they are permanently paid; this is the style of modern bureaucracy (for some the supposed new ruling class! The ruling classes arrive with open jaws, but not with trembling hearts).

No less interesting is what Alberto de Stefani wrote under the

title: *The government of the Po*. After giving a little history of the provisions relating to the past, he quotes the opinion of writers of technical journals: "The need to react to the system of concentration of the activity of the offices exclusively or almost exclusively in the design and execution of large works cannot be sufficiently insisted upon". This De Stefani did not see the radical scope of such criticism, he deplored the neglect of the conservation and maintenance of existing works and the drawing of plans for new ones; he quoted from other passages: "Tens of billions are being spent as a result of the floods (and tomorrow hundreds) after systematically skimping and denying the few funds for maintenance works and even for the closure of the breaks". This seems to have happened for the Rhine. An economist of De Stefani's caliber gets by with, "We all lack the spirit of *conservation* due to the abundance of uncontrolled *fantasy*."

Is it a question of national psychology? No longer; it is the result of the modern type of capitalist production. Capital is now incapable of the social function of transmitting the work of the present generation to future generations and using the work of past generations for this purpose. It does not want maintenance contracts, but gigantic construction projects: to make them possible, natural cataclysms not being sufficient, capital creates, by inescapable necessity, human ones, and makes post-war reconstruction "*the business of the century*".

These concepts must be applied to the criticism of the low and demagogic position of the so-called Italian workers' parties. Give to speculation and to the capitalist enterprise of investment in waterworks the capitals of the armament orders, and the latter (except to put the pseudo-reds in the metallurgical centers in crisis, if the thing were really done) will use them in the same style; muddling and speculating a thousandfold, and raising the glass for the coming, if not of the next war, of the next flood.

The immense river of human history also has its irresistible and threatening floods. When the wave rises, it roars against the two dikes that constrict it: on the right is the conformist dike, the dike of the preservation of existing and traditional forms; and along it, the priests chant in procession, the police and gendarmes patrol, the teachers and storytellers chatter about official lies and class scholasticism.

The leftist dike is the reformist one, and in it crowd the "popular", the artisans of opportunism, the parliamentarians and the progressive organizers; exchanging insults across the stream, both courts claim to have the recipe for the mighty river to follow its bridled and forced path.

But in the great bends the current breaks every brake, comes out of its bed and "jumps", as the Po jumped at Guastalla and Volano, in an unexpected direction, sweeping over the two sordid bands in the unstoppable wave of the subversive revolution of every ancient form of dike, molding society like the earth with a new face.