Focus

Blind track

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The people of Val di Susa (Italy) blocked the construction of the new high-speed railway line that should connect Turin with Lyons (France). This project is regarded as a strategic achievement for the economic development of the European Union, but local communities have a different concept of development and are asserting their rights through ad hoc experts' reports and the production "from the bottom" of new specialised knowledge. We shall describe these events as a case study to put ecological democracy to the test of facts, also through a comparison with the experimental actions taken in some Southern countries of the world.

From Europe to Brazil, the debate on health and environmental risks resulting from modernisation is upsetting democratic societies and urging new forms of participation in the decision-making process. There is a clash between different "concepts of the world", in which communication strategies play a crucial role and from whose outcome the society in which we wish to live in will emerge.

"You don't tell the frogs when you are draining the marsh", could feel authorised to say Rémy Carle, director of Electricité de France, when commenting upon the impressive nuclear reactor construction program completed by the French government between 1965 and 1985.[1]

Today, the European scenario has drastically changed, and usually any attempt to impose from the top risky – although promising – technological works such as the construction of waste to energy plants, the identification of disposal sites for toxic wastes or the implementation of highly impacting territorial transformation projects, without first establishing a transparent dialogue with the people involved in them, just leads to social conflicts.

Sometimes, the opposition of those who exert their veto power to protect local interest against projects of "general" interest is called Nimby syndrome, from the abbreviation of the English expression "not in my backyard". However, today, the existence of a general interest itself is questioned by a vision that calls for negotiation between different legitimate interests, be they economic, political, social or environmental.[2] For instance, the notion of "governance", which is currently a common expression in EU policies, explicitly refers to the need for processes through which individuals and institutions, both public and private ones, are enabled to best manage common interests and reconcile conflicting interests, thus implicitly admitting that "higher" interests cannot be invoked to smooth out differences.

In the Val di Susa case, we are facing events deeply affecting a community, which perceives a serious risk imposed from the top to the benefit of others. The unequal distribution of risks and benefits inevitably makes reference to the (denied) principles of freedom and justice, thus reinforcing the feeling of belonging to a community and the willingness of individuals to mobilise. In this context, communication processes play a crucial role.

High speed

At the European level, the dispute that opposed the people of Val di Susa – an Alpine region of Western Italy near the French border – to the Italian government and the European Union is paradigmatic. The dispute – still unsolved – deals with the construction of the Turin-Lyons high speed railway line (TAV) intended for shifting a significant portion of goods traffics between Italy and France to railway transport. Today, most of these goods are carried by about two million trucks crossing the border every year.[3] These construction works are strongly supported by the European Union because this connection is

regarded as a crucial hub of the so-called Corridor 5, the high-speed railway line that should connected Kiev with Lisbon.

On the contrary, the inhabitants and managers of Val di Susa are against this project, which provides for the excavation of a tunnel more than 50 km long between Venaus and Saint Jeanne de Maurienne (France): these impressive works will not be completed before 2018 and, over the next twelve years, might turn the valley into an enormous construction site. Many people wonder whether, in terms of costs and benefits, it would be better to strengthen the existing railway line, which is a less expensive and invasive option.

Moreover, the inhabitants of Val di Susa, supported by geological surveys, claim that excavation works would release dangerous materials such as asbestos and uranium, which are likely to be present in the rocks of Val di Susa, whose population unfortunately already holds the regional record of cancer-related deaths. Doubts and fears were increased by the lack of information on risks and the decision made by the Italian government to start works without proper consultation of all the parties involved in the project.

As a matter of fact, the construction of the Turin-Lyons line was included in the Law no. 443/01 (the so-called "Objective Law") on large construction works, which simplifies environmental impact assessment procedures and restricts negotiation opportunities. This choice, adding to a lack of communications, was immediately perceived as a "deceptive strategy":[4] the fastest way to close a big deal outflanking exposed communities and their legitimate calls for safety.

Similar cases show that any attempt to conceal risks immediately entails an – often irrecoverable – loss of credibility for governmental institutions, thus ending up by legitimating local committees that expose themselves "in the interest of the community as a whole"[5] and soon become the only credible interlocutors. The unbalance between costs and benefits facilitates mobilisation: indeed, benefits fall upon (and dilute in) a larger community, which is usually scarcely interested in the case, whereas costs do concentrate in smaller groups, which are strongly motivated since they are directly involved.[6]

This happened to Val di Susa as well, where the inhabitants spontaneously organised a protest movement, which dates back to the early 90s, at the time when the Turin-Lyons line project became operational.

New specialised knowledge

Since the first public meetings, "independent" experts were invited to take part: physicians, geologists, engineers and economists, who at times were commissioned true experts' reports by the so-called "No TAV" committee. In this way, the protest movement collected a large body of information on various aspects of the project (health, territory, engineering, economic implications). This material was immediately published on its website[7] and made available at the institutional level as well.

Unlike other well-known cases reported by literature,[8] this material goes beyond a simple contribution of laic information based on experience and direct knowledge of the territory. It is a true production "from the bottom" of new scientific knowledge commissioned to renowned experts so as to give scientific rational foundations to the reasons for protesting. The "independent" production of new specialised knowledge confers upon the "reasons for being against"[9] a legitimacy that can only be guaranteed by science, thus preventing local movements from being classified as antiscientific and based on irrationality, ignorance, or at least lack of understanding of scientific facts.

Over the last decade, similar experiences – in which local populations not only set *de jure* issues or the value of their knowledge and traditions against specialised knowledge, but also legitimated their requests even from the scientific point of view – multiplied in all continents. At times, researchers took a liking to social movements of natives, peasants, or *desplazados*, and produced evidence or arguments in favour of their views. This happened, for instance, in India, to some movements of peasants, which were supported by Vandana Shiva in her books sharply criticising the Green Revolution and the economic and agro-ecological theory that regarded high-yield industrial monocultures as crucial for developing and fighting hunger in Third World countries.[10]

NGOs against large hydroelectric dams are another well-fitting example: often, they commission environmental impact studies to show that other development options based on smaller plants or other energy sources are viable or that energy produced by large hydroelectric dams is far from being clean

and substantially contributes to greenhouse gas emissions (owing to putrefaction of the biomass submerged by flooding).[11]

In some more interesting cases, local communities resorted to scientific sources and combined them to traditional knowledge to produce environmental impact studies against those produced by governments or companies. In Brazil, the inhabitants of a *xavante* village in the savannahs of Mato Grosso, despite of some criticism according to which an Indian "is no longer an Indian" if he resorts to modern technology, created a website and asked a Brazilian chemist to publish on it the results of his tests on water polluted by *fazendeiros*, who were invading their lands. At the same time, they disclosed the description of their way of managing the ecosystem, as well as their cosmogony, to demonstrate that "if the world is to come to an end, then why should we dance and sing?".[12] Similarly, some Amazonian communities affected by the construction of the large dam of Balbina asked a local poet and peasant to write a rhymed poem aimed at disclosing the outcome of a biochemical study to show the catastrophic impact of the dam.[13]

Therefore, if on the one side scientific knowledge authority seems to be indispensable, on the other side the disclosure of opposed and irreconcilable truths gives a picture of science that is very far from standing as unquestionable, unique and independent knowledge that can ultimately offer solutions to settle technical and scientific disputes. Often causes, consequences and even definitions of technological modernisation risks are pervaded by uncertainty, and the parties involved can bend facts and data to partisan values and interests, thus delegating conflict settlement to politics.

Here trust plays a crucial role, and in many cases it is the only means to discriminate between opposing truths. By filling the information gap on risks left by "official" sources, local movements can easily become the only credible interlocutors. In this case, no communication campaigns can give back institutions the consensus of a population that, being presented the *fait accompli* and having lost trust in them, will inevitably ignore or reject any reassuring message. Usually, it is even too late to lay on the table the card of risk monetisation. The exposed community will refuse to accept it in exchange for economic benefits: all opportunities to negotiate are lost; direct clash is inevitable.

A clash between different concepts of the world

In Val di Susa, the climate grew heated in early November, when the first drill was positioned. To prevent works from starting – the beginning of works was also decided with no negotiations – the inhabitants of the valley occupied the excavation site and organised permanent pickets. The community sided unanimously with the "No TAV" front and, on November 16, fifty thousand people took part in a protest manifestation that paralysed the valley. The Italian government reacted by a misplaced attempt to militarise the territory. In the night of December 6, riot cops took actions to evacuate the pickets: many people were injured in the battle on both sides.

These events were largely reported by medias. This was the time when the story had the broadest coverage on the main Italian newspapers[14] and caused strong reactions of indignation in Italy and Europe. Whenever showing a conflict between David and Goliath – which is extraordinarily effective on medias – it is not hard at all to gain public support. And, generally speaking, whenever local movements succeed in bringing about the interest of medias (in case, resorting to very spectacular and symbolic actions) and raising their claims to the level of national politics, things turn to their advantage.

As a matter of fact, few days later, the Italian government surrendered and finally opened negotiations with the managers of Val di Susa: the beginning of excavation works was postponed pending an environment impact assessment to ascertain possible health and environmental risks. On November 30, 2005, the President of the Italian Republic, Carlo Azelio Ciampi, also intervened officially in the dispute, but he only said that Italy could not stop its development process. Nonetheless, there are many concepts of development, and the comic actor Beppe Grillo, when taking part in a meeting of the "No TAV" movement ironically stated, "Progress does not mean making mozzarellas run at 175 miles per hour".

This witty remark reveals that this case goes beyond a simple technical diatribe on the safety of a tunnel excavated right in the heart of the Alps. Disputes that trigger public debates in industrialised societies, from nuclear power to transgenic food, from global warming effects to large engineering works, increasingly often involve science and its applications because, more than ever before, they affect our lives and permeate our culture. However, contrary to what we would tend to believe, usually

discussions are not focussed on the safety of a given technology or settlement of a techno-scientific dispute, but on a clash between different "concepts of the world" in which social, cultural, political, legal, ethic or religious values and reasons play a crucial role.[15]

 As stated above, through communication strategies levering on values shared by communities, local committees can succeed in mobilising individuals to defend a common cause.[16] The first values levered on are justice and freedom, which are manifestly breached by the imposition of (or just the lack of transparent information on) a risk to the benefit of others. But other values deriving from a precise vision of the relationship between the environment and human activities – such as preservation of what, right or wrong, is regarded as natural – can contribute, and, as we can easily imagine, this vision is deeply rooted in the mountain communities involved in this story.

 In other words, disputes on technological risks are often triggered by a conflict between opposite concepts of the world and, according to the German sociologist Ulrich Beck, these different concepts should be construed as implicit moral judgments on the ways chosen by societies to develop:

> Behind all references to formulas and data, sooner or later, the problem of "acceptability" arises, and with it, again, the old question of "how we want to live".[17]

 Therefore, there is nothing surprising about the fact that, increasingly often, the public asserts its right to take part in choices that involve common assets such as health, the environment, or social and economic development.

Armed conservation?

Some opposite examples of social participation in ecological governance – in which local communities, rather than opposing to technological or industrial projects, fight for their right to use local natural resources against "top-down" conservation projects managed by governments or international environmental protection institutions – also deserve our attention. In many cases, protected areas intended for purely recreational or scientific territory management are located in territories inhabited by people that, for generations, have often been making a low environmental impact use of their land, although such a use is not consistent with the traditional rules of a park (no hunting, fishing, collecting wood, etc.).

 Until the 80s, environmental protection policies were essentially based on the exclusion of most human activities from the areas to be protected. Conserving meant enclosing, mollycoddling, segregating nature from the contact with man, who was seen as an external agent and inevitable cause of degradation. In many Southern countries of the world, this concept was applied as a true "armed protection".

 In the 80s, there was a massive expansion of social movements in many of these countries as dictatorships were defeated. Thanks to the action of groups of natives, peasants, or *seringueiros*, the idea gained momentum that social development and environment protection are not only mutually inclusive and consistent, but that the former cannot take place to the detriment of the latter, whereas the latter only exists when the former is guaranteed.

 In 1987, the Bruntland report opened the era of "sustainable development". In 1992, the Conference of Rio de Janeiro confirmed that something was changing. Often, the project-centred approach, according to which panels of experts from rich countries made decisions on means and ways to develop poor countries and adopted practices to "inoculate" and transfer allegedly all-solving recipes, turned out to be unsuccessful. Hence, people-centred projects aimed at meeting local needs, listening in addition to teaching, and focussed on participative management, were launched.[18] If "the common argument is that poor people are forced to cultivate marginal lands or to overexploit resources", "it may just as easily be said (as it as often been) that the excessive wealth and overconsumption of industrialised societies is responsible for the vast majority of unsustainable resource extraction, and that wealth may therefore be more appropriately blamed for ecological problems than poverty".[19]

 In the 90s, there was an unexpected change in route: several international agencies discontinued their support to mega-projects, which had been typical of the agreements between the World Bank, cooperation bodies and local governments, and started to support movements of victims of dams, to

favour small agricultural projects managed by local communities, to negotiate project structures and objectives with their recipients.

In the name of an ecological democracy

However, still today, the longly desired public participation in decision-making processes and choices has many opponents. Politicians of many European governments do not hesitate to turn to technical solutions to overcome disputes on risks, and panels of experts are regularly set up to express a judgement on the most diverse issues.

Yet, the "TAV" story in Val di Susa, like other recent experiences, emblematically proves that, in any democratic society, the solution to problems resulting from modernisation cannot be delegated to a technocratic *elite* because "even the best technical solutions risk failure if adopted by experts behind closed doors and meekly endorsed by political institutions".[20]

Of course, we are not suggesting that issues raised by technoscience will inevitably remain unsolved. For instance, with reference to Italian and European high speed railway lines, there is the experience – which is less known, although positive – of the new high speed railway line between Florence and Bologna, where works were started in 1996 and the first train will run in 2008. Again, there were protests, which were then smoothed out through long negotiations involving companies, citizens' committees, environmentalist associations, local authorities, and even magistrates that, at times, ordered construction sites to be sealed. Within the framework of these talks, the original project was revised several times: technical solutions were bent to the results of environmental assessments and close consultations with mayors and people living in the municipalities involved in the project were launched.

These two stories, having opposite outcomes, prove that the objective to be pursued is not the "absence" of conflicts, but the identification and implementation of the most effective means to "negotiate" settlement. Presently, in the light of past experiences, the best tools available to manage disputes resulting from modernisation are: open dialogue-oriented communications involving all groups concerned and extension of the participation in decision-making processes to society as a whole. The aim is not cherishing a utopian unique concept to smooth out all disputes. We should rather share the various perspectives and interests in order to make the best choice within the regulatory system of our democratic State.

So far, participative experiences in many countries[21] have demonstrated that negotiations limit the risk of excessive polarisation of disputes, thus making the use of restrictive solutions – which, in most cases, are unsatisfactory – such as "yes/no" referenda or, even worst, authoritative impositions less likely. However, more incisive and widespread models of participative democracy should perhaps be developed. In other words, we should develop an "ecological democracy" able to find "a socially sustainable solution to the ongoing conflict between technology and democracy".[22]

Apparently, the ecological issue requires new answers, and probably even new forms of democratic participation in the decision-making process: public discussion forums to broaden the narrow and, at times, "self-referential" boundaries of conventional politics.

Notes and references

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[3] See also G. Sturloni, *Le mele di Chernobyl sono buone. Mezzo secolo di rischio tecnologico*, Sironi, Milan, 2006, p. 162-165.
[4] D. Ungaro, *Democrazia ecologica*, Laterza, Rome-Bari, 2004, p. 97.
[5] D. Ungaro, *Democrazia ecologica*, cit., p. 96.
[6] L. Bobbio, C. Lazzeroni, "Torino 2006. Una mappa dei conflitti territoriali", cit.
[7] See for instance: <http://www.notav.it/>; <http://www.notavtorino.org>; <http://www.spintadalbass.org> (in Italian).
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[16] See for instance V. Murelli, *Terra bruciata, terra dell'eden. Strategie di comunicazione di gruppi di interesse coinvolti nella realizzazione di nuovi impianti industriali in provincia di Pavia*, Science Communication Master Thesis, Sissa, Trieste, February 2006.

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[22] D. Ungaro, *Democrazia ecologica*, cit., p. 133.