

7. Fragility as a condition: the landscape perspective

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7.1 THE LANDSCAPE FOR FRAGILITY

Fragility is the outcome of a set of aspects related to and dependent on environmental, social, economic, political and institutional factors that require specific interpretation skills and novel operational attitudes (Chiffi and Curci, 2019) and that can manifest themselves in very different situations, places and environments. Fragility can characterise isolated environments, with resources that appear scarce or non-existent, or with a strong imbalance with respect to neighbouring and competing places that conversely appear dynamic and robust; it also characterises abandoned places or, on the contrary, those subject to the wear and tear of excessive pressures, as well as places exposed to known or unexpected risks. Therefore, they can all be fragile: the inland areas of the Apennines; abandoned Alpine valleys; many intermediate territories of the Po Valley and the valleys and plains of southern Italy; the coasts of unauthorised building and environmental degradation; the slopes exposed to serious instability phenomena; some suburbs or historical centres; large monofunctional settlements affected by abandonment and fragmentation, by the impoverishment of the social fabric and by conflicts.¹ But fragilities can also emerge and become evident in very robust, central and accessible places, affected by dynamic and seemingly vigorous economies: in the inner suburbs of a metrop-

¹ In recent years, at the Department of Architecture and Urban Studies of the Politecnico di Milano, the reflection on territorial fragilities, on their nature and geography in Italy, has declined in relation to both peripheral contexts in metropolitan areas and marginal areas, in particular Alpine and Apennine ones, as well as intermediate territories (Di Matteo et al., 2021, pp. 4–5); the department's activity of excellence is documented at <https://www.excellence.dastu.polimi.it/laboratorio-fragilita>. Reflection on fragilities has been strongly intertwined with that on inland areas, and has led to numerous studies, research and publishing initiatives, initially related to the National Strategy led by the Agency for Territorial Cohesion (agenziacoesione.gov.it) and mobilising a wide research network and numerous subsequent initiatives (De Rossi, 2018).

olis such as Milan, in the agricultural areas of rich but polluted economies of industrial monoculture, wine, livestock farming, the places where traditional agriculture persists but is marked by the loss of skills in landscape care, the coasts of reclaimed territories, exposed to rising sea levels and groundwater pollution.

Fragilities often depend on phenomena that produce changes in a gradual, non-obvious way, on dormant situations that can flare up in an unpredictable and unexpected way. They depend on time, and change over time; understanding them requires a process of historical interpretation and conjecture about future conditions. If we consider resoluteness as an attribute of robustness and thus as the antithesis of fragility, we would have to agree that in fact the landscape is a constitutively fragile 'material', since it is incessantly subjected to processes of change that make its assets fatally mutable and provisional, whether they are semantic and morphological, productive or physiological. Changeability and instability are in fact inescapable features of the landscape, which cannot escape actions that act on its forms and structures, biotic and abiotic, of human or differently induced morphogenesis, sometimes peremptorily and instantaneously, sometimes very slowly and incrementally. The landscape always wavers, oscillates, is a succession of mutations.

Therefore, in a perspective that contrasts fragility with the characteristics of stability and durability, the landscape offers itself as a privileged platform for verifying the conceptual and operational tightness of design positions in relation to fragility.

This chapter reflects on how conditions of territorial fragility can be recognised, interpreted and treated from the point of view of landscape and landscape design. The hypothesis we put forward is that landscape, in its cultural and operational meaning, represents a specific way of reconsidering territorial fragilities as a set of characterising qualities, and not as a negative condition to be overcome. If observed and interpreted through the lens of the landscape approach, fragilities suggest ways and spaces for design action capable of triggering and enhancing forms of active prevention and even territorial reinvigoration. In particular, we do not investigate the relations between landscape and fragility in search of solutions, but rather we turn to the attitudes and methods of the landscape approach to reconsider the status of fragility: it is not a question of denying it, fighting it or curing it, but of understanding its dynamics, origins and possible evolution, as well as its immanent uncertainty, considering them as constitutive meanings of the project. There is indeed a close link between fragility, uncertainty and the unexpected, and this is why the landscape perspective can act as a way of recognising, interpreting and dealing with fragility, because the landscape is the staging and action of fragility, it is the visible and at the same time the operating platform of fragility. The crucial question is therefore whether fragility – understood as

instability and impermanence, delicacy and transience, resistance to control and predetermination – can be a declination of the performance and durability of contemporary landscapes, when properly understood, interpreted and addressed through design.

In the following pages, an initial set of considerations discusses the role of landscape as a vantage point for the emergence of new forms of shared knowledge and awareness. Most design and planning actions addressing territorial fragilities are still based on deterministic and engineering models of prediction and control,² aiming to deal with fragilities by providing robust and circumstantial solutions to specific and punctual problems: embankments, weirs, slope and shoreline consolidation, dams, canalisation. Even the proposals which, more recently, have tried to place themselves within a new systemic perspective, consistent with the processes of ecological transition, find support in the most stringent functionalism and its rhetoric: the reassuring practice of the so-called nature-based solutions, the quantitative approach to urban forestation and the atopic application of urban water management techniques (water-sensitive design) are examples. These are technically innovative, replicable actions, but they suggest a way of operating based on isolated, overtly performance-based actions, which are satisfied only with the quantitative correspondence between predictions and outcomes and which lend themselves very well to technocratic use. Such actions are often accompanied by propagandistic images and rhetoric that are reductionist of the complexity of the phenomena involved and renounce confrontation with spatial outcomes, sedimented cultural meanings, the sense and mutability of places and their performativity.³

On the contrary, the landscape gaze and the landscape project do not offer solutions in terms of certain, predictable and definitive results, but suggest a different direction, capable of ‘staying with the trouble’ (Haraway, 2016). In its many forms, the landscape project lives, by its very nature and tradition – which are military, botanical-agronomic, of civil and health design, social, technological and humanistic, literary and figurative (Panzini, 1993; Jakob, 2018; Lanzani, 2020) – within an exploratory dimension and a search for effectiveness through forms of regulation, of continuous reformulation of

² These methods were precisely criticised by John Friedmann in the 1990s, proposing the overcoming of a linear mode of design, from blueprint to implementation, in favour of a different, interactive, dialogic mode aimed at the specificities of places and defined as non-Euclidean according to the expression used at the last Congrès Internationaux d’Architecture Moderne (CIAM) in Otterlo in 1959 by Aldo Van Eyck in his overcoming of the Modern Movement (Campos Uribe et al., 2020).

³ An in-depth critical analysis of the neofunctionalist approach is proposed by Cristina Bianchetti (2016).

issues, sometimes of adaptation along lines of lesser resistance, of orientation of punctual or systemic actions in the search for effectiveness over time.

7.2 THE LANDSCAPE POINT OF VIEW

'Landscape' is a term with many meanings in a disputed field (Zagari, 2006), and it is worthwhile premising that it is precisely the coexistence, even contradictory, of its different meanings that makes its design dimension interesting and necessary. In the most common interpretation, drawn from the European pictorial and literary tradition, the landscape exists insofar as it is the product of a perceptive action, explicated on a territory and, inseparably, on the intertwined set of human and non-human facts that insist on it: the landscape exists insofar as it is seen; it is a hypothesis of a gaze on what is around us (Lassus, 1998). What is seen and what makes the existence of a landscape evident is the active relational field between the elements that contribute to it; it is the system of reciprocity and relationships that holds them together. It is a chaining, a system of rebounds, links and correspondences; it is the construction of a system of relationships that appear relevant and meaningful.

Deeply rooted in common sense and consolidated in jurisprudence,⁴ this meaning exposes itself to ambiguities and misunderstandings in which, however, a substantial part of the operativeness and topicality of the idea of landscape resides. There are at least two reasons for the ambiguity.

The first reason is that landscape, as the outcome of a sentient perception,⁵ is given as a possibility (of recognition, naming and, subsequently, of exploitation, custody or care) and not as the result of an immanent automatism. It therefore has an inevitably indeterminate character, in the sense of that it is not the result of deterministic cognitive processes. Landscape is a condition that knows no obviousness or self-evidence, but always needs to be diagnosed, affirmed, claimed and shared, and equally, cannot be imposed. It is a recognised or recognisable quality, an attributed or attributable value. The landscape does not exist in itself and therefore requires a constant exercise of questioning

⁴ "Landscape" means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors', European Landscape Convention (in Italy, Law No 14, 9 January 2006, Article 1). 'Landscape is defined as the expressive territory of identity, whose character is the result of the action of natural and human factors and their interrelationships ... This Code protects the landscape with regard to those aspects and characteristics that constitute a material and visible representation of national identity, as an expression of cultural values' (Cultural Heritage and Landscape Code, Legislative Decree No. 42, 22 January 2004, Article 131).

⁵ We insist on vision for the sake of simplicity, but it is quite clear that the senses, necessary for understanding the landscape, do not end with sight.

and verification to attest its existence or its exhaustion; or, again, to interpret the misalignments between the permanence, in the memory of individuals and communities, of territorial conditions that generate affection and identification, and the impermanence of the consistency and form of places (Ferrara, 2017). Similarly, the role of populations in the construction of the physical palimpsest of landscapes, in the sedimentation of their material and symbolic values, and the action of the same populations in the change and sometimes in the cessation of landscapes (Zagari, 2013), should be questioned.

Today, in the light of consolidated positions in the multidisciplinary debate expressed by the different voices of philosophers, ecologists, artists and designers (Clément, 1999; Descola, 2005; Ingold and Palsson, 2013; Kowarik, 2013; Latour, 1999), to speak of communities involved in the construction or depletion of landscapes can only imply their extension to forms of existence and sociality that are not only human. This opens up the second reason for the ambiguity inherent in the meaning of landscape that is being explored here, because if for a long time landscape has been assumed as a well-prepared scene, heir to aesthetic canons established in the wake of the European pictorial tradition, at least since landscape was established as an artistic genre with its own autonomy (D'Angelo, 2021), today we are witnessing new ethical and expressive interpretations. These, steeped in renewed environmental awareness and the recomposition of humanistic and scientific knowledge (Dominici, 2019), of art and biology (Latour and Weibel, 2020), find characters of ecological and aesthetic, economic and political quality, in metamorphosis and morphogenesis, in spite of stability, composure and permanence. The landscape emerges and is recognised in its immanent performativity, in its incessant endogenous work that ceaselessly modifies its assets, forms, values, meanings and destinies, expanding the dimensions of authorship, temporality and relevant techniques in its construction as a relational field. The landscape subsists and is recognised not only as object in vision, but also as subject in action. These ambiguities do not tend towards resolution, making the state of tension the immanent condition of existence and even vigour of the landscape. Dynamism, effervescence (Metta, 2022) and continuous transformative industriousness make the landscape an entity whose essence is action (Celestini, 2018). Thus, landscape is because it is seen, and is because it acts. Therefore, what we see – that particular quality that, when recognised, makes a country a landscape (Roger, 1997) – is a relational field made up of continuous drives and tensions, of generative and destructive restlessness, a seesaw of rebirths and ruins; what we see is therefore its effect and our effect on it. This point is crucial and firmly marks a change in the posture of contemporary culture towards landscape, with quite significant consequences for our purposes.

The first consequence is that perception and action are not opposing positions, but complementary, since the aesthetic qualities and semantic characters

that contemporary culture recognises and seeks in landscapes concern its modes and processes of becoming as a system of active and living relations, often transitory, ephemeral, even degenerative. Attention to the performativity of the landscape never implies its anaesthetic reduction in favour of the prevalence of pure biological and environmental data, but on the contrary, it implies the ability to read in the latter reasons of beauty and meaning, where the 'form' of the landscape is inextricably, though not deterministically, linked to its physiology.

The second consequence is that the landscape is understood today primarily as an operational code produced by the combination of different agencies, intentions and skills, including human ones, and therefore inevitably manifests characters of uncertainty and unpredictability. The avoidance of stability and prediction is often regarded as an insurgent cause of fragility. In fact, the reaction to risk, both at the local and neighbourhood scale and at the global scale, derives above all from fear of the uncertain and the unexpected (Beck, 1992). In a historical moment of epochal changes, of dangers and risks that are evident or feared, the concepts of disaster, catastrophe and apocalypse have a great deal of hold; above all because fear, as it is widely perceived, stems from the very idea of change itself, as well as or even more than from its actual manifestations. It is the change itself, it is the fact that the world is out of control, that puts us in crisis and causes fear, since 'transformation, transition, change are concepts towards which Western thought is unprepared, founded on an idea of nature conceived on the model of a subject-agent which sees itself at the centre of every process' (Celestini, 2018, p. 41). We are disturbed not so much because all aspects of the current conjuncture – environmental, economic, social – appear negative, but because they turn out to be uncontrollable. For this, the viewpoints of landscape architecture can be useful, because landscape design does not fear change, far from it: it works with the living and therefore thrives on disturbance; it knows that change is not an accidental but a substantial state, which is not to be feared, but understood and managed. In this sense, the landscape point of view and landscape architecture cease to be options and become necessities, not only for their interpretative, configurative and technical aspects, but also, and primarily, for their reasoning structure, for the conceptual tools with which they are able to tell the world and make the world. As such, they can instruct and guide both large-scale political and technical choices, as well as minimal actions, operating on several rhythmic and melodic lines that develop as in a score: the line of ecology and relations in the environment; that of social relations within contexts of dialogue; the political line, which defines values and objectives, nodes of consensus and conflict; and finally the aesthetic line, in a broad and inclusive sense of natural forms and phenomena.

7.3 THEMES AND EXPERIENCES OF THE PROJECT IN FRAGILE LANDSCAPES

In the following, to exemplify the attitudes and modalities of the landscape gaze and project, we refer to some fragilities that characterise the Italian territory extensively and that, in their manifestation, take on clear landscape evidence. These are places, situations and phenomena that are part of the habit of those who live in many parts of the peninsula, of those who travel along a large road or railway, cutting through, like a section, large portions of the territory, or that periodically show up in media images. We discuss isolated and abandoned rural buildings, in richer and more dynamic agricultural areas, and their fate in oblivion. We address the impoverishment and simplification of the agrarian landscape created by ‘modernisation without development’ (Sapelli, 2015), and possible new forms of agriculture compatible with people’s lives and the quality of the environment. We consider water, too little in droughts or too much in floods, and the many possibilities it offers in rethinking regulation, security and the quality of spaces. Lastly, we deal with the widespread and chronic phenomenon of forest fires, which makes evident the abandonment and deterioration of forest quality and is linked to the loss of local knowledge of fire, its rules, and the times and ways of using ancient agronomic and forest management techniques. These situations exemplify, among many other possibilities, several opportunities for action that integrate widespread knowledge of landscape transformation processes with a shared awareness, where visibility and knowledge also mean operability. In other words, it is a question of bringing to a cultural and political level – that is, within the space of sharing public images and common visions – that which otherwise belongs only to the inevitability of events, to the widespread and fragmented perception of risks,⁶ or to consolatory or consensual interpretations which are therefore inevitably reductionist.

7.3.1 The Ruins of Abandoned Landscapes: Composition and Recomposition

Travelling along an Italian motorway or railway, along the tracks that cut deep into agrarian landscapes, makes it possible to immediately grasp the widespread and indistinct phenomenon of the abandonment of the rural building heritage. The studies and research that for many years have documented

⁶ For the relationship between risk perception and awareness and its implications in contemporary society, reference is made to the writings of Ulrich Beck (see Beck, 1992).

Italian rural architecture and the territorial rationality of settlements, starting with Pagano and Gambi's studies (Pagano, 1936; Gambi and Barbieri, 1980), are today the documentation of a largely lost past, of which photographs, reliefs, transformed simulacra or mere ruins remain (Bevilacqua, 2002). Recent data on territorial changes in Italy help us to place this phenomenon in the broad picture of the transformations of the last 60 years:⁷ the subtraction of fertile soil for urban uses and infrastructures and the radical changes in agrarian practices, due to modes of conduction oriented towards increased and efficient production, have modified rural landscapes with consequences on land structure, agronomic quality and building stock, which has become progressively overabundant and inadequate. The phenomenon has affected the Italian territory more than others in Europe, and has left, as if after a flood, the abandoned remains of rural constructions in the plains and valley bottoms, and of inhabited areas and widespread settlements in the highlands.

Many recent readings and interpretations have extensively dealt with settlement abandonment, particularly in inland areas, especially from the perspective of creating renewed housing conditions linked to new policies and economies (De Rossi, 2018). These studies have also highlighted the technical and cartographic limits posed to the geographical and quantitative reading of the phenomenon at the minute scale, far from the main agglomerations or where recent superfluity of the territorial palimpsest has eliminated the strands of the 'thin and resistant' web (Bevilacqua, 2018) that, despite everything, in many parts of the Italian territory still sustains the system of rural territories.

At the tiny, close-up scale, which data and maps struggle to represent, one can in fact recognise the most fragile situations and artefacts. They are clusters of ruins, sometimes unrecognisable and reduced to piles of stones or dystopian groves of trees and shrubs in the agricultural desert of the plains. The landscape evidence of these situations anticipates analytical knowledge and poses urgent questions that cannot be answered by the search for a new meaning and possible reuse in relation to the past, nor, perhaps, in systemic and widespread actions: there are places where the residual materiality of things has lost and loses meaning every day. The artefact, or what remains of it, detaches itself from the meaning linked to use, memory, history, and requires a new point

⁷ Reference is made to the data and analyses presented in ISPRA's report *Territorio. Processi e trasformazioni in Italia*, published in 2018 (https://www.isprambiente.gov.it/files2018/pubblicazioni/rapporti/Rapporto_territorio_web.pdf). The words 'metamorphosis', 'transition', 'transformation', often used in it, describe an inexorable process of extension and transformation of the built-up area and of endogenous mutation of the agricultural and forest land.

of view which moves from physical, geological and biological evidence, suspended between a lost and forgotten past and an open future.⁸

These situations without a memory require an approach placed in the here and now, beyond nostalgia and the poetics of ruins, as opposed to the ‘anthropology of abandonment’ that characterises, for example, Vito Teti’s writings on the abandoned places of Calabria and aims to permanently rescue them from oblivion (Teti, 2004), as well as the poetics of Franco Arminio (Arminio and Ferretti, 2019). It is a matter of recognising and interpreting the extreme expression of the fragility of artefacts inherited from the past, which perish, leaving every vital cycle to return to the simple materiality of a heap of stones or soil, of waste and scrap.⁹ It is a widespread, indistinct condition, perhaps more frequent in intermediate territories – that is, far from metropolitan dynamics and inland areas – but it can be found everywhere: in the countryside of intensive agriculture, where the proportion of buildings functional to activities and the extension of farms has led to the disuse of most rural artefacts; in the areas enclosed and rendered inaccessible by large infrastructures or by the subdivisions produced by new land uses, production and logistics areas, technological and energy plants; but also in the high lands of the Alps and the Apennines, far from the major centres, in alpine pastures and forests; in the landscapes of land reclamation and large agricultural estates.

These situations, in their extreme frailty, close to disappearance, suggest two possible scenarios. The first is the final abandonment, ruin and dissolution of the artefacts, absorbed by the geology and the physical and biological cycles of the landscape; it is an accepted option, and one that brings back into the ecological cycle what pre-existed, considering and acknowledging the environmental risk that this may entail, and ultimately entrusting the object to the world of forgotten things (Schalansky, 2018). On the other hand, the second scenario calls for the careful storage and recomposition of what was built in the past (Lynch, 1991), through a sort of temporary takeover, ‘an act of stone towards a civilisation that ended the day before yesterday, the final phase of a parable that, however, also wants to suggest the beginning of a new

⁸ The theme of reuse, recycling and waste was dealt with in a large Project of Significant National Interest coordinated by Renato Bocchi between 2012 and 2015 with Istituto Universitario di Architettura di Venezia (IUAV), Università di Trento, Politecnico di Milano, Politecnico di Torino, and the Universities of Genova, Roma La Sapienza, Federico II in Naples, Palermo, Reggio Calabria, Chieti and Pescara, Camerino. In particular, on the subject of waste and the new and unexpected evidence in the landscape, see the contribution by Carlo Gasparrini (2014).

⁹ For the concept of waste in relation to the processes of decay and change of meaning, as well as with respect to the possibilities of reintroduction into urban life cycles, or care in storing what has been collected and used, a fundamental reference is the papers by Kevin Lynch collected by Michael Soutwork (Lynch, 1991).

era' (Dini-Girodo, 2020, p. 79). With these words, Ticino architect Martino Pedrozzi describes a set of 'recomposition' actions in the alpine pastures of the Malvaglia Valley, in Ticino. They are minimal interventions, tackled in an area dominated by the backdrop of the Alps and not immune to the phenomena of abandonment, of the decline into invisibility of minor artefacts, despite the many resources dedicated to the recovery and conservation of rural landscapes allocated by the Swiss confederation through regional policies. In abandoned alpine pastures, small buildings built of stone, with wooden beam ceilings, have collapsed, losing their original form and function. After a process of decomposition, what remains is slowly reassembled, collecting the stones and placing them within the original footprint, bridging a gap or even just the boundary defined by what remains of the wall perimeter. The interest and significance of the operation lie in the process it involves, in the rituality and the manner of the action rather than in the formal, discreet and almost invisible result, or in the undoubted landscape quality of the place where it takes place. Deconstructing and moving stones implies direct knowledge of their conformation, their weight, their arrangement with each other. It is a long and patient task that Pedrozzi initially carried out alone or with little help, later involving groups of students and volunteers. From waste, each stone acquires a new meaning when, taken in one's hands, it is weighed, observed in its form, understood in its constructive possibilities: a fragment of wall, a coping, a flat slab. The stones are reassembled to form perimeters, fills, finally a flat surface that encloses the structure. Disassembly, which is also a way of getting to know the elements of the artefact, is then followed by its recomposition into new forms. Simple plans describe the imprint and mark the persistence in the landscape of what has been an animal shelter, a barn, a dwelling. The action takes place without any need to refer to the use of the buildings to which the stones themselves belonged. It simply takes place in a space, occupying it with a new, durable artefact, which regains meaning in relation to its surroundings, reconstructing new relationships in an open manner.

The design actions experimented by Martino Pedrozzi are circumscribed in time: a few summer weeks dedicated to the care of a place, a didactic workshop with a group of university students from architecture schools.¹⁰ They enter and leave, discreetly, the long time of the landscape and the transformation of artefacts; they produce an acceleration, an intentional change, an interference represented by a minimal and probably temporary principle of order. Without an excessive economic investment, this leaves the place with a new conforma-

¹⁰ The workshop experience is documented in the video *Essere felici. A Martino Pedrozzi's Recomposition with USI, EPFL and ETH* (<https://vimeo.com/545850255>).

tion, different from the past, but also open to subsequent evolutions. As Michal Jakob writes in a lengthy commentary on Pedrozzi's work:

The work reflects ... an ecological process (having rearranged a site with minimal effort and environmental impact), an aesthetic process (having created a new, partly mysterious form), a social process (having worked together with a diverse group without any hierarchies) and also a political process, since such an activity nevertheless serves as a public manifesto. (Jacob, 2021, p. 5)

The value of the action is evidently symbolic and thus lends itself to being deployed in other situations and at different scales. We can imagine such a mode of operation transposed to the agricultural landscapes of the plains, to the margins of suburbs in large metropolitan areas, to the floodplain areas of rivers. A roofless building is completely invaded by the vegetation inside it, a new space inhabited by nature becomes a small heart of naturalness and biodiversity in the agricultural desert. The mere permanence of a void, a clearing, or a set of brambles grown over an expanse of bricks, produces a discontinuity in the forest, favouring the filtering of light. A wall perimeter, together with many similar wall perimeters, defines a rhythm, a sequence of references for those travelling at speed along a motorway or railway route, or a garden and a point of shade for those moving slowly across the landscape.

7.3.2 Simplification and New Complexity of the Agrarian Landscape

In agricultural spaces, a form of fragilisation is evident that is the 'other side' of the soil consumption produced by urban growth and measured every year by Istituto Superiore per la Protezione e la Ricerca Ambientale (ISPRA) reports:¹¹ it is extensive, progressive, devious, because it occurs in the continuity of the agricultural economy. In different ways, modern agricultural management has in fact led to the impoverishment of the agrarian landscape, the amalgamation of land, a reduction in landscape complexity and biodiversity, with significant environmental damage. The soil is thus increasingly weakened before it is consumed, through slow and progressive changes that escape the evidence of perception and originate in the global processes of agricultural modernisation of the past century. The effects on the environment of mechanisation and, since the 1940s, of the 'Green Revolution', are well known and highly debated (Carson, 1962; Shiva, 1993; Bocchi, 2015); without these advances,

¹¹ ISPRA annually collects data on soil consumption, supplemented in recent years by an in-depth study on the effects on ecosystem services. Documentation and annual reports can be found at www.isprambiente.gov.it/it/attivita/suolo-e-territorio/suolo/il-consumo-di-suolo/i-dati-sul-consumo-di-suolo.

much of the world would not have had access to the prospect of development, but with serious consequences for the environment and living and working conditions.¹² The dust storms in the central American states between the 1920s and 1930s – recounted by John Steinbeck in *The Grapes of Wrath* – which led to the abandonment of large territories and mass migrations, were caused by the transformation of large prairies into arable monocultures, deep ploughing and the use of industrial fertilisers, combined with the lack of rainfall, the loss of organic matter and, finally, the pulverisation of soil. These phenomena, together with the aggressive growth of urban and agricultural settlements, led some agronomists and foresters, such as Herbert Hanson and Aldo Leopold, to write the first scientific and civilised texts on the relationship between agriculture and the environment, proposing a new conservative and ecological attitude towards a different kind of agriculture, respecting the Earth's resources and their reproduction, with constant attention to the landscape, understood as the interaction between human action and wildlife (Hanson, 1939; Leopold, 1949; Wezel et al., 2009).

In Italy, the results of industrial agriculture – in the monocultures of the plains, in the landscapes of wine, hazelnuts, intensive horticulture and fruit-growing – are less drastic, yet relevant: soil pollution and impoverishment, improper water management, loss of biodiversity, of tree cover, hedges and woodland areas, functional to wind protection and pollination. The widespread perception and awareness of these phenomena mainly concern environmental aspects, while the consequences and evidence of the landscape remain on a blurred background or fragmented in partial images, a reflection of social fragmentation, expectations and local interests.¹³ The Italian agricultural territory is an extension inhabited and cared for by over 1 million workers, a number that does not take into account the many irregular seasonal workers, in conditions of absolute precariousness.¹⁴ The agricultural and livestock sectors are regulated and supported by European policies that commit one-third of the European Union's resources, and that for Italy alone correspond to 15 per cent of the total, amounting to over €7 billion per year. If the urbanised area in Italy measures 21 500 square kilometres, with an average annual growth rate over

¹² The United Nations Food and Agriculture Organization (FAO) reports annually on the analysis and monitoring of the condition of agriculture and food systems in the world (<https://www.fao.org/sustainability/en/>).

¹³ On the environmental conflicts related to agricultural activities and, more generally, on the environmental and social sustainability of Italian agriculture, take a look at the documentary and information activity conducted by the Forum nazionale salviamo il paesaggio (www.salviamoilpaesaggio.it).

¹⁴ The number of agricultural workers in Italy, including seasonal workers, is 1 088 034 (EBAN Nomisma 2022 data).

the last ten years of between 6 and 7 per cent, agricultural areas occupy 164 000 square kilometres of farmland, with 415 000 enterprises, against 128 000 square kilometres of utilised agricultural area (UAA), that is, the part directly cultivated, net of woods, buildings, rural infrastructure.¹⁵ This area is managed by increasingly structured tenant farms, but of limited size: on average they measure 18 hectares, a size that has doubled in the last 20 years, mainly due to the amalgamation in management between owned and leased areas. Only 1.6 per cent of Italian farms exceed 100 hectares of cultivated land, a figure that does not reflect the ownership structure, which sees large tracts of private and public ownership, especially in areas with a stronger agricultural economy.

Agriculture represents an extraordinary area, only partly practised, of policies and actions to reorient development,¹⁶ restoring the landscape point of view and the landscape project to a central role with widespread effects in all territories, including the most intensely inhabited ones. In fact, the spaces of agriculture in Italy, in their territorial differentiation and extension, represent the palimpsest and living matrix of the landscape – described by Sereni in the post-war period starting from iconography, and before that by Stoppani, integrating geography, history and society, geology and natural sciences of the *Bel Paese* in a great pedagogical tale (Sereni, 1961; Stoppani, 1876) – and are a constantly changing context, as well as a field of power and policies, which should be integrated between agriculture and culture, environment, society and work, inseparable aspects in a living and working landscape perspective.¹⁷ This can happen provided that the spaces of agriculture are not seen as a space for sectoral economies and policies, but as a laboratory for a new ecological and landscape quality pursued in a collective and shared manner.

For this to happen, two conditions are needed, which are not new in the history of landscape design: a broad, strategic vision, projected in the long

¹⁵ ISPRA data 2021, *Consumo di suolo. Dinamiche territoriali e servizi ecosistemici. SNPA 32-2022*. For information on the changes in agricultural areas in Italy, farm management and farm types, see the summary report of the Seventh General Census of Agriculture, www.istat.it/it/files//2022/06/REPORT-CENSIAGRI_2021-def.pdf.

¹⁶ For an overview of 2023/27 European agricultural policies and the potential limits of their implementation see Sotte (2021). As of 2023, funding and projects are no longer managed, as in the past, by the regions, but by the government on the basis of a national strategic development plan. The choices brought about by the pandemic and the new policies aimed at sustainability, through the New Green Deal, have led to a reorientation of investments towards curbing emissions and increasing biodiversity, with significant divergences between the objectives and the reality of national actions.

¹⁷ It should be kept in mind that the number of actors and decision-makers involved, in relation to the size of the territories involved, is not comparable to other contexts and policies capable of producing direct effects and modifications on the landscape, such as construction, infrastructure, tourism.

term; and a profound and spatially defined relationship, circumscribed in a near time horizon, with a place and with a set of possible modifications in the negotiation between natural dynamics, productive and economic objectives, health and wellbeing of communities.

If these two conditions coexist, the landscape can be the context of integrated actions, which take place in precise places and which over time can extend and replicate themselves, on the basis of workshops of a local nature, of agreements, pacts, consortia as widely described and practised by studies of a territorialist matrix since the 1990s (Magnaghi, 2020; Magnaghi and Fanfani, 2010; Ferraresi, 1993). The experience of agricultural districts, often governed and mediated by parks, moves in this direction. But even some more independent and isolated experiences have shown how the diffusion of a project culture in the landscape, combined with the opportunities offered by rules and funding, can be very effective and trigger reform processes, often starting precisely from certain fragile conditions. Farm experiences that integrate production, environmental and landscape aspects in relation to the local impacts of agricultural changes are also beginning to move in this direction, particularly where these affect the health and daily life of communities.

An example is the experience of the Cassinazza private farm, which operates on more than 1500 hectares of arable land in the irrigated plain between Milan and Pavia,¹⁸ close to the Pavia Canal, just beyond the limits of Milan's Southern Agricultural Park. Faced with tumultuous urban growth, which began in the post-war period and has not stopped (Balducci et al., 2016), since the early 1970s various actions to protect natural and agricultural areas – the outcome of important political battles – have led to the establishment by the Region of the Ticino, Adda and Groane parks, the Parco Nord, and since 1990, the Parco Agricolo Sud Milano (Ferraresi, 1993; Beltrame, 2000); but often without being able to act on the preservation of the landscape structure that evolved in the direction of monoculture, supported by European Union measures, and in the substantial freedom of companies owning or renting large estates, public bodies and foundations. The progressive outcome was the loss of the agrarian landscape not only as a structure of fields, irrigation systems, trees and agricultural diversification, but also as an image present in the daily life and memory of the citizens of the Milanese metropolis, which became a 'city without landscape' (Longo, 2017).¹⁹

¹⁸ The Cassinazza experience is documented on the website www.reterurale.it/ as well as through numerous journalistic contributions, including Caprara (2021). The data and information in this chapter are derived from direct sources and from what can be found on the company website.

¹⁹ Comparison of land-use data shows that the system of hedgerows and trees between farms that developed alongside the dense irrigation system has been almost

In this context, among the enterprises in southern Milan, the Cassinazza farm represents an anomaly and an interesting and well-established experiment. The anomaly consists of several aspects: the functional specificity of the company, which integrates industrial activities of special waste management and agricultural activities; the size of the farm, the result of the capitalisation of the two activities, at least ten times larger than the average of South Milan companies; the choice of a regeneration process that has made tactical use of European Union funds, rules for agronomic management, and opportunities of the differentiated local market which is also willing to pay the increased value of quality products, such as the Milanese market; finally, in deliberately allowing the invention of a new landscape, which marks a departure from past history, an island of biodiversity in the agricultural desert of South Milan, excluded from public use. The farm has allocated part of the surface area (about 20 per cent of the UAA) to the creation, over time, of wetlands and woodland areas,²⁰ and to the formation of a network of canals, whose section has been modified and widened to favour the function of irrigation by overflowing, accompanied by strips of hygrophilous vegetation. This condition has produced an increase in the presence of insects antagonistic to the harmful species, such that the need for insecticides has been cancelled out and the use of plant protection products has been limited to anti-fungals.

The relevant aspect of the Cassinazza farm is to have placed alongside its typical agricultural activity a focus on environmental aspects, to the point of considering the environment itself an agricultural product, with obvious advantages in both ecological and agronomic terms. The initial instrument was the use of European Union and regional funds for the creation of wetlands and woodland bands functional to agricultural management with a 20-year horizon; moreover with a prospect of reversibility permitted by the regulations themselves. Built over time, today the ecological-environmental infrastructure of the farm represents part of the value, image and the current economy, and more than 20 years after its start-up, the farm represents a possible future evolution of agricultural areas in the Milanese metropolitan area and, more generally,

completely lost between the post-war period and the present day, with a significant acceleration in the last 30 years. Dimple springs, surface aquifer gaining streams and water meadows have also been almost completely lost. The dominance of maize and soybean crops, partly replaced by dry crops in the face of a reduction in irrigated meadows and flooded rice fields, has changed the use of water resources for irrigation, creating imbalances in the demand-to-availability ratio, with dramatic consequences in the management of emergency conditions, as in the summer of 2022.

²⁰ The farm had access to €2 million in Community Agricultural Policy (CAP) greening funding and Rural Development Plan funds. The farm's natural area system today consists of 78 hectares of woods and permanent meadows, and over 100 hectares of wetlands.

in the territories of intensive agricultural production, flanking and integrating three different types of spaces. First, spaces dedicated almost exclusively to biodiversity, which support agronomic quality by improving water quality, the presence of insect and vertebrate species, protection from the wind, and so on, and provide a broad set of ecosystem functions. Second, agricultural spaces, still managed according to principles of farm efficiency, but with management methods based on agroecological principles aimed at quality production, crop sustainability and the creation of food chains. And third, spaces that are usable, traversable, open and available to those who inhabit the territories. There is no shortage of limitations and shortcomings, such as the excessive closure and protection with respect to the surrounding territory, or the abandonment of many beautiful rural buildings and farmsteads: destined for ruin, perhaps waiting for new uses.

In this sense, the Cassinazza experience recounts and explicates a framework of possibilities that can be generalised and is certainly already present in many areas in Italy. The question is how to handle the potential and fragility described so far with an attitude of contextual imagination that brings agroecological practices very close to those of landscape architecture:

the essential vision of agroecology ... the agroecological imagination – is to think contextually. Instead of doing the same in different places and the same in the same places, agroecology works by trying to do different things in different places through localization of knowledge, food, region, and more. And agroecology also works by doing different things in the same place, for example through crop rotation, crop and livestock integration, diversification, considering the farm as a home and a community, provision of habitat, and other forms of multifunctionality. (Bell and Bellon, 2018, p. 610)

7.3.3 The Water Landscape: Excess and Scarcity

Water is at the basis of the settlement principles of many areas inhabited by human beings, and the way in which its presence or absence is managed has often been decisive in defining the very location of a city itself: it is well known that the first urban settlements developed at the height of springs, not too far from ridges, and close to places where water could be drawn for domestic use, for crops and livestock. It was only later that cities took possession of the valleys, which required a high level of technical and political development, the kind that makes it possible to reclaim marshes, defend against floods, build bridges, canals and drainage systems, and combat waterlogging. Without water, therefore, the city is unimaginable, and at the same time, living with water requires advanced skills. The relationship with water is also decisive in defining the shape of cities, to the point that it is possible to subdivide them into concave, convex or plain, precisely according to the ways in which they

interact with water, both spring and meteoric (Laureano, 2013). It is no coincidence, for example, that lowland cities have historically developed forms that can be traced back to grids, exploiting the same isotropic geometric principle adopted for the drainage of extensive horizontal surfaces, where water tends to be stagnant because there is no slope that determines a prevailing direction of flow. In the same way, convex cities are typically developed on terracing, not only to make sloping surfaces partially horizontal and thus suitable for both construction and cultivation, but also, in the absence of springs of sufficient capacity, to be able to channel water into channels that, by exploiting gravity, allow the water to be stored in cisterns, intercepting at least part of its downward flow, which otherwise causes it to drain away without being available when needed.

The examples are innumerable; indeed, it may be considered that every urban matter is inevitably also a water matter. The topological and geometric correspondence between city and water has gradually become less and less clear with the strong acceleration of technological developments (at least from the industrial age onwards), generating disagreements that have gradually made water a dangerous element to be quelled with coercive measures. It is no coincidence that the season of the systematic construction of embankment walls in the main Italian cities crossed by rivers of a certain significance is placed for all of them in the same period, between the last decades of the 19th century and the early 20th century, when faith in technology capable of taming the impetuosity of nature was stronger than ever.

Unusual weather phenomena, a side effect of climate change, are increasingly demonstrating the inadequacy of interventions that have replaced the instability and thus the fragility of water territories, with the robustness of devices aimed at harnessing it with the pretence of taming it and leading it to a constant and unalterable condition that does not belong to it. In doing so, we have on the contrary exasperated the extremes of its fluctuating behaviour, linked to its excesses of temperament (floods, flash floods, storm surges) and its absence (droughts). Data collected by Legambiente's Osservatorio Città Clima reveal that 310 extreme weather events occurred in Italy in 2022, a 55 per cent increase over 2021. Of these, 117 were related to floods from heavy rains and river overflows, with a percentage increase of 19 per cent compared to the previous year; and 28 to prolonged drought,²¹ in this case with a per-

²¹ According to data from Istituto di Scienze dell'Atmosfera e del Clima del Centro Nazionale Ricerche (ISAC-CNR), rainfall in the first seven months of the year fell by 46% compared to the average of the last 30 years. The first part of the year was crucial, with five consecutive months of severe drought, and an anomaly of -44% rainfall from January to June, equivalent to about 35 billion cubic metres less water than normal ... In increasing difficulty were the rivers, such as the Po,

centage increase of 367 per cent compared to 2021. The management of water resources is therefore nowadays an inescapable mandate for any urban project, of any scale and tenor, and must be addressed simultaneously to the two phenomena, the flooding and the drought, since they have demonstrated equal severity, albeit with completely different manifestations: the former is sudden; the latter is gradual and progressive but no less devastating. This is why any landscape project is inevitably a water project, conceived as a turning cog in a dialogue with water, its chemical and mechanical qualities, as well as with its motions. It is only a question of renewing the 1000-year-old practice evoked earlier that wanted the reasons for the position and form of urban space to emanate from a structuring bond with water; it is necessary to imagine places that, in addition to being successful, accessible, functional and appealing public spaces, as well as efficient and sustainable productive spaces, are also hydraulic machines capable of directing and containing water, both to slow down its flow and reduce sewer overload in cases of particular abundance, and to store adequate quantities in anticipation of possible droughts.

There are countries to look to for their avant-garde positions: in Europe undoubtedly the Netherlands, and then the United States, where the design of water landscapes has long converged on strategies and methods oriented towards collaboration with the water behaviour of rivers, rainfall and tides, having abandoned the long-prevailing attitude of containing bodies of water within places, forms and devices not appropriate to its mode of action. However, some recent experiences comfort us in the knowledge that a design capable of negotiating with water, in forms of skilful and far-sighted mediation, is practised in Italy and can be a replicable reference, of method and solutions. This is the case of several projects by Studio Ceccon Zampieri, which introduce reflection on the ways of negotiating and non-hostile coexistence with water within contemporary public space arrangements. This is the case, for example, in Mestre, in the park of Via Mattuglie alla Gazzera, where areas that are marshy by nature are preserved in their hydraulic functioning and enhanced aesthetically, literally staging the ways in which water draws surviving passages of territories that once belonged to it entirely. This is also the case of the Parco Catene, in Marghera (Venice), built in 2012 in an agricultural fragment of about 8 hectares. The project recovers and renews the function of a series of hydraulic devices that have long been present on the site, long used for agricultural purposes, including *baulatura* (traditional convex shaping of

which at Ponte della Becca (Pavia) had a water level of -3 metres, and the large lakes, with filling percentages ranging from 15% of Lake Iseo, 18% of Lake Como to 24% of Lake Maggiore ... Lake Trasimeno reached a level well below the critical threshold, at -1.54 metres. In Latium, Lake Bracciano has dropped to -1.38 metres from its hydrometric zero. (Legambiente, 2022, p. 2)

land), drainage canals and main drains for water disposal, as well as approximately 6000 square metres of wet meadows, which allow the maintenance of the hydraulic regime and invariance of the area, conditioning the quantity and location of the sealed areas. On the surface of the area, incisions, corrugations, elevations, stresses, consolidations have been made, which respond to multiple criteria: they enhance the physical properties of the different soils; they condition the movements of users by suggesting perceptive directions; they make the hydraulic system efficient. These are not only drainage channels, but also drainage channels combined with underlying micro-perforated pipes which, by draining the lawn surfaces, ensure the water supply to a rainwater collection tank which in turn feeds the irrigation system, consisting of two circuits, one for the new trees, the other for sprinkling the lawns. It is therefore a system that works with opposing water regimes, directing excess water in the event of exceptionally heavy rainfall, and channelling water into special reserves in anticipation of drought periods.

What is striking about these projects is their ordinariness. They are not striking actions or muscular transformations, but rather a subtle, minute and pervasive work that innervates everyday landscapes, recovering their sense and efficacy, as much functional as identity and, not least, aesthetic. These are minor projects (Boano, 2021) that have the capacity to become structuring, and if they really became systematic practices, would be able to make decisive contributions to tackling the hydraulic fragility of our landscapes, even avoiding isolated and lavish works, in terms of dimensional, technological and financial tenor. These projects express not only the technical skill of knowing how to manoeuvre water territories without forcing, and with the necessary smoothness that knows how to transform their fragility into a qualifying character, but also the ability not to subordinate the sense of the project to the deaf application of textbook solutions – ‘rain gardens’, ‘sponge parks’, ‘concave structures’, ‘retention tanks’, ‘dry canals’ or ‘grassed waterways’ – which risk conforming to urban landscapes by resorting to a sampler of environmentally effective devices, but which, without the necessary rootedness in the physical and symbolic, material and immaterial characteristics of the contexts of reference, risk transforming the ‘water-sensitive project’ into an atopic and technocratic universalism, replacing environmental and spatial fragility with weakness of meaning and value.

7.3.4 Fire as Part of Landscape Development

Fires are an increasingly looming threat to our territories, and surveys reveal increasingly alarming phenomena. According to the most recent European Union report at the time of writing (San-Miguel-Ayanz et al., 2022), 2022 was the year with the greatest number and spread of fires since 2006, having

affected areas totalling 8600 square kilometres. It is no coincidence that 2022 was also the year with the most serious water crisis in Europe in the last five centuries: climate change, in fact, with rising temperatures and the prolongation of drought periods over increasingly large areas, are among the reasons triggering fire outbreaks. Other causes, no less significant, are the inadequate management of forests and agricultural areas, and the consequent development of environmental conditions favourable to the development of sudden fires that are difficult to manage. Italy is among the European countries most exposed to the risk of fires. In 2021, it held the continental record for the extension of areas on fire, amounting to almost 152 000 square kilometres, a 234 per cent increase over the national average of the previous decade (San-Miguel-Ayanz et al., 2022). These numbers paint an extremely grave picture, the causes of which are only partly attributable to endogenous phenomena or arson: the main cause is deliberate fires that are beyond the control of untrained people.

And yet, paradoxical as it may seem, fire is fire's worst enemy, as is well known to humans who have lived in territories exposed to its risks from very distant times, from the Mediterranean to California to Australia, and who have developed traditional practices of controlled, selective, localised and low-intensity fires. The reason is that these fires, if well managed, have advantages. For example, they sort the vegetation, clearing out that which easily catches fire, and making room for that which can withstand exposure to flames (a typical feature, in Italy, of many tree and shrub species of the Mediterranean maquis shrubland), thus helping to reduce the combustible load and restore altered or dysfunctional ecosystems. Another advantage is that they trigger vegetative successions, creating the conditions for soil renewal and the germination of latent species. In fact, fire is often considered a devastating element, but it is also an opportunity for rebirth: through fires, trees are carbonised, mineralised and then reborn, and many plant species, namely pyrophyllous, can only carry out their life cycle after the fire has passed²² (Clément, 2005), in turn contributing to the reinvigoration of soil quality. In different ways, these populations resorted to controlled fires to strengthen local ecosystems and reduce the risks of destructive fires developing beyond their control; in other words, they knew how to fight fire with fire. These methods of land management were once widespread in Italy as well. For example, in the Tavoliere, in Apulia, and in the areas bordering Daunia and Irpinia, the practice of controlled fires after the wheat had been harvested gave rise to the custom of

²² London rocket (*Sisymbrium irio*) is, for example, one of these plants; it owes its name and notoriety to one of the most devastating urban fires in Europe, the Great Fire of London in 1666: the city was reduced to rubble, and it is said that in a short time the remains were covered by a myriad of small yellow flowers, which then became the symbol of the city's rebirth (Clapham et al., 1968).

harvesting the residual burnt ears of grain; from these came the burnt wheat flour with which traditional fresh pasta was made; the burning of the fields was also a biological stimulus to the development of wild rocket²³ (*Diplotaxis tenuifolia*), an edible herb, an integral part of the local diet, to the harvesting of which time and attention was devoted. On late summer nights, the fire traced blazing lines in the landscape, of a deep orange colour, which emphasised the ruthless horizontality or the slight undulations of the terrain, in a ritual whose power, of danger and at the same time of regeneration, was perceived; in the following weeks, the fields appeared as if tattooed by the controlled passage of the flames, which had drawn them according to trajectories aware of the directions and intensities of the winds, in an intertwined choreography of air and ground; magnificently portrayed, for example, by the eyes of the Italian photographer Mario Giacomelli.

These practices have been largely lost, partly because of the ‘culture of removal’ that in Italy, and in many other countries, has sought to make social and economic redemption coincide with the overcoming of agriculture, pastoralism and harvesting, considered the embodiment of millennia of poverty and oppression. But the loss of this knowledge, in addition to causing a serious impoverishment of the local cultural heritage, also leads to the abandonment of crops and forests, producing intermediate areas of vegetation that constitute an enormous and dangerous combustible load, especially in light of the variations in rainfall patterns and temperatures, previously mentioned.

Instead, these skills could be renewed and relaunched as contemporary landscape design tools, within the framework of what has been called ‘pyrological design’ (Schuler, 2020). Examples are not lacking, especially in the United States, involving some of the most influential designers on the international scene. This is the case of Michael Van Valkenburgh (MVVA) who, exactly 30 years after the pioneering experience of the General Mills Sculpture Garden in Minneapolis, in which fires were an integral part of the garden’s prairie management plan, included the practice of controlled fires among the planned actions of the master plan for the Turkey Mountain Urban Wilderness Area, extended over more than 250 hectares, not far from Tulsa, Oklahoma. For a long time, especially in pre-colonial times, the local landscape was governed through controlled fires (pyro-silviculture), generating the complex mosaic of forests, glades and high, open grasslands that has long characterised it. But with the cessation of these practices, it has become a dense blanket of trees, largely of species not suited to resist fire, triggering a potentially huge risk of disastrous fires. Aware of this environmental, biological and cultural history,

²³ Wild rocket belongs to the botanical family Brassicaceae, like London rocket, mentioned in the previous footnote.

MVVA reintroduced low-intensity induced fires as a landscape design tool, dividing the area into 120 geographical units to be burnt in a progressive sequence. The project has been advised by experts, who in turn have trained competent operators who have been entrusted with the management of the park over time, since – as noted above – the practice of controlled fires requires specific preparation and cannot be improvised. Launched in 2021, the fires will be continued on an experimental basis for the next five years, with positive effects expected in terms of increasing biodiversity and containing uncontrolled fires.

Fire management goes hand in hand with land management, and these practices show that fire prevention coincides with the activation of virtuous cycles, both ecological and economic, as well as affective, of care, memory and rootedness. In line with the requirements of European Union directives (Nuijten et al., 2021), Italy too is equipping itself with prevention programmes²⁴ that find in pyro-silviculture a resource for containing risks and improving environmental conditions, as already takes place in a structured manner in other European countries.²⁵ It cannot be considered an isolated practice, as it is part of an integrated system in which other operational plans collaborate, from pastures to the management of public spaces. The hope is that, similarly to what has happened with water, a custom of collaboration and ‘complicity’ can also be established with fire, which can lead to ‘fire-sensitive projects’, introducing a repertoire of possibilities for entering into a relationship with an element that is certainly dangerous and, just like water, capable of bringing destruction but also fertility, meaning and beauty.

7.4 IN FRAGILITY: LANDSCAPE AS A FIELD OF DESIGN

From the themes and experiences described, it can be understood how the landscape point of view precedes and accompanies the operative and technical dimension of landscape, the design of which is in turn a matter of tension;

²⁴ The main funding system for prevention interventions in Italy is the European Commission’s Rural Development Programme (RDP). Regulation (EU) 1305/2013 re-proposed direct support for interventions to prevent damage caused to forests by fire (Sub-measure 8.3) and to restore forests damaged by fire (8.4) for the 2013–2022 EU programming period (extended until 2022).

²⁵ Examples include the Swedish LIFE Taiga project, funded by the European Union and the Swedish Environmental Protection Agency with a budget of almost €10 million over five years (2015–2019), under which approximately 120 controlled fires were conducted in Natura 2000 sites, with the objectives of restoring and conserving unique habitats; and the Spanish TREX Andalucía 2019 project, a collaboration between the Andalusian government and the United States-based Nature Conservancy, to train specialised personnel in the management of controlled fires.

today, more than ever, open to the need for an epistemological interrogation of its meaning, its methods and its tools, precisely in the light of the renewed awareness of the unfailingly performative nature of landscape (Jullien, 2014).

Since the landscape acts and, as has been referred to, is a subject as well as an object, it should be observed and handled from an ethological perspective, thus addressing the behaviour of its constituent elements (Corner and Hirsch, 2014; Mathur and da Cunha, 2009). To acknowledge that the landscape is a plural subject endowed with agency might lead one to think that it is outside the possibility of the project, placing itself outside the decisions and forecasts attributable to the wills that inform the competences of prefiguration and configuration. In other words, arguing that landscape is a subject could trigger the misunderstanding that it belongs to the sphere of operativity and not operability, understanding the former as endogenous action and the latter as heterodirected action. It could lead one to think that landscape is not plannable, because it is not a system of relations and situations that can be controlled, neither on a perceptual nor on a performative level.

In reality, if designing the landscape might seem a paradox, it is rather a matter of reformulating and welcoming a much broader, collective, open meaning of the project itself. In fact, it is not the landscape that must be removed from the sphere of the project, with an action of withdrawal that is as contrite as it is, at times, opportunistic (Sarkis, 2021), but it is the project that must be redefined in the light of the awareness of the partial but decisive indeterminability of the landscape. Understanding the landscape as a system of multiple agencies and as a situation open to occurrence does not therefore mean that it cannot be designed, but rather that it requires us to update our idea of the project, to rethink the terms, modes and objectives of the project with respect to the exercise of predictive and performance control and, if possible, redemptive control that modernity has elaborated and handed down. Recognising landscape both as an operable field which constructs and shapes itself, and as an operable field which can be constructed and shaped, the contemporary landscape project is redefined as a collaborative co-action, in dialectic between different skills and wills. It is a perspective that in its own way overcomes, reforming it, the traditional tensional field that for a long time has understood the landscape project as a triangulation between territories, architectures and devices,²⁶ and that finds in acting with the landscape

²⁶ The tension that has long defined the themes and objects of landscape design in the Italian tradition can be schematically described as lying between three vertices:

- Landscape as territory, that is, the symbolic forms between utopian representations (such as the idealisation of de facto lost historical landscapes) and the arrangement of atypical objects (the invention of new, unexpected composite landscapes).

(Celestini, 2018; Metta, 2022) a pertinent and effective synthesis with respect to the questions posed by territorial fragilities.

Understood in this way, the project takes the form of conscious and competent actions, sometimes in the form of extensive modification interventions, at other times of extremely minute interventions with respect to the dimension of the phenomena with which they are confronted in terms of scale, yet capable of triggering modifications with relevant effects, in terms of evidence and extent and significance. Regardless of the scale, these are in any case systemic projects that engage with the context and interpret it (McHarg, 1969), since they aim to interfere with the processual connections at the basis of the form and physiology of territories to obtain effects that, despite their duration, act in depth and know how to be structural.

From here, and with direct reference to the relationship between landscape design and territorial fragilities, derives the need to reiterate that landscape design is not a reassuring or consoling practice of remedy, but that its effectiveness lies in its ability to operate according to imperfect and incomplete systems, establishing physiological and not merely formal relationships with contexts.

The insights and cases presented in this chapter, along with some of the most interesting experiences of recent landscape projects, are not calming thaumaturgical devices, but are often a conscious destabilising practice, through the intentional triggering of disturbances or alterations, in the manner of a homeopathic therapy. Sometimes projects can limit themselves to physiological components, they let water and seeds spontaneously fertilise the soil, they draw with mud the bed of a river so that it can be modelled by flowing water, with new banks and canals they give shape and life to wet ecosystems where there was previously an industrial monoculture. Thus some of the landscape architecture experiences of recent decades are proposed as the determination of intentionally fragile states and arrangements, if by fragility is meant instability and fickleness, delicacy and transience, even disappearance and loss. These are projects that propose themselves as triggers of situations available for rewriting, modification, even cancellation as a result of complicit interaction with other forces and other actions, which may manifest or remain latent, may occur in predictable ways and times, or be sudden, or even never occur.

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- Landscape as architecture, with the arrangement of new objects and the creation of new recognisable forms in the landscape, self-referenced and independent (the monuments) or the design of the ground.
 - Landscape as a device in space or field of operation, project space in and for landscape, object and circumstance that accommodates relationships (remaining identifiable and recognisable, such as the many viewpoints, bridges, paths, benches) or becoming invisible in relationships.

These actions interrogate the alleviating categories with which we have learnt to describe the world we like, well-ordered, disciplined, and therefore static, with a constant arrangement, performing well to our use and consumption, locked in time by a misunderstanding of preservation.

This vision leads to the unravelling of a series of categories that have long informed the discourse on landscape design, derived from oppositional pairs that have typically contrasted what is spontaneous with what is designed, what is natural with what is artificial, what is human with what is, in fact, nature. These are distinctions that easily lose their meaning and usefulness if placed in the perspective of landscape as a performative sphere and subject, and landscape design as a mode of co-action.

This view may also lead us to reconsider some deep-rooted beliefs, for instance those that would have technique and aesthetics as fields of exclusive human relevance and competence, features of the superiority of humans over other living forms. On the contrary, it has long been demonstrated that other animals make use of tools to modify their habitats (Beck, 1980), and that many forms of multispecies symbiosis are based on choices of taste, to the point of being able to argue that what we insist on calling nature is nothing more than a sort of 2000-year event set up by all species for the pleasure of others, and that this pleasure is beneficial to all (Coccia, 2020). These are statements that could sound like attempts to delegitimise the project, to deny the technical and expressive responsibilities that have always connoted it. Far from it. It is a matter of reaffirming them, because it is on the development of technique and aesthetics that the construction of the world is based, to the point that they are also present in spheres of non-human existence, and of broadening their sense and spectrum, even amplifying their tenor of merit and responsibility. Understanding the project as the definition of the conditions for happening means having a profound and working knowledge of contextual situations and the ways in which other technical and aesthetic forms are active in them and, again, what effects can be generated by reciprocal interferences. There is nothing fatalistic or defeatist about this. Instead, it is a matter of reformulating the idea of the landscape project, of what it means, what categories it requires to introduce, what tools it should be equipped with to move towards the effects it intends to pursue, within a collective vision that includes the many agents that must inevitably be involved in the construction of complex and shared habitats. In this sense, the landscape project presents itself as an extremely fertile field of experimentation for renewing the status of the various disciplines that converge in the composition of the project culture of our time. To definitively place the concept of landscape in this operative meaning implies a rejoining of the mandates and tools of the project *tout court*, where the landscape project gives itself as a paradigm for a capacious reflection on the very

idea of the project in a broad and general sense, as an effective method option beyond the thematic pertinence of its own disciplinary field.

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