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Learning from Agricultural Heritage? Lessons of Sustainability from Italian “Coltura Promiscua”

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Abstract: Agricultural heritage is gaining increasing importance as a repository of lessons to be learned for more sustainable agriculture in the future. Among the forgotten European agricultural heritage, the Italian grapevine “coltura promiscua,” which integrates agroforestry and intercropping, survives only in a few regions in the form of relics. Based on geographic, historic, agricultural literature published on the subject between 16th and 20th century with a focus on North eastern Italy, on previous fieldwork research, and on the analysis of recent candidacies to the Italian National register, this contribution identifies five principles that can be considered today as lessons of sustainability in agriculture: vertical intensification, spatial multifunctionality, resilience through crop diversity, labour-intensive production, personal/familiar/community attachment. Taken together, these principles describe a new rationality that seems to adapt to changed global and local conditions and can suggest new strategies to design new sustainable agricultural systems. The research suggests that sustainability principles can be found both by studying relics of agriculture heritage, and by carefully reading the literature that described them in the past, well before the concept of sustainability itself appeared in the scientific debate. Finally, this paper highlights some difficulties in practicing these lessons in modern agroforestry systems and suggests directions for future research.



Citation: Ferrario, V. Learning from Agricultural Heritage? Lessons of Sustainability from Italian “Coltura Promiscua”. *Sustainability* **2021**, *13*, 8879.
<https://doi.org/10.3390/su13168879>

Academic Editors: Antonio Santoro and Mauro Agnoletti

Received: 18 June 2021
Accepted: 17 July 2021
Published: 9 August 2021

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Keywords: agricultural heritage; historical landscapes; traditional agroforestry systems; coltura promiscua; retro-innovation; Italy

1. Introduction

In recent years, agricultural heritage has often been presented as a repository of lessons to be learned for more sustainable agriculture for the future. The aim of this paper is to present the forgotten agricultural heritage of Italian “coltura promiscua”, and focus on which sustainability principles can be learned from it.

Between the 1990s and the 2000s, geographers and landscape ecologists started to alert against the imminent risk of loss of the European cultural landscape due to processes such as globalisation, abandonment, intensification of production and consumption [1–3]. Traditional rural landscape defined as those “with a long history, which evolved slowly and where it took centuries to form a characteristic structure reflecting a harmonious integration of abiotic, biotic and cultural elements” [4] (p. 109) and generally identified with those created from the Renaissance till the 19th century and surviving sometimes till today [1] began to be taken as an example of multifunctionality [5] and sustainability [4] as opposed to the industrial agricultural landscapes of modernity. The notion of traditional agricultural landscape—elsewhere “historical agricultural landscape” as in the first important inventory in Italy [6]—is not necessarily linked with history, but, as recently observed, helps to deal with intensive and omnipresent modern landscape changes [7].

The judgment of the unsustainability of modern industrial agriculture is rooted in the debate about sustainable development, which emerged in Western countries in the 1960s and was institutionalised in the 1990s, based on an idea of intergenerational solidarity and on the universally adopted “three pillars” scheme, i.e., economic, ecological,

and social sustainability [8]. Economically speaking “multifunctional agriculture” integrates the production of goods with other commodities (for example, agroenergies) and non-commodities (for example, ecosystem services) to integrate farmer revenue [9,10]; environmental/ecologic concerns inspired proposal for sustainable agriculture, such as “agroecology” [11] or “conservative agriculture” [12], while social concerns about food security after the 2009 global food crisis inspired new concepts such as “sustainable agricultural intensification” [13,14] or “climate-resilient” and “climate-smart” agriculture [15] in the frame of so called “resilience thinking”. International organisations such as FAO and the World Bank support sustainable agriculture [16,17]. In Europe, the European Commission is committed to sustainable agriculture and rural areas through the common agricultural policy (CAP) using as a framework the three pillars mentioned above [18]. It must be said that environmental concerns already contributed to inspire the 1992 CAP reform, that introduced in European agriculture the first agri-environmental measures.

In the same decade, at the international scale, the concept of agricultural heritage was gaining ground, also due to some global initiatives: in 1999, UNESCO designated the viticultural landscape of Saint Emilion in France, and in 2001 those of Tokaj and Douro valley; during the World Summit on Sustainable Development in Johannesburg, in 2002, the Globally Important Agricultural Heritage Systems (GIAHS) was conceived as a cornerstone of the Sustainable Agriculture and Rural Development (SARD) programme and established by the Food and Agriculture Organization of the United Nations (FAO) to identify and safeguard traditional agricultural systems and community-based agriculture. Trusting in their “time-tested resilience”, ancestral agricultural practices and traditional knowledge are believed to offer agricultural innovations for developing more sustainable agriculture [19].

In other words, both the concept of *traditional agricultural landscapes* and *agricultural heritage* refer to inherited landscape and their associated management systems, which are believed to have much to teach us about sustainability and resilience in the face of global change [20]. The idea that in the field of agriculture and rural development it is possible to learn “sustainability out of the past” is rooted in the debate about contemporary agricultural transition in western societies, interpreted as a shift from productivism either to post-productivism [21] or to a multifunctional regime [22], and it can be found in different fields, such as geography [23], archaeology [24], sociology. In this last field, the notion of retro-innovation has been proposed [25], and recently further developed [26], conceptualised as an active rediscovery of marginalised and often forgotten “knowledge and expertise that combines elements and practices from the past (. . .) and the present and configures these elements for new and future purposes” [25] (p. 163). Therefore, in the spirit of the GIAHS program, “by studying traditional systems, scientists can learn more about the dynamics of complex systems, especially about the links between agricultural biodiversity and ecosystem function and thereby contribute to the enrichment of the ecological theory and derive principles for practical application in the design of modern sustainable farming systems” [27] (p. 10).

Among traditional agricultural landscapes and practices, an important place is occupied by intercropping (the concurrent cultivation of more than one crop species in the same field) and agroforestry (an agricultural system that combines woody perennials with agricultural crops, animals, or both on the same unit of land), once widespread all over the world. Various cultivation systems associating different crops in the same field characterised many European regions in the past [5,23]. Silvopastoral systems, associating pastures and meadows with woodlands and fruit farming, were certainly the most widespread, especially around the Mediterranean [28]. The best known is the *dehesa* on the Iberian peninsula, where cork trees, holm oaks, or other types of oak are spread over unploughed land, on which wild grazing is practiced [29]. The combination of grass for cutting and fruit trees, in Germany termed *streuobstwiese*, was, and still is, partly widespread in continental Europe [30,31] and in the Alps. In the Apennines’ pastures, the white alder was exploited for its fertilising properties [32]. Agroforestry systems are still common in the Global South and the Far East, as the GIAHS list witnesses. Agroforestry, intercropping,

crop rotation, cover cropping, and integrated crop–animal farming can be adopted as the model practices for the climate-smart approach in agriculture (see [33] also for the vast literature quoted about these traditional practises worldwide).

“Coltura promiscua”, which used to be largely practised in some regions in Italy and is now disappearing, integrates intercropping and agroforestry. A closer examination of this agricultural heritage allows us to identify some principles that can inspire innovation in new agricultural systems. The study presented here suggests that these principles can be found not only scientifically examining relics of agricultural heritage but also by carefully reading the literature that described them in the past, well before the concept of sustainability itself appeared in the scientific debate. Lastly, this paper highlights some difficulties in putting into practice these sustainability lessons in modern agricultural systems and suggests directions for future research.

2. Materials and Methods

This essay is based on research dedicated to the study of “coltura promiscua” in Southern Europe, and in particular in North Eastern Italy. The research adopted a mixed-methods approach.

To improve the knowledge about “coltura promiscua”, to understand its different forms, how it has changed over time, and the reasons for its rise, decline, and fall, iconographic, archival, statistical, and literary sources were used. A careful examination of selected written sources was carried out, particularly including: (1) the main literature in the field of agriculture and viticulture between the 16th and 19th centuries—that is, in the phase of rise and decline of coltura promiscua—published in Italy or speaking about Italy (among others: [34–37]) and the main travel literature belonging to the Grand Tour tradition (among others: [38]); (2) books and scientific articles published between the 1960s and 1970s—that is, in the fall phase [39–45]; (3) the most recent scientific literature that has rediscovered coltura promiscua as a traditional landscape in Europe [5,23,46]. To identify what remains of the coltura promiscua in North Eastern Italy, fieldwork was carried out in a study area in the Veneto region, with systematic mapping and interviews with farmers who have preserved some fragments of this landscape. Twelve fragments were subjected to an analytical study, including an interview with the farmers who preserved them, aimed at investigating the reasons for their conservation. In the same area, some recent examples of the reconstruction of coltura promiscua for productive, touristic, or educational purposes have been identified. The results of this research have been partly published in Italian [46,47].

For the specific purposes of drafting this paper, the bibliographic sources and the notes of the interviews were re-examined through discourse analysis [48,49], together with two recent candidacies to the Italian National Register of Historical Landscapes and Traditional Agricultural Practices, relating to two different Italian regions that preserve fragments of coltura promiscua: Veneto (“piantata veneta”) [50] and Campania (“alberata aversana”) [51].

Lastly, some recent examples of a new agricultural system—namely modern agroforestry systems—apparently learning the lesson of coltura promiscua, have been critically examined, both as presented in the scientific literature and realised in practice [52].

3. Results

3.1. What Is the Italian “Coltura Promiscua”?

Strictly speaking, in Italian, the term “coltura promiscua” relates to every cropping system combining different permanent plantations and temporary herbaceous crops in the same cultivating unit, of advantage to both. This term was introduced in the XIX century in the statistical field:

We have a large number of crops and widely ranging cultivation methods. The most diverse crops follow one another in the same field, within the same year. Herbaceous plants are promiscuously grown and mixed with arboreal plants. Where there are olive

trees, grape vines, mulberries, and other fruit trees, there is no lack of cereals, legumes, and other industrial or fodder plants. We are miles apart from agriculture practiced in a number of European countries, where crops do not compete for the same land, and plantations does not follow one another, alternating regularly, over significantly extensive areas [53] (page 132. My translation).

What distinguishes Italian *coltura promiscua* among traditional agroforestry systems is the presence of grape vine, which gives the system a high degree of spatial/temporal complexity. Not two, but at least three elements, grassland or arable land/pollarded trees/grapevine, were laid out in the space at different heights, each with their own growing times and rhythms [41]. The field could be planted with cereals, vegetables, or flowers, even associated together, for example, maize sustaining beans; the grapevine was generally trained on pollards used as a living support (they said the vine was *married* to the tree); the field was dotted, or divided into regular strips, by different species of trees, exploited for timber (elm, ash tree, walnut tree), leaf (maple, mulberry), or fruit (olive tree, cherries, peach, apple tree) (Figure 1); these elements interacted with one another and with livestock farming.



Figure 1. *Coltura promiscua* associating multiple crops together in the same field (left) and specialised arable land (right) on the background of a Venetian villa (North Eastern Italy) in about 1960 (FAST–Foto Archivio Storico Trevigiano della Provincia di Treviso, Fondo Borlui, 80).

The grapevine/tree combination used to be practiced in other regions in southern Europe, characterised by very wet winters and hot summers: in northern Portugal, in the Minho region [54,55]; in the Basque country and in some areas of southern France [56]; and in Anatolian peninsula [57]. Nevertheless, Italy was seen as being the country of *coltura promiscua par excellence*, as witnessed by the large use of the Italian term internationally [5,23,40,57–61]. Until the first half of the 20th century, the Italian peninsula enjoyed pride of place in the *coltura promiscua*, both in terms of the complexity of the associations, and of the variety of species involved, as well as the quantity of farmland involved (Figure 2).



Figure 2. The distribution of *coltura promiscua* in Italy in the first half of XIX century (**left**) and the trees used as living support (**right**). Modified from [41] (p. 33).

3.2. The Rise and Fall of *Coltura Promiscua*: Discussing “Rationality”

The grapevine in *coltura promiscua* is documented both in written texts and in iconography in Roman times, but it has more ancient origins [62]. After the demographic decline and the growing wild of the Italian cultural landscape after the end of the Roman Empire in the late Middle Ages, the cultivation of vines regained vigour and expanded. Between the fifteenth and eighteenth centuries, the landscape of the *coltura promiscua* rapidly expanded, being described by agricultural writers and admired by travellers on the Grand Tour. In this phase of expansion, the judgment of the *coltura promiscua* is unanimously positive, as both a gorgeous landscape and an efficient agricultural system, capable of diversifying and multiplying production per space unit and ideally suited to the climate.

Think and rethink, is it not best to have/long rows in wide fields, /
vines will profit of the field’s tillage, /and the sun’s hot rays will reach them. /
Give the vines space to climb up high / and teach them to join their neighbours:
/you will see gorgeous laced festoons/produce plentiful grapes [63] (p. 141);
translation modified from [64].

In addition to grapes, wine, and grains, *coltura promiscua* guaranteed a series of secondary products: the strip of lawn under the rows of trees excluded from ploughing constituted a reserve of forage for the animals; the leaves of the trees, collected to reduce the shading of the crops, were used as supplementary fodder; mulberry leaves nourished silkworms; the trees provided fruit, timber, firewood, and poles for agricultural work. The leaves of the vine and the other pruning residues were used as fertilizers, thus integrating the limited animal production. Pollards are reported to protect both the vine from the tempest and the grains from excess solar radiation in summertime. The grapevine trained

in height was protected from the winter frost. Lastly, the coltura promiscua acted as protection for small wild mammals and birds, thus providing a kind of minimal hunting reserve.

In short, until the end of the eighteenth century, coltura promiscua represented the best way to intensively exploit agricultural land in the Italian historical-geographical-climatic context. Only in what followed did the system begin to be questioned by the nascent science of agronomy. The criticisms questioned the very principle of associating different crops in the same field, highlighting their different needs and therefore their mutual incompatibility: coltura promiscua was then accused of irrationality. For their part, the travellers of the Grand Tour began to observe the coltura promiscua with a less benevolent gaze, devaluing it compared to the new capitalistic agriculture being established in Great Britain, or to the new commercial viticulture in France and Germany. Take, for example, this statement from a German agronomist travelling in Italy in 1828:

Obtaining a harvest of grains and wine at the same time from the same field is something that can only be had in a climate as hot as that of Italy (...) Unfortunately, one encounters large tracts of country where the pollards serve as tutors to the vines, with serious prejudice to agriculture, with fields transmuted in this way into forests (...) To such unthinking people, the quality of the wine matters little; they pay attention only to the species that produce a lot and that react better to atmospheric events [38] passim (my translation, from the Italian translation published in 1843).

The coltura promiscua underwent a socio-technical delegitimization. Between the nineteenth and twentieth centuries, the principle of specialisation (the separation of crops) took hold, presented as the only form of rational cultivation. The rationalisation introduced by modern industrial agriculture (specialisation, intensification, mechanisation, use of synthetic fertilizers and pesticides, and drastic reduction of agricultural jobs) affected the different regions of Italy at different times and at different paces, also supported by the Common Agricultural Policy, starting from the 1950s onwards. In the 1970s, the coltura promiscua almost disappeared from the Peninsula.

3.3. *An Incomplete Fall: Relics of Coltura Promiscua and the Reasons Why They Are Preserved*

The radical decline of the coltura promiscua could not completely erase this landscape from the Italian countryside. Nowadays, in some regions, it is still possible to observe a few relics that have been preserved and are still in production. One can find some small areas of intercropping or some single row of vines married to the pollards in Veneto and Friuli in Northeast Italy, in Umbria and Tuscany in central Italy, and in Campania in the South. The farmers interviewed reported some reasons for keeping relics of coltura promiscua, and why they continue to take care of them:

- Supplementary income or supply, like fruit, grapefruit, wine, timber (economic value);
- Expressing a personal ability; satisfaction for a well-done job; practicing an open-air activity (functional value);
- Emotional bond, for example, memory of the family; a way to meet the family and friends, for example during grape harvest (social value);
- The will to transmit an ancient know-how to the following generation (cultural value).

It is important to observe that the choice to preserve the relics of coltura promiscua is not only a personal choice, but it is strengthened by a favourable social/familial context: a cultural association supporting the conservations, a son or nephew interested, and the family consuming products.

The threats reported are as follows:

- The great amount of time spent taking care of coltura promiscua.
- There is little or no recognition by local or regional institutions.

It is worth noting that no strictly environmental value is spontaneously reported by the farmers, even if the presence of relics is an enrichment of agrobiodiversity.

3.4. Heritagisation of *Coltura Promiscua*

During fieldwork, I found some examples of newly planted *coltura promiscua*. Reconstruction is often based on the memory of local ancient farmers, on the literature, or on archival documents. The aim was also to produce, but with an obvious implicit or explicit intention of a symbolic, cultural, or even tourism or commercial promotion. Products—especially wine—are sold with reference to agricultural heritage. This seems to be a clear signal of an ongoing process of heritagisation, also confirmed by the recent candidacies of the Venetian *coltura promiscua* (Figure 3) and of the Aversana *coltura promiscua* (Figure 4) to the National Register of Historical Rural landscapes as traditional agricultural practices.



Figure 3. Relics of grapevine in *coltura promiscua* in the province of Padua (North Eastern Italy).

Besides the obvious documentation of the historic values of the two systems, the candidacies witness an extraordinary attachment expressed by the farmers and the community. In both cases, the candidacies were presented by local voluntary associations, which organised numerous initiatives to enhance and protect the renown of the agricultural heritage. In both cases, the application not only focuses on the asset value of the landscape, but also on the quality and importance of the wine produced and of the ancient crops themselves as a way to maintain agrobiodiversity.



Figure 4. Relics of grapevine in coltura promiscua near Aversa (Southern Italy) (foto: courtesy of Gaetano Di Pasquale, 2011).

4. Discussion: Learning from Coltura Promiscua

On the basis of the literature examined, of the observations on the surviving relics, and of the opinions of farmers taking care of them, it is possible to propose an interpretation of the sustainability lesson provided by coltura promiscua. Five lessons can be identified: vertical intensification, spatial multifunctionality, resilience through crop diversity, labour-intensive production, personal/familiar/community attachment. Taken together, these principles describe a new rationality that seems more adapted to the changed global and local conditions and can suggest new strategies to design new sustainable agricultural systems. It is worth noting that (1) the lessons listed below are fully independent of the material form the agricultural landscape takes, and are rather tied to some general principles; (2) sustainability is not historically absolute, and is instead context-dependent: if coltura promiscua seems to have something to teach today, this does not mean that it has been socially/environmentally/economically sustainable anywhere and anytime in the past.

After these warnings, the five lessons can be briefly described in the followings, adopting the “three pillars” scheme.

Lesson 1. Vertical intensification (social/economic sustainability). Henry Desplanques [41] described coltura promiscua as a “vertical, multilevel polyculture” able to multiply the space to increase production. The global scarcity of fertile land and the pressure induced by the increasing population are good reasons to search for new solution of “sustainable intensification” [13]. Trees have great potential in agricultural land: their productive, protective, nutritious, filtering, and purifying functions could be expressed using underused agricultural spaces (at the edges of the field, in the interstices, etc.).

Lesson 2. Spatial multifunctionality (environmental/economic sustainability). For its ability to produce food, feed, and timber, to limit excessive solar radiation and wind, and to protect wildlife, coltura promiscua could be considered multifunctional [5,10]. Besides its original, economic meaning, multifunctional agriculture can be conceived in spatial terms, taking a different meaning: tangible and intangible productions need to be reconciled in the same limited space to manage potential conflicts and benefits.

Lesson 3. Resilience in diversity (environmental/social sustainability). Ancient agricultural treaties recommended cultivating different species of trees and different varieties of grapes in the same row, as well as a different crop in each strip of the same field. This strategy, severely criticised by modern agronomic literature, was explicitly adopted to safeguard at least a part of the harvest in case of pests or other accident. In “resilience thinking” approach, diversity is in itself a guarantee of resilience [65]. At the macroscale it could be useful to preserve the variety of regional characteristic landscapes [66], but interesting perspectives could be opened also by recognising and exploiting variety at the microscale, at the level of a single exploitation or a single crop.

Lesson 4. Labour-intensive agricultural systems (economic/social sustainability). The fortune of *coltura promiscua* depended not only on its capacity to produce a lot in a limited space, but also on its capacity to absorb manpower. I am aware that this principle seems to be the most distant from the current trend. For many decades, agricultural policies have pushed farmers towards low labour intensity and high capital intensity agriculture, where the latter was considered more advanced. What if, in the context of global change, there was room to imagine a new economy that does not focus on reducing manual labour but instead on increasing and qualifying it, while maintaining a good level of income? What if, instead of replacing man, technology simply guaranteed him close assistance?

Lesson 5. Personal/familiar/community attachment (social/environmental sustainability). This last lesson pertains to the social sphere and the emotional bond that individuals and communities can establish with the landscape. This bond seems to be a crucial factor in the conservation of relics of *coltura promiscua* and in the transmission of local knowledge. It arises from a daily frequentation of the agricultural landscape, from an embedded knowledge not yet completely erased by modernity. Today this knowledge is important because it makes the farmer a factor of stewardship for the rural territory. If adequately sensitized, organized and equipped with innovative tools, small farmers who live the countryside can constitute a formidable network for monitoring transformations and protecting the rural territory.

Who Is Learning What from Coltura Promiscua?

The *coltura promiscua* seems to have a follower in modern agroforestry, that in recent years has expanded in Europe, supported by scientific research. Numerous positive interactions between the trees and adjacent crops have been observed. At the environmental level, an increase in the variety of bird species and populations of small mammals is observed; the trees are refuge for the auxiliary insects that reduce the use of pesticides; the woody bio-mass increases carbon sink [67]. On the agronomic level, the presence of trees improves the microclimate, limiting evapotranspiration and erosion, protecting crops from excessing summer solar radiation, and increasing the fertility of the land [68]. Agroforestry also works well economically, providing an increase in total production [69].

Formal and functional similarities between modern European agroforestry (especially tree-based intercropping) and *coltura promiscua* are striking. Although modern agroforestry is not born of a conscious recovery of traditional agricultural practices, its supporters are not unable to claim the *coltura promiscua* as their own precedents [70]. This therefore seems a brilliant example of how it is possible to learn from agricultural heritage. Paradoxically enough, modern agroforestry rehabilitates the ancient basic idea of tidily mixing different crops in the same field, which was at the core of *coltura promiscua*. In light of new scientific knowledge, which is now able to penetrate deeper into the complex mechanisms that regulate natural processes, traditional agricultural systems appear to be bearers of a new rationality.

Nonetheless, some of the lessons listed above have not yet been entirely pursued. For example, modernisation is still made to coincide with the reduction of human work, a goal that perhaps should be revised today in light of the chronic lack of jobs that afflict Western economies. However, even leaving the labour-intensive perspective aside, sustainable intensification, spatial multifunctionality, and even diversity still have great potential to

develop in future research. For example, studies about vineyard agroforestry [71], although promising, are still rare. They are generally conducted on new plantations, while existing relics of *coltura promiscua* do not seem to attract the scientific interest of scholars, if not as a curiosity of the past. Far from leaving agricultural heritage only in the domain of heritage conservation, the sustainability lessons they can teach could be taken more seriously, and their existence could be an opportunity to empirically study how they work.

5. Conclusions

In response to the growing demands for sustainable intensification of agriculture and climate change, the traditional agricultural landscape that survived the 20th century simplification and specialisation process are now recognised as carrier of important lessons to be learned. Among global agricultural heritage, Italian grapevine “*coltura promiscua*” has been analysed, finding some principles that can suggest some new strategies to design new sustainable agricultural systems: vertical intensification, spatial multifunctionality, resilience through crop diversity, labour-intensive production. Taken together, these principles describe a new rationality that seems to adapt to new changed global and local conditions. In this framework, both the study of ancient historical, geographical, and agricultural literature and fieldwork analysis prove to be interesting sources for better understanding what to learn from agricultural heritage.

Modern agroforestry presents some formal and functional similarities with the historical landscape of *coltura promiscua*. Scientific research around it led to results that tend to “rehabilitate” some of the principles above mentioned, so apparently learning by agricultural heritage. In light of the new scientific knowledge, now able to penetrate the complexity of the mechanisms that regulate natural processes more deeply, a new rationality is recognised to traditional agriculture, in relation to the contemporary socio-spatial context and its new challenges. However, in fact, some criticalities concerning scientific speech and practice is observed: *coltura promiscua* is presented as a guarantee of feasibility and concreteness of modern agroforestry systems, but in fact its relics are not empirically studied to understand how they works in practice, not under the social, nor under the economic and ecologic profile.

On the contrary, in the perspective of retro-innovation a wide space for new interdisciplinary scientific research is open to achieve new results that can inspire not only conservation policies, but can also suggest new strategies to design new sustainable agricultural systems.

Funding: This research received no external funding. Final publication (Ferrario, 2019) has been funded by the Università Iuav di Venezia and by the Università di Padova, in the frame of the research project “PAST–Paesaggi rurali storici. Criteri identificativi, analisi territoriale, promozione sociale”.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Acknowledgments: I would like to express my thanks to Chiara Quaglia, Angelica dal Pozzo and Andrea Turato for their great help in the fieldwork. A warm thank to anonymous reviewers for their time and their really valuable suggestions.

Conflicts of Interest: The author declares no conflict of interest.

References

1. Vos, W.; Meekes, H. Trends in European Cultural Landscape Development: Perspectives for a Sustainable Future. *Landsc. Urban Plan.* **1999**, *46*, 3–14. [[CrossRef](#)]
2. *Threatened Landscapes*; Green, B.; Vos, W. (Eds.) Spon Press-Taylor & Francis: London, UK; New York, NY, USA, 2003; ISBN 9781135802578.
3. *The New Dimensions of the European Landscape*; Wageningen UR frontis series; Jongman, R.H.G. (Ed.) Springer: Dordrecht, The Netherlands; Norwell, MA, USA, 2004; ISBN 9781402029097.

4. Antrop, M. The Concept of Traditional Landscapes as a Base for Landscape Evaluation and Planning. The Example of Flanders Region. *Landsc. Urban Plan.* **1997**, *38*, 105–117. [[CrossRef](#)]
5. Pinto Correia, T.; Vos, W. Multifunctionality in Mediterranean landscapes. Past and future. In *The New Dimensions of the European Landscape*; Wageningen UR frontis series; Jongman, R.H.G., Ed.; Springer: Dordrecht, The Netherlands; Norwell, MA, USA, 2004; pp. 135–164.
6. Italian Historical Rural Landscapes. *Cultural Values for the Environment and Rural Development*; Agnoletti, M., Ed.; Springer: Dordrecht, The Netherlands; Norwell, MA, USA, 2013.
7. Renes, H.; Centeri, C.; Kruse, A.; Kučera, Z. The Future of Traditional Landscapes: Discussions and Visions. *Land* **2019**, *8*, 98. [[CrossRef](#)]
8. Purvis, B.; Mao, Y.; Robinson, D. Three pillars of sustainability: In search of conceptual origins. *Sustain. Sci.* **2019**, *14*, 681–695. [[CrossRef](#)]
9. OECD. *Multifunctionality: Towards an Analytical Framework*; OECD: Paris, France, 2001.
10. Van Huylenbroeck, G.; Vandermeulen, V.; Mettepenningen, E.; Verspecht, A. Multifunctionality of Agriculture: A Review of Definitions, Evidence and Instruments. *Living Rev. Landsc. Res.* **2007**, *1*, 5–43. [[CrossRef](#)]
11. Altieri, M.A. Agroecology: The science of natural resource management for poor farmers in marginal environments. *Agric. Ecosyst. Environ.* **2002**, *93*, 1–24. [[CrossRef](#)]
12. Kassam, A.; Friedrich, T.; Derpsch, R. Global spread of Conservation Agriculture. *Int. J. Environ. Stud.* **2019**, *76*, 29–51. [[CrossRef](#)]
13. Garnett, T.; Appleby, M.C.; Balmford, A.; Bateman, I.J.; Benton, T.G.; Bloomer, P.; Burlingame, B.; Dawkins, M.; Dolan, L.; Fraser, D.; et al. Sustainable Intensification in Agriculture: Premises and Policies. *Science* **2013**, *341*, 33–34. [[CrossRef](#)]
14. Tilman, D.; Cassman, K.G.; Matson, P.A.; Naylor, R.; Polasky, S. Agricultural sustainability and intensive production practices. *Nature* **2002**, *418*, 671–677. [[CrossRef](#)] [[PubMed](#)]
15. Lipper, L.; Zilberman, D. A short history of the evolution of the climate smart agriculture approach and its links to climate change and sustainable agriculture debates. *Nat. Resour. Manag. Policy* **2018**, *52*, 13–30. [[CrossRef](#)]
16. Sustainable Food and Agriculture. Available online: www.fao.org/policy-support/policy-themes/sustainable-food-agriculture/en/ (accessed on 7 July 2021).
17. Promote Environmentally Sustainable Agriculture. Available online: www.worldbank.org/en/topic/agriculture/brief/promote-environmentally-sustainable-agriculture (accessed on 7 July 2021).
18. Sustainable Agriculture in the EU. Available online: ec.europa.eu/info/food-farming-fisheries/sustainability (accessed on 7 July 2021).
19. Koohafkan, P.; Altieri, M.A. *Forgotten Agricultural Heritage: Reconnecting Food System and Sustainable Development*; Routledge: London, UK; New York, NY, USA, 2017.
20. Brown, J.; Kothari, A. Traditional Agricultural Landscapes and Community Conserved Areas: An Overview. *Manag. Environ. Qual.* **2011**, *22*, 139–153. [[CrossRef](#)]
21. Marsden, T.; Murdoch, J. Introduction between the local and the global. Confronting complexity in the contemporary food sector. In *Between the Local and the Global: Confronting Complexity in the Contemporary Agri-Food Sector*; Marsden, T., Murdoch, J., Eds.; Emerald Group Publishing Limited: Bingley, UK, 2006; pp. 1–8. [[CrossRef](#)]
22. Wilson, G.A. From Productivism to Post-Productivism... and Back Again? Exploring the (Un)Changed Natural and Mental Landscapes of European Agriculture. *Trans. Inst. Br. Geog.* **2001**, *26*, 77–102. [[CrossRef](#)]
23. Zimmermann, R.C. Recording Rural Landscapes and Their Cultural Associations: Some Initial Results and Impressions. *Environ. Sci. Policy* **2006**, *9*, 360–369. [[CrossRef](#)]
24. Guttman-Bond, E. Sustainability out of the Past: How Archaeology Can Save the Planet. *World Archaeol.* **2010**, *42*, 355–366. [[CrossRef](#)]
25. Stuiver, M. Highlighting the Retro Side of Innovation and Its Potential for Regime Change in Agriculture. *Res. Rural. Sociol. Dev.* **2006**, *12*, 147–173. [[CrossRef](#)]
26. Zagata, L.; Sutherland, L.; Hrabák, J.; Lostak, M. Mobilising the Past: Towards a Conceptualisation of Retro-Innovation. *Sociol. Rural.* **2020**, *60*, 639–660. [[CrossRef](#)]
27. Koohafkan, P.; Altieri, M.A. *Globally Important Agricultural Heritage Systems. A Legacy for the Future*; Food and Agriculture Organization of the United Nations: Rome, Italy, 2011.
28. Hartel, T.; Plieninger, T. *European Wood-pastures in Transition. A Social-Ecological Approach*; Routledge: Abingdon, UK, 2014.
29. Joffre, R.; Rambal, S.; Ratte, J. The dehesa system of southern Spain and Portugal as a natural ecosystem mimic. *J. Agrofor.* **1999**, *45*, 57–79. [[CrossRef](#)]
30. Herzog, F. Streuobst: A traditional agroforestry system as a model for agroforestry development in temperate Europe. *Agrofor. Syst.* **1998**, *42*, 61–80. [[CrossRef](#)]
31. Plieninger, T.; Levers, C.; Mantel, M.; Costa, A.; Schaich, H.; Kuemmerle, T. Patterns and Drivers of Scattered Tree Loss in Agricultural Landscapes: Orchard Meadows in Germany (1968–2009). *PLoS ONE* **2015**, *10*, e0126178. [[CrossRef](#)]
32. Cevasco, R. Environmental heritage of a past cultural landscape. Alder woods in the upper Aveto valley of the North-western Apennines. In *Nature and History in Modern Italy*; Armiero, M., Hall, M., Eds.; Ohio University Press: Athens, Greece, 2010; pp. 126–140.

33. Singh, R.; Singh, G.S. Traditional Agriculture: A Climate-Smart Approach for Sustainable Food Production. *Energ. Ecol. Environ.* **2017**, *2*, 296–316. [[CrossRef](#)]
34. Gallo, A. *Le Vinti Giornate Dell'agricoltura et de Piaceri Della Villa*; Appresso Gratosio Percaccino: Venezia, Italy, 1569.
35. Soderini, G.V. *Trattato Della Coltivazione Delle Viti e del Frutto che se ne Può Ricavare*; Filippo Giunti: Firenze, Italy, 1600. (in Italian)
36. Guyot, J. *Culture de la Vigne et Vinification*; Librairie agricole de la Maison Rustique: Paris, France, 1861.
37. von Babo, A.W.F. *Bericht über die im Auftrage des k.k. Ministeriums für Handel und Vokswirthschaft unternommene Bereisung der Weinbau treibenden Kronländer Oesterreichs, Kroatien, Dalmatien, Istrien, Venetien, Tirol, Krain, Steiermark*; C. Gerold's Sohn: Wien, Austria, 1866.
38. Burger, J. *Agricoltura del Regno Lombardo-Veneto del Consigliere Giovanni Burger. Versione Italiana del Dottor V.P. con Note del Dottor Giuseppe Moretti*; Dalla Tipografia Motta ora di M. Carrara: Milano, Italy, 1843. (in Italian)
39. Sereni, E. Note per una storia del paesaggio agrario Emiliano. In *Le Campagne Emiliane Nell'epoca Moderna*; Zangheri, R., Ed.; Feltrinelli: Milano, Italy, 1957; pp. 27–54.
40. Meynier, A. *Les Paysages Agraires*; Colin: Paris, France, 1958.
41. Desplanques, H. Il paesaggio della coltura promiscua in Italia. *Rivista Geografica Italiana* **1959**, *LXVI*, 29–64.
42. Sereni, E. *Storia del Paesaggio Agrario Italiano*; Laterza: Bari, Italy, 1961.
43. Gambi, L. Critica ai concetti geografici di paesaggio umano. In *Una Geografia Per la Storia*; Gambi, L., Ed.; Einaudi: Torino, Italy, 1973; pp. 151–168.
44. Tirone, L. Mutations récentes du vignoble italien. *Méditerranée* **1975**, *4*, 59–80. [[CrossRef](#)]
45. Tirone, L. Les dynamiques récentes du vignoble italien. *Méditerranée* **1996**, *83*, 87–96. [[CrossRef](#)]
46. Ferrario, V. *Lecture Geografiche di un Paesaggio Storico. La Coltura Promiscua Della Vite nel Veneto*; Cierre: Verona, Italy, 2019.
47. Ferrario, V. La coltura promiscua della vite come paesaggio rurale storico: Indagini di tipo quali-quantitativo propedeutiche alle politiche di conservazione. In *Il Progetto del Territorio Nelle Fonti D'archivio*; Carallo, S., Ed.; Labgeo Caraci: Roma, Italy, 2017; pp. 73–90.
48. Berg, L.D. Discourse analysis. In *International Encyclopedia of Human Geography*, 1st ed.; Kitchin, R., Thrift, N.J., Eds.; Elsevier: Amsterdam, The Netherlands, 2009; pp. 215–221.
49. Leipold, S.; Feindt, P.H.; Winkel, G.; Keller, R. Discourse Analysis of Environmental Policy Revisited: Traditions, Trends, Perspectives. *J. Environ. Policy Plan.* **2019**, *21*, 445–463. [[CrossRef](#)]
50. National Register of Italian Historical Rural Landscapes. Candidacy “La Piantata Veneta”. Available online: www.reterurale.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/17429 (accessed on 31 May 2021).
51. National Register of Italian Historical Rural Landscapes. Pre-candidacy “Alberata d’Asprinio”. (In Italian). Unpublished typescript.
52. Ferrario, V. Dalla coltura promiscua all’agroforestazione. Imparare dai paesaggi rurali storici? In *Oltre la Convenzione. Pensare, Studiare e Costruire Paesaggi Vent’anni Dopo*; Puttilli, M.G., Tanca, M., Castiglioni, B., Eds.; Memorie Della Società di Studi Geografici: Firenze, Italy, 2021.
53. Ministero Dell’Interno–Istituto Centrale di Statistica. *Annuario statistico Italiano, Anno I*; Tipografia elzeviriana: Roma, Italy, 1878.
54. Stanislawski, D. *Landscapes of Bacchus. The Vine in Portugal*; University of Texas Press: Austin, TX, USA; London, UK, 1970.
55. Altieri, M.A.; Nicholls, C.I. The simplification of traditional vineyard based agroforests in North-western Portugal: Some ecological implications. *Agrofor. Syst.* **2002**, *56*, 185–191. [[CrossRef](#)]
56. Lavignac, G. *Cépages du Sud-Ouest. 2000 ans d’histoire. Mémoire d’un ampélographe*; Editions du Rouergue-INRA Editions: Arles, France, 2001.
57. Tabak, F. *The Waning of the Mediterranean 1550–1870. A Geohistorical Approach*; The John Hopkins University Press: Baltimore, Italy, 2008.
58. Grigg, D.B. *The Agricultural Systems of the World. An Evolutionary Approach*; Cambridge University Press: Cambridge, UK, 1974.
59. Lebeau, R. *Les Grands Types de Structures Agraires Dans le Monde. Initiations aux Études de Géographie*; Masson: Paris, France, 1979.
60. Meeus, J.H.A.; Wijermans, M.P.; Vroom, M.J. Agricultural Landscapes in Europe and Their Transformation. *Landsc. Urban Plan.* **1990**, *18*, 289–352. [[CrossRef](#)]
61. Kruse, A.; Centeri, C.; Renes, H.; Roth, M.; Printsman, A.; Palang, H.; Jordá, L.B.; Velarde, M.D.; Kruckenberg, H. Glossary on agricultural landscapes. *J. Landsc. Ecol.* **2010**, *8*, 99–127.
62. Sereni, E. Per la storia delle più antiche tecniche e della nomenclatura della vite e del vino in Italia. In *Terra Nuova e Buoi Rossi*; Sereni, E., Ed.; Einaudi: Torino, Italy, 1981; pp. 101–214, (For the history of the most ancient techniques and names of vine and wine in Italy).
63. Crico, L. *Ecloghe Rusticali*; Dalle Stampe di Giulio Trento: Treviso, Italy, 1794.
64. Sereni, E. History of the Italian Agricultural Landscape. Burr Litchfield, R., Ed.; Giovanni Agnelli Foundation-Princeton University Press: Chichester, UK, 1997.
65. Widgren, M. Resilience thinking versus political ecology. Understanding the dynamics of small-scale, labour-intensive farming landscapes. In *Resilience and the Cultural Landscape: Understanding and Managing Change in Human-Shaped Environments*; Plieninger, T., Bieling, C., Eds.; Cambridge University Press: Cambridge, UK; New York, NY, USA, 2012; pp. 95–110.
66. Antrop, M. Why Landscapes of the Past Are Important for the Future. *Landsc. Urban Plan.* **2005**, *70*, 21–34. [[CrossRef](#)]

67. Tsonkova, P.; Böhm, C.; Quinkenstein, A.; Freese, D. Ecological benefits provided by alley cropping systems for production of woody biomass in the temperate region: A review. *Agrofor. Syst.* **2012**, *85*, 133–152. [[CrossRef](#)]
68. Dupraz, C.; Newman, S.M. Temperate Agroforestry: The European Way. In *Temperate Agroforestry Systems*; Gordon, A.M., Newman, S.M., Eds.; CAB International: Wallingford, UK; New York, NY, USA, 1997; pp. 181–236.
69. Lehmann, L.M.; Smith, J.; Westaway, S.; Pisanelli, A.; Russo, G.; Borek, R.; Sandor, M.; Gliga, A.; Smith, L.; Ghaley, B.B. Productivity and Economic Evaluation of Agroforestry Systems for Sustainable Production of Food and Non-Food Products. *Sustainability* **2020**, *12*, 5429. [[CrossRef](#)]
70. Paris, P.; Camilli, F.; Rosati, A.; Mantino, A.; Mezzalana, G.; Dalla Valle, C.; Franca, A.; Seddaiu, G.; Pisanelli, A.; Lauteri, M.; et al. What Is the Future for Agroforestry in Italy? *Agrofor. Syst.* **2019**, *93*, 2243–2256. [[CrossRef](#)]
71. Lang, C.P.; Merkt, N.; Geilfus, C.-M.; Graeff-Hönninger, S.; Simon, J.; Rennenberg, H.; Zörb, C. Interaction between Grapevines and Trees: Effects on Water Relations, Nitrogen Nutrition, and Wine. *Arch. Agron. Soil Sci.* **2019**, *65*, 224–239. [[CrossRef](#)]