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Ancient pollard trees in “coltura promiscua” in Italy: history, geography and perspectives

Associations traditionnelles de trogues et de vigne dans la «coltura promiscua» en Italie : histoire, géographie et perspectives

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Abstract

The Italian expression “coltura promiscua”, internationally renowned (Meynier, 1958; Zimmermann, 1981; Meeus, and al., 1990; Pinto Correia 2005; Zimmermann, 2006), indicates the association between pollarded trees, vines and arable land, typical of the Italian Peninsula, one of the most famous traditional agricultural landscapes of Europe (Sereni, 1957; Desplanques 1959; Gambi, 1973). By producing agricultural products, as well as preserving agrobiodiversity, “coltura promiscua” was – as we would say today – extremely multifunctional.

“Coltura promiscua” is nowadays no more practiced, besides the presence of some rare relicts, that the author recently mapped and classified in certain areas in North Eastern Italy. Starting from this research, this paper presents some insights about the role of pollards in Italian traditional landscapes, through historical sources and fieldwork evidence, which propose to learn some lessons for the future.

Résumé

L’expression italienne « coltura promiscua », utilisée internationalement (Meynier, 1958 ; Zimmermann, 1981 ; Meeus et al., 1990 ; Pinto Correia 2005 ; Zimmermann, 2006), indique l’association entre trogues, vigne et cultures arables, typique de la péninsule italienne. Il s’agit d’un des paysages agricoles traditionnels les plus célèbres d’Europe (Sereni, 1957 ; Desplanques 1959 ; Gambi, 1973). En combinant produits agricoles et préservation de l’agrobiodiversité, la « coltura promiscua » était -comme nous le dirions aujourd’hui- multifonctionnelle.

Elle n’est plus pratiquée de nos jours, à part la présence de rares vestiges, que l’auteur a récemment cartographiés et répertoriés dans certaines régions du Nord-Est de l’Italie. A partir de ce travail, de l’analyse de documents historiques et de données de terrain, cet article présente certaines réflexions sur le rôle des trogues dans les paysages traditionnels italiens.



(Fig.  Viviana Ferrario vine

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Introduction

In the frame of my pluriannual research about Italian “coltura promiscua”, thanks to this conference I have been focusing for the first time on pollarding. This was a challenge for me, as I started to observe my research object -where pollards have an important role- from a new perspective. “Coltura promiscua” is an ancient farming system, extremely common until the second half of 20th century in Italian peninsula and in other parts of Southern Europe, France included (Basque countries and Southern France for example, according to Jules Guyot in 1864). This is nowadays no more practiced, besides the presence of some rare relicts, generally including pollards. It seems interesting to provide a description of “coltura promiscua” form and function, in its geographical and historically diversity, both for collecting information about the conservation and management of the survivals, and for acquiring new knowledge to improve agricultural landscapes of the future.

After a brief overview, I will present some results of my ongoing research in North-Eastern Italy focusing on the role of pollards in the different kind of associations between the tree and the vine. An example – the Bottari method – will be described more in detail and I will take the opportunity to spend some words on the sources for deepening our understanding of agricultural landscapes of the past. I will conclude my presentation discussing some general principles that we can learn from coltura promiscua, and eventually consider in designing the future agricultural landscapes of Europe.

What is coltura promiscua?

The Italian term “coltura promiscua” is now used internationally, but its origin is relatively recent. It was introduced in the 19th century in Italian agricultural statistics, to indicate some traditional farming systems, in which farmers cultivated together, in the same field, perennial and annual cultivations. The “classic” Italian “coltura promiscua” associates in the same field three kinds of crops: herbs or cereals, fruit of timber pollards and the grapevine. Cereals used to be cultivated within the pollards, and trained on the pollards themselves, used as living sustains. Virgil described this landscape that seems to date back to a very remote time, well before the Roman Era:

“Quid faciat laetas segetes, quo sidere terram/ vertere, Maecenas, ulmisque adiungere vitis/conveniat...”
(Virgil, Georgics, I)

A French geographer, Henri Desplanques, that studied the landscapes of Central Italy in the 1950’s, described it as a “vertical policulture” (Desplanques, 1959). In the last few years, among the European traditional farming systems, “coltura promiscua” begun to be considered interesting for its multifunctionality (Pinto Correia, 2003; Zimmermann, 2006).

Time at my disposal is not enough to describe the changes of “coltura promiscua” along the centuries, so I limit myself in highlighting its geographic diversity. According to some authors from the 1950’s and 1960’s, there were three main types of Italian classic coltura promiscua (Fig.2).

Probably the most famous type is named “alberata tosco-umbro-marchigiana”. “Alberata” means a regular tree plantation. Grapes were trained on high stem trees, scattered within the grain fields. This association was described as a marriage: farmers used to “marry” the grapevine to the tree, like wife and husband. In the picture, you can see an old farmer, pruning the grapevine on a helm. Until the Dutch Elm Disease, in XX century, destroyed thousands and thousands of elms, this was the preferred tree to be planted with the grapevine.

A second type of “coltura promiscua”, adopted mostly around Naples, in the South of Italy, was called “arbustato”. A very similar system has been used in Portugal, in the Minho valley. Here the grapevine forms a sort of curtain along a row of poplars, 20 to 25 meters high. In between the curtains, grains or vegetables were grown. The poplars’wood was sold in Naples for heating.



(Fig.2) Some different types of “coltura promiscua” in Italy

The third type was more diffused in Northern Italy, in the Po plain; it was generally preferred in the lowlands. It consisted of vines trained from one tree to another, forming long rows of pollards (called *piantate*) dividing the same grain field in several parallel strips. The entire Eastern part of the Po plain used to be cultivated like that, with regular *piantate* in-between different crops in rotation. Farms were separated by denser and thicker hedges and both hedges and *piantate* included pollards.

Pollarding trees and pruning vines to make them live together

How really this system used to work? How pollards and vines were associated with each other? To give a single scientific answer to these questions is not possible, even when we consider only the last five hundred years in a single region, like I did in my research. A researcher must consider, in fact, the extreme variability of this kind of landscape from a geographical point of view, and its great variability along the centuries too. That is why the problem of the sources is crucial to understand for example what kind of pollarded trees used to be cultivated in “coltura promiscua”.

“Transpadana Italia, praeter supra dictas, cornu, opulo, tilia, acere, orno, carpino, quercu arbustat agros, Venetia salice propter uliginem soli.”

Plinio, Naturalis Historia, XVII, 198-211

Already Virgil, in the first century before Christ, mentions the elm as husband of the grapevine. Plinio, a century after, mentions olive trees and elms in Central Italy, and then describes the fields of the rich Po plain as planted with deciduous broadleaf trees, such as dogwoods, maples, limes, poplars, ashes, hornbeams, oaks, and willows. After 2000 years, in the first half of twentieth century, the list is quite the same (Desplanques, 1959).

Were all of them pollarded? I cannot give a general answer to this question, since the situation was very diverse from place to place. As far as I know, no one specifically studied pollards in coltura promiscua yet, at the national level. Nevertheless, we could anyway make some hypotheses about North Eastern Italy, working on iconography like some Tiepolo paintings (Fig.3, left), or on written sources, like some agricultural treaties of Middle age and Modern Era. As regards to trees used as living sustain for grapevine, agricultural writers generally repeat what they had read from classic authors, but sometimes they also add something about the way in which trees and vines were trained in their own regions. According to authors from North Eastern Italy, coltura promiscua was always practised, implying pollards.

Lucio Marchesini, who wrote a short ironic treaty in Venetian language in 1610, used the term “azzefò”, which means “pollarded”. Marchesini claims that pollards produce good wood and timber (for example walnut because of the high-quality timber for furniture), they host birds and protects the vine from storm. The shadow created by pollards does not damage arable lands, on the contrary, it protects them from excessive solar radiation in dry summers.

“La lombria de l'albaro azzefò / No fa male al terren, fa buone legne / Al dispieto de quanti ga stuggiò.”

Lucio Marchesini, Stuggio del boaro, Vicenza 1610

(means: “the shadow of pollards does not damage arable land and gives good firewood, in spite of learned people”)

Giacomo Agostinetti, in 1679, observes the mutual relation between pollards and vines, explaining how each kind of wood was used by farmers for different purposes.



(Fig.3) North Eastern Italy: pollarded willows in a G.D. Tiepolo paint (*Rest of the farmers, 1757; detail*) (on the left) and nowadays (on the right)

“In Visintina poi bruscano con la maggior parte dei Trevisani, portando tutti li capi della vide sopra li zeffi dell'arbore, tirandoli in quantità da un'arbore all'altro, legandoli tanto nel vecchio, quando nel giovane”

Giacomo Agostinetti, Cento e dieci ricordi che formano il buon fattor di villa, Treviso 1679

(means: “In the Vicenza area they use to prune the vine like people from Treviso, who bring all the shoots of the grapevine up to the pollards, and draw them from one tree to another, tethering together both new and old ones”)

Mulberry pollards and the vine: the Bottari's method

Agricultural treaties are an interesting source also for understanding changes in the idea of good cultivation. The 19th century is a turning point for "coltura promiscua": this is the moment in which new ideas about the right way to cultivate grapevines and to produce wine were imported to Italy from abroad, particularly from France and Germany. The combination of tree, grains and grapevine in "coltura promiscua" begins to be strongly criticized by experts and we find some first rare experiences of specialised production. Some "pioneers" cut the vines and eradicate the trees, substituting "coltura promiscua" with specialised vineyards or meadows.

Just before this crucial moment, G. Bottari in 1810 writes a brief treaty on how to combine grapes and mulberries "in order not to damage each other". This book had a great success, with three editions from 1810 to 1939.

Bottari wants to promote the combination of the two most rentable cultivations in the region: mulberry and the wine. Mulberry (*Morus alba*, imported from outside the region) was rarely utilised for sustaining the vine, because collecting the leaves for the silkworm in the summer damaged the shoots of the vine.

The Bottari's idea was to elaborate the traditional pollarding system, creating a double stage fork, in order to sustain a transverse stick, sustaining the vine shoots. Shoots were then connected from one tree to the other. Bottari describes in great detail both the pollarding method and the way to train and prune the vine. He also gives several advices about planting the tree and the vine and collecting their products. Some application of the Bottari method can still be observed in the region. In figure 1, one can see one of the very rare ancient piantate (rows of pollards) that I have been mapping in the last three years in the Veneto region (Fig.1).

Learning from "coltura promiscua" (some principles)

Why "coltura promiscua" disappeared? What happened? Despite the negative propaganda made by agronomists from mid-19th to mid-20th century, "coltura promiscua" resisted in North Eastern Italy until the 1960s. Then it suffered a sharp decline. Due to a complex series of social, economic and cultural reasons (among others: agriculture mechanisation, diffusion of fossil fuels, and last but not least, European Agricultural Policies), "coltura promiscua" was abandoned. Vine has been concentrated in specialised vineyards, while arables are now naked. The only trees left are those forming the hedges. You can imagine how much complexity we have lost, in terms of both visible landscape and agrobiodiversity.

In the last three years I have been studying "coltura promiscua" in the region of Venice, trying to answer to these questions. How did it change over time? How and why did the decline happen? Where does this system still exist (empirical research)? Why relicts could be preserved until now (landscape values)? Can all these answers help to define new policies and strategies?

Focusing on the last question, I think of a Belgian geographer, Marc Antrop, who some years ago, in his seminal article, suggested the reflection on why landscapes of the past are important for the future (Antrop, 2005). From my point of view this Conference on pollards may significantly contribute to the ongoing debate about historic rural landscapes, going beyond the realm of simple conservation. On the other side, I hope that the historic landscape of "coltura promiscua" can inspire new ideas on the agricultural landscapes of the future. Learning from "coltura promiscua" does not mean to simply copy its form, but to understand the principles beneath its use. When analysing coltura promiscua I find some general principles:

- the sustainable intensive use of scarce agricultural land, multiplying space along the z axe;
- the principle of resilience by diversity (the presence of diverse species and ages of cultivations pledge a secondary and tertiary crop when the primary crop would have been damaged);
- finally, a labour intensive, time consuming system can become strategic in future due to its capacity to produce... jobs.

Modern agroforestry is largely inspired by these principles. It does not imitate "coltura promiscua": it discovers a comparable way to answer to common problems.

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