

BUILDING AND ECONOMIC GROWTH
IN SOUTHERN EUROPE (1050–1300)

THE MEDIEVAL COUNTRYSIDE

VOLUME 26

General Editor

Phillipp Schofield, Aberystwyth University

Editorial Board

Laurent Feller, Université Paris 1 Panthéon-Sorbonne

Paul Freedman, Yale University

Thomas Lindkvist, Göteborgs universitet

Sigrid Hirbodian, Universität Tübingen

Piotr Górecki, University of California, Riverside

Sandro Carocci, Università degli Studi di Roma Tor Vergata

Julio Escalona, Consejo Superior de Investigaciones Científicas, Madrid

Pere Benito i Monclús, Universitat de Lleida



PETRIFYING WEALTH

The four-volume sub-series 'Petrifying Wealth' explores the sudden ubiquity of masonry construction between 1050 and 1300 in Southern Europe and its profound effect on the European landscape. New questions about wealth, society, and medieval building are explored, which highlight the link between construction in durable materials and the shaping of individual, collective, and territorial identities: the birth of a new, long-lasting panorama, epitomising the way we see the space and territory of Europe nowadays.

VOLUME 2

Building and Economic Growth in Southern Europe (1050–1300)

Edited by

SANDRO CAROCCI *and* ALESSIO FIORE

BREPOLS

***Petrifying Wealth. The Southern European Shift to Masonry as Collective Investment in Identity, c. 1050–1300* is funded by an ERC/European Research Council Advanced Grant (grant number 695515).**

Cover image: 'Stonemasons at work', Girona Cathedral, Romanesque cloister, west gallery. Twelfth century.
Photo: Federico Del Tredici.

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library.

© 2024, Brepols Publishers n.v., Turnhout, Belgium.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise without the prior permission of the publisher.

ISBN: 978-2-503-60541-8

e-ISBN: 978-2-503-60543-2

DOI: 10.1484/M.TMC-EB.5.132952

ISSN: 1784-8814

e-ISSN: 2294-8430

Printed in the EU on acid-free paper.

D/2024/0095/138

Table of Contents

List of Illustrations 7

**Introduction: Building Economic Growth
in Southern Europe**
Alessio FIORE 9

Part I **Farming**

**Storing for the Economy? Landed Estates and
their Buildings in Northern and Central Italy,
Twelfth and Thirteenth Centuries**
Lorenzo TABARRINI 19

***El mansus* de la Cataluña Vieja medieval:
La implantación de un señorío constructivo**
Víctor Farías ZURITA 39

**Reflections on the Archaeology
of Cereal Storage in Medieval Italy**
Giovanna BIANCHI 57

***Extrahere cequiam*: Irrigation Canal Building
and Agricultural Hydraulics in the Crown of
Aragon (1170–1300)**
Josep TORRÓ 79

**Canal-Digging in the Age of Economic Expansion:
Northern Italy, Eleventh–Thirteenth Centuries**
Fabrizio PAGNONI 101

Part II
Manufacturing

La expansión de la molinería hidráulica en Cataluña (siglos XI–XIII): Acerca de la construcción de molinos y sus promotores
Jordi Morelló BAGET 123

Productive Buildings and Economic Growth: Iron-Working in Central and Northern Italy (Eleventh–Thirteenth Centuries)
Maria Elena CORTESE 149

Building for the Market: Residential Properties in Medieval Italy (c. 1070–1250)
Alessio FIORE 169

Part III
Connecting

Petrified Nodes: Bridges and Economic Growth (Tuscany, 1050–1200)
Paolo TOMEI 189

Porti, cantieri e arsenali
Pinuccia F. SIMBULA 215

Conclusions
Sandro CAROCCI 243

Index 259

List of Illustrations

Reflections on the Archaeology of Cereal Storage in Medieval Italy — *Giovanna Bianchi*

- Figure 4.1. Location of sites mentioned in this chapter. 58
- Figure 4.2. Rocca degli Alberti (Monterotondo M.mo, GR).
In the centre of the photo are the remains of the silos. 60
- Figure 4.3. Rocca degli Alberti (Monterotondo M.mo, GR).
The excavation area with the tenth-century walls and the
remains of the granary marked with dark shading. 62
- Figure 4.4. Vetricella. Aerial view (drone) of the excavation of
the centre of the court of Valli. Circles indicate places where
the remains of seeds (carprests) accumulate. 70

Extrahere cequiam: Irrigation Canal-Building and Agricultural Hydraulics in the Crown of Aragon (1170–1300) — *Josep Torró*

- Figure 5.1. The Crown of Aragon: frontier advances (1080–1245)
and the location of major Christian hydraulic works. 80
- Figure 5.2. Canal network in Teruel in the mid-thirteenth century. 84
- Figure 5.3. The new canal of Alzira built by royal initiative in
1258–1272. 86
- Figure 5.4. The new canal of Vila-real built by royal initiative in
1272–1281. 87

La expansión de la molinería hidráulica en Cataluña (siglos XI–XIII) — *Jordi Morelló Baget*

- Figura 7.1. Molino dels Cups, al lado del río Cardener. Primera
noticia documental: 1080 (reformado en torno a 1224). 130
- Figura 7.2. La construcción de molinos en Cataluña
(siglos XI–XIII). 132
- Figura 7.3. La construcción de batanes en Cataluña
(siglos XII–XIII). 134
- Tabla 7.1. Periodización de molinos en construcción. 133

**Petrified Nodes: Bridges and Economic Growth
(Tuscany, 1050–1200) — Paolo Tomei**

Figure 10.1. ‘Cittadine borghigiane’ and major communication routes.	190
Figure 10.2. River crossings and docking points.	193
Figure 10.3. Confluence of the Arno and the <i>Arme</i> : tenth to eleventh centuries.	199
Figure 10.4. Investments and disputes over bridges: temporal rhythm.	201
Figure 10.5. Confluence of the Arno and the <i>Arme</i> : twelfth to thirteenth centuries.	203

Storing for the Economy?

Landed Estates and their Buildings in Northern and Central Italy, Twelfth and Thirteenth Centuries

This essay is a discussion of landed estates and rural buildings in northern and central Italy during the twelfth and thirteenth centuries; its aim is to link estates and buildings with wider socio-economic transformations. Before I begin, I would like to make some preliminary remarks. The geographical scope of my analysis covers the *Regnum Italiae* and the papal territories, in other words what was originally the Carolingian political sphere. I decided against including southern Italy in the study as this would have required me to consider a partially different set of historical questions, and to harness all the relevant bibliography. The period I chose to analyse is instead easier to justify. I shall focus on the century between c. 1150 and c. 1250, which is generally recognized as having been marked by a process of substantial economic expansion throughout Western Europe. This consisted — in very broad terms — of demographic growth, increased agricultural production, urban development, and the expansion of commercial and financial activities; what amounts, in short, to an increase in aggregate demand (which, moreover, took place under generally favourable climatic conditions).¹

This essay is based on a survey of the extant research, both historical and archaeological, although some local studies could be added. Many of the issues that I will discuss are familiar to Italian medievalists, but probably less so to an English-speaking public. In view of this, I shall attempt to provide a synthesis of the secondary literature by shaping my argument around four main themes, which may help to shed light on the relationship between landed estates and rural buildings on the one hand, and patterns of economic development on

* I would like to thank Margaret Goring and Gregory Woods for revising the English, Federico Del Tredici and Tiziana Lazzari for critiquing the content, and Taylor Zaneri for doing both.

1 An overview in Masschaele, 'Economic Takeoff'. Economic transformations and climatic shifts during the Middle Ages are discussed by Campbell, *The Great Transition*. Syntheses written in Italian are Palermo, *Sviluppo* and Cammarosano, *Economia*; cf. also the essays collected in Franceschi, ed., *La crescita*.

Lorenzo Tabarrini (lorenzo.tabarrini3@unibo.it) studied at the University of Pisa and at the Scuola Normale Superiore. He obtained his PhD from the University of Oxford, and he is currently *assegnista di ricerca* at the University of Bologna.

This is an open access article made available under a [CC BY-NC 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/)

the other. First of all, I will give a brief description of the four types of estates which, for reasons that will be clarified as we proceed, appear to deserve the most careful scrutiny. I shall then discuss the infrastructure and buildings which characterized these estates, paying particular attention to the materials with which they were built. Thirdly, I will identify the sections of society who paid for the creation of these estates. Lastly, I shall make a number of observations on the reasons behind their creation. At least two caveats have to be borne in mind, however. First, the written and archaeological evidence is not equally distributed across northern and central Italy. It follows that not all the geographical areas that I wish to investigate have received the same amount of attention in the existing scholarship, which cannot be regarded as a coherent body of research, and consists chiefly of regional studies. Second, with regard to this particular field of inquiry, the late Middle Ages have been more closely studied than the twelfth and thirteenth centuries. This fact can be explained by the remarkable wealth of information and internal coherence characterizing fourteenth- and fifteenth-century sources when compared to central medieval documents, which are plentiful but also somewhat erratic. I shall return to some of these points in due course; for now, it is sufficient for them to serve as part of the general background to the analysis that follows.

* * *

Let us begin with a brief description of the four types of landed estates I intend to focus on: *casali*, *cassine*, *grange*, and *poderi*. Other types of estate did exist, and I shall mention these later on; but *casali*, *cassine*, and *grange* are regarded as the most structured landed properties of northern and central Italy during the twelfth and thirteenth centuries, along with *poderi* (whose early history, as I shall explain in the ensuing paragraphs, is however rather obscure). Their construction required substantial investments, which is a key element for the understanding of the overall economic change. Not only were they complex structures. Another characteristic they shared was relative isolation from other rural settlements; they did not form part of castles or villages, despite the fact that, owing to their size and the presence of fortifications, they did in some instances resemble castles or villages. They were also often built from scratch, although in some cases pre-existing settlements and their infrastructures were used as a basis for the creation of *casali*, *cassine*, *grange*, and *poderi*.² I have refrained from including those settlements variously labelled as *ville*, *villenove*, *terre nuove*, *borghi franchi*, or *borghi nuovi* in my analysis; these too became more widespread during the course of the thirteenth century and can certainly be regarded as part of a process of small-scale urbanization — and thus of economic expansion. I have not omitted these settlements for reasons of space alone: because of their

2. Accurate and complete accounts of this are to be found in Comba, 'La dispersione'; Comba, 'Le origini'; and, with a focus on south-western Piedmont, Comba, 'Rappresentazioni'. Cf. also Varanini, 'Insediamenti'. A more recent overview is Rapetti, 'Paesaggi'.

size, their appearance was more that of small towns than large farms, which would take us too far from the analysis of landed estates and their buildings. The same is true of *incastellamento*, and particularly of the so-called *secondo incastellamento*, the second wave of castle building, which can be identified in some Italian regions over the twelfth and thirteenth centuries, but whose links with estate-creation would require a separate study.³

I shall begin with *casali*. The term *casale* is already attested across northern and central Italy in the early Middle Ages, when it defined an open settlement comprising, or coinciding with, a relatively small estate-centre.⁴ The *casali* I wish to focus on here are those that proliferated from the central decades of the twelfth century onwards around Rome, in the *Campagna Romana*, the area extending around the city for between 15 and 20 kilometres; this expansion is referred to as *incasalamento*. One can in fact distinguish two different phases of *incasalamento*, but here we are concerned with the first, which began in the 1150s, intensified in the 1190s, and continued for much of the thirteenth century.⁵ Over the course of that century the first *incasalamento* became a phenomenon of substantial agricultural reorganization, with landowners creating large numbers of new isolated rural estates. The size of *casali* is also believed to have been considerable from the start; actual data can be drawn only from fourteenth-century and early modern sources, but already in the thirteenth century they might well have occupied between fifty-five and 555 hectares.⁶ The second *incasalamento*, occurring between the fourteenth and the fifteenth centuries, was by contrast a step backwards, the result of the typical late medieval abandonment of open villages and fortified settlements, not only around Rome but also in Italy and indeed in Europe as a whole.⁷ It should be noted, as a final point, that the workforce of *casali* seems to have been constituted by salaried workers — even though, again, substantial information on this is available only from the fourteenth century.⁸

-
- 3 Cf. Settia, *Castelli*, pp. 319–25; Comba, “‘Ville’ e borghi nuovi”; the collection of essays in Comba, Panero, and Pinto, eds, *Borghi*; and those in Friedman and Pirillo, eds, *Le terre nuove*. On the *secondo incastellamento* in Tuscany cf. Farinelli and Giorgi, ‘Fenomeni’; on the construction of *castra* in the *Campagna Romana* from c. 1180 cf. Carocci and Vendittelli, *L’origine*, pp. 23–68; on the creation of new castles (and the abandonment of older ones) in western Liguria between the twelfth and the thirteenth centuries cf. Murialdo, ‘La riorganizzazione’; on the archaeology of *villeneuve* in Piedmont cf. Micheletto, ‘L’insediamento’.
- 4 For the Pianura Padana see Fumagalli, *Terra*, pp. 25–60. Cf. Bacchi, ‘Conquista’, on the Ferrarese. Examples can be found in the documentation from the monastery of S. Salvatore al Monte Amiata, too: cf. Wickham, ‘Paesaggi sepolti’, esp. p. 113. On the *casali* in the *Campagna Romana* during the early Middle Ages, cf. Lenzi, ‘Per una storia’.
- 5 The landmark monograph on the origins of Roman *casali* is Carocci and Vendittelli, *L’origine*. See also Maire Vigueur, *L’autre Rome*, pp. 86–93; and, with different nuances, Wickham, *Medieval Rome*, pp. 40, 59, 70, 80, 86, and 108.
- 6 Carocci and Vendittelli, *L’origine*, pp. 12–13.
- 7 Cf. Brezzi, ‘Il sistema’; cf. the following footnotes for further references.
- 8 See note 5.

Let us now move on to the *cassine*, or (in Italian) *cascine*. As was the case with *casale*, the word *cassina* was employed in the early Middle Ages with its literal meaning of small house, *casa*. In this study, however, the term has a different meaning. These *cassine* extended over much of Lombardy between the twelfth and fourteenth centuries, although the earliest evidence of them dates back to the tenth century; at that time, the term might signify a village or an isolated rural estate, but could also denote a simple storage facility. Around 1350 there were at least thirty-seven *cassine* on the outskirts of Milan, varying in size from three to thirteen hectares; they appear to have been smaller than *casali*, possibly because the immediate environs of Milan were heavily populated and the patterns of landowning and landholding were highly fragmented, with many potentially competing owners.⁹ It is important to stress that it was only in the twelfth and thirteenth centuries that *cassine* came to be identified as the permanent place of residence of various groups of rural workers and their families — and this was a new development. Some *cassine*, moreover, were grouped together (in the Italian historiography they are called *cascine a grappolo*) and had a clearly defined collective identity; indeed, they were a kind of local institution, not unlike rural communes. This is the case with the Milanese *Cassine de' Biffi* in the late *Duecento*, which have been studied by Enrica Salvatori.¹⁰ Around Cremona *cascine* appear to have been even larger, to the point that they resembled small towns.¹¹

Of the different types of estate examined in this article, it is *grange* that have attracted the greatest amount of interest from researchers. The word *grangia* derives from the late Latin *granea*, *granica*, *grancia*, which means barn or storage facility for cereals.¹² During the twelfth century, the term began to be used to denote the estate-centres belonging to the monasteries of the Cistercian order, and as a result can be found wherever Cistercians became established.¹³ In Piedmont, *grangia* had a broader meaning: it could simply define an isolated rural estate, together with the word *tectum*.¹⁴ *Grange* could either be built on the sites of pre-existing settlements or on previously undeveloped land, and could reach a considerable size: in 1275 Villamaggiore, one of the *grange* of the monastery of S. Maria di Chiaravalle Milanese,

9 And this separates the Milanese hinterland from the *Campagna Romana*: cf. Wickham, *Medieval Rome*, p. 39. The standard account on the surroundings of Milan is De Angelis Cappabianca, 'Le "cassine" tra il XII e il XIV secolo'. On eastern Lombardy cf. Menant, *Campagnes*, pp. 124–27. In the fifteenth century, the term *cassina* in the outskirts of Milan denoted all rural settlements that did not develop into a commune: cf. Del Tredici, *Comunità*, p. 59.

10 Salvatori, 'Una comunità'.

11 Grillo, 'Grange e cascine', p. 114.

12 Chiappa Mauri, 'Le scelte', p. 37. Please note that in Italian, *grangia* is singular and *grange* is plural.

13 Comba, 'Aspects'.

14 Cf. as an overview Comba, *Metamorfosi*.

comprised 420 hectares of arable fields and grassland.¹⁵ The workforce on this type of estate was initially composed for the most part of lay brothers, who were responsible for the cultivation of monastic demesnes. Lay brothers were aided by salaried workers and later on by *massarii*; these were tenants whose role became crucial towards the middle of the thirteenth century. At that time many Cistercian abbeys were burdened with debts and were therefore forced to lease out their demesnes, thus abandoning direct exploitation and replacing it with indirect management.¹⁶

Finally, I shall briefly outline the principal characteristics of the *poderi*. It is well known that the term *podere* refers to a very large, isolated and polyculture-oriented rural estate, usually with a tenant house at its centre, which was sometimes attached to the landowner's house. This type of estate has been the object of numerous studies, as the *poderi* constituted the farming unit to which the *mezzadria* contract was applied. The *mezzadria poderale* can be defined as a particular form of sharecropping tenure. It was characterized, among other things, by the equal division of the harvest between proprietor and tenant, by the joint provision of livestock and seed-corn, and by the short duration of contracts (which, however, were generally renewed). The *poderi mezzadrili* shaped the countryside in much of central Italy throughout the late Middle Ages and the early modern era, and their importance has long been acknowledged.¹⁷ Paradoxically, we have relatively little information about the creation of *poderi*, a process generally referred to as *appoderamento*. Oretta Muzzi and Maria Daniela Nenci have argued that in late twelfth-century Tuscany the word *podere* began to replace the term *mansus*, which denoted the farming unit dating from Carolingian times; they have also maintained, however, that at that stage the *podere* was not the *podere mezzadrile* of the fourteenth, fifteenth, and sixteenth centuries. In the central medieval period, using the term *podere* to describe a tenure was simply a way to emphasize proprietorial rights: the power (*potere* in Italian) that the landowner wielded over that land.¹⁸ Moreover, it should be stressed that in past historiography the

15 Comba, 'I Cistercensi', p. 249.

16 Cf. again Comba, 'Le origini', p. 373. On northern Europe see the classic essay by Higounet, 'Effets'. On Lombardy cf. Chiappa Mauri, *Terra*, esp. p. 30 on the leasing out of *grange* (see also Chiappa Mauri, 'Le scelte', p. 43 and following). Some local studies: Saracco Previdi, 'Habitat' (on the Marche region); Cortese, 'Gli opifici' (on S. Galgano in Val di Merse, in the Siense); Grillo, 'Dal bosco' and Comba, "In silva Stapharda" (on S. Maria di Staffarda, close to Cuneo, and the *grangia* of Aimondino). More local studies will be cited in subsequent footnotes.

17 The bibliography on *mezzadria poderale* is vast. With regard to Tuscany, I have recently summarized it in Tabarrini, *Estate*, Introduction, note 11, but I will cite some of it in subsequent footnotes.

18 Muzzi and Nenci, eds, *Il contratto*, p. 55. There are various — and sometimes divergent — views on the development of *poderi* in medieval Tuscany. According to Enrico Fiumi, *poderi* can be identified around S. Gimignano in the fourteenth century: Fiumi, *Storia*, pp. 129–40. Elio Conti sees the creation of *poderi* as the late medieval re-composition of the fragmented

concept of *appoderamento* has not always been used to indicate the spread of the *mezzadria* contract. *Appoderamento* might simply designate the process by which landed estates were made larger and more uniform, mostly through the purchase of bordering land plots — a practice known as *ingrossatio* in Latin sources.¹⁹ This distinction is relevant to this study: *ingrossatio* did take place over the twelfth and thirteenth centuries, and we shall see this again when discussing the landed patrimony of Cistercian *grange*. By contrast, the creation of *poderi mezzadrili*, as a late medieval and early modern phenomenon, falls outside the chronological scope of this essay.

There are some further structures that need at least to be mentioned, namely *bastite*, *casamenta*, *caseforti*, *motte*, *torri*, and *tumbe*. These were all fortified buildings (and were all to be found in a rural setting, except for the *casamenta*, which were located within the city of Vercelli)²⁰ usually situated at the centre of landed estates or areas in which land-clearing was required. In some instances, they fulfilled a mainly military function; in others, they developed into actual villages. For reasons of space, I cannot devote much time to them here; but it should be emphasized that these structures began to appear across many regions of northern and central Italy during the late twelfth and, above all, thirteenth centuries.²¹ This is significant: they testify to a generalized endeavour aimed at investment in rural buildings, broadly speaking over the same period in which *casali*, *cassine*, *grange*, and (bearing in mind the caveats mentioned above) *poderi* started to take shape in the countryside. In this sense, they can be seen as further manifestations of the process of economic development outlined above.

patterns of landowning and landholding that had characterized the countryside of Florence during the central Middle Ages: Conti, *La formazione*. Philip Jones acknowledges that the construction of isolated rural houses on the *poderi* was a remarkably obscure process: cf. Jones, 'From manor to mezzadria'. According to Giovanni Cherubini, the process of *appoderamento*, along with the dispersion of settlements, can be identified in some parts of Tuscany in the fourteenth century: Cherubini, 'Forme'. Giuliano Pinto has stressed that the contract of *mezzadria* began to be inextricably linked to *poderi* only during the sixteenth century: Pinto, 'Per una storia'. Franca Leverotti has hypothesized that the term *podere* may have been applied in the twelfth century to lands which formerly belonged to the fiscal domain: Leverotti, 'Scomposizione'.

19 This point was made by Klapisch-Zuber, 'Mezzadria' and reiterated by Comba, 'La dispersione'. Cf. also the contribution by Giuliano Pinto cited at note 18.

20 Cf. Gullino, *Forme*.

21 See as an overview Settia, *L'illusione*; Comba, *Metamorfosi*, pp. 77–78 on the *bastita* of Pogliola, close to Cuneo; Comba, 'Le origini', esp. pp. 377–81; Settia, 'Tra azienda agricola e fortezza'. Cf. also the essays in Comba, Panero, and Pinto, eds, *Motte*: namely, Grillo, 'Fra poteri pubblici e iniziative private', on the outskirts of Milan and Como; Mannoni and Sicios, 'Le torri', which argues that *torri* in Liguria emerge in our records between the twelfth and the fourteenth centuries; Tiberini, 'Colombaie', esp. pp. 287–90 on the slow expansion of *torri* in Umbria from the first decade of the thirteenth century on. It should be noted that in some areas *motte*, *torri* and *caseforti* did not appear until the late Middle Ages: this is the case with Friuli (cf. Degrassi, 'Motte').

My second point concerns the infrastructure and materials that characterized these estates, once again looking first at the Roman *casali* during the first *incasamento*. The *casali* were often grouped around a tower made of bricks (*turris*), which was sometimes more than twenty metres high — indeed, many of these towers have survived and are still visible in the *Campagna Romana*; they were enclosed by a *castellarium*, a word used to describe diverse types and sizes of walls. Since the *castellarium* encompassed the whole *casale*, the two terms sometimes became synonymous. Within the *castellarium/casale*, were various residential buildings: single- and two-storey houses (*solarate*), which were sometimes fitted with chimneys (and were therefore called *caminata*), as well as arguably imposing constructions named *palatia*. Importantly, the *casale* also comprised a substantial set of outbuildings, such as storage facilities for cereals, cisterns, and artificial caves, called *arnaria*, complete with niches and air-holes.²²

The Milanese *cassine* appear to have been less complex, which can be explained, to an extent at least, by their smaller size in comparison to Roman *casali* (which, as we recall, measured a maximum of thirteen hectares as opposed to 555). The most significant source of information regarding these small estates are the *cassine a grappolo*, which were structured around common spaces: these areas usually contained a well, an oven, and a press. An important role was played by mills and, at a later date, around the middle of the fourteenth century, by fulling machines used for paper production.²³

Significantly more information is available regarding Cistercian *grange*. As I mentioned earlier, *grangia* originally denoted a storage place for cereals — a form of infrastructure which indeed appears to have been central to Cistercian communities, to the extent that it came to define the entirety of their landed estates. Rinaldo Comba suggested in 1985 that the aisled warehouse may have been the sole unifying architectural element of Italian *grange*; however, this can only be proved by a comprehensive archaeological survey of all the surviving *grange* — and such a survey has yet to be carried out.²⁴ Let us now look more closely at two examples. The *grangia* of Valera must have been a particularly impressive structure: it was located near Lodi, which belonged to the abbey of Chiaravalle Milanese, and was the centre of a substantial land-purchasing operation, which led to the creation of a compact body of landed properties by the middle of the thirteenth century. By 1236 it was encircled by a ditch, and by 1255 an enclosure wall had been added, probably built of stone. It contained a brick kiln and it had a *lobia* (literally, an arcade) which might have been

22 Carocci and Vendittelli, *L'origine*, pp. 69–78, 85–89; Carocci and Vendittelli, 'Casali', pp. 299–300.

23 This is the case with the *cassine* outside Porta Ticinese, in Milan: cf. De Angelis Cappabianca, 'Le "cassine" tra il XII e il XIV secolo', esp. pp. 379–84.

24 Comba, 'I Cistercensi', pp. 241–42. A recent overview of the Cistercian *grange* located, for the most part, in modern France (some of them, like Vaulerent and Foncalvy, are monumental buildings, which have survived up to the present day) is Blary, 'La question'.

a dormitory or, again, a storage facility.²⁵ The second example concerns the monastery of S. Croce al Chienti, which was a dependency of the Cistercian abbey of S. Maria di Chiaravalle di Fiastra, in the Marche region. It deserves some scrutiny, as an inventory drawn up in the thirteenth century provides many details of the infrastructure and outbuildings included in S. Croce and its neighbouring *grangia*. *Infra claustrum* (that is to say, within the monastery) S. Croce had one storage facility, one infirmary, two cellars, kitchens, two larders, and a number of rooms for working with fabrics. *Extra claustrum* (outside the monastery) one could find various rural buildings as well as the *grangia*, which was surrounded by two ditches and provided shelter for a large number of farm animals.²⁶

We shall focus only briefly on *poderi* — since, as I remarked earlier, there is little information available about them during the twelfth and thirteenth centuries. What we can however say is that, firstly, late medieval Tuscan *poderi* were often created by reusing pre-existing structures, thus pointing to a certain degree of continuity in the patterns of at least some rural settlements — even though it is difficult to gauge exactly how far back this practice goes. It was not infrequent for groups of five to ten peasant houses to be combined to create a single *podere*, possibly also as a result of the demographic crisis marking the fourteenth and fifteenth centuries.²⁷ This same kind of development can at least be hypothesized with regard to Umbria and Marche, for which however written evidence is less plentiful than is the case for Tuscany.²⁸ As to their infrastructure, it should be emphasized that the largest *poderi* were cultivated by more than one peasant family, and usually included underground arcades, *colombaie* (that is, towers for the breeding of doves), gardens enclosed by masonry walls, and buildings for the maintenance of canals. Finally, it is worth noting that the landowner's house was frequently used as a storage facility.²⁹

The next point I wish to analyse is critical to the understanding of the relationship between landed estates and their buildings on the one hand, and overall economic change on the other. Who paid for these estates and buildings, and how? Here the emphasis is on the social position of the key figures involved, rather than on the types of estates. First and foremost, it was

25 Chiappa Mauri, 'La costruzione'.

26 Saracco Previdi, 'Grange'. An overview of the documentation of S. Croce al Chienti up to 1291 is Borri, 'Documenti'.

27 Mazzi and Raveggi, *Gli uomini*, pp. 130–31.

28 The classic reference work on the development of *mezzadria poderale* in Umbria is Desplanques, *Campagnes*, pp. 176–81. He argued that the *mezzadria* contract started to take its definitive form during the thirteenth century, whereas one needs to wait for the decades straddling the sixteenth and seventeenth centuries in order to observe the process of *appoderamento*. For a different view, stressing the earlier spread, in the countryside of Perugia, of isolated rural houses (which would be typical of the *mezzadria poderale*) cf. Grohmann, *Città*, II, pp. 893–913. On the Marche region, and the countryside of Ancona in particular, cf. Villani, *I centri*, pp. 63–66.

29 Cf. again Mazzi and Raveggi, *Gli uomini*, esp. pp. 132–34.

the mercantile classes of urban society who were the principal force behind the development of *casali*, *cassine*, and *poderi*. From the 1190s onwards, Roman merchants were fully engaged in European-wide trade networks; the profits derived from this activity were then reinvested in the purchase of land, thus paving the way for the first *incasamento* and its distinctively expansionist character.³⁰ Milanese *cassine*, too, particularly in the thirteenth and fourteenth centuries, were built on the initiative of the merchants and bankers who gradually began to replace the old consular aristocracy of the commune.³¹ The same pattern applies to Tuscan *poderi*, although the relocation of city-based owners to the countryside becomes clearly visible only in the fourteenth and fifteenth centuries.³²

The Cistercians are the second group to be considered, in particular the ways they financed *grange*. Firstly, the monks could benefit from donations of landed goods from bishops and major lay aristocrats; moreover, the exemptions from many tributes conceded by popes and emperors further contributed to their wealth. Two examples will suffice. In an attempt to establish good relations with the abbey of S. Maria di Morimondo, which stood on the boundary between their two dioceses, the prelates of Pavia and Milan conceded numerous estates to the resident Cistercian community, thereby playing a pivotal role in the creation of the abbey's substantial landed patrimony over the course of the twelfth century.³³ My second example regards S. Maria di Lucedio in Piedmont, which in the late 1180s was granted by the papacy a series of exemptions from the payment of tithes and tolls (namely those regarding cattle transhumance) which would later be confirmed by Emperor Frederick II; furthermore, over the same period S. Maria received donations from the bishop of Vercelli and the marquis of Monferrato.³⁴ Nevertheless, the support from aristocrats and sovereigns can hardly account alone for the monumental land-purchasing operations undertaken by Cistercian communities; and it is worth emphasizing that, in some instances, we have no idea where the money came from. This is notably the case with the *grangia* of Valera, which, as I mentioned earlier, was quite possibly one of the grandest Italian *grange* in terms of fortifications and rural buildings, judging from written evidence. It is therefore striking that, as Luisa Chiappa Mauri has argued, it is not at all clear how the landed patrimony

30 Cf. the list of families involved in the creation of *casali* provided by Maire Vigueur, *L'autre Rome*, p. 88.

31 Cf. De Angelis Cappabianca, 'Le "cassine" tra il XII e il XIV secolo', pp. 398–99; lists of families who took part in the creation of *cassine* can be found in De Angelis Cappabianca, 'Le cascine', p. 10, and in Salvatori, 'Una comunità', p. 204.

32 Classic references are Herlihy and Klapisich-Zuber, *Les Toscans* on the Florentine *catasto* drawn up in 1427; Cherubini, 'La "Tavola delle possessioni"' and Cherubini, 'Proprietari', on the Sieneese countryside in the fourteenth century.

33 Occhipinti, 'Il monastero' and Occhipinti, 'Fortuna'.

34 Cf. Panero, 'Forme'. An overview of the privileges granted by popes to Cistercian communities in northern Italy is Cariboni, 'Esenzione'.

of Valera was financed.³⁵ I would hypothesize that the Cistercians took out loans in order to purchase new lands, probably with the aim of making a profit by selling the agricultural surplus subsequently obtained. This is difficult to prove: credit transactions were seldom written down, and, when they were, in most cases interest rates were not stated explicitly.³⁶ What we do know, however, is that many Cistercian abbeys were burdened with debts around the middle of the thirteenth century. The accumulation of these debts can be explained by local dynamics, as was the case at Morimondo, which was destroyed by Pavese soldiers in 1237 and plunged into poverty as a result;³⁷ but I would not exclude the possibility that other religious foundations fell into debt as a consequence of spiralling interest rates.³⁸

With the exception of the Cistercians, religious institutions appear to have played a less prominent role than the urban bourgeoisie in the creation of isolated rural estates. There were, it is true, partial exceptions. Some of the thirteenth-century Milanese *cassine* were built by the chapter house of S. Giovanni di Monza and the hospital of S. Simpliciano in Milan. The landed properties of the Church dominated the *Campagna Romana* at least up until 1150, and continued to play an important role after that date; and in the second *incasalamiento* it was the clerics who were the protagonists. J.-C. Maire Vigueur has calculated that over half of the Roman *casali* attested between 1348 and 1428 were owned by clerics. But churches and monasteries ceased to be promoters of *cassine* after 1300, and the second *incasalamiento* was a retrograde step, resulting from the abandonment of castles and open settlements (named *ville*), which were turned into *casali*; this would appear to confirm the relatively marginal role played by clerics other than Cistercians.³⁹ The same can be said for rural lay aristocracies, who acted as patrons or benefactors of new Cistercian foundations by granting them lands, but who were in general less proactive than urban owners.⁴⁰ Finally, a brief mention should be made of the peasant class, as they too were behind a number of initiatives. The following are a handful of examples. From 1192 onwards notarial documents in Umbria begin to record the existence of *castellaria*, that is, small fortified

35 Cf. again Chiappa Mauri, 'La costruzione', p. 287.

36 An overview, focused on credit granted to agriculturists in Italy from the twelfth to the fourteenth centuries, is Gaulin and Menant, 'Endettement'. A point of comparison is provided by the brilliant analysis conducted by Chris Briggs on fourteenth-century England: Briggs, *Credit*, esp. p. 30 on the problems posed by the sources on credit transactions.

37 Cf. the articles cited at note 33.

38 I myself have struggled to explain the widespread indebtedness of Florentine ecclesiastical institutions at the beginning of the thirteenth century, and have had to resort to hypotheses: Tabarrini, *Estate*, ch. 2.

39 De Angelis Cappabianca, 'Le "cassine" tra il XII e il XIV secolo'; Maire Vigueur, 'Les *casali*', pp. 66–67; Wickham, *Medieval Rome*, p. 59. On the second *incasalamiento* cf. also Carocci and Vendittelli, 'Casali', pp. 297–98.

40 Examples are Chiaravalle Milanese (Radaelli, 'Archeologia', pp. 297–98), Lucedio (Panero, 'Forme'), Morimondo (Occhipinti, 'Fortuna', p. 316), and Staffarda (Panero, 'Formazione').

rural estates which were apparently constructed by local landowners.⁴¹ Some of the *tecta* in Piedmont were named after the people who built them; these did not belong to any recognizable aristocratic family and are therefore likely to have been small-scale landowners.⁴² The creation of rural estates known as *casarene*, in the Marche region, can also be ascribed to the peasant initiative, although these are attested only in the fourteenth century.⁴³ On a general level, these structures do not appear to have been particularly grand: the written evidence points in that direction, while archaeological remains are virtually non-existent. This is not difficult to comprehend, as small to medium owners were unlikely to have had the wherewithal to make substantial investments in rural buildings and fortifications.

We shall now move on to the final point of my essay — that is, the purposes for which these estates were created. Again, this is to an extent implicit in previous comments, but some aspects require further development. First of all, one characteristic common to all the types of estates discussed so far was the proximity between cultivators and the land they worked. *Casali*, *cassine*, *grange*, and *poderi* were intended to be places of residence for agricultural labourers; it can be inferred that such a proximity derived from an attempt at enhancing productivity on the part of landowners. In relation to this, landowners were evidently endeavouring to improve agricultural production. This is best demonstrated by the Roman *casali*, where wheat-farming and animal husbandry were closely interconnected; large grain fields such as those found in *casali* required the use of draught animals, which could clear far larger areas of land than a human workforce.⁴⁴ For the same reason, the aforementioned *grangia* of S. Croce del Chienti employed a number of farmhands exclusively tasked with tending cattle.⁴⁵ Another example is the *grangia* of S. Maria di Campo Imperatore, in Abruzzo. The excavations carried out there from 1997 revealed the presence of small stone buildings called *condole*, and of arcades called *locce* which served as shelters for the monks when they moved the cattle from the mountains down to the plain — also known as vertical transhumance.⁴⁶ The exploitation of watercourses and the creation of canals was similarly geared towards the increase in overall agricultural output: this emerges clearly from the documentation concerning the Milanese *cassine*, namely those located right outside Porta Vercellina, and also from the excavation (started in 2013) of the *grangia* of Nosedo, which belonged to the abbey of Chiaravalle Milanese.⁴⁷ As a final point, it is worth noting that cereals appear to have been stored

41 Tiberini, *Le signorie*, p. 191 and following.

42 Comba, *Metamorfosi*, pp. 78–79.

43 Cf. again Saracco Previdi, ‘Habitat’; an overview of Marche, Umbria and Lazio in Ait and Lanconelli, ‘Successi’.

44 Cf. again, for an overview, Carocci and Vendittelli, ‘Casali’.

45 See again Saracco Previdi, ‘Grange’.

46 Gabay, ‘Grangia’.

47 Cf. note 9 on Milanese *cassine*; on Nosedo, see Radaelli, ‘Archeologia’.

in one of the outbuildings which were a constant feature of *casali*, *cassine*, *grange*, and *poderi*. We may assume that a proportion of the stored cereals was not destined for home consumption, but was set aside in order to be sold at market — there was also possible speculation on the price of grain over bad years or bad seasons. This is consistent with evidence from England pointing to an increase in the number of barns and granaries after 1200.⁴⁸

* * *

We can conclude that the creation of *casali*, *cassine*, *grange*, and *poderi* reflects the increase in aggregate demand that characterized the period between c. 1150 and c. 1250. I would like to briefly outline three possible research avenues which, I hope, may be opened up by this review of the literature on isolated rural estates. First, this literature ought to be re-read in the light of what is known about credit to agriculturists: it cannot be a coincidence that the proliferation of storage facilities coincides, by and large, with the earliest evidence of increasingly consistent loans to peasants, both in cash and kind (which could be added to their sometimes meagre income, and possibly used to pay rent). Second, it should be emphasized that, with the important exception of Cistercian monks (who however would find themselves beset by debts by the middle of the thirteenth century), the social class that on the whole was best placed to finance structured estates and costly rural buildings was that which derived its income from commerce and finance. One might infer that these were the main drivers of economic change over the central Middle Ages, since they delivered the highest profits and therefore facilitated substantial investments; and if the role played by the merchant class in determining and furthering medieval economic growth is beyond dispute, the debate regarding the fundamental causes of that growth, and the relationship between the two, is still an open one.⁴⁹ Finally, it should be stressed that only considerable investment could provide tenants and rural workers with costly infrastructures. As Maria Serena Mazzi and Susanna Raveggi have suggested, this helps explain why harsh agrarian regimes, such as the *mezzadria poderale*, might have appeared more convenient and attractive than independent ownership. Whatever their difficulties, *mezzadri* were better equipped and could therefore in some respects enjoy less severe conditions than free peasants.⁵⁰ The study of landed estates, their buildings and the way these were financed may therefore shed light on the long-term success of the *mezzadria poderale*.

48 This topic has been studied with particular regard to the modern age: cf. the collection of essays in Ronsjin, Mignemi, and Herment, eds, *Stocks*. On England cf. Gardiner, 'Stacks', p. 34. The potentially speculative nature of stockpiling grain was already well known by the Carolingians: cf. Devroey, *La Nature*, esp. pp. 141–42.

49 See once again the essays in Franceschi, ed., *La crescita*.

50 Mazzi and Raveggi, *Gli uomini*, esp. pp. 132–34.

Works Cited

Secondary Works

- Ait, Ivana, and Angela Lanconelli, 'Successi e crisi delle nuove fondazioni. Modelli insediativi a confronto nell'Italia centrale: Marche, Umbria, Lazio', in *Fondare abitati in età medievale: Successi e fallimenti. Omaggio a Rinaldo Comba. Atti delle giornate internazionali di studio* (S. Giovanni Valdarno, 15–16 gennaio 2016), ed. by Francesco Panero, Giuliano Pinto, and Paolo Pirillo (Florence: EDIFIR, 2017), pp. 195–219
- Bacchi, Teresa, 'Conquista del territorio e modificazione dei modelli insediativi: Le aziende fondiarie nel Ferrarese (secoli XI–XII)', in *Le campagne italiane prima e dopo il Mille: Una società in trasformazione*, ed. by Bruno Andreolli, Vito Fumagalli, and Massimo Montanari (Bologna: CLUEB, 1985), pp. 135–61
- Blary, François, 'La question des clos symboliques et fortifiés des établissements cisterciens (XIII^e-XV^e s.)', *Bulletin du centre d'études médiévales d'Auxerre*, hors-série 12 (2020), 197–241
- Borri, Giammario, 'Documenti per la storia del monastero di Santa Croce al Chienti (1085–1291)', *Studia Picena*, 69 (2004), 7–87
- Brezzi, Paolo, 'Il sistema agrario nel territorio romano alla fine del Medio Evo', *Studi romani*, 25.2 (1977), 153–68
- Briggs, Chris, *Credit and Village: Society in Fourteenth-Century England* (Oxford: British Academy, 2009)
- Campbell, Bruce M. S., *The Great Transition: Climate, Disease and Society in the Late-Medieval World* (Cambridge: Cambridge University Press, 2016)
- Cammarosano, Paolo, *Economia politica classica e storia economica dell'Europa medievale* (Udine: CERM, 2020)
- Cariboni, Guido, 'Esenzione e formazione del *Privilegium commune*: Osservazioni a partire dai cenobi dell'Italia settentrionale', in *Papato e monachesimo 'esente' nei secoli centrali del Medioevo*, ed. by Nicolangelo D'Acunto (Florence: Firenze University Press, 2003), pp. 65–107
- Carocci, Sandro, and Marco Vendittelli, *L'origine della Campagna Romana: Casali, castelli e villaggi nel XII e XIII secolo. Con saggi di Daniela Esposito, Mauro Lenzi, Susanna Passigli* (Rome: Società Romana di Storia Patria, 2004)
- Carocci, Sandro, and Marco Vendittelli, 'Casali e castelli nella Campagna Romana (XII secolo – metà XIV secolo)', in *Motte, torri e caseforti nelle campagne medievali (secoli XII–XV). Omaggio ad Aldo A. Settia. Atti del Convegno* (Cherasco, 23–25 settembre 2005), ed. by Rinaldo Comba, Francesco Panero, and Giuliano Pinto (Cherasco: CISIM, 2007), pp. 295–302
- Cherubini, Giovanni, 'Forme e vicende degli insediamenti nella campagna toscana dei secoli XIII–XV', *Quaderni storici*, 24 (1973), 879–904 [also in Cherubini, Giovanni, *Signori, contadini, borghesi: Ricerche sulla società italiana del basso medioevo* (Florence: La Nuova Italia, 1974), pp. 145–74]

- , 'Proprietari, contadini e campagne senesi all'inizio del Trecento', in Cherubini, Giovanni, *Signori, contadini, borghesi: Ricerche sulla società italiana del basso medioevo* (Florence: La Nuova Italia, 1974), pp. 231–311
- , 'La "Tavola delle possessioni" del comune di Siena', *Rivista di storia dell'agricoltura*, 14.2 (1974), 5–14
- Chiappa Mauri, Luisa, 'La costruzione del paesaggio agrario padano: i Cistercensi e la grangia di Valera', *Studi storici*, 26.2 (1985), 263–313
- , 'Le scelte economiche del monastero di Chiaravalle milanese nel XII e XIII secolo', in *Chiaravalle: Arte e storia di un'abbazia cistercense*, ed. by Paolo Tomea (Milan: Edizioni Electa, 1992), pp. 31–49
- , *Terra e uomini nella Lombardia medievale* (Rome: Laterza, 1997)
- Comba, Rinaldo, 'Aspects économiques de la vie des abbayes cisterciennes de l'Italie du Nord-Ouest (XII^e-XIV^e siècle)', in *L'économie cistercienne: Géographie — Mutations du Moyen Âge aux temps modernes (Flaran, Troisièmes journées internationales d'histoire, 16–18 septembre 1981)*, ed. by Charles Higounet (Auch: Presses Universitaires du Midi, 1983), pp. 119–33
- , 'I Cistercensi fra città e campagne nei secoli XII e XIII: Una sintesi mutevole di orientamenti economici e culturali nell'Italia nord-occidentale', *Studi storici*, 26.2 (1985), 237–61
- , 'La dispersione dell'habitat nell'Italia centro-settentrionale tra XII e XV secolo: Vent'anni di ricerche', *Studi storici*, 3 (1984), 765–83
- , *Metamorfosi di un paesaggio rurale: Uomini e luoghi del Piemonte sud-occidentale fra X e XVI secolo* (Turin: CELID, 1983)
- , 'Le origini medievali dell'assetto insediativo moderno nelle campagne italiane', in *Storia d'Italia. Annali, VIII: Insediamenti e territorio*, ed. by Cesare De Seta (Turin: Einaudi, 1985), pp. 367–404
- , 'Rappresentazioni mentali, realtà e aspetti di cultura materiale nella storia delle dimore rurali: le campagne del Piemonte sud-occidentale tra XII e XVI secolo', *Archeologia medievale*, 5 (1978), 375–414
- , "'In silva Stapharda": dissodamenti, grange e villenove in un grande complesso forestale (XI–XIV secolo)', *Archivio Storico Italiano*, 167:4 (2009), 607–24
- , "'Ville" e borghi nuovi nell'Italia del Nord (XII–XIV secolo)', *Studi storici*, 32.1 (1991), 5–23
- Comba, Rinaldo, and Grado Giovanni Merlo, eds, *L'abbazia di Staffarda e l'irradiazione cistercense nel Piemonte meridionale. Atti del Convegno (Abbazia di Staffarda — Revello, 17–18 ottobre 1998)* (Cuneo: Società per gli Studi Storici, Archeologici ed Artistici per la Provincia di Cuneo, 1999)
- Comba, Rinaldo, Francesco Panero, and Giuliano Pinto, eds, *Borghi nuovi e borghi franchi nel processo di costruzione dei distretti comunali nell'Italia centro-settentrionale (secoli XII–XIV)* (Cherasco: Società per gli Studi Storici, Archeologici ed Artistici per la Provincia di Cuneo, 2002)
- Comba, Rinaldo, Francesco Panero, and Giuliano Pinto, eds, *Motte, torri e caseforti nelle campagne medievali (secoli XII–XV). Omaggio ad Aldo A. Settia. Atti del Convegno (Cherasco, 23–25 settembre 2005)* (Cherasco: CISIM, 2007)

- Conti, Elio, *La formazione della struttura agraria moderna nel contado fiorentino* (Rome: Istituto Storico Italiano per il Medioevo, 1965)
- Cortese, Maria Elena, 'Gli opifici idraulici dell'Abbazia cistercense di San Galgano in Val di Merse (Siena)', in *Dalle abbazie, l'Europa: I nuovi germogli del seme benedettino tra primo e secondo millennio (secc. X–XII). Atti del Convegno di Studi (Badia a Settimo, 22–24 aprile 1999)*, ed. by Alessandro Guidotti and Gabriella Cirri (Florence: Maschietto, 2006), pp. 303–11
- De Angelis Cappabianca, Laura, 'Le cascine del suburbio di Milano tra il XII e il XIII secolo', *Bollettino della società pavese di Storia Patria*, 88.40 (1988), 5–12
- , 'Le "cassine" tra il XII e il XIV secolo: l'esempio di Milano', in *Paesaggi urbani dell'Italia padana nei secoli VIII–XIV* (Bologna: GEM, 1988), pp. 373–415
- Degrassi, Donata, 'Motte, torri e caseforti nelle campagne friulane: Prime indagini e orientamenti di ricerca', in *Motte, torri e caseforti nelle campagne medievali (secoli XII–XV). Omaggio ad Aldo A. Settia. Atti del Convegno (Cherasco, 23–25 settembre 2005)*, ed. by Rinaldo Comba, Francesco Panero, and Giuliano Pinto (Cherasco: CISIM, 2007), pp. 195–208
- Del Tredici, Federico, *Comunità, nobili e gentiluomini nel contado di Milano del Quattrocento* (Milan: UNICOPLI, 2013)
- Desplanques, Henri, *Campagnes Ombriennes: Contribution à l'étude des paysages ruraux en Italie centrale* (Paris: Colin, 1969)
- Devroey, Jean-Pierre, *La Nature et le roi: Environnement, pouvoir et société à l'âge de Charlemagne (740–820)* (Paris: Albin Michel, 2019)
- Farinelli, Roberto, and Andrea Giorgi, 'Fenomeni di sinecismo e accentramento demico-insediativo pianificato: Il "secondo incastellamento" nella Toscana dei secoli XII e XIII', in *V congresso nazionale di archeologia medievale [Palazzo della Dogana, Salone del Tribunale (Foggia), Palazzo dei Celestini, Auditorium (Manfredonia) (30 settembre – 3 ottobre 2009)]*, ed. by Giuliano Volpe and Pasquale Favia (Borgo San Lorenzo: All'Insegna del Giglio, 2009), pp. 406–11
- Fiumi, Enrico, *Storia economica e sociale di San Gimignano* (Florence: Olschki, 1961)
- Franceschi, Franco, ed., *La crescita economica dell'Occidente medievale: Un tema storico non ancora esaurito. Venticinquesimo convegno internazionale di studi (Pistoia, 14–17 maggio 2015)* (Rome: Viella, 2017)
- Friedman, David, and Paolo Pirillo, eds, *Le terre nuove. Atti del Seminario internazionale organizzato dai Comuni di Firenze e San Giovanni Valdarno (Firenze, San Giovanni Valdarno, 28–30 gennaio 1999)* (Florence: Olschki, 2004)
- Fumagalli, Vito, *Terra e società nell'Italia padana* (Turin: Einaudi, 1976)
- Gabay, Noémie, 'Grangia cistercense Santa Maria del Monte a Campo Imperatore: Rilievo e studi di un insediamento medievale della transumanza in Italia centrale', *Chronique des activités archéologiques de l'École française de Rome* [<https://doi.org/10.4000/cefr.2058>], *Italie centrale*, online since 17 October 2018, site visited 24 August 2021

- Gardiner, Mark F., 'Stacks, Barns and Granaries in Early and High Medieval England: Crop Storage and its Implications', in *Horrea, Barns and Silos: Storage and Incomes in Early Medieval Europe*, ed. by Giovanna Bianchi, Juan Antonio Quirós Castillo, and Alfonso Vigil-Escalera Guirado (Bilbao: Universidad del País Vasco, 2013), pp. 23–38
- Gaulin, Jean-Louis, and François Menant, 'Crédit rural et endettement paysan dans l'Italie communale', in *Endettement paysan et crédit rural dans l'Europe médiévale et moderne. Actes des XVIIes journées internationales d'histoire de l'abbaye de Flaran (Septembre 1995)*, ed. by Maurice Berthe (Toulouse: Presses Universitaires du Midi, 1998), pp. 35–67
- Grillo, Paolo, 'Dal bosco agli arativi: La creazione della grangia di Aimondino in una raccolta di testimonianze degli inizi del Duecento', in *L'abbazia di Staffarda e l'irradiazione cistercense nel Piemonte meridionale. Atti del Convegno (Abbazia di Staffarda — Revello, 17–18 ottobre 1998)*, ed. by Rinaldo Comba and Grado Giovanni Merlo (Cuneo: Società per gli Studi Storici, Archeologici ed Artistici per la Provincia di Cuneo, 1999), pp. 269–86
- , 'Grange e cascine in area lombarda (secoli XII–XIII)', in *Attività economiche e sviluppi insediativi nell'Italia dei secoli XI–XV. Omaggio a Giuliano Pinto. Atti del Convegno (Cherasco, 25–27 ottobre 2013)*, ed. by Enrico Lusso (Cherasco: CISIM, 2014), pp. 107–18
- , 'Fra poteri pubblici e iniziative private: Torri e aziende rurali fortificate nell'area milanese e comasca (secoli XII–XIII)', in *Motte, torri e caseforti nelle campagne medievali (secoli XII–XV). Omaggio ad Aldo A. Settia. Atti del Convegno (Cherasco, 23–25 settembre 2005)*, ed. by Rinaldo Comba, Francesco Panero, and Giuliano Pinto (Cherasco: CISIM, 2007), pp. 167–83
- Grohmann, Alberto, *Città e territorio tra Medioevo ed età moderna (Perugia, secc. XIII–XVI)*, 2 vols (Perugia: Volumnia, 1981)
- Gullino, Giuseppe, *Forme abitative a Vercelli: Questioni e problemi per una ricostruzione del processo terminologico dei manufatti edilizi dal secolo X al secolo XIII* (Vercelli: Società Storica Vercellese, 1980)
- Herlihy, David, and Christiane Klapisch-Zuber, *Les Toscans et leurs familles: Une étude du Catasto florentin de 1427* (Paris: Presses de Sciences Po, 1978)
- Higounet, Charles, 'Effets des mutations de l'économie rurale cistercienne (XIII^e-XIV^e siècles)', in *Agricoltura e trasformazione dell'ambiente: Secoli XIII–XIV. Atti della XI settimana di studio (25–30 aprile 1970)*, ed. by Alessandra Guarducci (Florence: Le Monnier, 1984), pp. 119–30
- Jones, Philip J., 'From manor to mezzadria: A Tuscan Case-Study in the Medieval Origins of Modern Agrarian Society', in *Florentine Studies: Politics and Society in Renaissance Florence*, ed. by Nicolai Rubinstein (London: Faber & Faber, 1968), pp. 193–241
- Klapisch-Zuber, Christiane, 'Mezzadria e insediamenti rurali alla fine del Medio Evo', in *Civiltà ed economia agricola in Toscana nei secc. XIII–XV: Problemi della vita delle campagne nel tardo Medioevo (VIII convegno internazionale, Pistoia, 21–24 aprile 1977)* (Pistoia: Centro Italiano di Studi di Storia e d'Arte, 1981), pp. 149–68

- Lenzi, Mauro, 'Per una storia dei *casalia* del territorio romano nell'alto medioevo', in Sandro Carocci and Marco Vendittelli, *L'origine della Campagna Romana: Casali, castelli e villaggi nel XII e XIII secolo. Con saggi di Daniela Esposito, Mauro Lenzi, Susanna Passigli* (Rome: Società Romana di Storia Patria, 2004), pp. 307–24
- Leverotti, Franca, 'Scomposizione e ricomposizione di un "podere": il caso di Colognole in Colline', in *Un 'filo rosso': Studi antichi e nuove ricerche sulle orme di Gabriella Rossetti in occasione dei suoi settanta anni*, ed. by Gabriella Garzella and Enrica Salvatori (Pisa: ETS, 2017), pp. 209–30
- Maire Vigueur, Jean-Claude, *L'autre Rome: Une histoire des Romains à l'époque des communes (XII^e-XIV^e siècle)* (Paris: Tallandier, 2010)
- , 'Les *casali* des églises romaines à la fin du Moyen Âge (1348–1428)', *Mélanges de l'École française de Rome. Moyen Âge, Temps Modernes*, 86.1 (1974), 63–136
- Mannoni, Tiziano, and Matteo Sicios, 'Le torri della Liguria extraurbana tardo-medievale e l'evoluzione dei metodi di studio archeologici', in *Motte, torri e caseforti nelle campagne medievali (secoli XII–XV). Omaggio ad Aldo A. Settia. Atti del Convegno (Cherasco, 23–25 settembre 2005)*, ed. by Rinaldo Comba, Francesco Panero, and Giuliano Pinto (Cherasco: CISIM, 2007), pp. 125–34
- Masschaele, James, 'Economic Takeoff and the Rise of Markets', in *A Companion to the Medieval World*, ed. by Carol L. Lansing and Edward D. English (Oxford: Wiley-Blackwell, 2009), pp. 89–110
- Mazzi, Maria Serena, and Sergio Raveggi, *Gli uomini e le cose nelle campagne fiorentine del Quattrocento* (Florence: Olschki, 1983)
- Menant, François, *Campagnes lombarde au Moyen Âge: L'économie et la société dans la région de Bergame, de Crémone et de Brescia du X^e au XII^e siècle* (Rome: École Française de Rome, 1993)
- Micheletto, Egle, 'L'insediamento rurale in Piemonte tra X e XIII secolo: I contesti archeologici', *Archeologia medievale*, 37 (2010), 15–28
- Murialdo, Giovanni, 'La riorganizzazione signorile del territorio tra XII e XIII secolo: Incastellamento e decastellamento nel Finale', in *L'incastellamento in Liguria, X–XII secolo: Bilanci e destini di un tema storiografico. Atti della Giornata di Studio (Rapallo, 26 aprile 1997)*, ed. by Fabrizio Benente (Bordighera: Istituto Internazionale di Studi Liguri, 2000), pp. 101–29
- Muzzi, Oretta, and Maria Daniela Nenci, eds, *Il contratto di mezzadria nella Toscana medievale. II (Contado di Firenze, sec. XIII)* (Florence: Olschki, 1988)
- Occhipinti, Elisa, 'Fortuna e crisi di un patrimonio monastico: Morimondo e le sue grange fra XII e XIV secolo', *Studi Storici*, 26.2 (1985), 315–36
- , 'Il monastero di Morimondo in Lombardia tra tensioni locali e antagonismi di potere (secoli XII – inizi XIII)', *Nuova rivista storica*, 68.5/6 (1983), 527–84
- Palermo, Luciano, *Sviluppo economico e società preindustriali: Cicli, strutture e congiunture in Europa dal medioevo alla prima età moderna* (Rome: Viella, 1997)
- Panero, Francesco, 'Formazione, struttura e gestione del patrimonio fondiario dell'abbazia di Staffarda (secoli XII–XIV)', in *L'abbazia di Staffarda e*

- l'irradiazione cistercense nel Piemonte meridionale. Atti del Convegno (Abbazia di Staffarda — Revello, 17–18 ottobre 1998)*, ed. by Rinaldo Comba and Grado Giovanni Merlo (Cuneo: Società per gli Studi Storici, Archeologici ed Artistici per la Provincia di Cuneo, 1999), pp. 239–58
- , 'Forme monastiche di conduzione diretta della proprietà fondiaria: I Cistercensi di Lucedio', in *Grandi proprietà ecclesiastiche nell'Italia nord-occidentale: Tra sviluppo e crisi (secoli X–XIV)*, ed. by Francesco Panero (Bologna: CLUEB, 2009), pp. 171–93
- Pinto, Giuliano, 'Per una storia delle dimore mezzadrili nella Toscana medievale', *Archeologia medievale*, 7 (1980), 153–71
- Radaelli, Ricky, 'Archeologia di una grangia: Il caso di *Nocetum* presso Chiaravalle Milanese', in *Costruzione identitaria e spazi sociali: Nuovi studi sul monachesimo cistercense nel Medioevo. Atti dell'incontro di studio (Milano, 1–2 dicembre 2015)*, ed. by Guido Cariboni and Nicolangelo D'Acunto (Spoleto: CISAM, 2017), pp. 291–315
- Rapetti, Anna Maria, 'Paesaggi rurali e insediamenti nell'Italia del Basso Medioevo', in *L'Italia alla fine del Medioevo: I caratteri originali nel quadro europeo*, ed. by Francesco Salvestrini (Florence: Firenze University Press, 2006), pp. 25–56
- Ronsijn, Wouter, Niccolò Mignemi, and Laurent Herment, eds, *Stocks, Seasons and Sales: Food Supply, Storage and Markets in Europe and the New World* (Turnhout: Brepols, 2019)
- Salvatori, Enrica, 'Una comunità familiare nel suburbio milanese: Le Cascine Biffi-Bulgaroni', in *L'età dei Visconti: Il dominio di Milano tra XIII e XV secolo*, ed. by Luisa Chiappa Mauri, Laura De Angelis Cappabianca, and Patrizia Mainoni (Milan: La Storia, 1993), pp. 199–216
- Saracco Previdi, Emilia, 'Grange cistercensi nel territorio maceratese: Insediamenti rurali monastici dei secoli XII–XIII', *Proposte e ricerche*, 7.1 (1981), 15–23
- , 'Habitat sparso ed accentrato nell'entroterra della 'Marchia' nei secoli XI–XIV', *Archeologia medievale*, 7 (1980), 367–73
- Settia, Aldo A., *Castelli e villaggi nell'Italia padana: Popolamento, potere e sicurezza fra IX e XIII secolo* (Naples: Liguori, 1984)
- , *L'illusione della sicurezza: Fortificazioni di rifugio nell'Italia medievale, 'ricetti', 'bastite', 'cortine'* (Vercelli – Cuneo: Società per gli Studi Storici, Archeologici ed Artistici della Provincia di Cuneo, 2001)
- , 'Tra azienda agricola e fortezza: Case forti, "motte" e "tombe" nell'Italia settentrionale. Dati e problemi', *Archeologia Medievale*, 7 (1980), 31–54
- Tabarrini, Lorenzo, *Estate Management around Florence and Lucca, 1000–1250* (Oxford: Oxford University Press, 2023)
- Tiberini, Sandro, 'Colombaie e torri nelle campagne umbre: Dagli studi di Desplanques alle ricerche più recenti', in *Motte, torri e caseforti nelle campagne medievali (secoli XII–XV). Omaggio ad Aldo A. Settia. Atti del Convegno (Cherasco, 23–25 settembre 2005)*, ed. by Rinaldo Comba, Francesco Panero, and Giuliano Pinto (Cherasco: CISIM, 2007), pp. 279–94

- , *Le signorie rurali nell'Umbria settentrionale: Perugia e Gubbio, secc. XI–XIII* (Rome: Ministero per i beni e le attività culturali, Ufficio centrale per i beni archivistici, 1999)
- Varanini, Gian Maria, 'Insediamenti e territorio nella storia d'Italia', *Quaderni storici*, 21.63/3 (1986), 981–94
- Villani, Virginio, *I centri murati in età medievale* (Ancona: Sistema Informativo Territoriale della Provincia di Ancona, 2004)
- Wickham, Chris, *Medieval Rome: Stability and Crisis of a City, 900–1150* (Oxford: Oxford University Press, 2015)
- , 'Paesaggi sepolti: Insediamento e incastellamento sull'Amiata, 750–1250', in *L'Amiata nel Medioevo. Atti del convegno internazionale di studi storici (Abbadia San Salvatore, 29 maggio – 1 giugno 1986)*, ed. by Mario Ascheri and Wilhelm Kurze (Rome: Viella, 1989), pp. 101–37