

CESARE AGOSTINI

FRANCO SANTI

THE 2nd CENTURY B.C. ROAD FROM BOLOGNA TO FIESOLE

(Flaminia Militare)

HISTORY AND ARCHAEOLOGICAL EVIDENCE
FROM RESEARCH ON THE TUSCAN-EMILIAN APENNINES

To our families

CESARE AGOSTINI FRANCO SANTI

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(Flaminia Militare)

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RESEARCH AND EXPLORATIONS ON THE TUSCAN-
EMILIAN APENNINES**



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Agostini Cesare and Santi Franco

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DEI COMUNI DI LOIANO E MONZUNO



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DI BOLOGNA



COMUNE DI SAN BENEDETTO
VAL DI SAMBRO
(Provincia di Bologna)

INDEX

<i>Preface by Giancarlo Susini</i>	13
<i>Preface by Marco Macciantelli</i>	15
<i>Preface by Luciano Poli</i>	17
<i>Preface by the Authors</i>	18

INTRODUCTION	19
TITUS LIVIUS: <i>History of Rome</i>, Book XXXIX, paragraph 2.	21

PRELIMINARY CHAPTER

<i>The origin of our story</i>	
1 - A summer conversation.	23
2 - The Roman coin that inspired us to start our search.	25

PART ONE

THE ROMAN CONQUESTS FROM THE END OF THE 4TH CENTURY B.C. TO 187 B.C. *Historical Outline*

INTRODUCTION TO PART ONE	29
---------------------------------	----

CHAPTER I

The expansion of roman domination from the end of the 4th century B.C. to 200 B.C.

1 - The conquest of central and southern Italy (340-264 B.C.)	31
1.1 The Latin war (340-338 B.C.).	31
1.2 The municipia and Latin colonies.	31
1.3 Roads.	32
1.4 The second Samnite war (327-305 B.C.) and construction of the first consular roads	33
1.5 The wars in Magna Graecia (290-272 B.C.).	34
2 - The first Punic war (263-241 B.C.) and the conquest of Sicily, Sardinia and Corsica.	35
3 - Start of the invasion of northern Italy (Cisalpine Gaul) in 222 B.C. and the second Punic war (218-202 B.C.)	37

CHAPTER II

Northern Italy is recaptured and Roman domination in Cisalpine Gaul is consolidated (200-188 B.C.)

Introduction	39
1 - The wars against the Gauls in the Po Valley and the Ligurians in the Apennines from 200 to 190 B.C.	40
1.1 The war campaigns in 192 B.C.	41
1.2 Significant proof that Quinctius Falminius' legions passed through the Mugello in 291 B.C.	41
1.3 The wars in 191 B.C.: Publius Cornelius Scipione Nascia defeats the Boi Gauls in Bolgona	42
2 - The years 190 and 189 B.C.: foundation of the Latin colony of <i>Bononia</i> .	43
3 - Roman dominion in central and northern Italy in 188 B.C.; existing consular roads.	44

CHAPTER III

The year 187 B.C.: the consuls Marcus Aemilius Lepidus and Caius Flaminius defeat the Ligurians and construct two roads

1 – Consul elections in 187 B.C.: Marcus Aemilius Lepidus and Caius Flaminius.	47
2 - A description of Liguria and Ligurian guerrilla warfare.	48
3 - Identification of the battlefields.	48
4 - The battles of Caius Flaminius.	49
5 - The battles of Marcus Aemilius Lepidus.	50
6 - Caius Flaminius builds the Bologna-Arezzo transapennine road.	52
7 - Marcus Aemilius Lepidus constructs the road from Piacenza to Rimini (the Via Aemilia).	53

PART TWO

THE CONDITIONS POSED BY RIVERS AND MOUNTAIN RIDGES ON THE APENNINE ROAD SYSTEM

INTRODUCTION TO PART TWO	57
--------------------------	----

CHAPTER IV

For centuries the hydro-geographical fan on the Bolognese Apennines has hindered the road system

1 - Watercourses.	59
2 - The centuries-old difficulty in crossing rivers and torrents and the disasters caused by water.	62

CHAPTER V

The conditions posed by rivers and mountain ridges on the minor and secondary road system

1 - Local minor roads.	64
2 - Secondary middle-distance roads.	66
2.1 - The Passeggere pass.	67
2.1.1 – From the Passeggere pass to Monghidoro.	67
2.1.2 – From the Passeggere pass to the Raticosa pass.	70
2.1.1 – From the Passeggere pass to Madonna dei Fornelli.	70
2.2 - S. Ansano di Brento.	70
2.3 - The Montorio road.	72

CHAPTER VI

The four Apennine passes used in different eras.

1 - Montepiano.	73
2 - Giogo.	74
3 - Osteria Bruciata.	75
4 - Futa.	75

PART THREE

THE PROBABLE PRE-ROMAN ROAD SYSTEM BETWEEN BOLOGNA AND FIESOLE

CHAPTER VII

The probable pre-Roman road system between Bologna and Fiesole

1 - Nature points out the most convenient transapennine route to man.	81
2 - Fiesole and Felsina: the destinations of the Etruscan transapennine route.	82

PART FOUR

A HISTORICAL INVESTIGATION, THE START OF OUR EXPLORATIONS AND OUR FIRST FINDS

CHAPTER VIII

The start of our explorations, our first finds and the visit by professor Nereo Alfieri

1 - Our preliminary historical search for information about the ancient road system between Bologna and Fiesole.	91
2 - Determination of the area to explore.	93
3 - The difficulty in finding any clues.	94
4 - The day of the first find.	96
5 - The first excavations and the visit by Professor Nereo Alfieri.	98
6 - Professor Nereo Alfieri's monograph provides good hope.	100

INTRODUCTION TO PARTS FIVE AND SIX

<i>The search continues and the description of the remains uncovered in eight archaeological zones .</i>	103
--	-----

PART FIVE

THE EXPLORATIONS AND FINDS FROM MOUNT BASTIONE TO THE FUTA PASS (1979-1992)

CHAPTER IX

Mount Bastione (archaeological zone "A": sites A/1 - A/2 - A/3 and A/4) and the beech wood

1 - The Roman paving stones (sites A/1 - A/2 - A/3 and A/4).	109
2 - The pre-Roman path (sites A/5 and A/6).	115
3 - In three thousand years, seven parallel road routes have been built on the western versant of the same ridge	117
4 - The beech wood	119

CHAPTER X

Piana degli Ossi (archaeological zone "B") mount Luario and the Passeggere pass

1 - Our intuition regarding the existence of the kilns and the first analyses.	121
2 - The excavations carried out by the Archaeological Superintendency for Tuscany.	125
3 - The six kilns: an impressive industrial installation	131
3.1 - The choice of location for the kilns and the construction technique.	133
3.2 - The processing units used and the amount of lime produced.	134
3.3 - Could the kilns date back to the second century B.C.?	136
4 - Mount Luario.	138
5 - The Passeggere pass.	139

CHAPTER XI

Mount Poggiaccio (archaeological zone "C": sites C/1, C/2, C/3 and C/4)

1 - Description of the paving remains (sites C/1 - C/2 and C/3).	141
2 - The construction specifications of the paved road	146
2.1 - The technique adopted to lay the stones	146
2.2 - The work phases	148
2.3 - The quantity of material removed and used	149
3 - Other finds (site C/4)	150

CHAPTER XII

The finds on the slopes of Poggio Castelluccio

(archaeological zone “D”: sites D/1 - D/2 – D/3 and D/4)

- | | |
|--|-----|
| 1 - Description of the paving remains (sites D/1 - D/2 and D/3). | 153 |
| 2 - The excavation by the Archaeological Superintendency for Tuscany to investigate the stratigraphy of the road construction (site D/4) | 159 |
| 3 - The opinions and inspections by Giancarlo Susini and Raymond Chevallier. | 161 |

CHAPTER XIII

The finds on the peak of Poggio Castelluccio: a “castellar” (site D/5)

- | | |
|--|-----|
| 1 - The “castellar”: a Ligurian fort | 165 |
| 2 - Were the tactics used by the Romans to conquer Poggio Castelluccio the same as the ones used to conquer mount Olympus? | 169 |

CHAPTER XIV

The mysteries of mount Poggiaccio and Poggio Castelluccio

- | | |
|--|-----|
| 1 - An artificial reservoir on mount Poggiaccio and an area suitable for a camp.
Site C/1 : | 171 |
| 2 - The small pillars. | 174 |
| 3 - The fruitless search for a Ligurian necropolis. | 178 |
| 4 - The remains of a large building on Poggio Castelluccio (site D/6). | 178 |

PART SIX

THE EXCAVATIONS AND FINDS FROM MOUNT BASTIONE TO MOUNT VENERE (1985-1992)

CHAPTER XV

The glarea road in Predosa (archaeological zone “E”) 185

CHAPTER XVI

The Roman brick kiln in Sassorosso (archaeological zone “F”) 191

PART SEVEN

THE FINDS FROM THE FUTA PASS TO THE RIVER SIEVE (1993-1998)

INTRODUCTION TO PART SEVEN 199

CHAPTER XVII

Mount Poggione - S. Lucia (archaeological zone “G”:

Sites G/1 - G/2 - G/3 - G/4 and G/5)

- | | |
|---|-----|
| 1 - The start of the search south of the Futa pass | 201 |
| 2 - The remains of the paved road (sites G/1, G/2, G/3, G/4 and G/5). | 202 |
| 3 - The unusual and sudden slope between mount Poggione and S. Lucia. | 218 |

CHAPTER XVIII

The bridge in “Colombaiotto” in Bilancino (archaeological zone “H”)

1 - The road route from S. Lucia to the river Sieve.	220
2 - The theoretical crossing place on the river Sieve.	221
3 - News about the remains of a bridge near Bilancino and its whereabouts (“Colombaiotto”).	224
4 - What should the unknown bridge be called?	226
5 - Our first inspection and the excavations by the Superintendency (archaeological zone “H”).	228
6 - Historical investigation regarding the era of the first bridge built in Colombaiotto and the dating of wooden remains	229
7 - The remains of the bridge (archaeological zone “H”) as described and dated by Vittorio Galliazzo.	231
8 - Our conclusions.	240

PART EIGHT

IDENTIFICATION OF THE REMAINDER OF THE ROMAN ROUTE FROM BOLOGNA TO FIESOLE AND PROBABLE ALTERNATIVE ROUTES DURING THE IMPERIAL AGE

CHAPTER XIX

The route from Colombaiotto bridge to Fiesole

1 - Difficulty in perceiving clues and caution in the interpretation of place names.	245
2 - The morphology of the area alone indicated the most probable route of the road from Colombaiotto bridge to Fiesole	247

CHAPTER XX

The route from mount Venere to Bologna

1 - From mount Venere to mount Adone.	253
2 - The detour around mount Adone.	257
3 - The strategic position of Brento.	259
4 - From mount Adone to Bologna.	260
5 - The important pre-Roman transapennine pathway conditioned the choice of location For founding <i>Bononia</i> and showed C. Flaminius which route to follow	261

CHAPTER XXI

Probable diversions during subsequent epochs

1 - Diversions: inevitable events on mountain roads.	267
2 - The influence of changed security conditions and new settlements along alternative	267
3 - The “milestone” place names indicate the course of alternative routes.	268
4 - Sallust’s account about the circumstances of Catiline’s defeat in Pistoia (62 B.C.) provides important information.	270
5 - Alternative routes from Bologna to the Futa pass.	272
6 - Alternative routes from Florence to the Futa pass.	276
7 - The alternative route over the pass during the late imperial or upper medieval age.	278

PART NINE
A CONFERENCE, AN OVATION, A LAW ABOUT
ROMAN ROADS

CHAPTER XXII

Roads: constant protagonists in the history of Rome and its laws

- | | |
|--|-----|
| 1 - The conference about the “ <i>Tabula Peutingeriana</i> ”:
Ernst Gamillscheg’s visit and opinion | 281 |
| 2 - Victor von Hagen's ovation. | 285 |
| 3 - Regulations governing road maintenance and traffic restrictions applied to carts
in the city of Rome in 46 B.C. (<i>Lex Julia municipalis</i>). | 286 |
| 3.1 - Regulations governing compulsory maintenance of urban and extra urban
roads and pavements in Rome. | 286 |
| 3.2 - Regulations regarding traffic restrictions applied to carts in the city of Rome | 287 |

DOCUMENTS	289
------------------	-----

BIBLIOGRAPHY	307
---------------------	-----

APPENDIX
1979-1999
NOT JUST A QUESTION OF RESEARCH AND EXCAVATION

- | | |
|---|-----|
| 1 - Private and public publicity meetings. | 315 |
| 2 - “La viabilità tra Bologna e Firenze nel tempo” conference. | 318 |
| 3 - Foundation of the Archaeology Group and the opening of the Museum of History and Ethnography
in Bruscoli (Firenzuola). | 323 |
| 4 - The photographic exhibition in Valserena (S. Benedetto Val di Sambro) | 324 |
| 5 - News of the discovery of the Flaminia Militare reaches the United States of America. | 324 |
| 6 - Guided tours along the Flaminia Militare. | 328 |
| 7 - The Via Flaminia in the Press | 333 |

Preface by

Giancarlo Susini

A passage by the ancient author and famous historian, Livy, tells of a Roman consul - one Flaminius, son of the much more renowned and unfortunate notable defeated by Hannibal on the shores of lake Trasimeno, where his courage cost him his life - who in 187 B.C., ordered his legions to construct a road in the heart of Etruria, from Arezzo to the new city founded two years earlier in the heart of Cispadania, that is Bologna.

The attentive and therefore inquisitive reader will wonder: who knows what valleys that road must have beaten, what ridges and hillsides it must have climbed, and what passes it must have crossed to traverse the Apennines.

On reflection, it is a matter of identifying one of the many routes that linked the peninsula to the vast northern expanse and the plain that touches the Alps: for some time, historians – this book is about a passion for history – have been accustomed to defining everything that lies south and west of the Apennines as the 'first Italy', the Italy irrigated by the Arno, the Tiber and the Volturno, therefore the hearth where the first Roman Republic grew and took shape; whereas the other part of Italy, to the east and north of the Apennines, is defined as the 'second Italy'. According to ancient cosmography, the Italic peninsula was shaped like a trunk, stretching from west to east. The Adriatic Sea, which washed the shores of the 'second Italy', was *superum*, that is the 'top' sea, and the Tyrrhenian Sea, which represented the womb of the Latins and Etruscans, with some interference from the Carthaginians and the Greeks, was *inferum*.

Similar to the relationship between the roots below and the ripening fruit above, keeping the "first Italy" and "second Italy" orderly and under control was a complex and difficult task: the Ligurians had to be defeated in the west (not that far west as they only reached Mugello) as well as the Gauls in the north and east. In the face of so many wars, battles and ambushes, safe routes were needed to move wagons, infantry and cavalry. It is almost like listening to a general from one of our wars: soldiers must never be idle with nothing to do. Come on boys, dig, shovel, listen to the surveyors (they know how to find a safe path), collect the large stones and hew them...

So much interest in a passage written by an ancient writer, which poses huge problems in terms of knowledge about the land and calls to mind truly tormented pages of Roman history. Just the thought evokes fluctuating information in the minds of those who have studied: this is the historic outline illustrated in the first part of the book. And then, conversations between friends, remembered comments and the opinions of the elderly, the tenacity of folk stories (the 'Roman Road'), all fuel interest in a question asked with increasing insistence. Where did the consul set his men at work in 187 B.C.? If you think about it, Flaminius was not as fortunate as his colleague, Aemilius Lepidus, who in the same year built the road that was a continuation of the Via Flaminia (oh, dad's road!) from Rimini, along an undisputed, certain, unchallenged route, that still bears his name: Trunk Road 9, there it is on paper, a straight line from southeast to northwest.

Memories, testimonies and rumours resurface: here, there, and here again, archaeological finds are unearthed; enough data is collected to reveal a route. Geologists and linguists help by sometimes recovering the glimmer of a significant surviving reference in the name of this or that place. And so the search begins with

great precision: good heavens, what a lot of routes were trodden between the two versants in ancient times, truly a great many. However, some are more interesting than others: paving and carriageways lie within acceptable stratigraphies, on levels and profiles that allow agile transit; structures that can be satisfactorily dated. The extreme precision with which this work illustrates the many finds and remains uncovered on each site, drawing attention to the different morphology of the land, and thus allowing a hypothesis to be formulated, is certainly not its last merit (and perhaps it is only its first). It has yet another merit: its data is illustrated with precision, without using specialist terms so that any inquiring reader can understand the weight of the discoveries. Therefore, this work documents enough information to ensure current opinion is aware of the problems of the past, handed down and reviewed as the generations unfurl. This is because the opinions of the past lay at the basis of the need to

discover the history (or the stories) hidden in the ground: people's archaeology, meeting with success and frustration, inspiring new challenges without achieving one's own. Or perhaps achieving them after all.

This is not a history book – because history wants indisputable documents that can be discussed – however, it is an admirable and exemplary account of knowledge for history: yet again, the enthusiasts' keen knowledge has proved to be a precious gift to culture.

Giancarlo Susini

Professor of Ancient History at
the University of Bologna

Member of the National Academy
of the Lincei

Preface by

Marco Macciantelli

The idea of nature is more complex than commonly believed with a few pinches of understandable naivety. It holds a number of surprises. It is difficult to sever nature from man's intervention. From the inseparable relationship between man and the environment. From the relationship with culture.

This conviction is confirmed by the sensations working with others provide, where different roles come together thanks to a shared, passionate curiosity about the history of our territory, by Cesare Agostini and Franco Santi. It can be felt in the flow of the text and images, in the fabric of the story, which this volume sets forth in the detailed mosaic of its pages.

Yet again, a book (including this book the reader holds in his or her hands) is nothing more than an invitation to read. In this specific circumstance, it is an invitation centred on sharing a direct experience: an invitation to read a territory; to go to rediscovered places, with rhabdomantic intuition and silent and industrious patience, along routes still guarded by the shadowy secrets of our Apennines.

After a few steps, each will see that so-called uncontaminated nature can contain the traces and remains of a mobile and inventive man, our ancestor who lived just a few hundred or thousand years ago.

An experience that sees the involvement of a fascinating topic, that of historic road systems, in a plurality of routes impossible to put together within a narrow, or worse, unambiguous vision.

In fact, we are faced with a number of Apennine passes linked to medieval towns that mainly led to Rome or crucial crossroads with the Via Emilia.

Perhaps it is time to take a less distracted look at one of the most significant forms of our local tradition, dating as far back as the Roman era.

Parma, Modena, Reggio, Piacenza, Forlì, and Bologna were all founded by the Romans. They are all characterised by roads, roads have bestowed them with their present-day appearance. Roads that now prove not only to be a topographical fact but (by virtue of a certain frailty) places of important symbolic significance.

A road system that contains many layers thanks to the advancement of historic eras. A road system, the experts explain, shrouded in the mythical and fabulous character of pilgrimage in the Middle Ages, not always recognisable in archaeological terms because it mainly consisted in beaten tracks whose traces have been lost under the vegetation or by changes in the more general conditions of the land.

Therefore, an open attitude is preferred, open and able to take in the wealth of routes that historically passed through our territory.

Hopefully – especially as regards those involved in culture and tourism and during the Jubilee - there will be more motivation, interest and effort to use the imagination to enhance the identity of Bologna and its surroundings, in relation to the tradition of these newly uncovered routes that lay, and continue to lie, within our area.

This is why it is correct to refer to the concept of a historical road system that involved Bologna, especially the Bolognese Apennines where it had a rich variety of consequences. An open variety, able to house the work in this

well-documented volume, of those tenacious explorers, Cesare Agostini and Franco Santi, who have uncovered stretches of paving along the ridge between Savena and Sambro - Setta, in Pian di Balestra, in the Municipality of S. Benedetto Val di Sambro, on the summit and slopes of mount Bastione and beyond, along the north-south axis between Bologna and Fiesole.

These sections of paved road run atop or near the ridge from mount Bastione to the Futa pass and then downwards towards Mugello. It could be described as a new pedestrian diversion.

Now, it is not for the administrator (who is inclined to express a fondness for the area he must safeguard), to enter the scope of technical or specialist discussion. It is better for others to do so and, within this same text, professor Giancarlo Susini, with the insight of involved knowledge, without preclusion for the continuous growth of empirical research, states he is open to an unbiased consideration which I find particularly educational.

Therefore, I limit myself to wishing that

historical and archaeological research will assume the same variety and plurality as the routes, in the hope that this approach will promote the itineraries brought to light during the past years in the province of Bologna in terms of culture and tourism.

The administrator cannot overlook the chance – propitiated by the work of Agostini and Santi, the authoritative words of Professor Susini, the sensibility of the Municipality of S. Benedetto Val di Sambro, together with the precious contribution of the Carisbo Foundation - to shine light on the historic evidence embedded in our area that cannot be ignored, and promote more active and direct contact with our great (and perhaps not always adequately acknowledged and exploited) environmental and recreational resource, the Apennines.

Marco Macciantelli

Councillor for Culture and
Tourism in the Province of
Bologna

Preface by

Luciano Poli

After twenty years of study, exploration and document research, this volume records a portion of history that in part belongs to our territory.

When a population, “the Roman Population” started the territorial conquest that went on to define the great Roman Empire, it faced the problem of crossing the Tuscan-Emilian Apennines, which have always hindered links between the north and south of the country.

From this sprung the idea, later to become reality, to explore the land carefully for any traces that would point to such a route across an integral and uncontaminated environment.

A large area of our part of the Apennines was therefore excavated and analysed by our two fellow citizens, who with great tenacity and passion never gave up, even when

different (and perhaps overly superficial) interpretations provided by the experts dismantled their theories.

Thanks to the precious contributions of the L’Altra Romagna GAL and the authors-discoverers, our Municipality can now boast this much sought-after primacy, and hand down to history a prestigious document that allows us to almost touch and observe a portion in the history of a population which is perhaps not as far from us as it seems.

I would like to offer my sincere thanks (also on behalf of every citizen I have the honour of representing), to Cesare and Franco for their hard work and dedication, well illustrated and documented in this very beautiful book.

Luciano Poli

Mayor

of S. Benedetto Val di Sambro

Preface by the Authors

A memory, handed down by our ancestors, about a Roman road that passed up there, through Pian di Balestra, on the ridge to the left of the river Savena, was enough to arouse our interest. The closeness of our ancestral homes to the area made us decide to dedicate our free time to discovering the lost road.

Being neither ancient historians nor archaeologists, we were well aware of our limits, but we had the advantage of being extremely familiar with the area and its woodlands, as they were the site of frequent youthful excursions. It was this intimate knowledge of the area that convinced us that the straight ridge lying exactly along the Bologna-Florence axis may have been the chosen route for a transapennine road. However, there were no historic sources we could rely on to provide more exact indications or reassuring confirmation.

And then, Livy reminded us that the consul, C. Flaminius, had a road built from Bologna to Arezzo. This laconic information was enough to provide trust in its existence and the hope that we would find it up there, where rumour said it once passed.

Two years of exploration on the ground and historic research preceded the first discovery of a few metres of paving in August 1979.

We subsequently pursued with conviction our solitary explorations and excavations, to the encouragement of some and scepticism of others.

The months and years passed by quickly,

riddled with constant effort, economic burdens and hard work, either to reach the exploration sites on foot, or to excavate by hand.

However, the results achieved have amply repaid our efforts, in spite of the fact that the Authorities responsible made no contribution and we received no encouragement from the scientific world. Only our friends offered precious moral and material support and contributed towards helping to reach our objective.

All in all, we consider ourselves lucky to have identified and brought to light the road constructed by C. Flaminius after almost 2,200 years, hidden from the knowledge of historians and archaeologists by early abandonment and vigorous woodland growth.

They now have numerous remains to evaluate, and there is no longer need to wonder which route the Roman consul adopted to cross the Apennines. To them we entrust the results of our pastime, and we hope that these precious remains will be treasured by future generations so that they shall never again lie neglected below the woodland plants and trees.

However, if this was to occur, this book will be here to tell people where the road is hidden.

And thus, this famous aphorism by Aristotle summarises the story of our explorations:

“What is learnt from common sense and experience must be put before any theory, however well-founded it appears to be”.

INTRODUCTION

This volume has been published ten years after our first publication about this subject. At the time, we published the book “La Strada Flaminia Militare” to provide the latest information about our research and a brief summary of our first finds. We had not yet reached all our objectives and we could only rely on incomplete, although very significant finds.

Now that we consider our archaeological adventure to be complete, we have decided to put our entire story in writing, starting from the very beginning.

Therefore, this book wants to tell the complete and authentic story of our fruitful investigation that started in 1977 as a hobby, and which we continued with enthusiasm for over twenty years. Our aim was to find the remains of the transapennine road built by C. Flaminius in 187 B.C. between Bologna and Arezzo, as recorded by Livy in book XXXIX of his “History of Rome”: *“Now that the province was brought from a state of war into one of peace and stability, he built a road from Bononia to Arretium so not to have his men kept idle”*.

Now we have reached our objective, we would like to tell of our solitary explorations and record every find brought to light (not just concerning the road system), illustrated by numerous photographs and outline sketches. The continuity of the archaeological finds has been essential towards identifying with certainty a long stretch of the Roman road across the Apennines, and probably the rest of the route from Bologna to Fiesole, allowing us to formulate plausible hypotheses about the “diversions” created during the imperial age.

Our search was helped by a preliminary re-examination of the history of the Roman republic, with particular reference to the years immediately before and after the foundation of

Bononia (189 B.C.) and the year of the decisive battles against the Ligurians (187 B.C.) summarised in PART ONE. Our main aim has been to describe the progressive expansion of the road network, which occurred (as it always does) immediately after Roman dominion over the conquered lands was consolidated. We have also wanted to outline the political and military situation in northern Etruria and in Cisalpine Gaul in the year the Bologna-Fiesole-Arezzo road was built.

We also introduce the broader theme of the transapennine road system before and after the Roman era (PARTS TWO and THREE), in the area between Bologna and Florence, highlighting the determining influence rivers, ridges and natural passes have had on man’s movements during every age. Our research regarding the most commonly used medieval roads has helped us to confirm their substantial difference (in terms of construction and route) compared to the Roman road, while our considerations about the Etruscan-Ligurian track have allowed us to identify its route.

In PART FOUR, we continue the tale of our archaeological adventure (started in the preliminary chapter), describing our initial exploration and first discovery.

In PARTS FIVE and SIX, we describe in detail the finds made from 1979 to 1992, in the southern area between mount Bastione and the Futa Pass and between mount Bastione and mount Venere towards the north. We spent these thirteen years exploring the woods on the Tuscan-Emilian ridge at heights between 1,000 and 1,300 metres. This area is totally uninhabited and, therefore, extremely enchanting and mysterious. This woodland environment was always the most exciting to explore, as our guesswork was gradually confirmed by paving stones, kilns, castellers, the remains of Ligurian settlements, etc.

In PART SEVEN, we continue the account of the explorations and digs carried out from 1993 to 1998 on the Tuscan versant, south of the Futa Pass, where we found the best-preserved stretches of paved road. We also describe and document the casual find of the remains of an extremely ancient bridge during work to construct the Bilancino dam on the Sieve river, which told us where the consul, C. Flaminius crossed the river.

The archaeological evidence unearthed along the stretch of mountains from mount Venere and from the river Sieve, together with the morphology of the land, then convinced us of the southern route to Fiesole and the northern route to Bologna, described in PART EIGHT. Furthermore, by plotting the numerous place names of military origin along adjacent roads, we have been able to reconstruct the reliable “diversions” to the transapennine route used during the imperial era.

PART NINE, at the end of this book, describes a conference held in 1996 by Professor Ernst Gamillscheg from Vienna, about the *Tabula Peutingeriana* and his visit to the Roman road. We also pay homage to Victor von Hagen, recording his words of admiration about the magnificence of the Roman road network, and to Julius Caesar, quoting a number of regulations from the *Lex Julia municipalis*, issued by him in 46 B.C. These particularly appropriate regulations dealt with urban road maintenance and daytime traffic restrictions governing the transit of carts in the centre of Rome, and their relevance to the present-day is surprising.

“FLAMINIA MILITARE”: as named by us.

During our studies, we noted that no historian, Livy included, ever mentioned this road with a name that reminded one of its builder. In ancient times, it was sometimes referred to as the *Cassia*, because it was considered the transapennine branch to Bologna of the Rome-Arezzo-Florence (Fiesole)-Pisa consular road of the same name; or, otherwise, as the *Clodia* or *Claudia*.

This was probably an attempt to avoid confusion with the more famous *Via Flaminia*, which linked Rome to Rimini, built by C. Flaminius’ father in 220 B.C.

This need for clarity was undoubtedly noted by the modern historians who attempted to identify the 187 B.C. transapennine road before we commenced our research; they called it *Flaminia secunda* or *altera* or *minor*. (N. Alfieri, G. Uggeri).

We also realised it was not only necessary to distinguish the road we uncovered on the ridge left of the river Savena from the 220 B.C. road, but especially from the road recently conjectured along other ridges, and called the *Flaminia minor*.

Thus, we chose the name “FLAMINIA MILITARE”, in memory of the consul who has gone down in history as its builder and to underline that this road was built essentially by the Roman legions for strategic and military reasons.

TITUS LIVIUS
HISTORY OF ROME
BOOK XXXIX

(2)... "C. Flaminius consul, cum Friniatibus Liguribus in agro eorum pluribus proeliis secundis factis, in deditio-nem gentem accepit et arma ade-mit..... Translatum deinde ad Apuanos Ligures bellum, qui in agrum Pisanum Bononiensemque ita incursa-verant, ut coli non possent. His quoque perdomitis consul pacem dedit finitimis. Et quia a bello quieta ut esset provincia effecerat, ne in otio militem haberet, viam a Bononia perduxit Arretium.
(omissis)

M. Aemilius alter consul agros Ligurum vicosque qui in campis aut val-libus erant, ipsis montes duos Ballistam Suismontiumque tenentibus, deussit depopulatusque EAST Pacatis Liguribus exercitus in agrum Gallicum duxit, viamque a Placentia, ut Flaminiae committeret, Ariminum perduxit".

(2)... "The consul, Caius Flaminius, fought several successful battles against the Ligurian Friniates on their territory, accepting their surrender and disarming them... War was then waged against the Ligurian Apuani, whose incursions into the farmlands of Pisa and Bologna had made cultivation of the soil there impossible. The Apuani were vanquished, and the consul made peace with their neighbours. Now that the province was brought from a state of war into one of peace and stability, he built a road from Bologna to Arezzo so not to have his men kept idle.
(ceteris omissis)

The other consul, M. Aemilius, destroyed and burnt the fields and villages of the Ligurians who lived in the plains and valleys, whose inhabitants had fled to the heights of two mountains, Balestra and Suismonzio... After establishing peace in Liguria, he led his army to Gaul and built a road from Piacenza to Rimini to join up with the Via Flaminia".

PRELIMINARY CHAPTER

THE ORIGIN OF OUR STORY

1 - A summer conversation.

2 - The Roman coin that inspired us to start our search.

1 - A summer conversation.

Although it is very dull to attribute the origin of our archaeological adventure to coincidence, that is exactly what happened and we would simply like to tell how it began.

Only a casual meeting could have dragged two people, professionally involved in activities completely removed from historical and archaeological research, into an adventure that lasted over twenty years.

The upper valley of the Savena and the village of Castel dell'Alpi with the lake formed in 1951 after a vast and deep landslide that blocked the course of the river.



It all sprung from a conversation we had one August evening in 1977 in Castel dell'Alpi¹.

We already knew each other by sight because our families are from that same village, where they settled over ten generations ago; however, we had never spent time in each other's company because we both now lived in Bologna and were tied up with our respective jobs.

The only time of year we ever saw each other was during the summer holidays, usually in one of the few bars in Castel dell'Alpi, where the conversation almost always slipped into football, motorcar racing and sport in general; other topics were rarely discussed and if they were, conversation ran dry after only a few exchanges.

And so, one summer after another, the summer of 1977 arrived.

Almost every evening on the first days of August, we would end up in front of the usual bar, seated at a table, chatting about the usual things, sometimes vivaciously. However, one evening, while we were enjoying the pleasant breeze from the lake, the conversation took a completely different turn: the unknown and remote origins of Castel dell'Alpi, the devastating landslides, old and recent, that have radically muted the orography of the valley, lowering the surrounding mountains, carrying away and destroying entire villages.

We talked about villages that disappeared centuries ago, about the ruins scattered here and there, all destroyed with force and perhaps burnt down by the notorious Marchesino Lupo and his band of thieves in 1301. Someone mentioned the famous pole factory for making lances, manufactured with *fraxinus ornus* (flowering ash, locally known as "ornello"), which still grows along the hedgerows today, rare testimony of ancient and much larger cultivations: excellent wood, light, resistant good for making a lance, spike or "partigiana"².

However, the main topic that kept us talking into the small hours was the ancient road network, if that intricate network of footpaths

and mule tracks that linked the solitary houses and small villages scattered over the entire valley could be described as such.

Therefore, speculating about the stories handed down by word of mouth by our ancestors, the topic reached further and further into the past, as far back as the Roman era. We remembered that our fathers had told us that centuries ago, our ancestors travelled along a *Roman* road that crossed the Apennines on top of the ridge that runs in a straight line southwards towards Tuscany and northwards towards Bologna, to the left of the river Savena.

Could this be a figment of the imagination of solitary transapennine wayfarers who needed reassurance that they were travelling along a very ancient, tried and tested route, or could it really be the undying memory of a Roman road?

We were unable to provide these questions with an answer.

Our only certainty was that we had never seen the remains of a Roman road (as illustrated in archaeology books) on the ridge we had trodden countless times since we were boys (or more recently for work or straightforward walks); all we had ever come across was one of the many mule tracks that, until a few decades or so ago, connected the more remote villages.

This mule track is exactly the same as every other. Its bed is in utter disarray; it has sunk below the level of the fields and woods to the extent that it looks like the bed of a stream. No more than two metres wide, in some places, it is impenetrable due to the wild growth of the hedgerows. However, in spite of this, there is something different about it, which gave us the impression of it being a much more important road than the others, considering:

- a) it winds for tens of kilometres, exactly following the top of the north-south ridge without any significant differences in level, from Emilia to Tuscany across the backbone of the Apennines;
- b) the track is mainly straight, (like the ridge), except for a few modest detours, clearly

¹ Castel dell'Alpi is in the Municipality of S. Benedetto Val di Sambro (in the province of Bologna), located almost at the source of the river Savena, 737 metres above sea level near the Tuscany-Emilia border. It is a summer holiday village enhanced by a charming natural lake where it is possible to go fishing and canoeing.

² A "partigiana" was a lance with a long point used by infantrymen in the Middle Ages.

required to overcome natural obstacles (landslides and rock falls that have gradually taken place since ancient times);

- c) for fifteen kilometres, this stretch of track between Emilia and Tuscany does not pass through any villages. It only passes by three farmhouses, distant from each other and linked to the villages at the bottom of the valley by steep and tortuous mule tracks along the mountain slopes.

Evidently, the role of this mule track was to cross the backbone of the Apennines; that is link the Bolognese side of the mountains to the Florentine side. It was obviously used for long-distance journeys even in ancient times.

The other numerous mule tracks have a very different pattern: always tortuous with steep differences in level, they form a network linking individual villages and often end in the villages they reach, thus confirming their role as part of the local road network.

In the face of these differences, well known to us due to our capillary knowledge of the area, we

agreed that the name *Roman* given to the road by our ancestors could derive from its actual use during the Roman era.

2 - The Roman coin that inspired us to start our search.

During this conversation, Franco Santi mentioned that two years earlier, at the bottom of a crack in an outcrop of sandstone in a centuries-old quarry near Castel dell'Alpi, he had found a well-preserved coin portraying the she-wolf suckling Romulus and Remus on one side, and an eagle on a perch with the word "ROMA" on the other ³.

He found the coin during a trip to the quarry that he sometimes used to extract sandstone needed for his job⁴.

The coin fired his imagination; however, one idea in particular stuck in his mind and it was linked to that so-called *Roman* road.



Bronze coin dating back to 320-268 B.C. minted in Capua and found by Franco Santi in a crack in a sandstone quarry near Castel dell'Alpi, on the eastern slopes of mount Bastione. One side portrays the she-wolf with her head turned towards the suckling Romulus and Remus. The other portrays an eagle on a perch and the words ROMAE.

³ A bronze coin minted between 320 and 268 B.C. in Capua.

⁴ Franco Santi is a stonemason specialised in the construction of sandstone fireplaces, who often quarries sandstone from the various local outcrops. After shaping the raw material, he makes square blocks of different shapes and sizes, which he then uses. To detach the large sandstone blocks from the outcrop, he inserts iron wedges in various points of the numerous cracks found in this type of sandstone. He then strikes the wedges with a hammer, driving them into the crack until the rock stratum breaks. It was while carrying out this process, when the sandstone block split open, that he found the coin at the bottom of a crack.

The thread of logic was simple: if a coin dropped in that crack, the person who lost it was probably someone who was quarrying the stone during the Roman era. The stone could have been used to construct buildings or bridges, or to pave important roads. It was this thought that induced us to consider with less scepticism that the Romans may have constructed a paved road on top of the ridge on Pian di Balestra and mount Bastione. However, because we had never seen the remains of any paving stones, we did not know whether to believe or disbelieve this suggestive theory. In any case, the fact that there were no visible remains did not prove that a paved road did not exist, seeing as it was obvious that in two thousand years, natural events (rock falls, landslides, erosion, etc.) and the centuries-old sedimentation of leaves, branches and earth could have hidden any ancient remains from human eyes. We also believed that if a paved road *had* been constructed along tens of kilometres, some sort of remains must still exist, and surely, a careful and rational exploration would uncover them. It would have been much more difficult, or even impossible, to find traces of the road if it had been made of beaten earth or gravel (a *glarea* road); but the coin found in the

sandstone quarry made us hope that the quarried stones had been used to build the road, at least where the nature of the soil demanded paving.

This conviction became so rooted in our minds that we ended our first meeting with a promise to meet again to draw up a work schedule that would take into account the amount of free time we could dedicate to the search.

This decision was further helped by the fact that we had two advantages:

- the proximity of the area to explore to our homes in Bologna and our summer homes in Castel dell'Alpi;
- our first-hand knowledge of the area, where we spent time and which we had explored during our youth and adult years.

Our scant historic knowledge persuaded us to study Roman and medieval history (especially as concerned events in our local area), in the hope that we would find useful evidence and proof. The only information we had was vague, seeped in imagination and based on local folklore. However, local folklore was always univocal in handing down the memory of a very ancient Roman route⁵ on the ridge to the left of the Savena.

⁵ This tradition is so deeply rooted that, with resolution 25 dated 25 January 1969, the Municipal Council of S. Benedetto Val di Sambro agreed to call the road that runs through Madonna dei Fornelli (exactly along the north-south ridge between the rivers Savena and Sambro from north to south "*via Romana Antica*" [Ancient Roman Road] .

PART ONE

THE ROMAN CONQUESTS FROM THE END OF THE 4TH CENTURY B.C. TO 187 B.C.

Historical Outline

INTRODUCTION TO PART ONE

To fully understand the reasons that induced the Romans to construct the road we decided to search for, it is fundamental to have at least a general idea of the overall extension of Roman domination at the time, the events that preceded this era and above all, the boundaries in the north of Italy at the start of the 2nd century B.C.

When analysing an event handed down to us by ancient history, regardless of whether it is of a military, political or technical nature, it is vital to look at the overall historic context in which the event took place, because its context can provide illuminating clarifications.

In terms of our research, this road was constructed and then fell into decline due to strategic and military reasons.

In general, Roman roads call to mind the grandiose road network that existed during the imperial age. In the 1st, 2nd and 3rd centuries A.D., when the Roman Empire underwent its maximum expansion, there were thousands and thousands of kilometres of paving; after all, the borders of the empire reached the north of England, northern and eastern Europe, every country in the Mediterranean, Asia Minor, north Africa, etc. This is perhaps because, although we are taught about the republican age at school, attention tends to be focussed on the imperial

age; on those enthralling events that represent the apex of Roman political and military power, from the point of view of territorial expansion and economic power.

However, the period of Roman history involved in our research starts at the beginning of the 2nd century B.C., in the midst of the republican age, when Rome was still consolidating its dominion in northern Italy (Cisalpine Gaul). We have wanted to re-read Roman history from the end of the 4th century B.C., focussing attention on the immediate and direct consequences of the Roman conquests: the political and military organisation of conquered territories thanks to the foundation of Latin colonies, the constitution of municipia and the construction of roads to the capital.

We believe it is useful to outline the most important events in the gradual expansion of Roman domination from the end of the 4th century B.C. to the beginning of the 2nd century B.C. (that is, up to the moment when the road in question was built) for the benefit of those readers who do not have specific knowledge of this period in history.

CHAPTER I

THE EXPANSION OF ROMAN DOMINATION FROM THE END OF THE 4TH CENTURY B.C. TO 200 B.C.

1 - The conquest of central and southern Italy (340-264 B.C.).

1.1 - The Latin war (340-338 B.C.).

1.2 - Municipia and Latin colonies.

1.3 - Roads.

1.4 - The second Samnite war (327-305 B.C.) and construction of the first consular roads.

1.5 - The wars in Magna Graecia (290-272 B.C.).

2 - The first Punic war (263-241 B.C.) and the conquest of Sicily, Sardinia and Corsica.

3 - Start of the invasion of northern Italy (Cisalpine Gaul) in 222 B.C. and the second Punic war (218-202 B.C.).

1 - The conquest of central and southern Italy (340-264 B.C.)

1.1 - The Latin war (340-338 B.C.)

After Rome was sacked in July 390 B.C. by the Senone Gauls, who then immediately withdrew northwards to join with other Gallic tribes, the Romans consolidated their defences by constructing massive walls around the Capital.

At the time, Roman dominion covered about 1,500 square kilometres. The Romans were surrounded in the south and east by mainly hostile Italic populations; their relations with the Etruscans, who occupied the north, were based on mutual tolerance; however, both sides kept a watchful eye on each other.

In 340 B.C. the Latins, Campani, Volsci and Aurunci formed an alliance and started a war (the so-called Latin war) against Rome. Thanks to the help of the Samnites, they were defeated by the Romans.

Following this victory, Rome forced their defeated enemies to become Roman citizens or allies and occupied their lands.

1.2 - The municipia and Latin colonies.

At this point in history, the Romans made

a fundamental political choice regarding the fate of the populations they defeated, a choice that proved to be their winning card in future conquests.

It must be said that the Romans did not destroy the populations they defeated, neither did they crush them under their authority or military organisation, nor did they reduce them to slavery. Instead, they adopted a substantially “soft” policy, which they readily adapted according to the situation, the aim being to annex the new populations to the Roman State and thus increase Roman territorial and military power.

It is well known that during the Italic wars, the Romans carried out massacres (for example against the Aequi), reduced their prisoners to slavery and confiscated land from any population who opposed them with force. However, once conquered, these populations were subjected to “soft” conditions, in other words, these conditions ensured significant benefits for the defeated¹.

Trust in this benevolent organisation spurred some Italic populations to form a spontaneous alliance with the Romans (thus avoiding the consequences of certain defeat and also retaining their internal independence)

¹ This policy was always adopted by the Romans, even in later eras. Polybius' criticism of the Carthaginians is significant (Polybius: Histories, book X, paragraph 37) because during the second Punic war,

and offer military aid to Rome. In line with this policy, some Latin cities were incorporated into the Roman state and their citizens became Roman citizens. Other Latin cities maintained their independence with the right to carry out “*conubium*” and “*commercium*” with Roman citizens, but they had to give up part of their land and were forced to make an alliance with Rome, undertaking to provide the Romans with military aid if necessary.

The Campani, Volsci, Aurunci, etc. were completely incorporated into the Roman state with limited rights of citizenship (*civitas sine suffragio*). This meant that they had to pay taxes and provide military service, but they did not have the right to vote during assemblies, nor could they cover any position of responsibility in Rome.

This form of limited citizenship granted to defeated populations allowed Rome to increase its dominion and population, and become progressively more powerful. By integrating conquered populations, Rome did not fear that they would develop ideas about becoming an independent state, considering that in practice, they maintained their identity and continued to govern themselves. These communities with Roman citizenship became to be known as *municipia*.

At the same time, large areas of land expropriated from people forced to enter in an alliance with Rome were colonised. Proletarian Romans created settlements and were assigned arable land. They could establish independent communities with the right to carry out *conubium* and *commercium* with Romans, but they had to renounce Roman citizenship, pay taxes and comply with military obligations.

These *colonie latine*, granted the same rights and duties imposed on the defeated Latin cities, were established in strategic positions, near the borders of Latium, so they could also act as military garrisons for the safety of Rome itself.

The Latin colonies, autonomously organised

but closely linked to Rome, were, together with the municipia, Rome’s strongpoint in its expansion in Italy and the Mediterranean.

When first founded, the Latin colonies were the outposts in Rome’s territorial expansion and mainly acted as military garrisons. Later, as the dominion of the Republic spread, and consequently Rome’s borders became more distant, the Latin colonies developed into hardworking colonies, dedicated to agriculture, artisanship and trade.

1.3 - Roads.

The other strongpoint of republican Rome was the construction of an efficient and rational road network, which quickly connected the recently founded municipia and Latin colonies to the Capital.

A road network must have already existed before the Romans arrived in the areas inhabited by the populations they defeated. However, these roads were much more modest in size and at times, they were only sheep tracks, mule-tracks or footpaths that had formed naturally due to the constant passage of men and animals travelling from one village to another. They had not been created to cover large distances, also because the local populations (who were often at odds with each other) had no interest in doing so.

However, the Romans (who wanted to create fast connections between the Capital and its conquered lands), constructed straight roads which headed directly towards their destination. They did not consider the pre-existing and modest road system, unless it coincided with the route of their road.

The ability to send messages quickly, armies or goods to any part of its dominion was the winning strategy of the Romans compared to other populations.

Their road system allowed them to win decisive battles and affirm

in Spain, they treated the defeated Iberians badly: “After the Carthaginians had defeated the Roman armies and killed both the commanders, Gnaeus and Publius Scipio, they believed they had unquestionably secured Iberia for themselves. The Carthaginians treated the native population haughtily and thus they were seen as enemies instead of loyal allies. This was inevitable because the Carthaginians thought that the method by which power is acquired is different from the method by which it is maintained. They had not realised that the people who preserve what they have conquered best are those who uphold the same conduct and principles by which they originally won it. It is well known and evident that those who maintain power over their subjects are those who offer benefits and the prospect of a splendid future. However, if, after they have achieved their supremacy, they behave with hostility and ill treat the defeated and act overbearing, the sentiments of their subjects will also change. This is what now happened to the Carthaginians”.

their domination on the known world of the time².

Livy and Polybius often tell how this or that consul, involved in campaigns distant from the Capital, sent fast messengers (*nuntii*) to the Senate in Rome for orders, or authorisation to continue the war after their mandate had expired, or requests for urgent military aid to face the enemy in moments of uncertainty.

These predicaments underlined the importance of direct and perfectly maintained roads, with frequent stopping places equipped with all the facilities required by messengers (*mutationes* and *mansiones*).

Obviously the first extra-urban Roman consular roads were simply covered in gravel and were only paved where required by the soil (on steep slopes, in muddy areas, on high mountains, etc.); this simple layer of gravel (*glarea strata*) allowed the road to be completed quickly, making connection with the most remote colonies, in direct contact with the enemy, as fast as possible.

1.4 - The second Samnite war (327-305 B.C.) and construction of the first consular roads.

Following the victorious Latin war, which ended in 338 B.C., the Romans founded the first two colonies in the south: Cales in 334 B.C. near the river Volturnus and Fregellae in 338 B.C. in the valley of the Liris, near Terracina, also founded in 327 B.C.

This penetration into Samnium sparked the hostility of the local populations who started a war in 327 B.C. which more or less continued until 305 B.C. (the second Samnite war).

During the conflict, the Greek government ruling Naples gave the Roman garrisons a friendly welcome. This initial contact with one of the Greek populations that had settled in Italy encouraged the start of important alliances for Rome.

In the alternating won and lost battles (for example the defeat at the Forche Caudine in 321 B.C.), overall, the Romans managed to beat cities back the Samnites in spite of being attacked from the north at the same time by Etruscan and

Umbrian

As the Romans gradually recaptured the areas taken from the Samnites on the southern front (for example the colony of Fregellae), they founded new colonies, such as Sessa Aurunca in 313 B.C. on the Fregellae-Cales axis, and in the same year, Saticula (respectively north and south of Capua).

In 312 B.C., the censor, Appius Claudius "*the Blind*" started to build the most classic of the Roman roads along this route, the Via Appia (it reached Capua), designed to supply rapid military aid to the new colonies on the Samnite front, still at war and just 150-200 km from Rome.

Although they were still busy fighting the Samnites, the Romans attempted to consolidate the safety of the Capital by fighting against the populations from the central Apennines to the east.

They easily subdued the Abruzzi populations (Marsi, Peligni, Marrucini, etc.) who became their allies. However, they annihilated the Aequi for putting up strenuous resistance.

Immediately after these military successes, the Romans founded the colony of Sora (303 B.C.) in the land of the Marsi to the northeast of Fregellae and Alba Fucens (303 B.C.) near present-day Avezzano, in the land of the Peligni.

In the meantime (306 B.C.) they started to build the Via Valeria, which passed through Tivoli and headed towards Alba Fucens.

They then turned their attention to the Umbrians and in 299 B.C., founded the colony of Narni.

The start of the 3rd century B.C. saw the Romans fighting against the Umbrians in the north (they formed an alliance with the Etruscans and Gauls, who had occupied the Adriatic side of the Apennines) and against the Samnites who had restarted hostilities in the southeast. The Etruscan, Umbrian and Gaul coalition was defeated in the battle of Sentino (295 B.C.) and in 290 B.C., the Samnites accepted Roman rule, after the colony of Venosa was established on their territory in 291 B.C.

² The Romans carried out a daring enterprise during the battle of Metaurus in 207 B.C. where they defeated and killed Hasdrubal. To prevent Hasdrubal's army from joining forces with Hannibal's army, they first challenged Hasdrubal's army by marching four-hundred kilometres, from the river Ofanto to Senigallia, in just seven days with six thousand foot soldiers and one thousand cavalrymen.



Plate 1

Roman dominion in Central Italy during the first decades of the 3rd century B.C. and the Latin colonies.

Following the victory of Sentino, the Romans took control of Etruria, Umbria and the Marches and founded the colonies of Senigallia (*Sena Gallica*, 289 B.C.) and Rimini (*Ariminum*, 268 B.C.) They strengthened the city of Arezzo, already a Roman colony since 311 B.C., and unsuccessfully besieged again by the Etruscans and Gauls in 284 B.C.

On the Adriatic front, they also founded the colony of Hadria in 286 B.C., which corresponds to the present-day Atri, between Giulianuova and Pescara.

The Via Salaria was built immediately, making it possible to reach Rieti. It is probable that shortly after, construction was continued as far as the Adriatic so the necessary military support could be provided to the colonies as they were gradually founded along the coast. The Via Salaria was certainly continued as far as the upper Piceno

in 268 B.C. after the inhabitants of the area were also brought under Roman rule.

Although there are no precise historic references, it is likely that during the first half of the 3rd century B.C., the Romans had already either built or improved a road in the northeast, towards the new colonies of Senigallia and Rimini, probably retracing a route towards the Apennines, used by the Umbrian and Latin populations.

However, history only dates the construction of this road as far as Rimini by the consul, Gaius Flaminius, to just 220 B.C. The road is named the Via Flaminia after its builder, although G. Flaminius probably just straightened and improved an existing road. The date 220 B.C. refers to the period when the road was completed.

Also in the north, towards Chiusi (and at least as far as Arezzo), the Romans used an Etruscan track which they must have already converted into a road during the first years of the 3rd century B.C. to penetrate into the heart of Etruria, again to create fast communication with Rome.

Although construction of the Via Cassia by the consul, Caius Cassius Longinus³ officially started in 200 B.C., this may have been the year when he ordered the existing *glarea* road to be paved. It appears that the road was paved as far as the XXI mile from Rome, as far as Veio, where the road branched off to the left, onto the Via Clodia, an ancient Etruscan road to Saturnia, which the Romans began to pave in 225 B.C.

Roman penetration along the Tyrrhenian coast of Etruria in 273 B.C. was secured in 273 B.C. with the foundation of the port colony of Cosa, in front of the Argentario. Also in this circumstance, a pre-existing road was used. It was later straightened and improved in 241 B.C. by the consul, Caius Aurelius Cotta, after whom the road was named (*via Aurelia Vetus*).

1.5 - The wars in Magna Graecia (290-272 B.C.)

While conquering Etruria, Umbria and the Marches, the Romans started to expand their territories towards

³ Some historians believe that the Via Cassia was built no earlier than 171 B.C.

Magna Graecia. Worried about the Roman intrusion, the inhabitants of Taranto asked Pyrrhus king of Epirus for help, who landed in Italy in 290 B.C. and waged a war with alternating outcomes⁴, until he was finally defeated in 275 B.C. in *Maleventum* (later called *Beneventum*).

With the final submission of Taranto, in 272 B.C., Roman domination spread throughout southern Italy as far as the Straights of Messina, consolidated with the foundation of Paestum in 268 B.C. and Brindisi in 244 B.C. Following the foundation of these colonies, to link Brindisi to Rome, the Via Appia was continued to Benevento, Venosa (a colony founded in 291 B.C.) and then Taranto.

The Via Appia, the oldest Roman road, subsequently became the most important for trade with the eastern provinces of the Empire (*regina viarum*). It features the fundamental construction principles of every Roman consular road; it heads directly towards its destination covering the shortest possible distance, or rather, it follows a straight line.

Thus, when Claudius “*the Blind*” started to construct the Via Appia from Rome to Capua, he avoided the pre-existing and unpractical route of the Via Latina⁵ and, without being at all preoccupied about crossing the Pontine marshes (overcome by constructing high embankments); he proceeded to build very long stretches of straight road⁶.

Even the oldest part of the Via Appia, between Benevento and Taranto, headed directly towards its destination, ignoring both an unpractical and prehistoric ridge road towards Canosa and Metaponto, and a coastal road from Bari to Brindisi (*via Minucia*).

After Rome had conquered central and southern Italy with its brilliant military operations, it retained its power by implementing a wise political and administrative organisation which was substantially created in three ways:

- through direct government on its own territory, which in mid 3rd century,

B.C. had reached a surface area measuring 27,000 km, that is over 20% of peninsular Italy, settled by about one million Roman citizens with full rights (the urban centre of Rome already counted more or less 150,000 inhabitants);

- through the Latin colonies which were independent on an administrative level, but also closely integrated with Roman political and military administration. Inhabitants enjoyed limited political rights compared to Roman citizens.
- through federations and alliances drawn up with Italic peoples, who retained their independence but agreed to supply military aid and armies when needed.

This dominion, guaranteed by solid military power, encouraged the development of progressive economic prosperity and lively cultural effervescence. The manual labour provided by slaves, increased in great numbers by enslaving prisoners of war, gave impulse to agriculture, artisanship and production in general. The spoils of war also contributed towards increasing State funds, and the State used its funds to create public works (roads, aqueducts, temples, theatres, etc.)

2 - The first Punic war (263-241 B.C.) and the conquest of Sicily, Sardinia and Corsica.

It was only thanks to the military power and wealth achieved in 270-260 B.C. that Rome could sustain and win the first war against Carthage, defined by Polybius as the greatest war in the world in terms of duration, violence and the extent of operations, which involved the whole of Sicily, the east Mediterranean Sea and the lower Tyrrhenian Sea.

Hostilities began when the Romans landed in Sicily in aid of Messina, which was under siege by Hiero, an ally of the Carthaginians and who already controlled part of the area.

The Roman successes unleashed a total war

⁴ This has gone down in history as the so-called “Victory of Pyrrhus” a theoretical success, but with such losses that it can substantially be considered a defeat. In fact, in the battle of Ascoli delle Puglie, in 279 B.C., the Romans were fought off, but Pyrrhus’ army suffered such grave human loss that it was not worth the advantage of the victory in the field.

⁵ The Via Latina followed a more internal route and already linked Rome to Capua, crossing through the colony of Cales and the city of Casilinum. Because it formed a link with Casilinum, it is also called the Via Casilina.

⁶ Along the route between Rome and Terracina, today surfaced with tarmac and used by modern traffic, the road featured such long straight stretches that during the 1950’s, it was sometimes closed to traffic and used by the car racing champion, Piero Taruffi, to beat a number of world speed records with a special vehicle he built himself (the *bisiluro*).

against the Carthaginians, who had no intention of abandoning their Sicilian colonies.

The Romans needed a powerful navy to take possession of the entire island. Therefore, in the shortest possible time, they fitted out a fleet of one hundred quinqueremi warships⁷ with which the consul, Gaius Duilius, routed the Carthaginians in the waters of Milazzo in 260 B.C.

Other maritime successes followed until 255 B.C., when the Romans attempted to invade enemy territory by landing an expeditionary corps on the north African coast under the command of M. Attilius Regulus. However, this attempt failed.

The war continued on Sicilian soil, and the Carthaginians were finally defeated and forced to abandon Sicily only after the Roman victory in the naval battle near the Aegadian Islands in 241 B.C. After this, all the various peoples in Sicily were forced into submission, except in Messina and the kingdom of Syracuse. The Romans later exploited their victory in Sicily and their domination of the seas to conquer Sardinia in 238 B.C. and Corsica in the years that followed.

Therefore, from 230 to 220 B.C., Rome dominated the whole of central and southern Italy as far as the Straits of Messina, and as far as



⁷ A quinqueremi was a Roman battleship with five rows of superimposed oars; Publius tells that every quinqueremi housed 300 oarsmen and 120 soldiers.

a border line through Pisa, Fiesole, Sarsina and Rimini⁸ to the north. Sicily, Sardinia and Corsica were added after the first Punic war, as well as control of the Tyrrhenian Sea and the eastern Mediterranean.

At this point the consular roads that had already been built were:

- the Via Appia as far as Brindisi
- the Via Valeria as far as Alba Fucens (Avezzano)
- the Via Salaria as far as Hadria (Atri)
- the Via Flaminia as far as Rimini
- the Via Clodia as far as Saturnia
- The Via Cassia, practically as far as Arezzo⁹
- the Via Aurelia Vetus as far as Cosa (present-day Ansedonia facing the Argentario).

Naturally, other local roads had been built near Rome, which were named after their destination or builder (Tiberina, Laurentina, Nomentana, Tuscolana, Ardeatina, etc.)

3 - Start of the invasion of northern Italy (Cisalpine Gaul) in 222 B.C. and the second Punic war (218-202 B.C.)

After the end of the first Punic war (241 B.C.), from 233 to 229 B.C., the Romans fought against the Illyrians who inhabited the coasts of Yugoslavia; they offered refuge to the pirates who infested the Adriatic sea.

Once order had been restored along the Adriatic coast and in the sea, the Romans concentrated their efforts on curbing Carthage's expansionist goals in Spain by drawing up a treaty.

Over the following years, Rome devoted its attention to the political and administrative organisation of the occupied territories; but an agricultural reform in Piceno in favour of the Latin

coloni and to the detriment of the Senone Gauls, provoked an uprising. They incited the other Gallic-Celtic tribes and joined forces with the Boi Gauls, the Gesati (originally from the Rhone valley), the Insubres and the Taurini, preparing to wage war against Rome.

The Romans sent the consul, Lucius Aemilius to Rimini, expecting the enemy to launch their attack there, and only sent a praetor to Etruria to command Sabine and Etruscan forces who had formed an alliance with Rome.

The powerful Celtic army crossed the Apennines, and near Fiesole¹⁰, clashed with the Etruscan and Sabine armies who failed to put up enough resistance and were easily dispersed.

With such weak opposition, the Celts advanced quickly to the heart of Etruria, sacking the area as they went. They arrived in Chiusi just "*three days' march from Rome*"¹¹ and once there, learned that the Roman army stationed in Etruria was about to reach them. Having already taken abundant plunder, they decided to retreat northwards following the route they had used to advance. When contact was made with the Roman army, they pretended to retreat along the Chiana valley, thus enticing the Romans into an ambush near Fiesole. The Romans were taken by surprise, defeated, and the survivors retreated southwards, aided by Lucius Aemilius' legions, who had been defending the Adriatic front, and by Gaius Attilius Regulus' legions, who had left Sardinia and landed in Pisa.

The final battle took place in Talamone in 225 B.C., where the Gallic army was wiped out; those who were not killed were taken prisoner.

On the wave of this victory, the Romans decided to hit the Gauls on their own ground and root them out for good¹². Therefore, they penetrated Cisalpine Gaul for the very first time and in 224 B.C., defeated the Boi Gauls.

⁸ Undoubtedly at the time, Pisa, an Etruscan city, was already under the influence of Rome, even though a Roman military colony was only established in 180 B.C. The same applies to the Etruscan Fiesole, which was substantially forced into submission only in the year 200 B.C. Sarsina was conquered in 266 B.C. and became a federate city, whereas Rimini was established as a Latin colony in 268 B.C.

⁹ The date of construction of the via Cassia is just as controversial, but it must have already been an important road in 230 B.C. if one considers that it must have linked Rome to the colony of Arezzo founded at the end of the 4th century B.C.

¹⁰ Paolo Giudici: *Storia d'Italia narrata al popolo*; Published by G. Nerbini, Florence, 1930, chapter sixteen, paragraph 6.

¹¹ Polybius: *Histories*, book X, paragraphs 23, 24 and 25.

¹² Polybius: *Histories*, book II, paragraph 31: "... and this was how the most formidable Celtic attack failed, which had put all the Italics (and especially the Romans) in great and terrible danger. Given the happy outcome, the Romans hoped they could completely oust the Celts from the entire Po valley; therefore, the following year, they dispatched both the consuls against the Celts..."

In 223 B.C., under the command of Publius Furius and Gaius Flaminius, the Roman legions returned to the Po valley, crossed the river Po and conquered *Clastidium* (the present-day town of Casteggio, twenty kilometres south of Pavia) and claimed a number of victories over the Insubre Gauls. The consuls in charge the subsequent year decisively defeated the Insubre Gauls by conquering *Mediolanum*, their most important city (222 B.C.)

In 218 B.C., the Romans reinforced the occupied territory by establishing the Latin colonies of Cremona and Piacenza, which guarded either bank of the river Po.

Roman domination had just been established in Cisalpine Gaul, when Hannibal's armies descended from the Alps in autumn 218 B.C., sparking the start of the second Punic war.

The Boi and Insubre Gauls immediately rebelled against Rome and joined forces with Hannibal's army, as did other Ligurian populations¹³. The Carthaginian commander rapidly won two victories, one on the river Ticino and the other on the river Trebbia. The Roman survivors withdrew into the cities of Piacenza and Cremona, which Hannibal could not siege because he had no war machines.

Therefore, hoping that every population subdued by Rome would rebel, he descended into Etruria and again defeated the Roman legions

in 217 B.C. on Lake Trasimeno, where the consul, Gaius Flaminius lost his life.

In spite of his successes, Hannibal did not risk a siege on Rome. He knew Rome was well defended and decided to head towards the Puglie, hoping he would find new allies among the Italic peoples.

This is where he inflicted the last serious defeat on the Roman legions during the battle of Canne (216 B.C.) After this victory, numerous Italic peoples, once allies of Rome, changed sides and formed an alliance with the Carthaginians. However, the Romans managed to keep Hannibal under control in the south of Italy where he could not receive reinforcements from Carthage because he did not possess any ports on the Italian coast, nor from his brother, Hasdrubal, who died in 207 B.C. while attempting to reach his brother over land from the north.

Thus, Hannibal wandered for many years in southern Italy, where his resistance was worn down by Quintus Fabius Maximus (called the "Cunctator").

Rome on the other hand, adopted an offensive strategy in Spain, and in 204 B.C., the consul, Scipio the African received authorisation from the Senate in Rome to invade Carthaginian territory in north Africa.

In spite of Hannibal's return to Carthage, the Carthaginians were finally defeated in the famous battle of Zama in 202 B.C.

¹³ This is confirmed by Polybius (Book XV, Paragraph 11) who, describing Hannibal's preparations in view of the fight against Scipio the African in Zama in 202 B.C. states "... *Hannibal stationed over eighty elephants in front of his troops, he stationed twelve thousand mercenaries behind them: Ligurians, Gauls, Balearians and Mauretanians; behind these he lined up native Africans and Carthaginians...*"

CHAPTER II

NORTHERN ITALY IS RECAPTURED AND ROMAN DOMINATION IN CISALPINE GAUL IS CONSOLIDATED (200-188 B.C.)

Introduction

1 - The wars against the Gauls in the Po Valley and the Ligurians in the Apennines from 200 to 190 B.C.

1.1 - The war campaigns in 192 B.C.

1.2 - Significant proof that Quinctius Flaminius' legions passed through the Mugello in 291 B.C.

1.3 - The wars in 191 B.C.: Publius Cornelius Scipio Nasica defeats the Boi Gauls in Bologna

2 - The years 190 and 189 B.C.: the Latin colony of *Bononia* is founded

3 - Roman dominion in central and northern Italy in 188 B.C.; existing consular roads.

Introduction

The period of history we are interested in spans 200 to 180 B.C. Thus, we carefully studied the events regarding the conquest of Cisalpine Gaul and Liguria by the Romans, searching for any useful information handed down by Latin historians (Polybius, Strabo, etc.) and able to shine light on the shady areas in Livy's account of the events in 187 B.C. which led to the construction of the military road from Bologna to Arezzo.

Although there are no direct references to the *Bononia-Arretium* road, our careful study of the twenty years from 200 to 180 B.C. did provide information useful for our research.

Given that our interest is focussed on Etruria, Cisalpine Gaul and Liguria, we did not research the contemporary Roman conquests that took place beyond Italy.

Therefore, we shall not mention the Roman military campaigns in Spain, on the Mediterranean coast of north Africa, on the Illyrian coast to the east, in the Balkans, Macedonia, Greece and Asia Minor. Some of these victories were final and others temporary; they kept the Roman legions busy on distant fronts while they were still fighting the Gauls and Ligurians in Italy.

In fact, it is surprising to note that during the years 200-190 B.C., Rome tolerated the presence of dangerous and hardened enemies just 400 km from the Capital (the Boi Gauls and Ligurians), who could have threatened the metropolitan area and also have extended their hegemony up to 2-3,000 km from Rome. We believe this evidently irregular territorial expansion of Roman domination was not the consequence of a rushed imperialistic policy, but the effect of occasional military interventions, either necessary from time to time, or to safeguard Rome.

Thus, the conquest of the Salentina peninsular in 272 B.C. was the consequence of the defeat of Pyrrhus and the Tarantini, who had attacked the Romans. The same applies to the conquest of Spain and the north African coast (202 B.C.), a natural consequence of Rome's reaction to the attack by Hannibal in Italy.

The Romans also had to fight the Gauls on their own soil, as occurred during the sacking of Rome in 390 B.C., the battle of Sentino in 295 B.C. and the battle of Talamone in 225 B.C. It was after this latter victory against the Gauls that the Romans decided to penetrate Cisalpine Gaul, to weaken the Gauls for good and end their regular incursions.

Therefore, it can be said that in some cases, at least until 200-180 B.C., the expansion of Roman dominion in Italy was the chance consequence of a substantially defensive policy. Even the wars against the Ligurians were provoked by their incursions on the plain which had just been colonised by the Romans.

1 - The wars against the Gauls in the Po Valley and the Ligurians in the Apennines from 200 to 190 B.C.

The invasion of Italy by Hannibal substantially caused the territories which had already been conquered in Cisalpine Gaul to be lost, thanks to a revolt by the Gesati, Insubres, Boi etc.¹.

After the end of the second Punic war (202 B.C.), the Romans had to recapture the Po valley. This area was particularly fertile and lush, and the Romans had already established the colonies of Piacenza and Cremona here in 218 B.C.

Polybius wrote a significant description about this area in 160-150 B.C.²:

"... The fertility of this area is not easy to describe. It produces such an abundance of corn, that often in my time the price of wheat was four obols [the obol corresponded to fifteen hundredths of an aureas lira] for the Sicilian medimnus [six Roman modii, equal to 51.48 litres], and two obols for the same quantity of barley, while a metretes of wine [40 litres] cost the same as a measure of barley. Panic and millet are produced in enormous quantities. There is an abundance of acorns which grow in the forests scattered throughout the plain; just consider that while very large numbers of swine are slaughtered in Italy every year for private consumption and to feed the army, almost all are reared in the Po Valley. Food is particularly abundant and cheap as illustrated by this example: travellers seeking hospitality at

inns do not have to bargain for the price of each item they consume, but ask for the overall price per day per person. As a rule, the innkeepers ensure their guests lack nothing for half an as per day, that is the fourth part of an obol and rarely charge more than this".

During the war campaigns in the Po Valley, the Romans not only fought against the Gauls who had been living there for a number of centuries but also against the Ligurians who lived along a broad stretch of the Apennines as far as the Ligurian coast to the west and beyond the Mugello to the south. Although in the past the Ligurians had been enemies of the Gauls and Romans alike, they sided with the Gauls against the Romans when the Romans were busy recapturing Cisalpine Gaul.

Thus, the Romans were forced to fight on two fronts and were undoubtedly reluctant to fight against the Ligurians, considering there was no economic advantage in conquering their land which was impervious, poor in terms of food and plunder. Furthermore, they considered the Ligurians more barbaric than the Gauls because split into numerous mountain tribes which had no cultural tradition and who were illiterate (*Ligures omnes fallaces sunt... inlitterati, mendacesque*)³, and totally lacking any political or military organisation that could offer any glory to the Roman legions who would have defeated them. They considered them more of a nuisance than a serious threat. In fact, these mountain people were mainly content to carry out incursions into the lowland areas at the foot of the mountains, looting what they could before retreating up the mountains. The Romans liked to line their legions up in the field, ready to face the enemy; therefore they found it particularly difficult and dangerous to pursue the enemy into these valleys⁴.

¹ Polybius: *Histories*, book III, paragraph 40: "the Gauls called Boi, had long been waiting for an opportunity to break their allegiance to the Romans, but had never had a suitable chance. Now encouraged and confident at the news of the imminent arrival of the Carthaginians, they rebelled against the Romans..."

² Polybius: *Histories*, book II, paragraph 15

Polybius was born in Megalopolis in Greece in 200 B.C. Thanks to his friendship with Quintus Fabius Maximus and Scipio Aemilianus he moved to Rome in 168 B.C. where he settled. He wrote his "Histories" from 160-140 B.C. He died in 118 B.C.

³ Marcus Porcius Cato: *Origines*, II, 1.

Nino Lamboglia⁵, an expert in Ligurian civilisation, made the following analysis about the social organisation of the Ligurians: “Ancient scribes state that the internal constitution of the Ligurian tribes did not develop evolved forms of urban agglomeration, especially in the mountain areas; they were organised into *vicos et castella*. This type of structure was still visible and effective in the *pagi* during the Roman era. In Liguria, the *pagi* formed the territorial framework that survived until the Middle Ages. Many *pagi* formed a *conciliabulum*, which could *coniurare* (in Livy’s words), that is form a confederation and unite in the face of an internal or external threat. Thanks to this solid organisation which clung to the mountains and which was moulded by the landscape, the eastern Ligurians (the Apuani, Friniates, Tigullii or any others whose name remains unknown to us), formed a bulwark which for many years proved to be invincible against the superior power of the Roman legions.

According to ancient historians, after 200 B.C., the Romans were often forced to fight the Gauls and the Ligurians at the same time, employing the legions of two consuls.

Already in 197 B.C., while the consul Cornelius Cethegus was fighting against the Insubres and Cenomani, the other consul, Minucius Rufus was fighting the Ligurians. In 194 B.C., the two consuls in charge also fought battles at the same time against the Boi Gauls and the Ligurians.⁶

1.1 - The war campaigns in 192 B.C.

In 192 B.C., Quintus Minucius fought against the Apuani Ligurians in Pisa and defeated them.

Livy tells of the event⁷ “... *From that moment, Minucius did not give the enemy any respite. He left Pisa, reached Liguria and razed their*

strongholds and villages to the ground. Here the Romans were able to take back the spoils that had been plundered from them in Etruria”.

This passage confirms the predatory incursions carried out by the Ligurians in northern Etrurian cities (allies of Rome). Further on, Livy underlines the Roman efforts to weaken the Boi Gauls. In fact the Senate decided to send both consuls in charge against their enemies:

“...*It was decided that because there appeared to be no immediate threat from Antiochus⁸, the consuls should leave for their theatres of war; (Gneus) Domitius taking the shortest route from Rimini and Quinctius (Flamininus) through Liguria, entering the region of the Boi. The two consular armies on the march in different areas, devastated a wide area of enemy territory...*”

1.2 - Significant proof that Quinctius Flamininus’ legions passed through the Mugello in the year 192 B.C.

This brief passage by Livy provides important information for our research. First of all, it states⁹ that both consuls, Quinctius Flamininus and Gnaeus Domitius, received the order to converge on the same area, that is in Cispadania, the region of the Boi with Bononia as its capital. Livy points out the Gnaeus Domitius left Rimini and headed for Bologna along a road that existed before the consular Via Emilia was built and which probably wound its way along the edge of the Po valley, near the initial spurs of the pre-Appennine hills.

Instead, the other consul passed through Liguria to reach the established meeting point, with the obvious intention of attacking the Boi Gauls from behind.

⁴ At times the Ligurians risked more demanding incursions, they attacked the colony of Piacenza and occupied the city of Modena (in Roman possession but not yet a colony), they posed such a threat to Tyrrhenian coast and the upper Po Valley that the Romans hurriedly rebuilt Genoa as their base for military operations in the north (T. Livius, “History of Rome”, book XXX paragraph 1).

⁵ Nino Lamboglia: “Punti di vista sui Liguri orientali dopo le scoperte di Chiavari”, page 1 (Extract from the *Giornale Storico della Lunigiana* – new series, year XII, numbers 1-4 January-December 1961).

⁶ T. Livius: *History of Rome*, book XXXIV, paragraph 43.

⁷ T. Livius: *History of Rome*, book XXXV, paragraph 21.

⁸ Antiochus III, from the Seleucid dynasty, carried out military operations in Asia Minor and occupied Thrace in 196 B.C.

⁹ T. Livius: *History of Rome*, book XXXV, paragraph 22.

The Roman historian does not mention the point of departure of the other consul, Quintus Flamininus; however it can be presumed that he either set off from Pisa (a departure point used in former years by the legions to launch attacks on the Ligurian tribes), or from another base in Liguria which could have been Arezzo or Fiesole. Anyway, Livy mentions how, in order to reach the territory of the Boi Gauls, he passed through Liguria and devastated everything he came across on the way (these areas were not those travelled through by Gnaeus Domitius and, therefore, were not in Emilia). It can be presumed that the consul, Quintus Flamininus, chose the most practical and safest route to reach his colleague in Bologna. Thus, after leaving Pisa, he must have crossed the Apennines across the Collina pass along the Pistoia-Porretta Terme axis, and then descended along the valley of the river Reno. If he set out from Arezzo or Fiesole, he must have crossed the Apennines using the Futa pass, along a very ancient Etruscan route through Mugello, and then descended directly to Felsina along the watershed between the rivers Setta and Savena. This second itinerary appears the most probable because:

- a) the Pistoia-Collina pass-Reno valley route passed through an area controlled by Friniates and Apuani Ligurians, well known to the Romans as very bellicose tribes. In their campaign against the Boi Gauls, they did not intend to lose time to fight other people. Therefore it was more convenient for Quintus Flamininus to cross the Apennines further south-east, passing through the land of the Mucelli Ligurians (in the present-day Mugello) who were probably weaker and less bellicose than the Apuani and Friniates, considering that the Latin historians never mention them playing a lead role in any battles against Rome.
- b) a comparison between these military operations and the later operations in 187 B.C. between the Ligurians and the consuls, M. Aemilius Lepidus and C. Flaminius shows that only the Friniates and Apuani Ligurians are mentioned during the battles¹⁰

whereas the Mucelli Ligurians¹¹ (who had settled in the present-day Mugello), are not. From this circumstance it is possible to presume that in 192 B.C., the consul Quintus Flamininus quickly passed through the Mugello devastating the area with ease and without setting up any military garrisons. During the years that followed, this omission probably allowed the Apuani Ligurians to come to the aid of the surviving Mucelli and also occupy this area of the Tuscan-Emilian Apennine, which then forced in 187 B.C. M. Aemilius Lepidus to recapture the area. However, to avoid making the same mistake as Flamininus, this second time around the Romans decided to police the pass permanently, building a transapennine road which directly linked the stronghold of Fiesole and the colony of *Bononia*, recently established in 189 B.C.

1.3 - The wars in 191 B.C.: Publius Cornelius Scipio Nasica defeats the Boi Gauls in Bologna

The year 191 B.C. also saw two important events.

One concerns the assault by the Ligurians against the camp of the proconsul, Quintus Minucius, who presided over the area around Pisa; he beat off the attack without following them to their villages. This solely defensive strategy did not weaken the Apuani Ligurians, as we shall see later on, and Quintus Minucius' strategy was criticised by the Senate.

The other event was the continuation of the battles against the Boi Gauls. During the year, Publius Cornelius Scipio Nasica was appointed consul of Cispadania, with the precise aim of weakening the Boi Gauls for good.

He stationed his legions in Castenaso¹² near Bologna, where he camped for two months waiting for the spring and then fought against the Boi Gauls. The outcome was a great victory for the Romans which finally forced their centuries-old enemy, the Boi Gauls into submission. He then confiscated

¹⁰ In fact Livy mentions that a decisive battle took place on mount "Ballistam" (mount Balestra) on the Tuscany-Emilia border north of the Futa pass, where the upper Mugello ends (T. Livius, "History of Rome" book XXXIX paragraph 2).

¹¹ The exact name of this tribe is controversial: some call them the "Magelli".

¹² The place name "Castenaso" probably comes from *Castrum Nasicae*.

half of their territory “... so the Roman people could send colonies there if they wanted...”¹³.

In effect, the land was distributed among the Latin colonies when, two years later, *Bononia* was founded.

However, at the end of this brilliant success by Publius Cornelius Scipio Nasica, Livy relates a very important episode which is worth pointing out. He confirms that the Romans continued to fight against the Ligurians for many years to come because he tells that Scipio Nasica, convinced that he would be awarded a triumph by the Senate for this important military success, demobilised his troops and agreed to meet them in Rome.

However¹⁴: “...The tribune of the plebe, Publius Sempronius Blaesus thought that Scipio (Nasica) should not be denied the honour of a triumph, but that it should be deferred to a later date. The tribune explained that conflicts against the Ligurians were invariably linked to conflicts against the Gauls, because being neighbours the two tribes usually helped each other. It would have been possible to end the conflict with the Ligurians if Publius Scipio had either himself entered Liguria with his army after defeating the Boi in battle, or if he had sent some of his troops to help Quintus Minucius, held up for more than two years in an inconclusive war... (ceteris omissis). The Consul's response to this was that he had not been sent to fight in Liguria, that he had not been at war against the Ligurians and that he was not asking to celebrate a victory over them”.

The tribune's opinion expresses the mood that hovered around Rome regarding the many years and persistent battles against the Ligurians. It was certainly not fear, but rather unease about the drawn out war against these wild and barbaric people. Moreover, it was to end this unease that four years later (in 187 B.C.), the Senate sent both consuls in charge to fight against the Ligurians¹⁵.

2 – The years 190 and 189 B.C. The foundation of the Latin colony of *Bononia*

Once the Boi Gauls were defeated, Scipio Nasica secured peace throughout Cispadania, finally allowing Rome to consolidate its dominion.

The colonies of Piacenza and Cremona were strengthened and repopulated (the number of inhabitants had dropped due to war, illness and emigration).



Roman paving in Bologna discovered at the start of Strada Maggiore during excavation work to lay underground piping (November 1981).

¹³ T. Livius: *History of Rome*, book XXXVI, paragraph 39.

¹⁴ T. Livius: *History of Rome*, book XXXVI, paragraph 39-40.

¹⁵ For more information about this war, please consult chapter III.

Then the Senate decided to found a Latin colony in Bononia¹⁶: “*in that same year, on 30 December¹⁷, a Latin colony was founded in Bononia by the triumvirs, Lucius Valerius Flaccus, Marcus Atilius Serranus and Lucius Valerius Tappo pursuant to a senatus consultum. Three thousand men were involved in its foundation, cavalrymen were granted seventy jugers¹⁸ each and the other coloni were granted fifty. The land had been taken from the Boi Gauls, who had in turn driven away the Etruscans...*”.

Once the families of the Latin coloni finally settled in Bologna, they integrated with the defeated Boi tribes, encouraging them to help establish large farms prone to flooding and mainly covered by woodland.

Therefore, the area was not only subjected to military occupation but was also settled by coloni who farmed the land, raised farm animals (especially pigs) and worked as craftsmen, covering a total area of about 40,000 hectares, equal to 8,000 centuries (that is 400 square kilometres).

At the same time, ignoring the presence of the insignificant Boi city, the *cardo maximus* (north-south axis) and the *decumanus maximus* (east-west axis) of *Bononia* were established.

The *cardo maximus* coincided with an ancient track which descended from the hills (now Via Val D'Aposa - Via Venezian) and came from Etruria. At a right angle, the *decumanus maximus* (now Via Ugo Bassi - Via Rizzoli)

probably ran along a former track that skirted the edge of the plain, on the spurs of the hills¹⁹.

3 - Roman dominion in central and northern Italy in 188 B.C.; existing consular roads.

After the end of the second Punic war, the recapture of Cisalpine Gaul ended in 188 B.C., when Rome conquered the whole of Etruria, Cispadania (present-day Emilia) and Transpadania (present-day Lombardia) once and for all. Rome also took control of the Veneto, its traditional ally in the east, and so bordered with the Friuli and Venezia Giulia areas. Westwards, Rome only controlled the Ligurian coast and Genoa in particular, rebuilt by the Romans in 202 B.C. after its destruction at the hands of the Carthaginians in 205 B.C.

The Apennines from the west Ligurian Riviera to Mugello continued to escape Roman dominion. The Romans had still not managed to defeat the Ligurians once and for all, in spite of the numerous wars fought during the former decade.

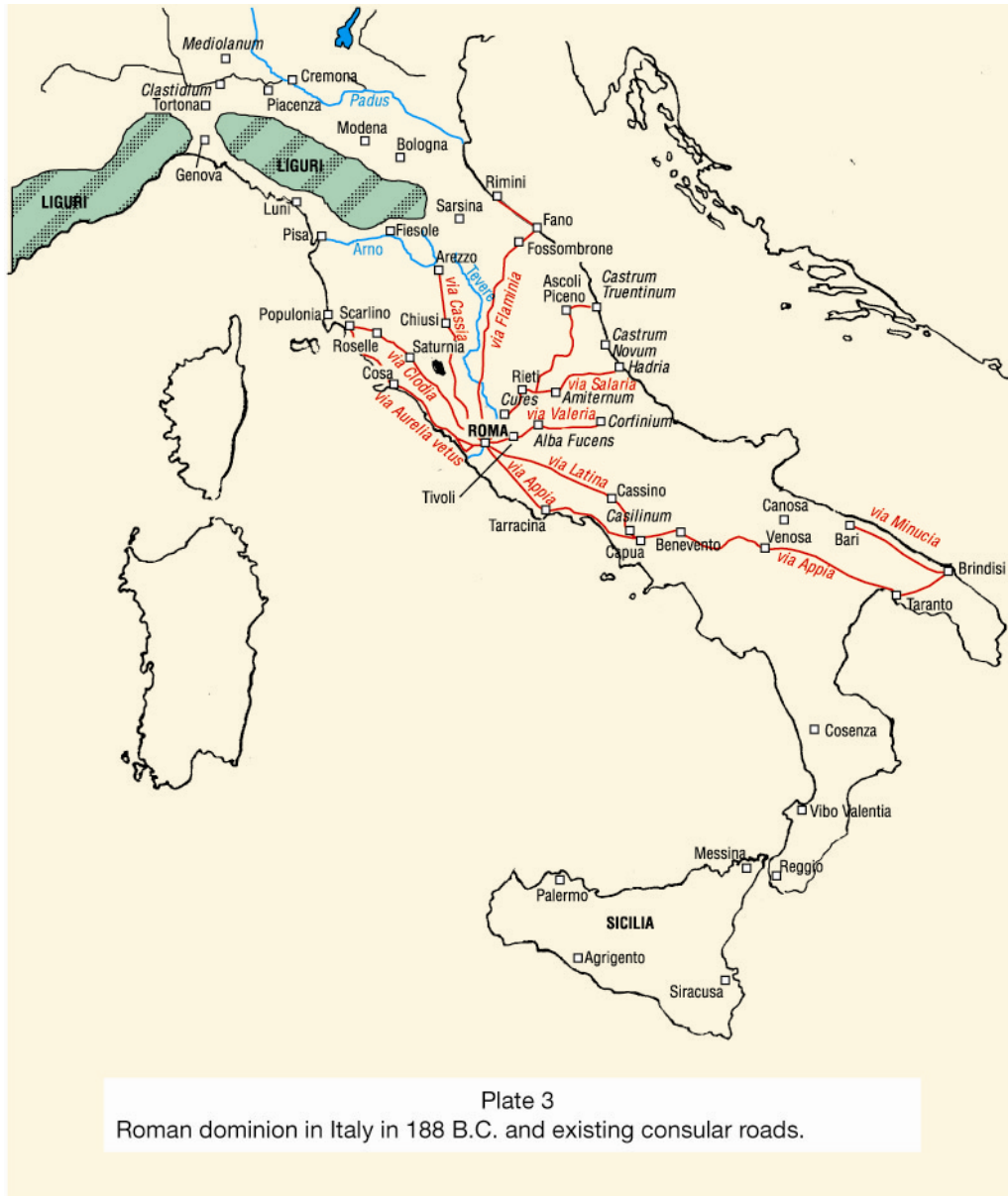
They could not bear to have this thorn in their side because it was a constant threat to the peaceful development of entire Cisalpine Italy and northern Etruria.

¹⁶ T. Livius: *History of Rome*, book XXXVII, paragraph 57.

¹⁷ Was this December 190 or 189 B.C.? The prevailing opinion of historians is that it was the year 189. However, according to Scullard (Rom. Pol. page 285), it was 190.

¹⁸ The “juger” measured 2,500 square metres. Therefore, cavalrymen were assigned 17.5 hectares and other coloni were assigned 12.5 hectares. This calculation is based on the supposition that there were 500 cavalrymen and 2,500 other coloni.

¹⁹ Other roads were subsequently built, thus forming a perfectly square road grid. During construction of the pedestrian subway on the via Ugo Bassi - Via Indipendenza crossroad, the impressive remains of large paving stones made of trachyte were discovered. When the city was founded, the road surface was made of local materials (pebbles and gravel); the paving subsequently underwent numerous renewals, but only a few roads in the centre were laid with large paving stones made of trachyte from the Euganei Hills. This is confirmed in the report by J. Ortalli, from the Archaeological Superintendency for Emilia and Romagna (“Strade di Bologna romana, tipologia e topografia” in ‘Strenna storica bolognese’, XXIV, 1984). Ortalli highlights how the use of large trachyte paving stones was limited to just a few roads of the city centre. It is worth quoting his description of the Roman paving discovered in Strada Maggiore: “*Following excavations carried out to lay pipelines, numerous remains of the eastern suburban stretch of the Via Aemilia were discovered. Starting from Via Castiglione, up to fifteen metres east of the crossroads with Via Guido Reni, the road was paved with the usual large trachyte paving stones, which at this point stopped and were joined against a 40 cm wide “drop-in slab or guide” which can be interpreted as a stone containment kerb perpendicular to the road axis: beyond this limit, the road continued eastwards along the same axis for the first 15 metres, paved with large river cobbles and then with a roadbed of river gravel 30-40 cm deep*” (work cited, page 290).



With the very recent foundation of *Bononia* The Romans obviously intended to set up a permanent garrison at a vital crossroads for trade from Rimini, Piacenza and Fiesole. Even in Etruscan times, the Tuscan city of Fiesole was a crucial point for trade from Etruria heading towards Felsina and the Adriatic ports in the Po Valley.

Even after the Gaul invasion, the once Etruscan Felsina must have preserved its privilege of being the final destination of the transapennine track from Etruria, where extensive trade took place, causing Fiesole and Felsina to flourish.

Now that Bologna was theirs, the Romans could not tolerate that the link to Etruria could be made impassable by hostile tribes.

The work to build the northern consular roads (suspended during the second Punic war), had not restarted because of the military effort required by the wars against the Gauls and the frequent incursions by the Ligurians. Obviously, when conquering Cisalpine Gaul, the Roman legions exploited the existing local road network, which was more or less practicable but certainly did not comply with their requirements. Once the conquest had been completed, it was necessary to build proper roads which would penetrate into Cisalpine Gaul and

form a fast link to Rome through Etruria, as soon as possible. On the Adriatic side, the Via Flaminia consular road ended in Rimini, while in Etruria, the Via Cassia reached as far as Arezzo, on the Tyrrhenian side, the Via Aurelia ended in

Salebro (now Scarlino), near Follonica.

Therefore, these roads had to be extended northwards to link the newly conquered areas with Rome; and this is exactly what happened in the year 187 B.C.

CHAPTER III

THE YEAR 187 B.C.: THE CONSULS MARCUS AEMILIUS LEPIDUS AND CAIUS FLAMINIUS DEFEAT THE LIGURIANS AND CONSTRUCT TWO ROADS

- 1 – Consul elections in 187 B.C.: Marcus Aemilius Lepidus and Caius Flaminius.
- 2 - Description of Liguria and Ligurian guerrilla warfare.
- 3 - Identification of the battlefields.
- 4 - The battles of Caius Flaminius.
- 5 - The battles of Marcus Aemilius Lepidus.
- 6 - Caius Flaminius builds the Bologna-Arezzo transapennine road.
- 7 - Marcus Aemilius Lepidus constructs the road from Piacenza to Rimini (the Via Aemilia).

1 – Consul elections in 187 B.C.: Marcus Aemilius Lepidus and Caius Flaminius.

On 18 February 187 B.C., during the “*comitia*” in Rome, Marcus Aemilius Lepidus and Caius Flaminius were elected consuls. Livy narrates that¹: “... *there were rumours of a major war in Liguria which was growing increasingly serious day by day. Therefore, on the day when the new consuls discussed spheres of competence and the state of the Republic, the Senate assigned Liguria to both as their province. This senatus consultum was opposed by the consul Lepidus, who claimed that it was disgraceful that both consuls be confined to the valleys of Liguria... (ceteris omissis). After listening to these protests the Senate remained firm in their decision: Liguria should be the province of both consuls...*”

The dissatisfaction expressed by M. Aemilius Lepidus was due to the usual contempt for the savage Ligurians; their treacherous and loathsome guerrilla warfare did not deserve such effort and their defeat held no glory for the victors. In the past, the Romans

considered the conflict against the Ligurians as straightforward local policing operations, wrongly convinced that they could get rid of these irritating mountain people when and how they wished.

Thus 187 B.C. arrived and after about a decade of clashes, the Ligurians had yet to be finally defeated, mainly because the Romans lacked any real strategy to conquer the Apennines as well as an essential military plan.

However, the Senate recognised the mistake and realised that control of the Tuscan-Emilian–Ligurian Apennines was fundamental for the safety of the Po valley, northern Etruria, Lunigiana and the Ligurian coast. A further alarm bell was sounded by the news that the Apuani Ligurians were carrying out incursions and destroying crops in the recently colonised countryside near Pisa and Bologna. Thus in 187 B.C., in spite of M. Aemilius Lepidus’ opposition, the Senate did not hesitate to assign Liguria to the new consuls as their sole province, and more precisely, the Apennine area between Pisa and Bologna.

¹ T. Livius: work cited, book XXXVIII, paragraph 42.

2 - Description of Liguria and Ligurian guerrilla warfare.

Before narrating the two consuls' military operations in the area, Livy² describes the difficulties the Roman legions encountered due to the guerrilla tactics employed by the Ligurians and the impervious nature of the area to conquer: "... *In Liguria there was everything to sharpen the soldier's mettle: mountainous and harsh terrain, positions that were difficult to reach and difficult to clear if the enemy had already secured them; steep narrow roads fraught with the risk of ambush; a nimble and fast-moving enemy, who struck unexpectedly, never allowing them to rest or feel secure anywhere; well fortified positions that had to be stormed with hardship and danger; an impoverished land that forced the soldiers to get by on scant food and offered little hope of plunder. Thus, there were no camp followers, no drawn-out lines of pack animals bringing up the rear. There was nothing but arms, just arms, and people who placed all their hope in them. There was never any lack of opportunity to fight the enemy, because they were so poor that they had to raid their neighbours' fields, but they never got involved in decisive battles*"³.

The lack of pack animals in the rearguard indicates there was no expectation of any spoils (which would have required pack animals). These pack animals often belonged to civilians and merchants who followed armies at a distance, ready to trade any form of plunder for money. This was highly appreciated by the commanders, because by immediately converting their plunder into cash, they avoided having to drag it around with them during the war.

We believe that the imaginative description of the Mugello by the Tuscan historian, P. Lino Chini⁴ depicts what the area probably looked like at the time: "... *suddenly, as if in a large highly polished mirror, I see the Mugello become a deserted valley encumbered with horror and fearful silence. Its castles, churches, villages and farmhouses have disappeared, completely dissipated;*

its beautiful cultivated vineyards, lush fields, pretty roads, pleasant banks, shaded avenues...are no more; and in their place there is thick black undergrowth, a deep lake in the middle with wild eagles, hawks and crows circling in the air above, violently shaking their feathers while ruinous rivers descend from the mountains troubling and agitating with raucous ferment the lowland moor. I look around me and see the highest mountain peaks covered in snow and ice, and on the lower hillocks that slope down to the valley there are clearings near rough and humble huts. Herds of buffalo and cows wander around the huts along with few and hard to come by figures, who look more like wild beasts than men, their loins covered by shaggy furs; they have rough hair, a sinister look and a ferocious countenance. Thus the Mugello appeared to me in that ideal vision, and this is the picture that has remained so fixed in my memory that still, after 18 years, I can still see it in my mind and it is always before me. Call it as you wish, a poetic vision, a fantastic dream or something similar; I am certain that my description is very close to the truth, and that at the time of the Magelli Ligurians, the appearance and conditions of our land was even worse than how I imagined and described it".

3 - Identification of the battlefields

Although Livy's account provides an accurate description of the nature of the territory the two consuls attempted to conquer, it is not as exhaustive and exact in pinpointing the location of the battles.

He fails to mention from where the two armies departed and on which fronts they attacked the enemy.

The only Ligurians mentioned are the Friniates and the Apuani.

The only geographical quotes are:

- the countryside near Pisa and Bologna;
- mounts Auginus, Balestra and Suismonium.

Therefore, the only scant references we have to reconstruct the whereabouts of the legions are the general movements mentioned by Livy and our own topographical knowledge.

² T. Livius: work cited, book XXXIX, paragraph 1.

³ We recognised incredible similarities between this description of the Apennines inhabited by the Ligurians and the sites we explored on the border between Tuscany and Emilia, north and south of the Futa pass.

⁴ P. Lino Chini: "Storia antica e moderna del Mugello". Book I, page 55.



The sign indicating the tourist location Pian di Balestra on the slopes of mount Bastione.

It is not possible to resort to other annalists, because there are no other historical references about the topic.

Therefore, we must attempt to identify the locations occupied by the enemy that the two consuls had to fight.

The Friniate Ligurians, settled on the eastern slopes of the Apennines, in the valleys near Modena and Reggio Emilia, and they very probably settled in the upper valley of the river Reno near Bologna.

The Apuani were the most numerous and bellicose Ligurians⁵, and occupied the western side of the Tuscan-Ligurian Apennines: the Apuani Alps, Garfagnana and Lunigiana.

They had also spread from their homelands towards the Pistoia Apennines, probably forming alliances with the Friniate tribes.

Without doubt, the Mugello was the theatre of war, considering the battles were fought in the area between Pisa and Bologna and that one battle took place on mount Balestra, not far north of the Futa pass. In spite of this, no memory remains of any autonomous belligerence by the *Mucelli* (the inhabitants of the area), otherwise we believe that Livy would have mentioned them, just as he mentioned the other tribes involved in the fight. Furthermore, the Mucelli are not mentioned in any of the other Roman campaigns against the Ligurians before or after 187 B.C. Therefore, we can presume that they were only moderately important from a demographic and military point of view.

Perhaps when the Romans were about to attack their land, the Mucelli requested and were granted the protection of the Apuani, who according to the account of this conflict, took command of operations with the Friniates.

4 - The battles of Caius Flaminius.

Titus Livius first mentions the battles of C. Flaminius, and then those of M. Aemilius Lepidus. However, the two consuls probably agreed to start their military operations at the same time to prevent the escape of the retreating enemy, as occurred during previous wars.

As for the Pisa - Bononia axis, they not only had to win the battles but they also had to win this area of the Apennines once and for all.

Livy starts his description of the battles fought by C. Flaminius as follows⁶: "... After several successful battles against the Ligurian Friniates, the consul, C. Flaminius, accepted their surrender and disarmed them. However, because he had to use force due to their reluctance to surrender their arms, they abandoned their villages and sought refuge on mount Auginus⁷. The consul followed them in close pursuit, but because they were mainly disarmed, they scattered again

⁵ Every war fought against the Ligurians by the Romans before and after 187 B.C. was mainly against the Apuani.

⁶ Titus Livius: work cited, book XXXIX, paragraph 2.

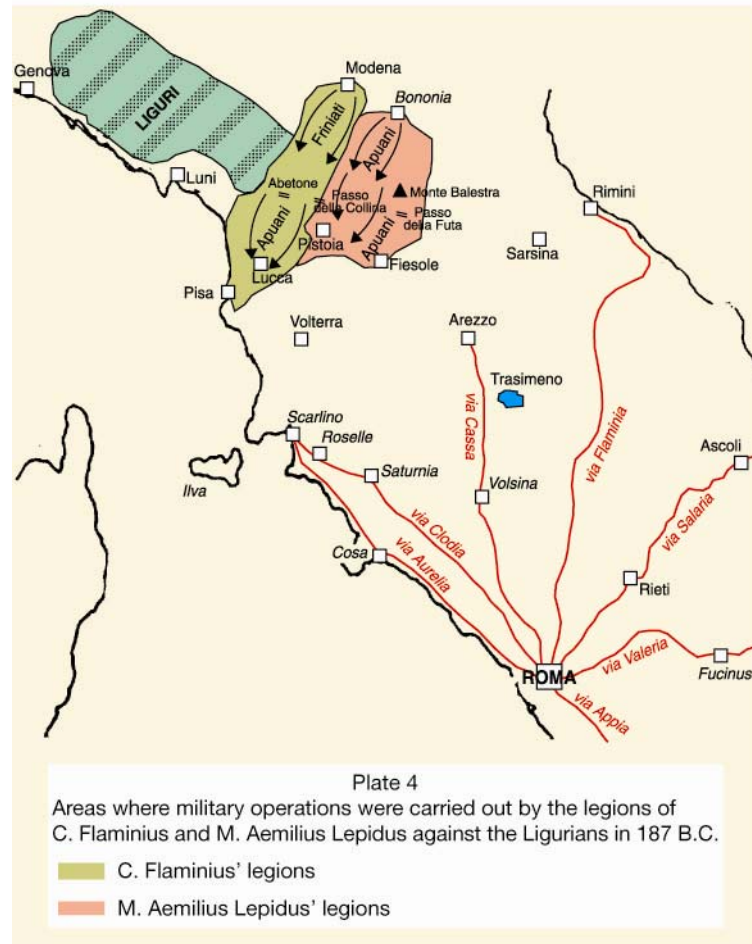
⁷ This mountain cannot be located because there is no place name that can be derived from it in the Modena, Reggio Emilia or Bologna Apennines.

fleeing headlong over impracticable terrain and rugged rocks, inaccessible to the enemy. From here, they escaped over the Apennines. Those who had remained in their camp were surrounded and overwhelmed. The legions were then led across the Apennines. The Ligurians were able to hold out for a while thanks to the mountain height they had seized, but they soon surrendered. A more thorough search for weapons was carried out and they were totally disarmed.

It is likely that the two consuls joined forces near Bologna⁸ and set out from this recently established Latin colony on two parallel fronts: M. Aemilius Lepidus towards the Bolognese Apennines, C. Flaminius towards Modena and Reggio. Considering that no one knows where mount Auginus is located, the exact movements of C. Flaminius cannot be pinpointed. However, he pursued the fleeing enemies across the Apennine range; they may have ended up near Pavullo, Sestola, Abetone or, beyond the Apennines, near Castelnuovo Garfagnana, Barga, Bagni di Lucca and S. Marcello Pistoiese.

The consul then moved his legions across the Apennines in an attempt to capture the Friniates who had scattered in the Tuscan valleys, but he was unable to take them all prisoner. In fact, M. Aemilius had to complete the task of rounding up the escaping Friniates in Tuscany. By now, the consul Flaminius and his legions had reached the western side of the Apennines. They then descended into Tuscany along the valleys of the Serchio, Garfagnana and Pistoia. Here they fought the Apuani Ligurians who had a powerful stronghold in the area and who had carried out skirmishes and plundered the Pisa countryside.

Titus Livius continues⁹: “... war was then waged against the Apuani Ligurians, who had devastated the farmlands of Pisa and Bologna to such an extent that any cultivation of the soil was impossible. Once the Apuani were also vanquished, the consul made peace with the neighbouring peoples.



Therefore, once Caius Flaminius had completed his expedition and defeated the Apuani in Tuscany, he restored peace in the area. He then must have re-crossed the Apennines and returned to Bologna (if it is true that, after a period of rest, he started to build a road from Bologna to Arezzo).

5 - The battles of Marcus Aemilius Lepidus.

We believe it is very probable that M. Aemilius Lepidus assembled his troops in Bologna and from here, launched his attack against the Apuani Ligurians who had occupied the Apennines near the upper valley of the rivers

⁸ We shall later see that at the end of this war, the two consuls probably met up again in Bologna.

⁹ Titus Livius: work cited, book XXXIX, paragraph 2: by referring to the countryside around Pisa and Bologna, Livy evidently wanted to indicate the outer limits of the large area between the two important cities of the time, where the Apuani carried out their plundering. The fact that he does not mention Fiesole may mean that it was not affected by the incursions because firmly in the hands of the Roman garrisons.

Savena, Setta and Reno. Once they had sacked and devastated the area around Bologna¹⁰, the Ligurians could only have withdrawn towards the Collina pass, along the valley of the Reno and towards the Futa pass, probably along the existing and very ancient track from Bologna to the Mugello, along the ridge to the left of the river Savena. Then, after pursuing the enemy over the mountain passes and through the Pistoia and Mugello valleys, the consul defeated the Apuani and the Friniates who had escaped Flaminius and restored peace in the area (which at the time was inhabited by Ligurians). We must return to Livy to locate the battles fought by M. Aemilius Lepidus: "... *The other consul, M. Aemilius sacked and burned the villages of the Ligurians in the plains and the valleys, whose inhabitants had sought refuge on mounts Balestra and Suismontium*¹¹. He then attacked the men who had sought refuge on the mountains, first he harassed them with light skirmishes, forcing them to descend to the plain where he engaged and defeated them in a regular battle. During the battle, he vowed a temple to Diana.

Now that he had subjugated the tribes on this side of the Apennines, Aemilius advanced against those on the other side of the range, including the Friniates that C. Flaminius had not reached. He defeated them all, disarmed them and forced the entire population to move from the mountains to the plains. After establishing peace in Liguria, he led his army into Gaul".

There are two cornerstones to our interpretation:

- 1) mount Balestra, the refuge and stronghold of the Apuani appears in modern cartography under the name of mount Bastione, but was indicated as mount Balestra in previous centuries. Mount Balestra stands on the border between Tuscany and Emilia, on the uphill ridge across the Apennines, 8.5 kilometres north of the Futa pass, on the watershed between the rivers Setta and Savena, between the municipalities of S. Benedetto Val di Sambro and Firenzuola. The old place name lives on in "Pian di Balestra" a flat area near the peak¹². Unfortunately, the mountain Livy calls "Suismontium" has never been located. It stood near mount Balestra, and was the second refuge of the Ligurians who escaped during the same attack by M. Aemilius Lepidus.
- 2) From Livy's words that M. Aemilius Lepidus, "*had now subjugated the tribes on this side of the Apennines, Aemilius advanced against those on the other side of the range, including the Friniates that C. Flaminius had not reached*" it is possible to deduce that:
 - a) this confirms our localisation of mount Balestra as being the area he occupied on this side of the Apennines, that is on the Bolognese side;
 - b) only after this conquest did he "*advance against those* (the Apuani and Mucelli) *on the other side of the range*", that is on the other side of the Futa pass, in the valley of the Mugello and beyond the Collina pass in the valleys of Pistoia, probably where

¹⁰ Titus Livius: work cited, book XXXIX, paragraph 2: "... *war was then waged against the Apuani Ligurians, who had devastated the farmlands of Pisa and Bologna to such an extent that cultivation was impossible*".

¹¹ Titus Livius: work cited, book XXXIX, paragraph 2 "... *M. Aemilius, alter consul agros Ligurum, vicosque qui in campis aut vallibus erant ipsis montes duos Ballistam Suismontiumque tenentibus deussit depopulatusque est...*".

¹² We do not agree with the theory formulated by a number of contemporary historians, which locates the mount Balestra mentioned by Livy in these circumstances of war in the Apennines of Reggio Emilia, on the border with present-day Liguria. Here, Livy is referring to the battle fought in 187 B.C. against the Apuani who had made incursions into Bolognese territory; therefore, he is referring to the Tuscan-Emilian Apennines and not the Emilian-Ligurian Apennines. In the context of these battles, it was the other consul, (C. Flaminius) who entered the territory of Modena and Reggio to defeat the Friniates; if Livy had mentioned mount Balestra in reference to the battles fought by C. Flaminius, one could theorise that while pursuing the Friniates in their flight to the mountains of Reggio Emilia and Liguria, he would have reached the mount Balestra mentioned by Livy in the context of another war. In book XL, paragraph 41 Livy mentions (with reference to the wars against the Ligurians), a mount "Ballistam" which some locate at the source of the river Secchia, near the Cerreto pass, bordering with the present-day Liguria; however, these events took place in 180 B.C., in a temporal, territorial and war context that has nothing to do with the battles fought by M. Aemilius Lepidus. In fact, it was the consuls, A. Postumius and Q. Fulvius, who fought against the Ligurians north of the river Magra; Livy tells that the former occupied mounts Ballistam and Leto, blocking the enemy's road and starving them into submission; it is obvious that this mount Ballistam cannot be the same mentioned by Livy in the wars of seven years earlier, not to mention that the mount mentioned by Livy was mentioned together with mount Suismontium and this mount is mentioned with mount Leto. Therefore, it appears logical to suppose that these two mountains had the same name but were located in different places.

the Friniate Ligurians sought refuge from Flaminius when he cleared the adjacent area.

Titus Livius ends by pointing out that Marcus Aemilius Lepidus “*subdued everybody*”, that is the Apuani, Mucelli (who had probably formed an alliance with the Apuani), and the survivors of the Friniate tribes. Then “*after establishing peace in Liguria*¹³, he led his army into Gaul”, that is, he returned to Bologna.

To summarise, the legions of the two consuls met in Bologna and started the war against the Ligurians on two adjoining fronts moving in the same direction: C. Flaminius fought against the Friniate in the valleys and Apennines of Modena, and M. Aemilius Lepidus (on C. Flaminius’ left) fought against the Apuani in the valleys and Apennines of Bologna.

Both then continued the offensive beyond the Apennines along the routes they were responsible for and, after bringing peace to the area, returned victorious to Bologna.

Thus after completing the belligerent phase of their mandate from the Senate, the consuls now had to consolidate their victory by constructing roads. These roads were to act as a long-lasting reminder to the bellicose Ligurians who continued to inhabit the neighbouring provinces, that Rome was not going to tolerate any more incursions.

In spite of this, the Romans had to continue fighting against the Ligurians for a further twenty years; the Apuani Ligurians were only completely subdued in 180 B.C. following their mass deportation ¹⁴.

6 - Caius Flaminius builds the Bologna-Arezzo transapennine road.

After first defeating the Friniate Ligurians on the Modena Apennines, and then the Apuani Ligurians on the other side of the Apennines and bringing peace to the area, C. Flaminius returned to Bologna where he joined up with the legions of M. Aemilius Lepidus¹⁵. At this point, Livy adds¹⁶: “... And now that the province was brought from a state of war into one of peace, he built a road from Bononia to Arretium to ensure his men were not kept idle”.

This is the only mention of the construction of the Bologna to Arezzo road in the Latin annals. This sole mention of the road and its probable brief use, misled (and was unfortunately misunderstood from then on), the historian Strabo (born in Greece in 64 B.C. and who lived in Rome during the age of Augustus ¹⁷). Strabo not only ignored its existence but also confused the father, Gaius Flaminius, with the son, Caius Flaminius, attributing to the son the construction of the Via Flaminia between Rome and Rimini, which instead was built in 220 B.C. by Gaius (the father, who died during the battle of Lake Trasimeno against Hannibal in 217 B.C.)

Strabo’s obvious error created an interpretational conflict among scholars that it was still a cause for discussion even at the end of the 18th century, when the Bolognese historian, Ludovico Savioli ¹⁸, mentions this divergence by pointing out that Caius Flaminius must have constructed a road

¹³ Here Titus Livius refers to the Tuscan valleys occupied by M. Aemilius Lepidus and which at the time were part of Liguria.

¹⁴ Titus Livius: work cited, book XL, paragraph 38: “*The Ligurians had not been expecting a war before the arrival of the consuls in the province and they were taken by surprise and some 12,000 surrendered. Cornelius and Baebius, who had first consulted the Senate on the matter by letter, decided to bring these down from their mountains onto the plains, far from their homes. Their purpose was to deprive them of any hope of returning; for they were convinced that this was the only way of ending the Ligurian War. The Romans possessed an area of public land in Samnite territory that had formerly been the property of the Taurasini. This was where the consuls wished to relocate the Apuani Ligurians, and so they issued an order for them to come down from the mountains with their wives and children, and bring with them all their possessions... (ceteris omissis). Some forty thousand people, including women and children were relocated at public expense*”.

¹⁵ From Livy’s account, it can be understood that this meeting took place on Bolognese territory: in fact, Flaminius started to build the road from Bologna and as concerns M. Aemilius Lepidus, Livy clearly states that he returned to the land of the Gauls.

¹⁶ T. Livius: work cited, book XXXIX, paragraph 2.

¹⁷ Strabo: “Geography” “Italy”, book V, paragraph 11: “... in fact, Marcus Aemilius Lepidus and Gaius Flaminius shared the same consulship. After defeating the Ligurians, the latter built the Via Flaminia from Rome through Tyrrhenia and Umbria as far as the outskirts of Ariminum...”

¹⁸ Ludovico Savioli was born in 1729 and died in 1804.

linking Etruria to Bologna, in the land of the Apuani Ligurians he had defeated¹⁹.

We do not believe Caius Flaminius built the road just because it was a way of keeping his men busy with hard work, and to ensure they were not left idle. We have already mentioned that it was part of Roman strategy to build roads through conquered lands, that the Ligurians carried out repeated incursions in the same areas and that the Senate decided to keep these newly colonised provinces under firm control.

Therefore, it was this key requirement that pushed C. Flaminius to build the road as ordered by the Senate. That this was part of an essential strategic plan is proved by the fact that M. Aemilius Lepidus built the Via Aemilia at the same time.

It is also necessary to point out that C. Flaminius could only have started the building work, because the time available during this first consulship was extremely limited.

A reconstruction of his movements in 187 B.C. suggests the following chronology:

- February: elected consul;
- March-April: the army gathers near Bologna and prepares for war;
- May-June: battles against the Friniates;
- July-August: battles against the Apuani in Etruria;
- September: return to Bologna and a period of rest;
- October: road building starts;
- December: consulship expires.

The length of the route (approximately 180 km) and the contingent logistical difficulties in constructing a road on the Apennines (including at high quotas) implies that the teams of legionaries and prisoners must have

worked for at least a few years²⁰. This plurennial commitment is indirectly confirmed by the events of the following year. Livy specifies²¹ that the two consuls nominated for the year 186 B.C., and that is, Quintus Marcius and Spurius Postumius: “took command of the army led the previous year by the consuls C. Flaminius and Marcus Aemilius Lepidus; a *senatus consultum* instructed them to recruit two new legions... (ceteris omissis)... on completion of the investigations²² Quintus Marcius set out first, heading for the Apuani Ligurians”.

Recruitment of two new legions was necessary to restore forces after the human losses suffered during the wars waged by C. Flaminius and M. Aemilius Lepidus, but was probably also necessary to replace the soldiers employed in the construction of the two roads that had just been started. In fact, the legionaries not only had to superintend the work, but also protect the construction sites to prevent the prisoners forced to build the roads from escaping. They also had to defend the area from attacks by the Ligurians who had yet to be completely defeated.

7 - Marcus Aemilius Lepidus constructs the road from Piacenza to Rimini (the Via Aemilia).

Livy concludes his account of the 187 B.C. Roman-Ligurian wars with these words ²³: “... after establishing peace in Liguria, he (M. Aemilius Lepidus) led his army to Gaul and built a road from Piacenza to Rimini to join the Via Flaminia”. In the last pitched battle against the Ligurians, he made a vow of a temple to Queen Juno. Such was the military campaign carried out in that year in Liguria...”

¹⁹ Ludovico Savioli: “Annali Bolognesi dall’anno di Roma 363 to 1274”, page 18: “It must be said that Strabo was wrong because he does not concur with Livy. And I know that Strabo’s defenders will question this but the road from Bologna to Arezzo mentioned by Livy, was needed by the Romans to allow them fast communication between Etruria and Bologna due to the defeated Apuani”.

²⁰ The work was demanding although (as we shall see later) Flaminius probably just improved and widened a road that had existed since the dawn of history.

²¹ T. Livius: work cited, book XXXIX, paragraph 20.

²² The investigations regarded the Bacchanal.

²³ T. Livius: work cited, book XXXIX, paragraph 2.

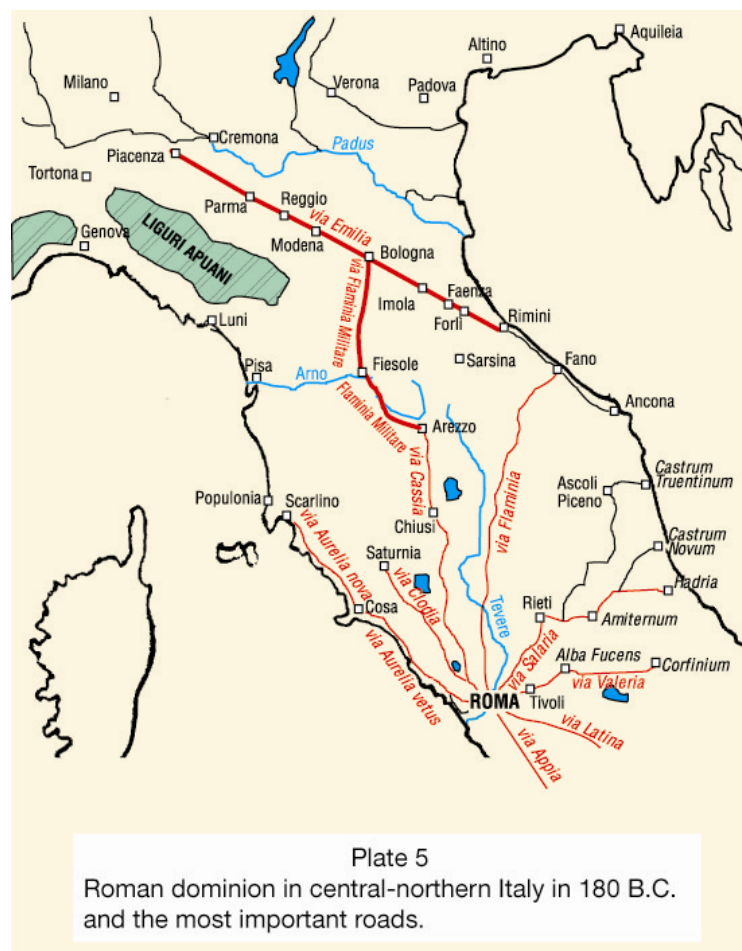
Therefore, Aemilius Lepidus completed road construction in the areas where peace had been achieved, finally linking the ancient colony of Piacenza (founded in 218 B.C.) to Rimini; from here it was possible to reach Rome along the existing Via Flaminia. Thus, Roman dominion was finally consolidated throughout Cisalpine Gaul.

If it is true that M. Aemilius Lepidus selected the route and began to construct this great artery (the Via Aemilia, named after him), it is also true that it took many years to complete (work apparently continued until 175 B.C.) Twelve years is a reasonable amount of time considering the work needed to consolidate the areas of marshland, as well as the construction of bridges to span the numerous rivers that flow down from the Apennines.

While building the road, the Romans founded other colonies along the route:

- Parma and Modena (*Mutina*) in 183 B.C., the first two colonies of Roman citizens;
- Reggio Emilia, during M. Aemilius Lepidus' second consulship, and after whom it was named (*Regium Lepidum*).

Then during the course of the 2nd and 1st centuries B.C., many other urban centres were established along this great thoroughfare, which all prospered thanks to lucrative trade links: Fidenza (*Fidentia*), Castelfranco Emilia (*Forum Gallorum*), Claterna, Imola (*Forum Cornelii*), Faenza (*Faventia*) (already Roman in 225 B.C.), Forlì (*Forum Livii*) and Cesena (*Caesena*).



PART TWO

THE CONDITIONS POSED BY RIVERS AND MOUNTAIN RIDGES ON THE APENNINE ROAD SYSTEM

INTRODUCTION TO PART TWO

Thanks to our articulated and vast modern road system, we often forget the existence of mountain ranges and waterways, all conquered by impressive works of engineering. Very rarely do we feel the force of nature, only when communications are interrupted by widespread floods, sudden landslides or heavy snowfalls¹.

However, in ancient times, travellers encountered numerous difficulties, especially along mountain itineraries, where landslides or rivers could constitute impassable obstacles.

This is why routes along mountain ridges were preferred; there were fewer risks of landslides and rock falls, no rivers to cross; orienteering was easier and the distance to cover was shorter².

Obviously, this was the case when the ridge headed in the desired direction. Otherwise, the traveller had to tackle alternative routes, exploiting the opportunities offered by nature, never going against nature and always trying to find the shortest and easiest route. Often long diversions were necessary, sometimes to overcome natural obstacles, at other times

to avoid hostile communities or excessively expensive tolls.

For centuries these problems afflicted travellers whether on foot or horseback (and more often than not by mule). After the fall of the Roman Empire, and up to 1762³, it was impossible to travel over the Apennines from Bologna to Florence by carriage, cart or gig⁴.

Before starting our explorations, we studied the hydro-geological configuration of the Bolognese versant of the Apennines. We particularly dwelled upon the transport problems of past centuries to get an idea of how different travel was in the past compared to the present-day.

We also identified a number of medieval routes, which were “secondary” compared to other long-distance routes, without forgetting the four Apennine passes used in different epochs to link Bologna to Florence.

We believe it is important to take a preliminary look at these factors, because they give a clear idea of the precarious conditions of the transapennine road system in the Middle Ages and demonstrate that the massive road structure we unearthed could not have belonged to this epoch.

¹ Just consider that at times, all Bologna-Florence road traffic can become completely jammed due to snowfalls and icy stretches.

² When a route unwinds around the side of a mountain, it is always longer than the route over the mountaintop (so long as the mountain is not excessively high), even if the routes are parallel, because it must follow the curves of the slopes.

³ In 1762, the first carriage road from Bologna to Florence was opened through the Raticosa and Futa passes.

⁴ Arturo Palmieri has the following to say about this (“La montagna bolognese del Medio Evo” Published by Arnaldo Forni, 1981, pages. 326-327): “However, goods and people could only be transported by pack animal (ceteris omissis). Travel by carriage was not even in use when Girolamo Ranuzzi (1870) dictated the work standards of the spa in Porretta. These standards establish prices for the carriage of people on horseback and sedan chairs.”

CHAPTER IV

FOR CENTURIES THE HYDRO-GEOGRAPHICAL FAN ON THE BOLOGNESE APENNINES HINDERED THE ROAD SYSTEM

1 - Watercourses.

2 - The centuries-old difficulty in crossing rivers and torrents and the disasters caused by water.

1 - Watercourses.

If you look at a physical map of the Tuscan-Emilian Apennines, you will notice that a series of rivers and torrents fan out from the mountain range (including the Futa massif, the Sasso di Castro, mount Freddi, mount Oggioli and mount Canda) which cover various distances to reach the Po Valley¹.

The Futa Pass is the source of the two main watercourses: the Gambellato to the west and the Santerno to the east.

The Gambellato torrent joins the Setta at Castiglione dei Pepoli; at Sasso Marconi, it joins the Reno and a few kilometres after Casalecchio, it intersects the Via Aemilia. Although the course of this first torrent is brief, it collects the water of a vast deep valley, crowned by a series of peaks that, starting with mount Bastione to the east, continues southwards with mount Luario, Poggiaccio and Poggio Castelluccio as far as Futa; here the peaks head left with Poggio della Mandria. These peaks all form a watershed between Bologna and Florence. Instead, the source of the Santerno is on the eastern side of the Futa pass. This river also collects the water of a large basin (enclosed by a circle of mountains) that runs from north to south from

Giogo di Scarperia (882 m above sea level) to Tre Poggioli (966 m above sea level) with a diameter as the crow flies of approximately 15 km; the east-west axis goes from mount Banditacce (1202 m above sea level) to Monte del Fabbro (986 m above sea level); the diameter along this line is also some 15 km. Therefore, the upper basin of the Santerno, near Firenzuola measures almost 180 square kilometres with a consistent water flow rate even during the summer, due to the numerous streams that flow into it. Unlike the other rivers and torrents that flow down from the Apennine watershed towards the north-northeast, the Santerno swiftly descends from Castro S. Martino and Cornacchiaia until it meets the torrent Rovigo in the east until it too, turns towards the northeast. After the upland plain of the characteristic town of Firenzuola², its meanders sink and the water has eroded the rock to reveal spectacular layers of sandstone alternated by layers of marl, the water level then rises where the two main torrents meet: the Rovigo on the right and the Diaterna on the left further downstream. After about thirty kilometres, the Santerno flows through Castel del Rio. After this very beautiful town³, the valley gradually widens and the steep, almost vertical slopes are replaced by less harsh terrain; from the pointed mountain peaks, the Santerno descends to the hills as far as the

¹ Some scholars inappropriately describe the descent of these watercourses as “comb-like”.

² At this point, the valley is so wide and flat that according to local folk tales, in ancient times, before the torrent was brought under control, it often flooded forming large marshes, which were difficult to cross.

³ Once the dominion of the Alidosi family.



The orography of the Bolognese Apennines highlights a ridge from Bologna to the Futa pass, which includes the source of the Santerno. It flows through a large basin facing northeast which interrupts the other ridges, thus preventing them from reaching the Tuscan-Emilian watershed.

plain, intersecting the Via Aemilia to the east of Imola after a course of almost 60 km. Therefore, the courses of the Gambellato (then Setta and Reno) and the Santerno, start from a single peak, forming the two sides of a large triangle whose base is about 40 km long and which can ideally be considered as along the Imola-Bologna axis (Borgo Panigale).

A series of torrents descend within this area, and eventually intersect the Via Aemilia, the boundary between the flood plain and the retreating mountain slopes.

The Savena is the largest of these torrents; its source is at Poggio di Savena (1116 m above sea level) near the Futa pass. It competes with the Santerno for water from the peak of Sasso di Castro and with the Gambellato for water from the peak of Banditacce. Its waters descend directly northwards as far as the suburbs of Bologna and intersect the Via Aemilia at S. Lazzaro di Savena after about 46 km. The Savena flows through the bottom of a narrow valley and it is flanked by very steep mountainsides. There is another bottleneck downstream of Monterumici, the so-called “Gole di Scascoli”; its course near mount Adone, between mounts Castellazzo and Livergnano is equally narrow. Since ancient times, these inaccessible cliffs have prevented a route through the valley bottom, forcing traffic to run along the nearby ridges⁴. The route that unwinds to the left has been used during every age, as we will be pointing out in the following chapters.

The source of the river Zena is near the Futa trunk road 65, southeast of Loiano, at 800 m above sea level. The Zena flows along a tortuous course through a narrow valley flanked by mounts Livergnano and Monte delle Formiche. The roads through this valley are narrow with numerous hairpin bends and are often damaged by rock falls. The Zena does not reach the Via Aemilia because it flows into the Idice at Pizzocalvo.

The source of the river Idice is at the Raticosa pass, where the Futa trunk road meets the provincial road from Piancaldoli. The ridge on its right starts

on the slopes of mount Canda and is subject to landslides. It continues as far as the Sillaro watershed and then descends from Tre Poggioli, Sasso della Mantasca and Spedaletto (all on the border with Tuscany). As far as Casoni di Romagna, the hill has been depleted by landslides and erosion, revealing ophiolites such as Sasso di S. Zenobi and Sasso della Mantasca. On the left versant, the sandstones of the “Macigno di Monghidoro”⁵



Sasso di S. Zenobi (900 m above sea level): an ophiolite of volcanic origin, 3 km northeast of the Raticosa pass.



Sasso della Mantasca (826 m above sea level): also of volcanic origin, Sasso della Mantasca stands at the start of the watershed between the river Idice and Sillaro.

⁴ The present-day road on the bottom of the Savena valley was opened to traffic during the last decade of this century, following fifty years of contrast and discussion, of work started and then suspended, of ruinous floods, which - inevitably - tore away long stretches of the road bed, creating considerable havoc for local traffic. Only decisive intervention by the Bologna Provincial Government ensured that a convenient road was built at the bottom of the valley.

⁵ These layers of sandstone are called “macigni” and are part of the sandstone-marl flysch known in geology as *Monghidoro formation*, dating back to the Palaeocene-Cretaceous, some seventy million years ago.

are more resistant to erosion, and the downward slope is harsher and steeper. At Bisano, the valley narrows and, on the left, mount Bibele, with the famous Celtic village on its peak, stands guard over the valley of the Idice and the Zena. The valley remains narrow until after Mercatale where it opens out onto the plain. At Pizzocalvo it receives the waters of the Zena and, after about 40 km, intersects the Via Aemilia.

The source of the torrent Quaderna starts from the peak of Castelvechio, between mount Calderolo and mount Armato. Its route through the hills is brief and most of its basin features erosion furrows and is subject to landslides; it crosses the Via Aemilia between Maggio and Osteria Grande, after a distance of 12 km.

The source of the Sillaro starts on the peak of Tre Poggioli, and flows north-northeast towards the plain.

The basin of the Sillaro consists in scaly clay featuring jagged and serrated erosion furrows, corroded by the weather and landslides. The upper part of this valley is in the province of Florence and includes the picturesque village of Piancaldoli. After about 35 km, the Sillaro intersects the Via Aemilia at Castel S. Pietro.



The gravel road that unwinds along the ridge of the watershed between the Idice and the Sillaro, along the stretch south of Casoni di Romagna. The road is forced to follow the tortuous bends around the frequent subsidence of the erosion furrows in an utterly treeless landscape.

The Sallustra flows between the Sillaro and the Santerno; its source is in Gesso, on mount La Pieve. The nature of the terrain in its basin is not unlike that of the nearby Sillaro; it flows for about 20 km from its source to the Via Aemilia.

This brief description of the watercourses and ridges that descend along the Emilia versant of the great Apennine backbone, underlines that the most important rivers and ridges start from just two passes, the Futa and the Raticosa. The Gambellato, Savena and Santerno start at the Futa pass whereas the Idice and Sillaro start at the Raticosa pass.

Two corresponding parallel ridges also start from the same two passes, but each ridge features a fundamental difference: while there is a gradual descent from the Futa pass to the Mugello valley, the same cannot be said for the Raticosa pass. In fact, the vast and deep depression of Firenzuola opens out south of the Raticosa. Here, anyone wanting to cross the Apennine range is forced to descend and then re-ascend to the Giogo pass.

2 - The centuries-old difficulty in crossing rivers and torrents and the disasters caused by water.

All these watercourses, fed by streams, ditches and torrents pose a threat when there are heavy rainfalls.

During these weather conditions, drivers crossing the bridges on the Via Aemilia over the rivers and torrents that flow down from the Apennines can see how the menacing swollen waters invade the river banks, dragging huge tree trunks and all sorts of things downstream (even animals). It is also common to read reports about people on the riverbed surprised by flash floods. Our ancestors tell of men overcome and drowned in their attempt to reach the other side of rivers, adventurous fords, leaps that would nowadays win an Olympic medal and miraculous rescues immortalised by epigraphs such as the one commemorating the inauguration of the bridge at Alberaccio, below Cornacchiaia:

“Virgin Mary, you have saved so many from the dangers of the waters in the ford across this river for so many years

Grateful we place this sacred reminder on the bridge constructed in the year MCMXIII so that our grandchildren will know of your Grace”.

The bridge over the Diaterna, a left affluent of the Santerno, was built in the eighteenth century by Grand Duke Leopold, thanks to the interest shown by Cardinal Martini who was shocked by the number of accidents and deaths by drowning caused

in the attempt to ford the swollen torrent⁶.

Some place names in the Apennines still have the name of "guado" [ford] or originate from the word (for example, Vado). A ford is a stretch of river where the riverbed widens and the water almost flows at ground level; therefore, the river is less deep and flows less fast. It was where the tracks or paths to farms and villages crossed from one side of the river to the other. A rope was stretched from one side to the other of important fords. There were usually buildings built very close to the river as well as other constructions, such as mills. In the dry season, the inhabitants removed any large rocks from the ford and filled whirlpools so that pack animals could also get across. The people who lived near fords often built long ladders. They tied a rope to one end, raised the ladder and then lowered it, ensuring it rested on a rock or outcrop; people could then crawl across the ladder. When the ladder was no longer needed, they recovered it to ensure it was not dragged away by the current.

However, a ford is not the same as a bridge, and however convenient the route of a road may be, it cannot be considered a proper road if there are no bridges over the rivers. Safer than the ford and the ladder expedient, was the footbridge (still found along mountain footpaths). A footbridge consists in two parallel beams laid across a river from one bank to another, resting on natural rock or two abutments made using large, dry laid rocks. A series of planks is nailed to the beams and a rope acts as a handrail. However, the problem with this type of bridge is that it cannot be used by animals.

Bridges across rivers were always entirely or almost entirely made of wood and were located in the most important crossing points for local traffic. Guidotti⁷ made a list of bridges, but because these were wooden bridges, they quickly fell into ruin, almost

always destroyed by floods. If a bridge was solid, perhaps made of masonry, it lasted longer. However, these bridges were subject to every kind of toll and levy such as the bridge over the Savena, which, at the end of 1700, cost one *Paolo*⁸ for a seat with two wheels⁹.

Exceptional downpours have always caused disasters, especially in the past. From the newspapers of the time, one learns of the flood on 6 November 1864¹⁰: "*The streams became rivers, flooding everywhere, dragging footbridges, mills, charcoal kilns and farms downstream*". When rivers overflow from their beds, they erode their banks; this upsets the balance between the base and the side of the mountain and causes landslides. The gradient is steeper along the upper part of watercourses, therefore a great quantity of rocks are transported downstream; as they roll along the bed of the river, they erode and consequently lower the riverbed.

The abundant and continuous rain that fell in 1951 over the entire Tuscan-Emilian Apennines, and the subsequent floods, created numerous landslides, blocking roads and causing houses to collapse. One of the most dramatic events took place at Castel dell'Alpi; during the flood, the bed of the Savena was lowered by about ten metres where the river flows through the town. Just below the peak of Monte dei Cucchi, over thirty million cubic metres of material started to move. The material blocked the course of the Savena and the riverbed was raised by 25 metres, creating the present-day lake. There were no casualties, but a number of houses, scattered on the slopes of the mountain, a small hamlet, "La Carsa", and Castel dell'Alpi were almost entirely destroyed and had to be abandoned; even the link road to the provincial capital was blocked for a long time.

⁶ From the book "Firenzuola e il suo territorio" by Pier Carlo Tagliaferri, published by Lalli, 1998.

⁷ Paolo Guidotti: "Quaderno culturale bolognese" Issue 2; "La casa della montagna bolognese". Published by Atesa.

⁸ "Paolo": a coin minted by Pope Paul II (Alessandro Farnese 1534-1549)

⁹ Giovanni Casali: "Percorsi e valichi dell'Appennino fra storia e leggenda". Arti grafiche Giorgi e Gambi, 1985, page 66.

¹⁰ Paolo Guidotti: "Strade transappenniniche bolognesi". Published by Clueb, Bologna 1991, page 289.

CHAPTER V

THE CONDITIONS POSED BY RIVERS AND MOUNTAIN RIDGES ON THE MINOR AND SECONDARY ROAD SYSTEM

1 - Local minor roads.

2 - Secondary middle-distance roads.

2.1 - ThePasseggere pass.

2.1.1 – From the Passeggere pass to Monghidoro.

2.1.2 – From the Passeggere pass to the Raticosa pass.

2.1.1 – From the Passeggere pass to Madonna dei Fornelli.

2.2 - S. Ansano di Brento.

2.3 - TheMontorio road.

Watercourses have slowly and relentlessly eroded the earth's crust, creating valleys named after the river that flows through them; subsequently the ridges between opposing slopes are also named after the rivers, for example, between the rivers Setta and Savena, between the rivers Savena and Idice, and so on. As regards the Bolognese Apennines we interested in, these ridges start from the mountainous Futa massif and fan out lengthways like peninsulas, sloping down from the mountains to the hills, until they reach the plain. The road system created within these strips of land has mostly been conditioned by the rivers and torrents that divide them. Other, (and no less important) causes forced the already precarious ancient long-distance road system to avoid areas tormented by erosion furrows and precipices, such as the Pliocene sandstone strip that cuts across the entire area that, from the valley of the Reno, through Badolo, Monte Adone, Livergnano, Monte delle Formiche and Monterenzio, crosses the Sillaro as far as the hills on the Sallustra. In these areas, the ancient road system becomes sparse; the few existing routes are narrow and reflect the difficulties caused by the nature of the area.

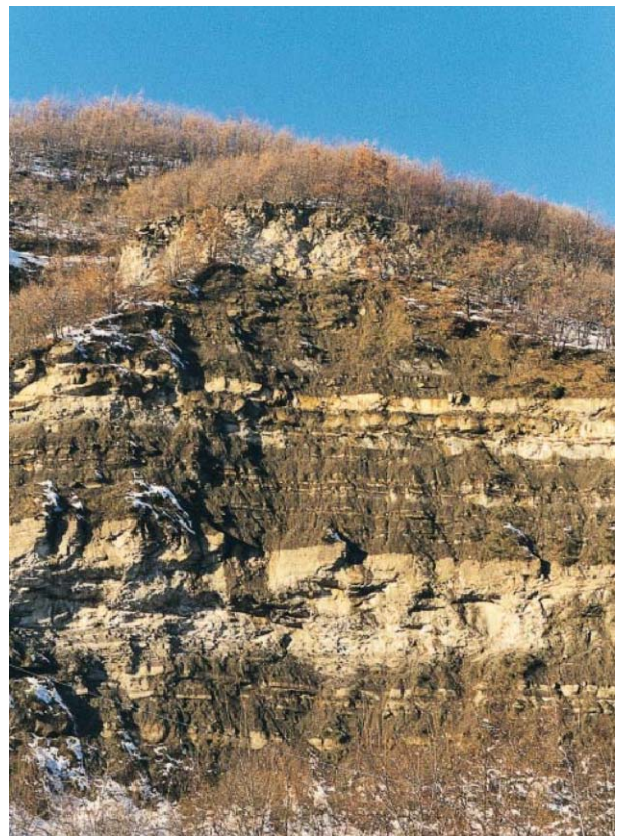
1 - Local minor roads.

In spite of these natural obstacles, over thousands of years, man created a road network, which was generally accessible to people on foot and animals and, along some stretches, sledges¹. This local road network still exists; a number of what were once mule tracks have been widened, covered with tarmac and transformed into roads, weaving along from village to village, crossing rivers over solid bridges with stone arches. However, there is another half-concealed "minor" road network made up of in trails, paths and mule tracks across meadows and woods. When these fields were once ploughed by farmers, they piled any emerging stones at the edges of these tracks, now covered with brambles and thorn bushes and almost entirely or practically inaccessible. However, in the meadows, this road network was mainly edged by hawthorn hedges; these paths are no longer used either and a mass of branches and brambles span from one side to the other, completely blocking the way. In the woods, especially in the areas populated by beach and oak trees, these tracks have been furrowed in the ground by the continuous passage of men and animals and water erosion; it is still possible to walk along lengthy stretches of these tracks.

¹ These were rustic sled-like vehicles, made using two tree trunks about 15 cm in diameter. If they were drawn by a pair of oxen, they were lashed together at the end; if they were pulled by a single animal (usually an ass), they were parallel. These vehicles (if they can be described as such) slid along the road surface and could be used over muddy surfaces full of stones and holes, and could even overcome steep gradients.



Valle del Savena (Scascoli): *an example of a "fault" (geological rock strata interrupted by tectonic movement).*



Valle del Savena (Trasasso): *various layers of limestone strata.*



Two typical upper Apennine mule tracks: one shows obvious signs of rough paving laid in ancient times near a village, at the time inhabited by numerous families.



The other is below the level of the surrounding countryside; due to a lack of paving, the transit of people and animals over hundreds of years, and erosion by rainwater have caused progressive sinking.

2 - Secondary middle-distance roads.

Added to this complex web of roadways, there is another more important and very probably older road system, which we shall define as “secondary”. This system includes middle-distance roads that always travel in a precise direction. Where possible, these roads are straight and run along the watersheds with brief diversions, in an attempt to avoid the unstable flanks of the mountain heights.

We have often travelled along the upper Apennine routes described further on in this chapter in an attempt to identify and solve the many mysteries (ruins and paving stones) we came across during our explorations. We especially wanted to discover and identify the locations people once aimed to reach when they opened these mule tracks.

After the fall of the Roman Empire, the mule track prevailed over the road. This is how Arturo Palmieri describes the decline of the Roman road system²: *“In the Middle Ages, Roman roads lost their importance, and especially from the 5th to the 10th centuries, Roman roads fell into the saddest and most ruinous state of abandonment. Political disorder, administrative chaos, wars, ethnic and religious hostilities, a decline in industry and trade, removed every means and motive to preserve*

roads. Nothing but a trace remained of the Roman roads. Huge stretches of these beautiful paved roads soon disappeared, and with time, the rest disappeared too. Just simple tracks remained, created by the passage of horses and people on foot”.



Pian di Balestra (August 1998): the woods covering the Apennine mountain ridge from Pian di Balestra to the Futa pass are still as uncontaminated as they were in the Middle Ages; just as in past centuries, robust mules are still used to transport wood to the nearest carriage road.

² Arturo Palmieri: “La montagna Bolognese nel Medio Evo”, published by Zanichelli, Bologna, 1929, page 322.

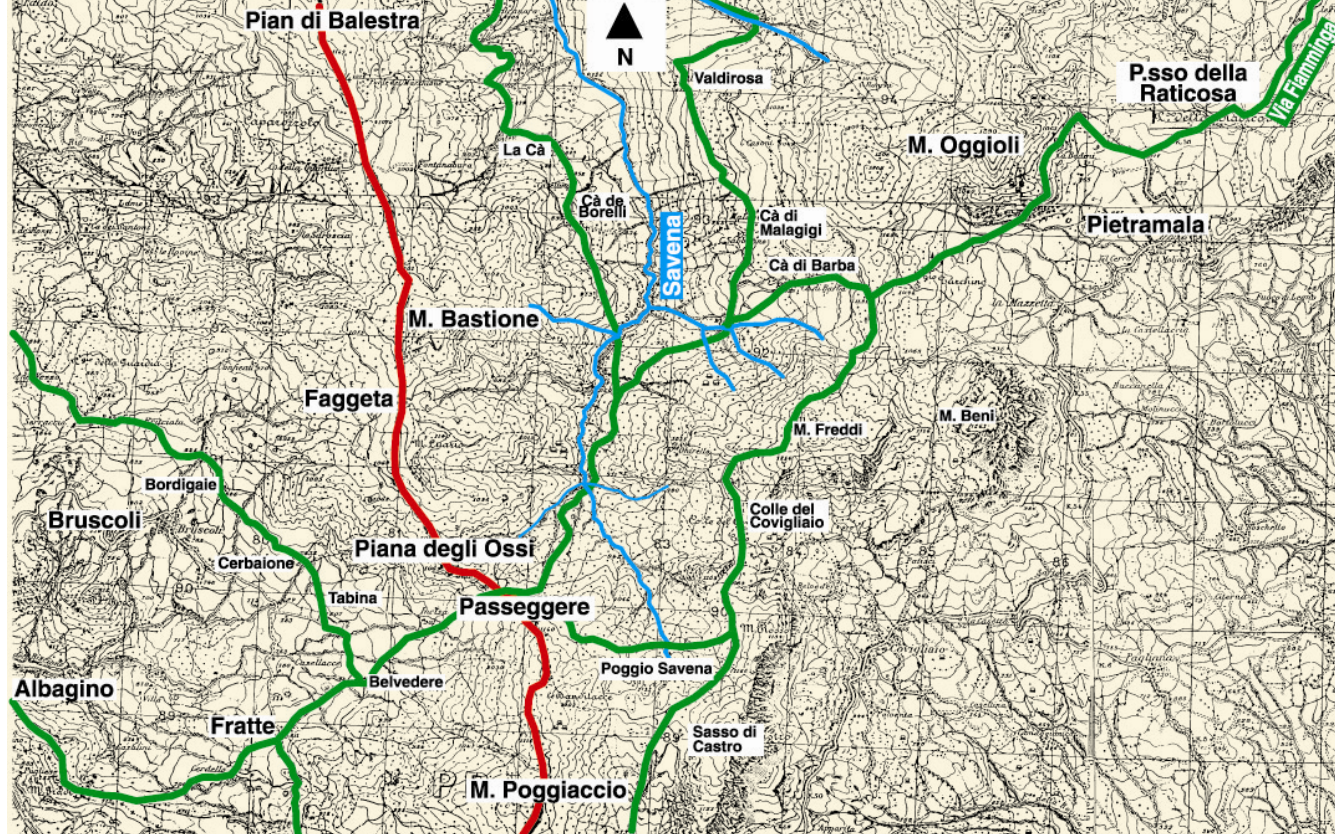


Plate 6

- The route of the Roman transapennine road.
- The routes of the medieval mule-tracks to Passeggere.

(Italian Military Geographic Institution (I.G.M.) authorisation No. 5034 dated 13.07.99)

2.1 - The Passeggere pass

The road through the Passeggere pass is an example of a “secondary” road, located at an altitude of 1010 m above sea level between two mountains: Luario (1140 m above sea level) to the north and Banditacce (1202 m above sea level) to the south. This pass has never been honoured in the chronicles of the past by the transit of famous personages, nor has it ever been deemed worth mentioning by scholars of historic road systems. Even after our recent and well-known discoveries, dedicated to the study of the Apennine road system, no one has ever mentioned this pass, nor the series of Ligurian “castellars” which guard the oldest itinerary towards Tuscany north and south of the Passeggere pass.

Passeggere comes from “passeggeria” [passing]. Its name leaves no doubts: a place of frequent passage, where passage is easy. We stated at the start of this paragraph that this is an example of a “secondary” road, but this place

could not have been very “secondary” considering it is traversed by a large road which unravels for tens of kilometres south as well as northwards³.

However, we do not wish to discuss this great road, but a number of mule tracks that crossed the Passeggere pass⁴.

These all travelled from southwest to northeast because their aim was to connect the people living in Castiglion dei Pepoli in the Gambellato basin with Romagna.

2.1.1 – From the Passeggere pass to Monghidoro

One of the most important of these roads (still practicable today), descends as far as the Savena. It crosses the upper part of the Savena, where the river flows as three streams, called the “tre Savenelle” [three little Savenas], which have a limited flow rate and are therefore easily forded even when the river is flooded.

³ The “Flaminia Militare”.

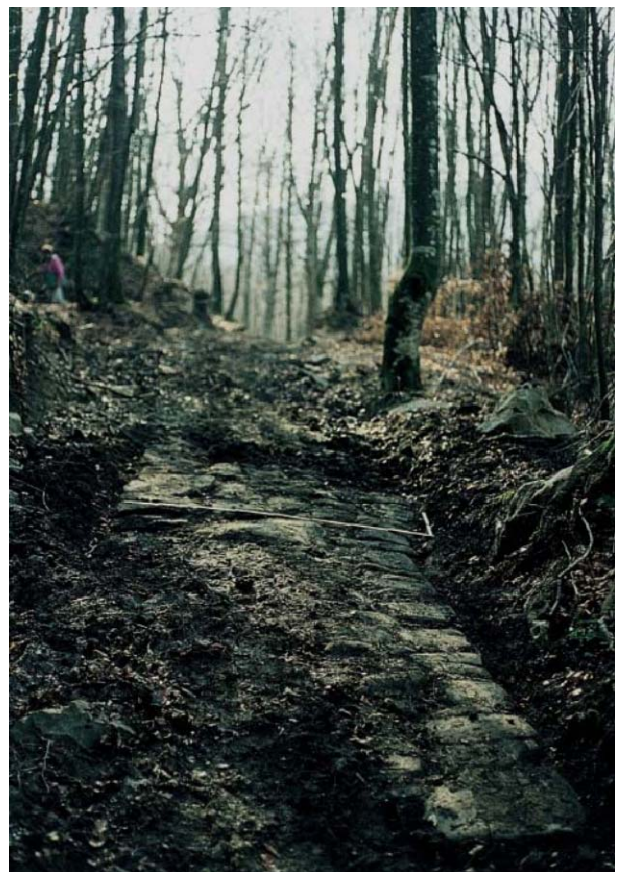
⁴ It is now used by merry groups of tourists travelling towards the Futa pass or the Boccadirio Sanctuary, or on their way to visit the large brick kiln installation in nearby Piana degli Ossi. However, we are certain that in past centuries, travellers using this crossroads proceeded at a fast pace and on their guard, fearful of meeting bandits, highwaymen and outlaws of every description. Travellers proceeding along the east-west axis have to cross a true mountain pass, whereas those travelling along the north-south axis pass through a hollow.



It then continues along the slopes of mount Freddi, on the right bank of the Savena, passing through one of the most verdant woods on the entire Tuscan-Emilian Apennines: majestic, centuries-old oaks frame an enchanted landscape where clearings, ponds and plants are alternated by streams with crystal clear water, flowing with a tuneful murmur down the side of the mountain.

Medieval ruins testify the past presence of a flourishing rural community. The area is presided over by the remains of a building, constructed in a dominant position and still called the "Casa del Papa" [Pope's House]. Although the road is narrow, at times it sinks between high banks of earth supported by walls and large dry stones, indication it was used for a long time before it was paved. In fact, about 700 m before and after the "Casa del Papa", the road is 1.60 m wide and carefully paved with sandstone slabs.

As regards the events that occurred in the Apennines during the dark centuries of the Middle Ages, we have found no mention of this area, nor about the paving on the road, or the destruction of its buildings, which must have taken place in violent circumstances considering that they still bear traces of fire. The devastation arouses the suspicion that this may have been the work of the terrible mercenary troops under the command of



Remains of the 1.60 m wide paved mule-track on the slopes of mount Freddi; this road came from Passeggere, crossed the source of the Savena and headed eastwards; it then branched off towards the Monghidoro ridge and the Raticosa pass and Piancaldoli (this latter stretch was called the Via Fiamminga).



The west versant of the ridge near Bruscoli (centre); the Passeggere pass lies at the lowest point of the ridge. The highest summit is Poggiaccio and Poggio Castelluccio on its right. In the foreground stands the isolated hill of Poggio Rocca where it is still possible to see the remains of the medieval castle of Bruscoli (12th-15th centuries).

Count Lando, who in 1358, caused widespread death and destruction, terrorising the inhabitants of the mountains and leaving a trail of burnt ashes and hangings wherever they went⁵. This theory is in part confirmed by the fragments of ceramics found among the ruins, which can be dated back to about this period.

Some 6 kilometres after passing through this area of destruction, the road reaches the ridge between the rivers Savena and Idice, just south of Monghidoro, in Cà del Costa, passing through Pian d'Ardole, Monte del Comune and Piamaggio. Looking westwards from this watershed, it is possible to enjoy fantastic sunsets over mount Cimone and Corno alle Scale and, nearer, see most of the ridge between the Setta and Savena; eastwards it is possible to see mount Canda and most of the ridge between the Idice and Sillaro, which slopes down from Spedaletto and Casoni di Romagna, as far as Villa di Cassano.

This ridge has always been a popular place for settlements, which we attribute to the stability of its almost entirely sandstone terrain from Monghidoro to Pianoro,

free of the landslide-prone and unstable clay frequently found on the ridges further east. This ridge has had problems in terms of roads due to the instability of the ground



The mule track heading eastwards near the Passeggere pass; the centuries-old passage of people on foot and animals has caused the unpaved roadbed to sink considerably.

⁵ Stefano Casini: "Dizionario biografico, geografico, storico"; Volume 1, page 90. Count Lando was Corrado Lando di Svevia or Corrado Virtinguer di Landau.



S. Ansano di Brento: the historic church before its total destruction by the bombardments during the war fought here in 1944-45. (The CARISBO Historic Art and Documentation Collection).

south of Monghidoro, especially along the stretch between Cà del Costa-Raticosa. Perhaps this was why the road that started at the Passeggere pass (which was stable and smooth) was preferred by those who wanted to travel from Monghidoro to the Futa pass.

2.1.2 – From the Passeggere pass to the Raticosa pass.

The most important route was certainly the mule-track from the Passeggere pass, across Colle del Covigliaio and mount Freddi, to the Raticosa pass. Here it was possible to find a vast area served by ridge roads that descended fan-like as far as the Via Aemilia along the stretch between the course of the river Idice and Imola⁶.

2.1.1 – From the Passeggere pass to Madonna dei Fornelli.

Another mule-track went from the Passeggere pass to Madonna dei Fornelli along the slopes left of the Savena, avoiding the snow-covered winter peaks of mounts Luario, Bastione and Monte dei Cucchi.

2.2 - S. Ansano di Brento.

Another road junction belonging to the “secondary” road system was near what was once the church of S. Ansano di Brento. Today only a few stones remain of this very ancient building; now covered in brambles, many of the hewn stones were removed after the Second World War and re-used in Scascoli and Livergnano.

Destroyed during the 1944-45 war, S. Ansano has fallen into oblivion. The painstaking description by the unforgettable Luigi Fantini during a visit to S. Ansano after its destruction in the summer of 1945 is significant⁷: *“a few stretches of the perimeter wall of the church were left standing: the bell tower and the ancient oratory of S. Ansano had disappeared, nothing else remained except the small Romanesque apse.*

All the cypress trees and every other neighbouring tree had disappeared from the small suggestive cemetery, whereas the area surrounding the holy enclosure had literally been transformed into a hollow of bomb craters, where

⁶ At Colle del Covigliaio this road later joined another important main road. In fact, those crossing the Futa pass to reach the north versant of the Apennines and wanting to avoid passing below the precipice east of Sasso di Castro and the stretch below the crag of mount Beni, could take (from the village of La Traversa) the road west of Sasso di Castro which, at Colle del Covigliaio, rejoined the road from the Passeggere pass.

⁷ Luigi Fantini: “Antichi edifici della montagna bolognese”; Volume 2, page 139.

the fragments of coffins and human bones emerged in a haphazard chaos. I left the place horrified, disgusted and bitter with the sad thought that such careless profanation was the work of that vertical biped science has classified with the reverberating title of Homo sapiens!”

Among the skilfully hewn stones in the remains of the small Romanesque apse Fantini refers to, there are a number of bricks featuring handgrips, which probably came from a nearby Roman ruin.

The age of this church is mentioned in “Le Chiese Parrocchiali della Diocesi di Bologna” [The Parish Churches in the Diocese of Bologna] by Luigi Aureli with these words: “*This church certainly existed at the dawn of Christianity as certified by many authentic documents. In the sixth century, when it is said that the ancient Brento was destroyed, the church and its environs were donated by Agapetus the First to Theodore the Sixteenth, Bishop of Bologna. The donation was confirmed in about 590 by Pelagius I and Charlemagne in 771(...)”*⁸.

It must have been an important centre in past centuries.

S. Ansano was linked to Pianoro Vecchio by a practical road with long stretches of paving on the left of the Savena. It then joined the stretch of Roman road built during the imperial age (which had the names of *miliari*, such as *None*, *Octò* and *Sesto*) and which reached Bologna⁹.

Four important mule tracks reached the north of this parish; the first, to the west, arrived in Brento along a steep rise, the second headed south along the course of the Savena and then climbed the slopes of Monterumici until it reached the ridge road. The other two forded¹⁰ the Savena a few hundred metres apart; the track further downstream reached Livergnano, the other climbed to Guarda, mount Castellare, Anconella and



S. Ansano di Brento (January 1999): *the remains of the apse of the church of S. Ansano. Franco Santi photographs the niche where a Roman brick featuring handgrips is walled.*



S. Ansano di Brento (January 1999): *on the inside wall of the ruined apse of the church of S. Ansano it is possible to observe a Roman brick featuring hand grips which has been incorporated in the niche, evidently found nearby.*

Loiano. Although the latter have not been surfaced, they can be used by traffic.

⁸ Luigi Aureli: “Le Chiese Parrocchiali della Diocesi di Bologna, ritratte e descritte”; S. Tommaso d’Aquino Printing Works, 1849 Volume III, Parish No. 69.

⁹ We describe the route of this Roman road in more detail in chapter XXI.

¹⁰ This was the most important ford across the Savena along its course through the hills. It can still be forded by cars and tractors. At this point, the waters of the Savena slow down to overcome the Pliocene barrier downstream, depositing pebbles and gravel and splitting into numerous streams, thus allowing passage from one side to another almost all year round.



S. Ansano di Brento (January 1999): *the very ancient track on the left bank of the Savena can still be seen today about a kilometre north of the church ruins.*

The mill of S. Ansano stands on the right bank of the Savena, at the junction between these two roads. All that remains is a dilapidated building covered in brambles and brushwood; the nature of its industry demanded that it stood on a crossroads.

2.3 - The Montorio road.

The road to Montorio is perhaps the most enigmatic and mysterious of all. It leaves the road on the ridge between the Setta and Savena, descends from Monte dei Cucchi, goes through the small village of Borgo, crosses the Pian del Voglio-Rioveggio provincial road at Montefredente and continues along the entire ridge between the Setta and Sambro; after the village of Monteacuto Vallese, it reaches Montorio. Below Montorio, just before the river Setta, it intersects trunk road 325 to Castiglione dei Pepoli and descends to the river. After crossing the river, it goes through La Quercia, ascends to S. Martino and Caprara and descends towards Sperticano, in front of the Misa Etruscan necropolis in Marzabotto. We have no theory to put forward about this road. However, we would like to mention that various Etruscan statuettes from the 5th century B.C. have been found along this route, which covers a distance of less than 30 kilometres on one of the most stable terrains found in the Apennines.

CHAPTER VI

THE FOUR TRANSAPENNINE PASSES USED IN DIFFERENT ERAS

- 1 - Montepiano.
- 2 - Giogo.
- 3 - Osteria Bruciata.
- 4 - Futa.

There are four Apennine passes near the Bologna-Florence route from west to east: Montepiano, Futa, Osteria Bruciata and Giogo di Scarperia. Their altitude ranges from the 714 m above sea level of Montepiano to the 917 m above sea level of Osteria Bruciata.

These passes have variably shaped the history of the road system whenever man has had to cross the Apennine backbone, whether for trade, transhumance, war or invasion.

1 - Montepiano

This is the most western of the four passes and links Castiglione dei Pepoli to the Tuscan versant towards Prato. Its northern slopes open out on the Setta valley, whose riverbed winds around the almost perpendicular mountainsides. Passage through this area is very difficult; there is not a suitable route through the valley bottom nor along the ridge, and communication between Prato and Castiglione dei Pepoli has always been extremely gruelling right up to the last decades of the past century. The mule track that crossed the pass was one of the most impracticable and demanding. Just think that until the mid nineteenth century, further downstream the only route from Castiglione dei Pepoli was along the gravelly shore of the Setta, accessible only when the water level was low enough¹. However, a route along

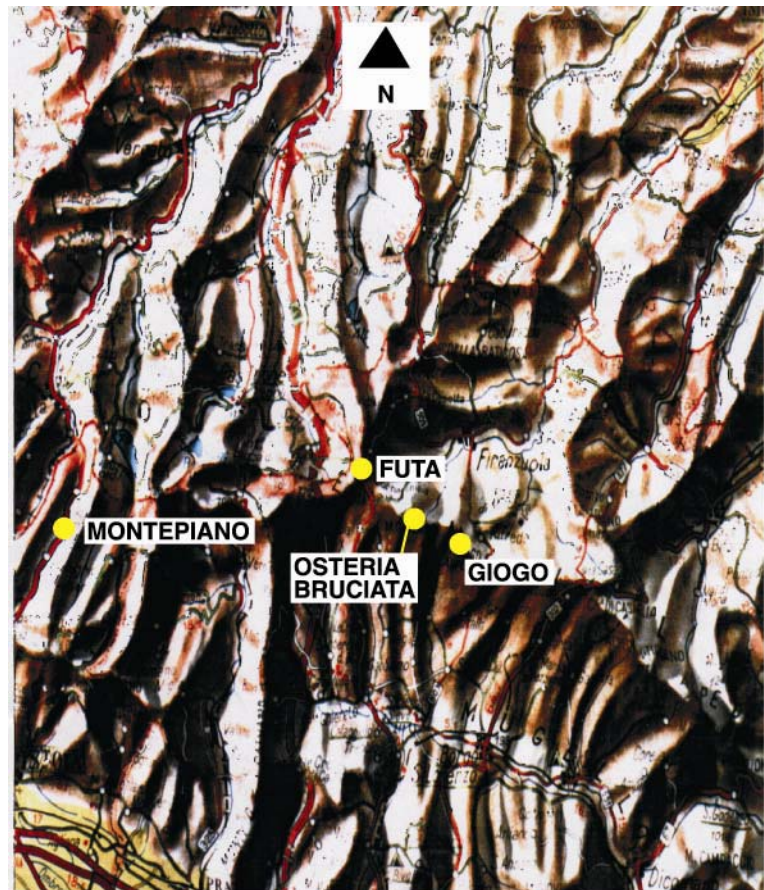


Plate 7

The four Apennine passes used in different eras. From the west: Montepiano, Futa, Osteria Bruciata and Giogo di Scarperia.

¹ Paolo Guidotti: "Strade transappenniniche bolognesi dal millecento al primo novecento, Porrettana, Futa, Setta". Published by Clueb, Bologna, 1991. A very well documented volume about this route.

a riverbed cannot be defined as a road. This precarious situation is mentioned by Paolo Guidotti *"The engineer, Mr. Mattioli, entrusted by the consortium of the Setta valley Municipalities to study a route from Bologna to Castiglione, states that there is no alternative except along the bed of the Setta from Sasso to Castiglione and from there to Montepiano and S. Quirico as far as the confluence of the rivers Setta and Brasimone and then mule-tracks through narrow gorges or atop very high sierras"*.

To reach Castiglione dei Pepoli from Bologna, it was advisable to follow a route along the present-day trunk road 65 over the Futa pass (Pianoro, Loiano, Monghidoro, etc.) as mentioned by G. Fontana who tells of a trip to Castiglione accomplished a few years after 1870³: *"The Tuscan Futa road was the route adopted by whoever wanted to travel without breaking their back astride a horse along the rough tracks or the gravelly shore of the river... There were various tracks from Futa to Castiglione: through S. Giacomo, Baragazza, or by descending before the Futa to Piano and then to Baragazza, then ascending to Castiglione. This was the route taken in 1711 by Captain G. Antonio Cardì, envoy of the Commissioner of Imperial Feuds in Italy, to inspect the feud of Castiglione; it was also the route taken by Cardinal Lambertini in 1731"*.

If the conditions of these transapennine roads were so precarious in the nineteenth century, one can just imagine what they were like during earlier centuries.

It was very difficult to open a road on the Emilian versant due to the deep ravines, and work continued for 30 years to build just six kilometres of road from Castiglione to the border with Tuscany⁴. Things were not much easier on the other versant; the road from Prato kept to the valley bottom as far as S. Quirico, (278 m above sea level) and then thanks to a long route with a series of hairpin bends (which sometimes headed backwards) it reached Montepiano

717 m above sea level) passing through the village of Sasseta, which clung to an impervious ridge.

2 - Giogo

The Giogo pass is the furthest east and only became practicable after the Florentines started to build Firenzuola (8 April 1332). Before this, the path must have been barely accessible to foot traffic if the Comune of Florence decided to open the road from Scarperia to Firenzuola⁵.

We shall only make two observations, which are more of a practical than historic nature:

- the Florentines opened the road through the Giogo pass solely for military reasons; nevertheless, being near the direct axis between Bologna and Florence, and because the stretch through the pass was maintained, for centuries it was the only accessible route (on foot or at the most, astride a mule);

- because the Florentines built Firenzuola on the left bank of the Santerno to better dominate enemy territory, they must have also built a bridge. However, the river must have destroyed the bridge more than once and dragged it downstream if in 1751 the Scarperia to Firenzuola road was defined in a travel guide as *"blind and broken due to flooding by the Santerno which had to be forded"*⁶.

It is easy to deduce that this pass (along with the Montepiano pass) has nothing to do with the concept of a Roman transapennine route. The Romans would never have descended from the 968 m above sea level of the Raticosa pass to the 400 m above sea level of the marshy plain of Firenzuola, crossing a torrential river such as the Santerno, only to ascend once more to the 882 m above sea level of the Giogo pass, unless this shortened the route.

² Paolo Guidotti: work cited, page 255.

³ Paolo Guidotti: work cited, page 255. Extracts that Guidotti drew from A. Bignardi: "Una gita di cento anni fa (1875) a Castiglione" from the memories of G. Fontana, Parma 1975. Pompeo Mattioli, some considerations about the new Val di Setta carriageway, Parma 1865.

⁴ Paolo Guidotti: work cited, page 305.

⁵ We shall not narrate the vicissitudes of the various personages who have travelled through this pass during the past centuries, until the opening of the Futa postal service in 1762; these events have already been described in extraordinary diary accounts filled with an abundance of detail by Repetti, Sterpos and Rombai.

⁶ Leonardo Rombai and Marco Sorelli: "Percorsi e valichi dell'Appennino fra storia e leggenda, Futa, Osteria Bruciata, Giogo"; page 42.

3 - Osteria Bruciata

Daniele Sterpos is certainly the most convinced advocate of a medieval passage through the Osteria Bruciata pass. With regard to this he writes:⁷ *“Existence is acknowledged of another road which crossed the mountains between Bologna and Florence during the upper Middle Ages and which may have linked the two cities: the route from the upper valley of the Santerno, now the site of Firenzuola, to the shores of the Sieve and the Arno. It can fundamentally be identified thanks to a number of parishes, which very probably existed long before the year one thousand. There are still two country churches in Cornacchiaia on the Santerno and in Sant’Agata in Mugello, which according to tradition were built by countess Matilde in the 11th century, but which present a primitive plan which goes back to a much earlier date. Cornacchiaia and Sant’Agata respectively lie north and south of a high mountain range: when linked as the crow flies, they form a line along the Apennine ridge (perfectly aligned with the points of the compass mentioned above) which passes close to the depression forming the Osteria Bruciata pass. It is very likely that the road took advantage of the pass and the two country churches mark the exact point in which the road comes to a relatively flat area on either versant”*.

This is Sterpos’ description so far of the route across the Osteria Bruciata pass. He then goes on to describe the itinerary towards Bologna with these words⁸: *“And so, from Cornacchiaia to Florence, from the Santerno to the Arno, it is possible to follow a route which has many of the features of early medieval roads, starting with the steep gradients. Can the same be said for the stretch of road from Cornacchiaia to Bologna? Is it possible to prove that it is part of the “oldest road to Bologna”, or at least the oldest in terms of the Middle Ages? According to Repetti and Niccolai, to continue northwards from Cornacchiaia along the upper Santerno valley, the road had to go through Le Valli and Pietramala: a logical route, the same as the Bologna road used from the fourth to the seventh centuries. Just above Pietramala, the exit of the internal hollow*

of Firenzuola is marked by the Radicosa corridor; from there the high ridge between the Savena and Idice stretches towards Bologna where Monghidoro and Loiano now stand”.

It is true that the itinerary described by the illustrious scholar was the shortest from Cornacchiaia to Bologna, but the same cannot be said for those who reached Pietramala from the Bolognese versant and who were heading for the Mugello valley. The altitude of the locations along the itinerary across the Osteria Bruciata pass measure: Pietramala 851 m above sea level, Cornacchiaia 473 m above sea level, Osteria Bruciata 917 m above sea level. The route through the Futa pass is almost flat: Pietramala 851 m above sea level, Covigliaio 855 m above sea level, Traversa 851 m above sea level, Futa 903 m above sea level. Along the first route, it was necessary to pass the difficult crossing on the river Santerno (although on the upper part of the river) as well as the steep and tortuous stretch from Cornacchiaia to the Osteria Bruciata pass.

We believe this route from Pietramala to Osteria Bruciata was kept open during the Middle Ages by the Ubaldini, feudal lords of the area, for their own practical reasons⁹, and subsequently used by wayfarers to cross the Apennine ridge in both directions. It is reasonable to believe that the Futa pass was not used during this epoch due to a serious political or geological problem.

4 - Futa.

The Futa pass is west of the Osteria Bruciata pass and east of Montepiano. It acts as a watershed between the Gambellato torrent to the west and the river Santerno to the east.

It is exactly located along the ideal straight line joining Bologna to Florence and is more or less the same distance from both cities. Therefore, it is obvious that the Futa pass has always been on the shortest Apennine route thanks to the random and advantageous position of the ridges that start from the pass, whether north towards Bologna or south towards Florence.

⁷ Daniele Sterpos: “Comunicazioni stradali attraverso i tempi, Bologna-Firenze”. Istituto Geografico De Agostini, Novara 1961; page 32.

⁸ Daniele Sterpos, work cited, page 34.

⁹ The Ubaldini family owned a number of castles along the road.

Medieval historians often use the name *Stale* to describe this pass; that is a place of passage for wayfarers and armies.

This is Emanuele Repetti's description¹⁰: "*Futa in the Stale Apennine. The most commonly used pass in the central Apennine mountain chain is called the Futa (...) This is where (...) the old main road passed from the Province of Mugello across the Stale pass, and from hence it continued to Bologna*". Repetti also narrates that: "*in 1358, the Republic of Florence built fences, towers and thick battlements made of wood all along the pass to defend itself from any new incursions by bands of mercenaries intending to use the Stale pass*" (Matteo Villani: "*Cronica*").

From Lino Chini we also learn that¹¹: "*For a number of years, Italy had been overrun by various bands of armed bandits, bands of mercenaries (ceteris omissis) who caused immense damage wherever they stayed and wherever they passed. Famous was the band led by an ex monk who once belonged to the order of the Hospitallers, called Friar Monreale D'Albarno. After 1353, he started to pillage Tuscany, Romagna and the Marches, placing levies on towns and provinces, looting and carrying out massacres wherever he went. Because there was no other way of getting rid of them, populations paid the bandits huge amounts of money. Drawn by his demon to Rome, the wicked ex monk did not enjoy the fruits of his villainous thefts because Cola di Rienzo, Tribune of the Roman People with a sentence passed on 29 August 1354, cut off his head. However, his large band of mercenaries stayed together and the just as cruel and terrible Conte di Laundau, called Conte Lando in folktales, became its leader*¹². Once he was at their head, he led his band to prey on the kingdom of Naples and Lombardy. In 1357, he descended to Bologna where, according to old Ammirato, it was possible to pass through the mountains and enter the Mugello in just one day through an open gap in the mountain, called the *Stale* road. The Florentines knew that they must not waste time and thus asked

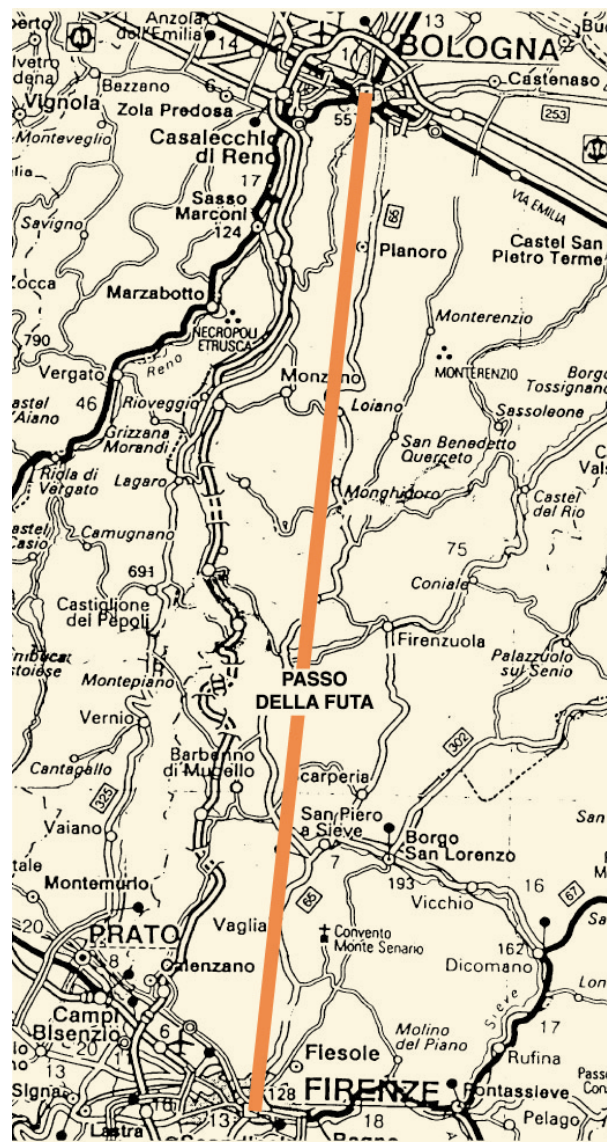


Plate 8

The Futa pass lies exactly along the ideal straight line between Bologna and Florence.

the Ubaldini if they could help defend their estates: the Ubaldini agreed to this and the Republic sent six thousand soldiers, of which half were crossbowmen and nine hundred cavalry. The Ubaldini came with 1500 soldiers from among their vassals, and they immediately gave the order to build a barricade measuring a mile and half between two mounds along the *Stale* road; which they then fortified with barriers made of

¹⁰ Emanuele Repetti: "Dizionario geografico, fisico, storico della Toscana". Florence 1835, Volume II, page 364.

¹¹ P. Lino Chini: "Storia del Mugello". Anastatic reprint of the original edition, Florence 1875, published by Soc. Multigrafica, page 193.

¹² As already mentioned in the former chapter, Conte Lando was Corrado Lando di Svevia or Corrado Virtinguer di Landau. He died in 1363, in Lombardy stabbed by a lance during a fight.



The Futa pass in the foreground (903 m). On the horizon from left to right: Sasso di Castro (1276 m) with the village of Traversa at its foot, mount Beni (1263m) and mount Canda (1158 m). The Raticosa pass is between mount Beni and mount Canda.

huge beach trees which formed a stockade and this is where they set up their tents and camp.

The band of mercenaries fell into an ambush set up by the local people at the Scalelle pass in Belforte, in the Careglia Apennines, between the Sieve and Lamone valleys. Over a thousand horses and three hundred horsemen were killed during the battle. The remaining mercenaries regrouped at Dicomano and sought refuge in Vicchio castle.

Chini then continues ¹³: *“The band of mercenaries stayed in Vicchio for just one day and one night, because on learning the news, fresh soldiers arrived from Florence and the mercenaries knew they were in grave danger. Therefore, they left Vicchio, and after descending onto the plain, and following a successful skirmish against the crossbowmen on the banks of the Sieve and after killing more than 60 under the command of Ghisello degli Ubaldini, they took the Stale road and returned to Imola in Romagna accomplishing a 42 mile journey in a single day! (...) Thus having liberated the Mugello and the Comune of Florence from the threat of these hoards of thieves and bullies, when the Lords learned that they had retreated into*

Romagna, from where they could newly invade their county at any moment, they decided to fortify the Stale pass”. From Repetti’s description of the Futa pass and Chini’s historic tale of the wars fought by Conte Lando, it is possible to draw two important conclusions about the pass.

The most used, according to Repetti, for the simple reason (in our opinion) that it was the easiest way of getting from one side to the other of the Apennine range. This is still true today; after all, it takes more than a few thousand years to change the orography of an area, so very little change can have occurred after just a few centuries.

The mountains, valleys and rivers we admire today on our walks are the same seen by the Etruscans, Ligurians, Romans and all those hoards of barbarians that have invaded Italy during every period of history. Bologna has not changed location and has been positioned below Colle dell’Osservanza since it was established. The Mugello valley is still there, on the other side of the Apennines where it stretches from the Calvana mountains to Dicomano.

¹³ P. Lino Chini: work cited, page 302.

Today, when the third millennium lies at our door, walking is a favourite pastime. Jolly parties of ramblers meet everywhere, especially on our Apennines in the search for much sought-after uncontaminated nature. Anyone can associate a pastime with the curiosity of discovering the shortest and most convenient route from Bologna to Florence. We only suggest the point of departure and arrival: Bologna and Fiesole¹⁴. Discover for yourselves the transapennine route followed by the Etruscans, Romans and, many centuries later, wayfarers and shepherds with their flocks striving to reach better winter pastures in Maremma.

We would like to point out that the Statute drawn up by the Florentine Customs Office in 1579 ordered *“every shepherd from Mugello, western Romagna or anywhere near Bologna on the other side of the Apennines (particularly numerous were those from Bruscoli, Firenzuola, Castro, Trasasso and Montefredente) wanting to lead their flocks to pastures in Maremma “along the usual and widest roads” from September to May of the following year, to report to the “Colla” or Customs Office in Barberino to pay the due tax”*¹⁵.

It is also clear from Chini’s words that the Futa (or Stale) pass was the most convenient. Chini tells that when *the bandits* were barricaded in Vicchio castle, not wanting to clash with the soldiers of the Republic of Florence, they took to the Stale road to return to Imola in Romagna. The Futa pass was certainly not the shortest route from Vicchio to Imola but after their former experience in the Scalelle gorge, they preferred an open, spacious, (although longer) route, where ambushes were less likely. Moreover, although the Florentines knew the mercenaries were in Romagna, they feared their return and hastily fortified the Stale pass.

Six hundred years after Conte Lando’s mercenaries invaded Tuscany, and precisely in the autumn of 1943,

the strategies of the “Oberkommando der Wehrmacht”, that is the high command of the German armed forces, decided to set up a defensive line called the “Gothic Line” along the northern Apennine chain. Impressive fortifications were built, especially near the mountain passes. But *“nature herself had taken the trouble to create a particularly weak point right at the centre of the ridge: the Futa pass where trunk road 65 to Bologna passes, 42 km from Florence. When the T.O.D.T.¹⁶ was setting up and arming the Gothic Line, it soon became aware of this weakness and ensured that the defences on the Futa pass were the most formidable of all”*¹⁷.

These “formidable” defences persuaded the Anglo-American allies to move the direction of their attack on the Gothic Line east of the Futa pass, to the Giogo pass, which they won at dawn on 17 September 1944¹⁸.

These military events deserve a comparison. The hardships endured in the Middle Ages on transapennine journeys by famous personages (although they were accompanied by numerous servants, mounts and sedan chairs) cannot be compared to the transport problems of armies made up of thousands of foot soldiers and cavalry, wagons and all sorts of weapons and arms. The armies had to avoid narrow valleys, subject to ambush and all types of obstacles. To ensure their manoeuvres were swift and safe, they required open spaces, ridges with stable ground, not those scaly clays that make the tormented and impracticable mountainsides prone to frequent landslides.

These obvious requirements have convinced us that it was pointless to conceive, plan and build a transapennine road that was mainly for military use, unless it was built on the watershed ridge between the rivers Savena and Setta, and thus across the Futa pass.

¹⁴ Cross the Apennines using whichever pass you prefer: the Giogo, Osteria Bruciata or the Futa pass (not the Montepiano pass which is too remote). You can either walk along the ridge between the Setta and Savena, between the Savena and the Idice or between the Idice and Sillaro. Using a step counter on your belt and a stopwatch, take note of the length of the route and the time it takes. Then take a different route on the way back.

¹⁵ Leonardo Rombai and Marco Sorelli: work cited, page 40.

¹⁶ T.O.D.T. was the German military engineering organisation.

¹⁷ Douglas Ordill: “The Gothic Line”. Published by Clueb, Bologna 1967, page 14.

¹⁸ Nevertheless, the three American divisions employed in the operation on the Giogo pass lost 500 men and 2000 were wounded.

PART THREE

THE PROBABLE PRE-ROMAN ROAD SYSTEM BETWEEN BOLOGNA AND FIESOLE

CHAPTER VII

THE PROBABLE PRE-ROMAN ROAD SYSTEM BETWEEN BOLOGNA AND FIESOLE

- 1 - Nature points out the most convenient transapennine route to man.**
2 - Fiesole and Felsina: the destinations of the transapennine Etruscan route.

1 - Nature points out the most convenient transapennine route to man.

Now that we are on the verge of entering the third millennium with all the weight of our culture, saturated by computers and satellite telecommunication systems, the most advanced mechanics, vehicles for travel by land and air which allow us to cover huge distances in a short time, it is undoubtedly difficult to delete over 2,500 years of history and civilisation and re-live the thoughts and worries of the Etruscan who in the 6th century B.C. wanted to cross the Apennines.

Certainly many others before him will have ventured into the valleys along the Apennine range, to search for the most convenient, shortest and safest route among the numerous obstacles they must have encountered. And from that moment on, every other traveller that followed trod the same path, crushing the same blades of grass and the same fallen leaves. Thus, a path was created that signalled the route towards the desired destination; for centuries the existence of this path reassured our Etruscan ancestor, indicating the route to follow across the Apennines. Whoever chose this route as their preferred path certainly bore in mind the three primary requirements of anyone travelling on foot:

- brevity: then as now, man attempts to reach his destination by covering the shortest distance and this is achieved by travelling in a straight line, when the

nature of the terrain allows; therefore it is the “line of sight” that indicates the route to follow;

- convenience: man has always attempted to cover the distance with the most gentle gradient, over terrain that can be covered in any weather condition; if along certain stretches this is not possible, man tries to overcome the problem by laying cobbles, gravel or paving;
- safety: ridge routes have always been preferred because they offer two important advantages:
 - the possibility of getting one’s bearings and a view over vast distances; therefore making it possible to see any enemies or predators;
 - there are no watercourses: crossings over rivers and streams have always constituted an enormous uncertainty for travellers. Whoever set out on a journey on foot was always in constant doubt as to whether a watercourse could be forded and the existence or not of gangways or footbridges over large rivers; a stream in flood or a collapsed gangway could compromise the journey, even if the destination was in sight.

However, the morphology of the Apennine chain does not always guarantee that all three requirements (brevity, convenience and safety) are present at the same time along every route. Thus, at times, to reach a certain destination, man has had to forgo one or more of these requirements.



View of the Apennine ridges on the Bolognese versant. The red line indicates the ridge route used by the Etruscans and the Romans from Bologna to the Futa pass.

2 - Fiesole and Felsina: the destinations of the Etruscan transapennine route.

Of the 94 kilometres from Bologna to Fiesole, from Bologna to the river Sieve (in Bilancino) as many as 71 kilometres run along a gently sloping ridge route which is perfectly aligned in the right direction: from Bologna (54 m above sea level) to Poggiaccio (1166 m above sea level) the ridge gradually rises for 50 kilometres and then descends for 21 kilometres as far as the river Sieve (233 m above sea level) near Bilancino.

From here, there were two possible paths to Fiesole.

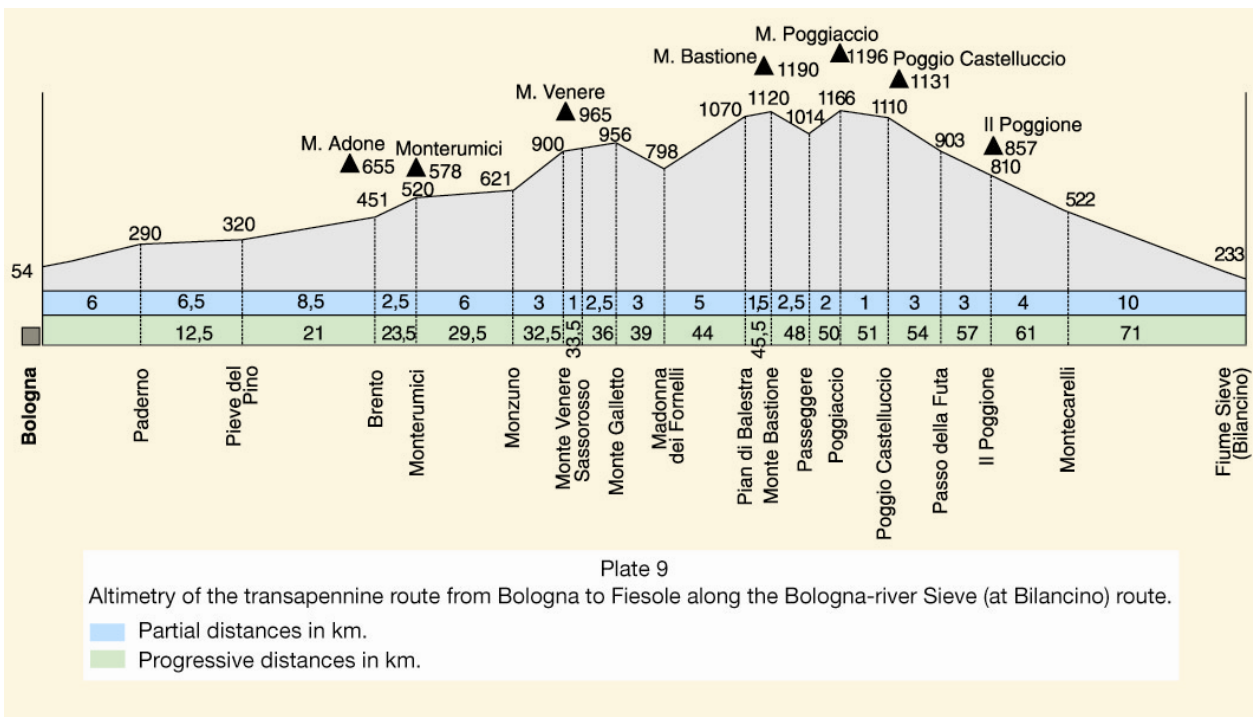
One route crossed the Sieve west of Bilancino, avoiding marshes to the east, and then ascended to S. Giovanni in Petroio, as far as the river Trebbio (435 m above sea level) and then re-descended to Tagliaferro (250 m) and then continued along the valley of the river Carza, beyond Vaglia, and rose on the west versant of Poggio Torricella as far as "L'Uccellatoio" (altitude: 489). From here it descended again beyond Trespiano (266 m), then, after the

Lastra, it turned towards the river Mugnone (altitude: 100) reaching Fiesole at an altitude of 266.

The other path followed the Sieve as far as S. Piero (205 m), then it ascended the opposite versant passing near the Abbey of Buonsollazzo (540 m) as far as the peak of mount Senario (815 m), this is where the descent towards Fiesole (295 m) started across Poggio Le Croci (518 m) and Poggio al Pratone (702 m).

Comparing the two itineraries in terms of altimetry, the first was probably the preferred route, not only because it was shorter (-4 km) and with fewer differences in level (just 1203 m instead of 1572 m), but also because it avoided extensive marshes which probably covered the valley of S. Piero in Sieve at the time.

On the Emilian versant, the ridge has just an average gradient of 2.2% with 8.9% maximum peaks from the southern suburbs of Bologna to Paderno (2.5 km), 9% from Monzuno to mount Venere (3 km) and 7.6% from the Passeggere pass to mount Poggiaccio.

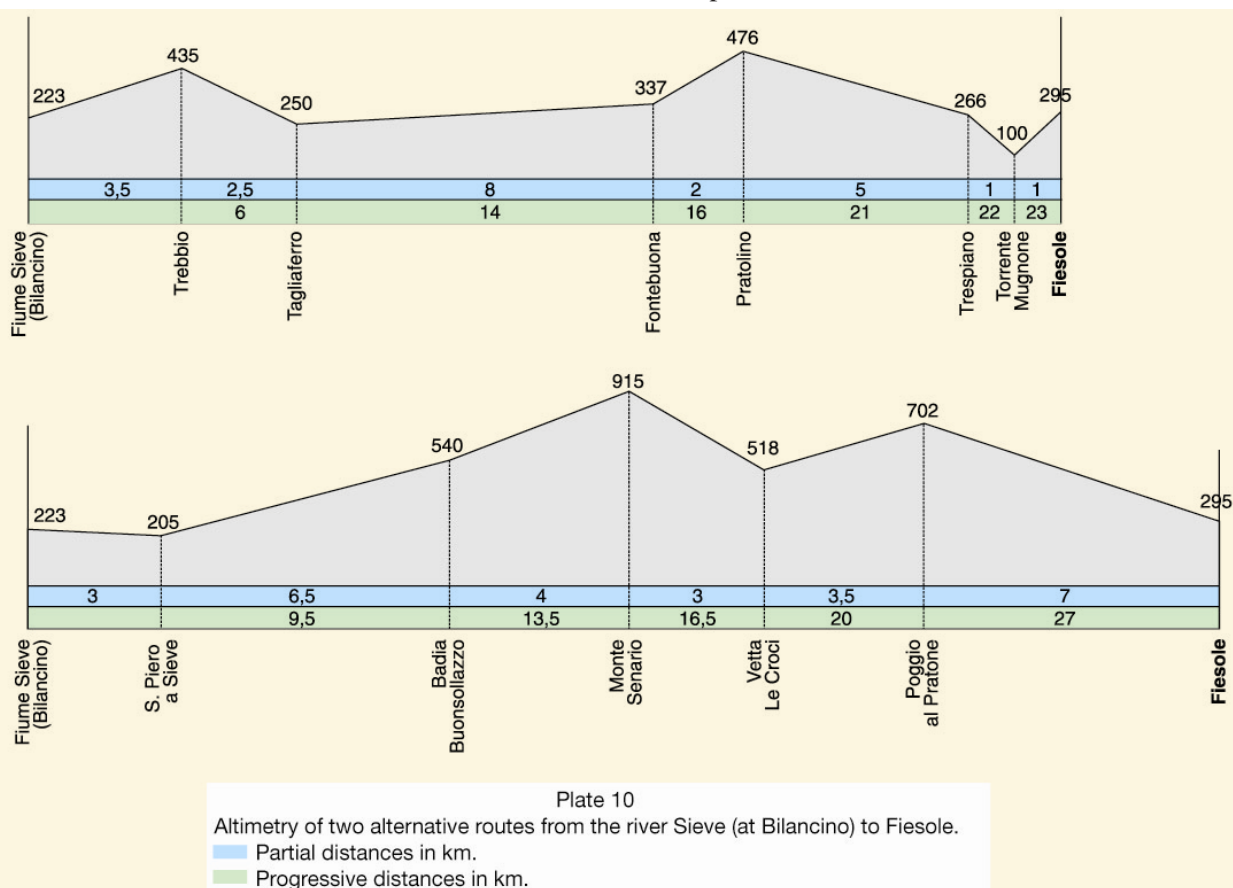


On the Tuscan versant the average gradient is 4.17% with 6 to 7% maximum peaks from Poggiaccio to the Futa pass (4 km) and 5.5% from Futa to Montecarelli (7 km).

Therefore, there is a “natural bridge” between the two versants, undoubtedly used by the Etruscans during

their maximum territorial expansion in the Po Valley (6th and 5th centuries B.C.)

Thus, Fiesole and Felsina were the destinations of most of the trade between Tuscan Etruria and Po Valley Etruria and the happy economic situation of these two cities derived from their position at the foot of the two Apennine versants.





The level left ridge of the Savena used throughout the ages to cross the Apennines with ease. Behind stands the snow-capped Corno alle Scale.

If one considers that this natural bridge has been used since prehistory, it is more than a rough guess to suppose that the transapennine route was not created to link two existing cities, but that the cities were built in strategic locations to supply and control the trade that was already travelling along the route.

The tried and tested use of this natural and practical transapennine route, compared to other relatively nearby routes, convinced the Romans that this was where they had to build their road.

It is also obvious that this was not the only transapennine path used by the Etruscans to reach Po Valley Etruria. According the principles that have always governed selection of the most convenient route, the Etruscans certainly must have used other *tramites* to cross

the Apennines, especially where a shorter, alternative route was preferable. Therefore, when travelling from northern Etruria (the present-day Pisa, Lucca, Pistoia, etc.) it is probable that they crossed the Collina pass and the Reno valley to reach Misa or Felsina, without passing through Fiesole.

Therefore, from Fiesole to Faenza, they would have passed through the present-day Borgo San Lorenzo, Marradi and Brisighella without travelling through Felsina. Then, more than now, the brevity of the route was fundamental because it saved time; 30 kilometres less meant one less day of travel with the consequent logistical advantages.

The map indicating the probable Etruscan itineraries forming links with the north shows that the most important and commonly used route passed through the Futa pass¹.

¹ Mauro Cristofani: "Rasenna - Storia e civiltà degli Etruschi"; published by Scheiwiller, Milan, 1986, page 135

Even the great Etruscologist, Mauro Cristofani, has the following to say about the Apennine passes used by the Etruscans:

"... the entire problem regarding the relations established between the Etruscans and the people who lived on the other side the Apennines is caused by this bipolarism. As is known, communication was possible thanks to the ridge roads and the valleys created by the mid course confluents of the Arno, Sieve, Bisenzio and Ombrone, whose sources converge towards the Apennine watershed, where the Reno, Setta and the Savena have their origin".



Plate 11
The probable road routes used by the Etruscans in the 5th century B.C.

All traffic from central and southern Etruria, that is from Tarquinia, Vulci, Saturnia, Roselle, Vetulonia, Chiusi, Arezzo, Siena, Populonia, Volterra, etc., heading towards the Po Valley, had to converge in Fiesole and from here continue north towards Felsina. Felsina received the traffic arriving from Po Valley Etruria and especially from Spina, the most important Adriatic port for trade with Greece and the East.

Misa (near Marzabotto) was also undoubtedly a place of transit for Etruscan trade, which followed the valley of the Reno and continued beyond the Apennines through the Collina pass, probably just to reach the extreme north of Etruria. In fact we believe that the traffic from Felsina towards Fiesole (and therefore heading towards the centre-south of Etruria), crossed the Collina pass and followed the course of the Reno in spite of the presence of Misa in the valley because

they would have had to travel 29-30 km further compared to the Futa road.

This latter itinerary could also have been used as a practical link between Fiesole and Misa.

In fact, during our explorations, we noted that when coming from Fiesole, at Pian di Balestra (altitude: 1101 above sea level and 6 km north of Poggiaccio) a ridge goes off to the left along a diagonal that passes through Montefredente, Monte Acuto Vallese and Montorio; it gradually slopes down towards the river Setta, which it crosses upstream of Riveggio. Misa is only 9-10 km away from this point, easily reached by passing through “La Quercia” and the historic Monte Sole Park.

Therefore, we do not share the prevailing opinion of scholars who believe the Collina pass was

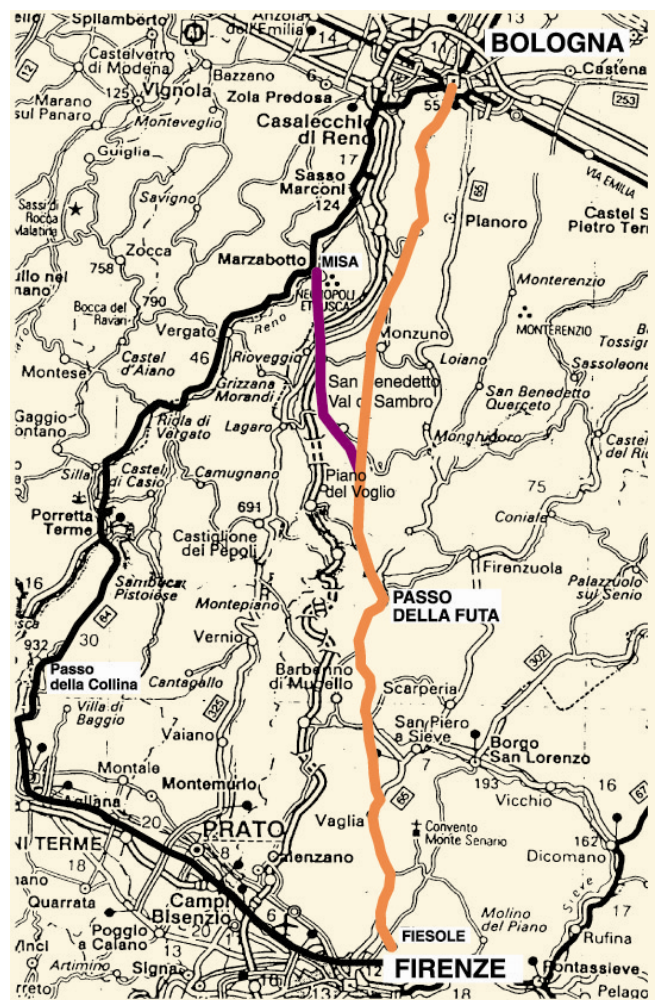


Plate 12
The probable Etruscan route from Fiesole to Felsina.
The detour towards Misa along the Montorio ridge.

the preferred route of the Etruscans to and from the Po Valley.

Misa could certainly not have competed with Felsina, which in the 5th century B.C. had become an urban centre of primary importance, a reference point for the multitude of Etruscan settlements on the plain and located in a key position for contact with their native land.

It is true that more archaeological finds regarding the urban tissue of Misa have been found than those of Felsina; but it is obvious that because Roman and medieval Bologna were superimposed on the same site, it has not been possible to unearth the original extension of Felsina.

The extremely numerous tombs, uncovered during the past two centuries, indirectly testify the greatness and the importance of this city defined by Pliny as *Princeps Etruriae*.

The importance of the position of Bologna for the development of trade from and to Po Valley Etruria is also underlined by Guido Achille Mansuelli²: *“Only information from sources mention that Modena and Parma belonged to the Etruscans (ceteris omissis), but numerous finds in the internal and the western pre-Alp areas of the Po Valley clearly testify a flow of trade through the Po Valley towards the other side of the Alps. Within this picture, Bologna formed a weld between the internal Etruscan route towards Orvieto, Chiusi, Valdarno, the Apennine mountain passes and the Emilian foothills, now projected towards the continent”*.

The Celtic invasion of Po Valley Etruria determined the end of Etruscan dominion in the area, however the transapennine links between the two peoples were not completely destroyed. Trade continued between the two regions (although on a lesser scale), bearing in mind that the Gauls and the Etruscans were not always hostile. As a matter of fact, in a number of circumstances, they forged military alliances to contrast Roman expansion³.

The Apennine Ligurians very rarely interfered on the plains. There was a situation of mutual tolerance that allowed modest trade as well as the use of the transapennine paths and especially the main path through the Futa pass.

Fiesole was certainly no less important than Felsina, located in an enviable position above one of the most suggestive landscapes in Tuscany. Thanks to its strategic position it became increasingly important, until it not only became a military power guarding the most commonly used Apennine pass, but also a rich city, irreplaceable for its trade with Po Valley Etruria. In particular, when the latter region was conquered by the Celts, a strong military garrison at the foot of the Apennines became vital to defend Etruria. Perhaps it was in this historic context that Fiesole was equipped with a triple row of walls.

Nevertheless, with the progressive expansion of Rome, Fiesole also realised that it was better not to fight but to create alliances, acknowledging the advantage of being friends with the powerful Romans to fight against the invasions from the north (which continued to be a real danger until the last decades of the 3rd century B.C.)

Polybius mentions Fiesole when describing an invasion of Etruria by an army of Celts.

In 225 B.C., an army of 70,000 Gesati Celts crossed the Alps, summoned by the Boi and Insubre Gauls. After they crossed the Apennines, they dispersed an army of Etruscans and Sabines near Fiesole⁴ and invaded Etruria in search of plunder. They met no other resistance because the Romans expected an attack near Piceno and so had reinforced their Adriatic front. Thus, the Celts reached Chiusi, where they encountered the Roman army stationed in Etruria and who were camped near them.

At this point Polybius narrates that⁵: *“... When night fell, the Celts lit their campfires. They left their cavalry there with orders*

² Guido Achille Mansuelli: “Profilo geografico culturale dell’Emilia preromana” in the “Storia dell’Emilia Romagna”, University Press, Bologna 1976, page 35.

³ At the battle of Sentino, in 295 B.C., coalition of Etruscans, Umbri and Gauls was defeated by the Romans.

⁴ Paolo Giudici: *Storia d’Italia narrata al popolo*; Published by G. Nerbini, Florence, 1930, Book Sixteen, paragraph 6, page 164.

⁵ Polybius: work cited, book II, paragraph 25.

that they should wait for daybreak, and then when they became visible to the enemy they were to retreat along the same route. Instead, under the cover of darkness, they headed towards the city of Fiesole and took up their positions. They intended to wait for the cavalry and carry out a surprise attack on the enemy who was following. At daybreak, when the Romans saw the cavalry was alone and thinking that the Celts had fled, they pursued the cavalry along the route of their retreat..."

From this account, it is possible to understand that the false retreat by the Celtic cavalry probably took place along the same road they travelled during their advance into Etruria, which they were very familiar with and considered safe. If the Celts stopped near Fiesole to set up their ambush, the road they had used to reach Etruria passed through Fiesole. Therefore, it is probable that they used the transapennine route from Fiesole to Felsina through the Futa pass.

This theory is also backed up by the words of Paolo Giudici⁶ who has the following to say about the descent of the Celts in Etruria in 225 B.C.: "... *Lucius Aemilius Papus took command of the operations against the Gauls and with an army of twenty thousand soldiers, joined along the way by the same number of Umbri, went to Arimino. A strong army of Cenomani Gauls and Veneti, allies of Rome, were threateningly camped near the broader with the Boi and another army of Etruscans and Sabines, commanded by a praetor, were ready to prevent the enemy from reaching the pass into Etruria*⁷. *There was also a reserve army waiting in Rome.*

The formidable army of barbarians descended into Etruria over the Apennines. They clashed with the Etruscan and Sabine army near Fiesole, but in vain because the hoards of barbarians had the advantage during the battle that ensued and, after defeating the praetor's troops they continued to advance

and ravaged everywhere as far as Chiusi"⁸.

Therefore, according to Giudici, Fiesole was the first Etruscan city the Celts came across during their descent from the north; thus it is obvious that they used the existing transapennine route between Felsina and Fiesole which must have been practical and solid enough to allow the transit of an imposing army consisting in "*fifty thousand infantrymen and twenty thousand cavalry and chariots*"⁹.

Although it is easy to imagine the difficulties the Celtic army met while crossing the Apennines, one must presume that the "path" was an actual road; otherwise, the barbarians would not have reached Etruria. If there had only been a path, the twenty thousand cavalry and chariots would have had to march single file. If they had kept just two metres apart, when the head of the column reached Fiesole, the rear would have still been in Modena, leaving the column exposed to easy attack from the flank. Furthermore, the chariots must have needed a road at least 2-2.5 metres wide and the roadbed would have been destroyed after the transit of a few hundred chariots and cavalry unless it was very solid.

It is necessary to point out these facts because they give us an idea of what life was like at the time and provide us with important information about the road system. By researching Latin texts we have learnt to glean sufficient illumination from the scant geographical information to reconstruct the movements of armies and, consequently, the existence or less of roads.

In conclusion, these bellicose events confirm the existence in 225 B.C. of an important transapennine road axis between Felsina and Fiesole across the Futa pass; a road axis which in 187 B.C. was improved and paved where necessary by C. Flaminius.

⁶ Paolo Giudici: work cited, book sixteen, paragraph 6, pages 163-164.

⁷ Polybius: work cited, book II, paragraph 23-24: *As soon as the Romans learned that the Celts had crossed the Alps, they sent the consul, Lucius Aemilius with an army to defend Rimini and to keep an eye on the enemy's movements and one of the praetors to Etruria... (ceteris omissis). The Sabine and Etruscan forces who had rallied to the support of Rome, numbered four thousand cavalry and over fifty thousand infantry. After these forces were formed, they were posted in Etruria under the command of a Praetor.*

⁸ Theodor Mommsen:

History of Rome; published by Aequa, Rome, 1938, volume three, chapter three, paragraph 9: ... "*The Celts found the Apennines weakly defended and they sacked with ease the rich Etruscan plains which had not seen any hostilities for a long time*".

⁹ Polybius: work cited, book II, paragraph 23.

After the serious defeat suffered in this war, the Etruscans in Fiesole realised there was no way they could ever resist an attack from the north alone and that, for their future safety, they would have to form an alliance with Rome, which they then did.

A further push towards the formation of this alliance was inspired by the descent of Hannibal. According to Polybius¹⁰ after the Carthaginian crossed the Apennines and

the marshes (perhaps in the valley of the Arno), he set up camp near Fiesole to rest his armies. Therefore, it is highly probable that Fiesole was sacked by Hannibal to supply his army.

Finally, after the second Punic war, Fiesole became an important Roman stronghold guarding against the Apennine Ligurians.

¹⁰ Polybius: work cited, book III, paragraph 80-82.

PART FOUR

A HISTORICAL INVESTIGATION, THE START OF OUR EXPLORATIONS AND OUR FIRST FINDS

CHAPTER VIII

THE START OF OUR EXPLORATIONS, OUR FIRST FINDS AND THE VISIT BY PROFESSOR NEREO ALFIERI

- 1 - Our preliminary historical search for information about the ancient road system between Bologna and Fiesole.**
- 2 - Determination of the area to explore.**
- 3 - The difficulty in finding any clues.**
- 4 - The day of the first find.**
- 5 - The first excavations and the visit by Professor Nereo Alfieri.**
- 6 - Professor Nereo Alfieri's monograph provides good hope.**

1 - Our preliminary historical search for information about the ancient road system between Bologna and Fiesole.

During the autumn and winter of 1977-78, we set about studying history, paying particular attention to the events that could have influenced the Apennine road system and reading the works by the Latin historians (Polybius, Titus Livius, Strabo, Pliny, etc) to find out if there was any information about the construction of the road. We were delighted when we came across Livy's account, which mentions the construction of a road from Bologna to Arezzo in 187 B.C. by the consul Caius Flaminius¹. Instead, Strabo's *Geography of Italy* was disappointing. It contradicted Livy and stated that the same consul built a road from Rome to Rimini² in the same year.

Strabo's mistake was clear³; he attributed to the son, C. Flaminius Nepote, construction of the road carried out in 220 B.C.⁴ by the father.

In spite of the utmost care and attention, we have not been able to find any other quote that confirms the construction of this road, nor any information that certifies its existence even in any intermediate location other than the main cities mentioned by Livy.

This transapennine route does not even appear in the *Tabula Peutingeriana*⁵, which only mentions the highly trafficked consular roads used during the mid 4th century A.D., that is about five hundred years after this road had been built. Therefore, it seems probable that at the time, the road built for military reasons to guard the route across the Apennines was probably no longer used or no longer acknowledged as a consular road and for this reason was not indicated in the historic road map.

We were surprised by the complete silence by historians until the 18th century, in fact we only found mention of it once, two thousand years later, in the work by the Bolognese historian, Ludovico Savioli⁶. He states that

¹ Titus Livius: work cited, book XXXIX, paragraph 2.

² Strabo: work cited, book V, paragraph 11.

³ Strabo was born in 64 B.C. and Titus Livius in 59 B.C.

⁴ We have already mentioned the completion of the Via Flaminia from Rome to Rimini by the consul G. Flaminius in 220 B.C.

⁵ The *Tabula Peutingeriana* is a document written on parchment 6.8 metres long, dating back to the 12th-13th centuries A.D. It illustrates the geography, roads, distances and place names of the Roman Empire. It is named after the German humanist, Konrad Peutinger who published it in 1500.

⁶ Ludovico Savioli: "Compendio storico preliminare agli Annali bolognesi dell'anno di Roma 363 al 1274", section I, note S and section II, page 59.

the road built by C. Flaminius to Etruria, passed through Brento (a village that still stands on the ridge)⁷ and ascended from Bologna to the left of the torrent Savena and continued as far as Pian di Balestra, where our ancestors handed down the memory of a Roman road.

We had finally found confirmation of Livy's account and, above all the first topographical reference that indicated the ridge used by the Romans to cross the Apennines. Unfortunately, Savioli provides this information without referring to any archaeological finds and, therefore, without giving any material proof of the Roman road. His belief was probably based on direct or indirect historical sources unknown to us.

The lack of evidence and the idea that this road had been forgotten for twenty centuries was not very convincing, considering that we had to give credit to oral information that had been handed down over such a long period.

However, Savioli's words dating back to the end of 1700 coincided with the words of our ancestors, and so these words began to take on more credibility.

The abbot, Serafino Calindri, mentions more than once in his detailed historical-geographical work written in 1781⁸, a very ancient road that headed towards Tuscany along this same ridge. However, just like Savioli, he does provide information about finding the remains of the road. We believe that if any remains had been found, he most certainly would have mentioned them, given the accuracy with which he describes

the places he visited in person. He probably just reported the tales of the inhabitants of the villages located along the ridge, such as Brento, Monzuno and Cedrecchia, who all agreed on the ancient age of the route.

Other scholars in 1800⁹ and 1900¹⁰ were also convinced that a Roman road was built along the ridge, however without indicating any paving or other artefacts that could back up this idea.

By the end of spring 1978, we had concluded an initial phase of historical research and acquired consistent confirmation regarding the possible existence of a Roman road along the ridge. We had not found any certainties, partly because Livy did not identify the exact route followed by Flaminius and although every historian who had more or less marginally taken an interest in the matter agreed about the existence of the road, none offered any information regarding the discovery of any remains. Therefore, our only certainty was that in 187 B.C. the Romans built a transapennine road from Bologna to Arezzo. This certainty was not to be underestimated because it was the only piece of historical evidence on which to base our research.

However, considering the morphological compatibility of the ridge with the existence of a road, the opinions of historians and popular tradition, we already had enough clues to start our exploration on the ground with relative optimism

⁷ We pointed out that Brento has been located on an important road axis to Etruria since very ancient times in chapter VII when discussing the Etruscan route between Felsina and Fiesole. Savioli provides confirmation of the strategic importance of Brento when he mentions that Brento was a city with its own bishop's see (work cited, page 59).

⁸ Serafino Calindri: "Dizionario corografico, orittologico, storico, etc. dell'Italia – montagna e collina del territorio Bolognese", Bologna 1781, volume I, page 236-382, volume II, page 285, volume IV, page 138.

⁹ G.L. Monti: "De viis publicis ac militaribus romanorum tempore per agrum bononiensem ductis" from the "Giornale Ligustico", 1828, page 651.

¹⁰ Arturo Palmieri: "La montagna Bolognese nel Medio Evo", Bologna, 1929, pages 331-332.

Guido Achille Mansuelli: "La rete stradale e i cippi milliari della regione ottava", extract from *Atti e Memorie della R. Deputazione di storia patria per l'Emilia e la Romagna*, volume VII, 1941-1942, page 41.

This great contemporary historian theorises about the existence in Imperial times of another Roman road that linked up with Etruria through the Reno valley and Collina pass. Nothing could be more probable considering the pre-existence of an important Etruscan route in the same direction and the expansion of the Latin-Roman settlements over the entire Bolognese area, including the valleys that penetrate the Apennines.

2 - Determination of the area to explore

The first problem we had to deal with was where to start our explorations. The ridge where the hypothetical Roman road was supposedly built is very long (a mere fifty kilometres on the Bolognese versant) and in theory the remains we were looking for could be anywhere along the ridge. Therefore, we had to restrict our explorations to the area where we were most likely to uncover tangible proof after almost 2,200 years.

Initially we tried to evaluate which environmental situations and which construction specifications of the road could have had a negative influence on the preservation of such ancient artefacts. Our attention turned immediately to the various geological features of the ridge. The initial part (Paderno, Pieve del Pino) features outcrops of scaly clays; the intermediate part features much more solid and consistent soil¹¹ as far as Monzuno, followed by white limestone as far as Pian di Balestra. From here to the Futa pass, the limestone disappears, replaced by soil that is only compact if it is dry, with frequent outcrops of sandstone¹². Considering the geological situation of the ridge, it was clear that the soil is so solid in the middle part, that all you have to do to build a road for all seasons is flatten the surface without laying any paving stones. The sandy-gravel bed, and (even more so) the white limestone bed, crumble so easily that with the passage of traffic they compact and become more and more consolidated and flat until they look like a rolled road¹³. At the same time, this fragmentation creates a drainage effect that makes transit easy even when it is raining.

These observations convinced us that from Pieve del Pino to Pian di Balestra (31.5 km) the Roman road must have only been a *glarea* road and therefore impossible for us to identify and date.



Mount Bastione: *the dense and wild woodland that covers the summit of the ridge on mount Bastione at the Futa pass made it particularly difficult to identify the paving. Furthermore, in the summer the continuous canopy of leaves above darkens the undergrowth making it difficult to sight clues.*



Mount Bastione: *during the winter the leaves fall making it easier to observe the ground for up to tens of metres.*

Therefore, we decided not to explore this area, as well as the area from Bologna to Pieve del Pino (but for different reasons). In fact along this stretch, the geology of the ridge very probably required paving: from Bologna to Paderno due to the gradient, and from Paderno to Pieve del Pino due to the scaly clay bed

¹¹ Formations dating back from the lower Pliocene with large embankments of pebbles and sandstone.

¹² These layers of sandstone are called “macigni” and are part of that sandstone-marl flysch known in geology as *Monghidoro formation*, referable to the Palaeocene-Cretaceous, which dates back to some seventy million years ago.

¹³ These roads were common almost everywhere until the advent of asphalt in the 1950's/60's.

which was impossible to travel across even on foot when it rained¹⁴. However, if any paving had been laid, there was no hope of finding any trace from Bologna to Paderno, due to the obvious and considerable modifications to the urban tissue and road network that have affected a large city such as Bologna. Nor was there any hope of finding any paving from Paderno to Pieve del Pino, due to the progressive upheavals caused by the natural formation of erosion furrows, which has increased over the past years.

Thus having excluded any investigation from Bologna to Pian di Balestra, the exploration area was limited to the 10 kilometres that separate the latter location from the Futa pass. Here we hoped that the geology of the soil had forced the Romans to build a paved road, necessary to guarantee easy transit even in case of rain. This is the most verdant and wildest area of the Apennines, mainly covered by large beech and conifer woods, furrowed by numerous streams of uncontaminated spring water which flow downhill to supply larger rivers such as the Savena¹⁵. Here and there in small clearings amongst the trees, the ferns grow up to two metres high in their attempt to find the sunbeams that force their way with difficulty through the tree branches. Other plants do not grow in their shade and the soil is covered by a soft mantle consisting in fallen leaves, which no-one moves or treads on.

Until the first decades of 1900, only the woodcutters and the charcoal burners came to these areas, forced by their jobs to live in improvised “huts”, but as soon as they could, they returned home to their houses further down the valley, leaving the woods to the boars, roebuck, foxes and wolves.

Since the fall of the Roman Empire, this area has always been a border area, often hotly contested and thus uninhabited, but a more or less useable road has always passed through it because it was the route across

the Apennines. Therefore, the trace of an ancient mule track has been preserved until the present-day, although the route is often blocked by the growth of all sorts of wild plants and thorns, especially thick along the track, because no one has come this way for over the past fifty years.

3 - The difficulty in finding clues

A further three considerations restricted the search between Pian di Balestra and the Futa pass.

a) Because this area has always been uninhabited, it was unlikely that any of the paving stones had been removed. It is well known that during the Middle Ages, even prestigious Roman archaeological remains were pillaged when construction materials were required elsewhere.

b) It was more likely that a paved road in these uninhabited and borderline areas would be Roman, compared to near a town or village where the road could have been built later for local traffic.

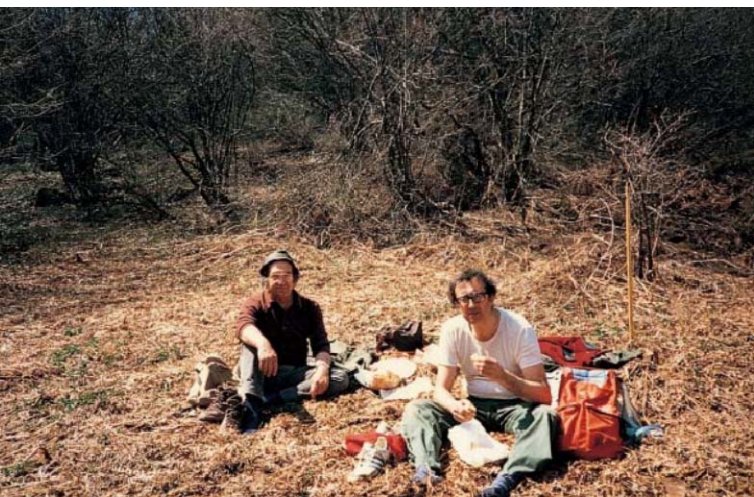
c) These areas were so easily reached from our summer homes nearby. The search would have been a way of spending our holidays; pure enjoyment, doubtlessly interesting, but always and anyway enjoyment, which we could pursue in July and August, in fresh woodland at an altitude of 1000 metres and more above sea level.

Therefore,, in July 1978, we decided to start our search, which did not consist in a straightforward exploration of the area, but required numerous test digs so see if we could find any remains of paving stones.

Well-aware of the effort that this required, and wanting to reduce the effort as much as possible, even if in a context of

¹⁴ The existence of an ancient paved road along this stretch of the ridge is mentioned by Giannitrapani. In his book, “L’Appennino bolognese, descrizione ed itinerari” published in Bologna in 1881 by the Printers ‘Fava e Garagnani’, by the CAI (Italian Alpine Club), on page 592, when describing a road that links Bologna to Castiglione dei Pepoli he says “*in ancient times, an entirely paved mule-track ascended from Porta Castiglione in Bologna to mount Paderno and Pieve del Pino...*”. We do not want to assume that this paved road is the Roman road, but only highlight how even in the Middle Ages, a “paved” mule-track was indispensable to travel on foot or with pack animals along this stretch of ridge.

¹⁵ The source of the Savena is south of Castel dell’Alpi, created by the convergence of three streams called the “Tre Savanelle”. According to tradition, the river gets its name from these three streams, but its origin is probably different. In fact, we agree with Professor Giancarlo Susini from Bologna University who believes that the names of many torrents and rivers such as Savena, Savio, Sava, etc. come the Celtic root, *sav* (water).



Mount Bastione (1979): *Franco Santi and Cesare Agostini, sitting on a soft bed of dry ferns during a break from their springtime search, before the vegetation started to bud at an altitude of 1000 metres.*

exciting summer entertainment, we were convinced that the belt to explore lay on either side of the top of the ridge, near the still visible traces of that ancient mule-track which went from Pian di Balestra to the Futa pass.

Because numerous holiday homes were built on the ridge at Pian di Balestra during the sixties, we decided to start our ground search three hundred metres further south, near the Tuscany-Emilia border, on the upper slopes of mount Bastione, where the abbot, Serafino Calindri, mentioned the existence of a very ancient road with these words¹⁶: “... below it (editor's note: that is below the peak of mount Bastione or Balestra), a short distance away, there was a territorial boundary stone, located near a most ancient road that went from Bologna through Monzone and onwards into Tuscany. The road was still used during the summer months by carriers and wayfarers...”.

There are two important details in Calindri's description:

- indication of a “territorial boundary stone” between the Grand Duchy of Tuscany and the Papal States, just below the peak of mount Bastione;
- the fact that it was *located near* a very ancient road. Considering that Calindri was writing in 1781, the use of the superlative *most*

ancient was understood by us as dating back to time immemorial which could coincide with the Roman era; the verb *went* reinforces this concept because he is obviously referring to a road that did not exist any more or which was no longer visible. Therefore, it was not the mule-track used at the time in summer by carriers and wayfarers.

Giving credit to these indications, first we went to look for the boundary stone, which we found easily because it was located along the present-day border between Tuscany and Emilia. The mule-track was equally easy to find, although during the 1950s it was broadened and improved near the boundary stone to allow vehicle access to two nearby farmhouses.

Satisfied that we had identified this first topographic reference, we explored with particular care the slopes of mount Bastione, especially where the slope descends to join the line of the ridge from Bologna to the Futa pass. We hoped to guess where the remains of the paving lay by observing the surface



Mount Bastione, Tuscany-Emilia border: *an original cylindrical sandstone boundary stone, identical to the one found until 1992 on the Tuscany-Emilia border on the slopes of mount Bastione, which Serafino Calindri saw at the end of the 18th century, very close to a most ancient road. It was one of the reference points for the start of our search. This particular boundary stone was recently stolen, but other identical stones dated 1789 can still be found along the boundary, the year in which they were installed as testified by the date sculpted on their side.*

¹⁶ Serafino Calindri: work cited, page 236.

of the mountain slope, and thus identify any slightly flat areas measuring at least 2/3 metres wide and which ran parallel to the ridge.

We thought that if the paved road still existed and was hidden below hundreds of years of sedimentation by leaves and earth, it would have affected the shape of the slope, providing a flatter surface that would appear unnatural compared to the uphill and downhill slope. Furthermore, the downhill edge of the paving may still be visible along certain stretches due to scant sedimentation and erosion by rainwater and the wind. With these expectations, we paid particular attention to every stone that emerged from the undergrowth with a certain logical alignment, checking to see whether they could be the tips of the remains we were looking for.

There are sandstone outcrops of varying size scattered throughout the area. The sediments can sometimes lie horizontally forming a broken network that can be deceptive at first sight; furthermore, stones of various sizes have broken off from the sedimentations over the millennia, and because half concealed by the leaves, drew our attention. We also had to consider the possibility that we might uncover an area where the paving had been upset by landslides, which may have caused the stones to roll down the slope, thereby scattering the original compact structure. Therefore, it was important to observe any stones scattered here and there under the leaves carefully, to check whether they held any clues to previous use, such as manmade cuts, rounded edges or one side eroded by traffic and the weather.

Our survey of the surface was relatively easy where the thick beech woods prevented the growth of other plants or shrubs; the eye could sweep over a radius of 30-40 metres looking for clues. More

difficult was the search in the clearings where luxuriant ferns, brambles and every type of weed grew. In these cases, we had to cut back all the vegetation to ensure there was nothing important underneath. Any perception of a clue implied verification, which (at best) consisted in a small dig to check whether the outcropping stone had been carved by man and if there were any other stones aligned with it to form the edge of a road. More tiring was the excavation work in areas where an abnormal gradient made us suspect the existence of a solid horizontal plane; in these cases we tried to dig as far away as possible from the stumps of the beech trees, but in spite of this, we still encountered difficulties due to the presence of a network of roots that spread in every direction. These test excavations were carried out with a robust pick and shovel which we took turns to use, however by evening, the day's toil made itself felt, even if at the time we were respectively only 40 and 45 years old.

4 - The day of the first find

Summer 1978 ended without us finding any trace of the paved road, although we had explored a good part of the ridge. At the onset of the following spring, we carried out more extensive explorations while the trees were still bare and the dried autumn ferns still crushed against the ground after the winter snow and before new ferns started to shoot.

We hoped the overall panorama the season offered would allow us to gather some sort of clue, but unfortunately we came away empty handed.

We restarted our exploration in July 1979, on the ridge on the upper slopes of mount Bastione¹⁷ which, in spite of being close to the Pian di Balestra holiday village,

¹⁷ To better understand the terminology we use to describe locations, we have to clarify what we mean by "ridge" or the "road on the slopes" of a specific peak. Our route follows the ridge top exactly, which generally follows a regular, gradually ascending course from Bologna to Poggiaccio, where it starts to descend to the Futa pass. However, not every point of the route along the ridge coincides with the orographic ridge; when encountering unexpected asperities, even the very oldest road system created diversions around these isolated orographic outcrops. These diversions tended to be located on the side of one of the two versants, to avoid any futile ascents and descents needed to maintain the route along the ridge. In other words, the route passes below individual peaks, even if they are relatively high, to ensure continuous progress with the fewest differences in level possible; this is the case on mounts Bastione, Poggiaccio and Poggio Castelluccio.

was not popular with holidaymakers because of the thick vegetation. We preferred to go unnoticed due to a sense of privacy and to avoid having to explain what we were doing with excavation tools in such isolated locations. We also feared being ridiculed by those who did not share our ideas or believed we were looking for other items. Furthermore, news of our search had spread amongst the inhabitants of Castel dell'Alpi and many thought we were wasting our time. Nevertheless, we continued our efforts during the entire summer holidays, exploring the designated area inch by inch and carrying out frequent test digs. Every time our feet felt a stone beneath the leaves or ferns, we uncovered and examined it carefully. If we suspected it was a stone carved by man, we enlarged our excavation to see if there were any other stones.

After many futile excavations, our feet finally knocked against a stone in a clearing concealed by thick ferns. We were just three hundred metres within Tuscany, on the western slopes of mount Bastione, about 70 metres below the peak and about 10 metres above the mule-track, whose route is still visible. Just as we had done before, we cut back the ferns so we could see what we were doing and excavate the stone. The sandstone emerged by just 5-6 cm and appeared to be wedged solidly in the ground. After removing the surrounding soil, with a certain indifference we noticed that downhill it was flanked by soil whereas uphill it lay next to another stone. We continued to excavate uphill and discovered a third stone which was as stable as the other two. At this point, we started to think that we may have found something important, but neither of us dared say anything to this effect, as if to ward off bad luck.

We continued to excavate uphill for about another metre, following the hypothetical width of the road and more sandstone blocks appeared before our eyes. This continuity of perfectly level stones, each fitting next to the other, convinced us that what we had found was man-made paving. But one metre's width was not enough to attribute the paving to the Romans. We had to excavate further until we reached the other edge of the road surface, so we could measure its width. As we gradually proceeded uphill, the soil above the paving



Mount Bastione (25 August 1979): *Franco Santi with our first find, when we had uncovered just 1.20/1.30 metres in width of the paving. Note that the ferns growing around the excavation completely covered the ground.*

became deeper and forced us to remove an increasing amount of material. We abandoned the small hoe we used to make our test digs and took up our pick and shovel which we always had with us. With great vigour, we continued our excavation, making it as narrow as possible in an attempt to discover as soon as possible where the other side of the paving ended. Inwardly we hoped we would not reach the other edge too soon, because the wider the road surface, the more likely it was built by the Romans.

During the Middle Ages, muddy stretches of mule-tracks were paved to ease the transit of people on foot or horseback. But these were always 1.60-1.80 metres wide. However, the Romans never built paved roads measuring less than 2.40 metres wide, not even on high mountain passes.

Aware of these construction features, we continued to excavate, hoping that

we would find more stones, at least up to a width of 2.40 metres. As we proceeded with our excavation, we measured the uncovered width and when we reached 2.40 metres without yet finding the uphill edge we were overcome by a sense of great satisfaction. We no longer felt weary and shortly we had uncovered the entire road width, reaching the uphill edge which set the road surface at 2.50. Overwhelmed by enthusiasm, we extended the excavation along the length of the road, and before the sunset, we had exposed the paving over a length of 1.50 metres and a width of 2.50 metres.

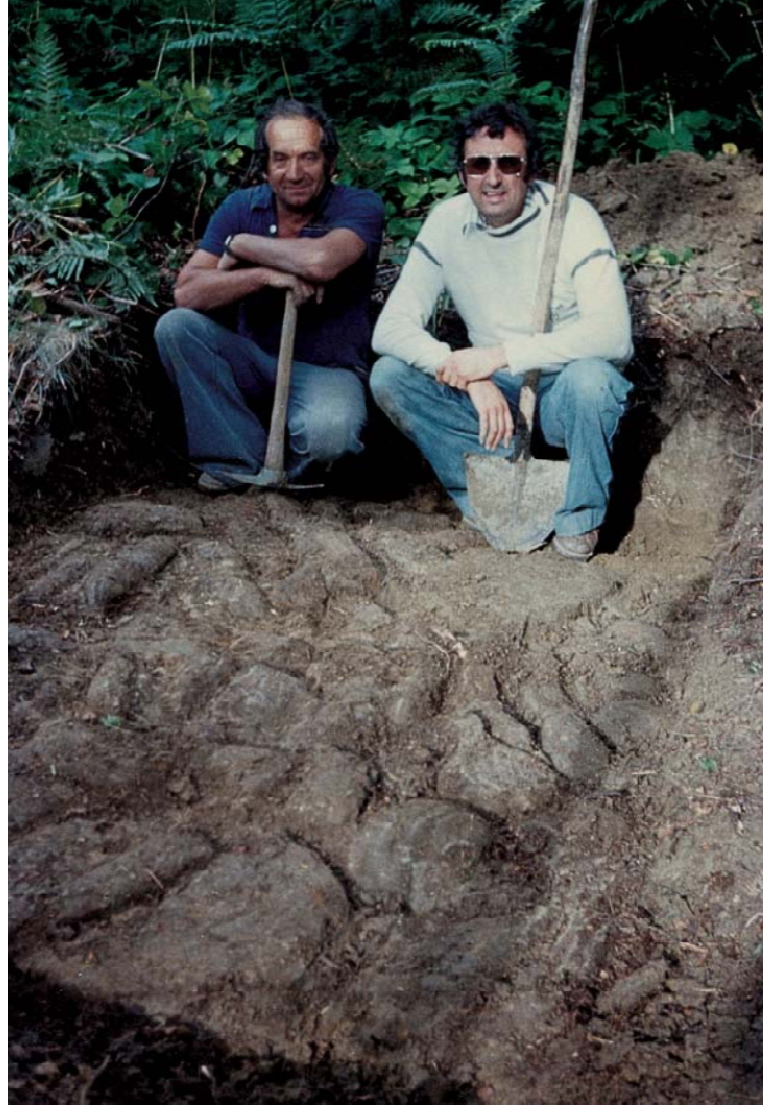
It was late afternoon on 25 August 1979; the most wonderful day of our entire archaeological adventure, because deep down we knew that we had finally found the Roman road remembered by our ancestors.

That evening, we returned home triumphant to celebrate with our families the discovery that they had believed impossible.

5 - The first excavations and the visit by Professor Nereo Alfieri

The next day we immediately returned to the site to continue our excavation and unearth further metres of road. The paving was compact and well preserved, made of hewn sandstones, placed one next to the other. The stones on the uphill edge of the road were much wider than those on the downhill edge, because the stones on the downhill edge were laid vertically. The stones in the centre of the road were smaller but perfectly arranged between the two lateral “guides”, which were still intact and without any blurs. We considered ourselves lucky to have found such a well-preserved first stretch of road, which allowed us to observe its structure.

The way in which it was built, its position in relation



Mount Bastione (25 August 1979): Franco Santi and Cesare Agostini on the site of the first find at the end of the day's excavation. Their satisfaction is easy to see from their faces.. (Photograph taken by Andrea Agostini, Cesare Agostini's fourteen-year-old nephew, present at the find).

to the ridge and its direction, convinced us that we had uncovered the Roman road.

After just a few more days' excavation, we had uncovered a stretch about 10 metres long by the entire 2.50 metre width¹⁸.

Curiosity and eagerness to find confirmation of its continuity convinced us to carry out a further test dig, 70-80 metres further north, along the theoretical direction of the road. After a few unsuccessful digs, we moved slightly further downhill where the slope was flatter. Here we found a stone wider than the ones found on the downhill edge two days earlier. We continued to dig

¹⁸ This stretch of paved road is 2.50 m wide but most of the remaining road uncovered during our search has a constant width of 2.40 metres, equal to about 8 Roman feet (29.7 cm x 8 = 2.376 m). However, we found some stretches with an average width between 2.50 and 2.60 metres. These differences can very probably be attributed to the different state of preservation of the structure: the 2.40 metre wide stretches are as perfectly compact as when they were built, whereas the stones in the 2.50 metre wide stretches may have become loose due to soil subsidence.

along the road axis and uncovered about ten more, which reminded us of the edges (curbstones) of the first Roman consular roads.

In the meantime, two friends, Salvatore Argenziano and Giorgio Brighetti, who we had told about our find, invited Franco Bergonzoni, the then director of the Archiginnasio Library in Bologna and scholar of Roman archaeology¹⁹ to come and have a look at the remains. Franco Bergonzoni thought it appropriate to request the participation of Nereo Alfieri, Professor of Ancient Italian Topography at Bologna University, who accepted the invitation. An urgent inspection was agreed before the end of August. We met on the edge of the carriage road and reached the excavation site through an opening in the dense undergrowth. Once we had reached the site, Bergonzoni and Alfieri carefully observed the stones still dirty with soil and scrutinised the structure of the paving which looked like a surreal painting framed by the dark disturbed soil and the green ferns.

We waited silently, only answering their questions about the history of the place and indications useful for pinpointing the position.

After a polite exchange between Bergonzoni and Alfieri, the latter expressed his doubts. He substantially said that this small stretch of road might perhaps belong to a paved road built by the Romans, but confirmation was needed as to whether it continued as far as the Futa pass (8.5 kilometres further south) before it could be recognised as having a transapennine function compatible with the important Roman road system. If this could not be proved, a road of this type could have been built in more recent times to cover brief distances between a convent and a church, or a small medieval village and a mill, etc.

We immediately excluded the existence of any villages, mills or convents anywhere near the ridge, except for the well-known "Stale" hospice on the Futa pass. We then asked if in his opinion it could be the remains of the road mentioned by Titus Livius,



Mount Bastione (August 1979): a faded image of the inspection at the end of August of the first remains of the paving of the *Flaminia Militare* on mount Bastione; Franco Santi (right) illustrates our opinion to Nereo Alfieri (centre), who listens carefully, while Franco Bergonzoni takes notes.

built by the consul C. Flaminius in 187 B.C. from Bologna to Arezzo.

Alfieri's answer was categorical and absolute: he had already identified that road himself on another ridge, between the river Idice and the Sillaro, and therefore it could not pass where we were on mount Bastione. This affirmation surprised us because we were not aware of the results of his research on the other ridge, and disappointed us because it destroyed the historic foundation on which our research was based.

Alfieri probably realised our feelings from the expression on our faces and felt obliged to repeat his opinion telling us that as little as

¹⁹ Franco Bergonzoni from Bologna has published numerous studies about Bologna during the Roman age, and takes a special interest in tracing the first urban roads built by the Romans.

three years before, he had published in the “Atti della Accademia delle Scienze dell’Istituto di Bologna” [Acts of the Academy of Science of the Institute of Bologna] the results of his research that identified the route of the road constructed by the consul C. Flaminius from Claterna to the Raticosa pass²⁰.

Although we were embarrassed because we had revealed that we had not investigated the opinion of every modern scholar, we enquired about the construction features and the lengths of the Roman road he had found. He then clarified that he had not yet found any road paving, but that he had formulated a hypothesis about the existence of Flaminius’ road, having found persistent use of road names whose origin could be attributed to the name of the consul Flaminius in documents dating from 1100-1200.

These words reassured us, leaving us with hope, because our modest finds had not been completely demolished by the concrete existence of alternative archaeological finds, but only by an argument founded on documents dating back to more than 1300-1500 years ago and open to interpretation. Anyway, due to our lack of knowledge about his writings on the subject and due to an instinctive reverence we did not offer any doubts about Alfieri’s theory although Bergonzoni appeared to express fewer reservations about the Roman origin of the paving before his eyes²¹.

6 - Professor Nereo Alfieri’s monograph leaves room for hope.

Although the meeting with Nereo Alfieri had seriously dampened our initial enthusiasm, there was no way we wanted to definitely give up the task.

He had only

seen a few metres of road and therefore, had not been able to acknowledge its continuity and its constant and solid structure. Furthermore he had been taken to an unknown mountain and a wood where it was difficult for him to locate his position and understand the exact direction of the ridge and the road. Added to the fact that he was unaware of the history of the area, he could have easily attributed the road to nearby medieval communities in spite of our reassurances that none existed.

However, it is undeniable that his authority on the subject and especially his affirmation that he had already identified the route of C. Flaminius’ road along another ridge, had spread a shadow of doubt over our first finds. We were curious to read his writings and as soon as we returned to city life after the holidays, we studied them with the utmost attention.

After reading the text, we were filled with cautious optimism. The route theorised by Alfieri was only based on a few road names found in documents from the 12th and 13th centuries and later, which were not backed up by any archaeological finds resembling a Roman road network. Furthermore, in a preliminary description of the physical geography of the Tuscan-Emilian Apennines, Alfieri expressed his doubts about making a morphological identification of the ridge which Flaminius had followed and hoped that: “...*In practice, if it were possible to identify the pass or a stretch of mountain used by the Via Flaminia “Minore”²², it is reasonable to suggest that its continuation would follow the initial furrow and spur. In the case of Bologna, this type of search would be vast because two hydro-geographic systems converge near our city: the Reno-Setta to the east and the Savena-Zena-Idice, to the west*”²³.

²⁰ Nereo Alfieri: “*Alla ricerca della via Flaminia Minore*”. Extract from the Acts of the Academy of Science of the Institute of Bologna, - moral science class – 70th year. Reports, Volume LXIV; 1975-1976 – printed by Compositori, Bologna 1976.

²¹ Bergonzoni subsequently sent a written report to the Archaeological Superintendency of Emilia Romagna specifying in the subject: “*Municipality of S. Benedetto Val di Sambro; stretches of road paving perhaps from the Roman age in the mount Bastione area*”.

²² The name Flaminia “minore” was attributed by Professor Alfieri to the route he hypothesised on the ridge that acts as a watershed between the river Idice and the river Sillaro.

²³ Nereo Alfieri: work cited, page 56.

Thus, a number of possible alternative routes remained open, considering that Alfieri did not absolutely exclude our ridge between the Savena and the Setta. Alternatives and doubts that Alfieri expressed a little further on to conclude his brief geomorphologic description of the Tuscan—Emilian Apennines: “...*The conclusion of this methodologically indispensable examination is not reassuring: without the support of specific sources, the search for the route of the ancient road cannot be taken any further than more or less equivalent theories...*”²⁴.

We were relieved to learn

that the substance of Alfieri's text was quite different from the categorical statements made on the day of his inspection on mount Bastione, because it left open the possibility of proving that Flaminius' road was built on our ridge, if we could find its continuation as far as the Apennine pass.

After reading the text, we no longer saw Alfieri as a supporter of a theory that contradicted ours but as a valuable prompter of what we had yet to do.

Therefore, all we had to do was continue our search as far as the Futa pass. And that is exactly how we spent the years to come.

²⁴ Nereo Alfieri: work cited, page 57.

INTRODUCTION TO PARTS FIVE AND SIX

The search continues and the description of the remains uncovered in eight archaeological zones

Inspired by the discovery of the first few metres of paved road on mount Bastione, we continued our search convinced we would find other remains towards the Futa pass, aware of the need to reach this objective, which Alfieri himself considered fundamental.

This was in spite of the fact that we were substantially disappointed by the coldness of the academic world, which showed utter indifference to these first finds and did nothing to exploit the opportunity to open an archaeological research site on a university level so close to Bologna. It would have been a perfect training ground for young archaeology assistants and students and we could have offered our services as guides. The area was difficult to explore and we were convinced that with mutual collaboration we could have achieved some interesting results.

However, on one hand, the negative attitude of the scientific world was beneficial because it fired our competitive spirit and increased our enthusiasm for our "solo" efforts to continue the exploration. From that moment on, we dedicated more time to our explorations from March to November. It was no longer a matter of carrying out searches as if they were a holiday pastime, but it was a matter of bringing to an end a task that had become a moral obligation.

To give more scientific consistency to our search, we realised that we not only needed to dedicate attention to identifying the road route but

also to every clue and outcrop that could help us reconstruct the history of the area.

The ancient mule track along the crest of the ridge was our constant guide and reference (it is still visible along most of its route). At times, it was difficult to identify because hidden by vegetation, or because we were led astray by anomalous deviations created to avoid unexpected obstacles. Whatever the case, we always managed to find the itinerary by returning to the crest. We paid particular attention to the name of each place we went through, checking to ascertain their origin. This applies to mount Luario, Piana degli Ossi and Poggio Castelluccio.

As we intercepted each small stretch of paving, we carried out the narrowest excavation possible to discover the edges of the road and to check the width to ensure it was the same structure and continuation of the road system uncovered previously. It was only later, with the manual help of willing friends that we returned to these sites to further our excavation and get a broader and more complete view of each find. Therefore, the remains that we would like to illustrate to you now are the result of our explorations, test digs and the collaboration of numerous friends who offered us important manual aid and moral support.

When in the autumn of 1986, the Archaeological Superintendency for Tuscany (competent for the area), was officially informed of our finds¹, it attentively started

¹ By letter dated 29/09/86 (document 1). We sent the Archaeological Superintendency of Tuscany an initial report of our finds. We received a very prompt reply informing us of an imminent inspection by one of their officials (document 2), subsequently arranged for 16/11/1986.

to check the progress of our research and subsequently excavated in the areas we indicated.

Only the remains of the bridge in Colombaiotto (in Bilancino – archaeological zone “H”) and the Roman brick kiln in Sassorosso can be attributed to a concomitance of lucky circumstances. These finds lie exactly along the route of the road, one on the river Sieve and the other near mount Venere. They are important archaeological testimonies, which confirm the existence of the Roman transapennine route for a further 21 kilometres, increasing the continuity of the remains to a total 37 kilometres.

The remains of the Roman road are substantially located in the heart of the Apennine range, in eight archaeological zones, which we shall describe in the following pages, indicating their exact position on I.G.M. [Italian Military Geographic Institution] maps and illustrating them with plans, sketches and photographs.

Starting from zone “A” (mount Bastione), the site of our first positive excavations, we proceed in compliance with the chronology of our finds as far as zone “H” (the bridge in Colombaiotto).

The finds between mount Bastione and the Futa pass (PART FIVE 1979 - 1992) are grouped into four archaeological zones (A, B, C, D,) located on the highest point of the transapennine itinerary, reaching altitudes of 1120 metres on mount Bastione, 1166 metres on mount Poggiaccio and 1110 metres on Poggio Castelluccio². The actual Apennine pass used by the Roman route is, therefore, on mount Poggiaccio and not on the Futa pass, which only reaches an altitude of 903 metres above sea level³.

We mainly passed the first ten years of our explorations searching along this band of territory. Although it is just 8.5 km long, we were kept very busy with numerous test excavations. In many cases, our efforts were rewarded by the discovery of well-preserved stretches of paving as well as other interesting archaeological remains, which confirmed



Plate 13
Route of the Roman road from Bologna to Fiesole.

- Evidence of this route is provided by the continuity of the archaeological finds.
- Probable continuation of the route northwards to Bologna and southwards to Fiesole.
- Archaeological sites: sites A, B, C, D, E, F, G and H.

² These altitudes refer to the Roman road, which passes just below these peaks, following the level of the ridge; thus avoiding unnecessary ascents and descents over a few tens of metres. Their peaks reach respectively 1190 m, 1196 m and 1131 m above sea level.

³ The Futa pass is now the pass used by trunk road 65 (called the Futa road) because this is where the modern road starts its constant descent towards Mugello.

the persistence along this ridge of an important pre-Roman, Roman and Medieval road system.

From 1979 to 1983, we continued our search alone. We were then joined by Vittorio Di Cesare, a freelance journalist and topographer, who was one of the first to realise the importance of our task and who often came with us to carry out topographical surveys of the previously uncovered paving. When in 1985, we were featured in the monthly magazine of the Soc. Autostrade in Rome, he wrote six articles to illustrate the finds made up to that point ⁴, thus publicly revealing the results of our

research for the very first time.

This news did not escape the attention of Nereo Liverani, journalist for "La Nazione" (a daily newspaper in Florence), who on 5 November 1985, published an article about the topic⁵. It was the first article in a daily newspaper with a wide readership that contributed (as well as the spread of the discovery through personal contacts and conferences), towards arousing progressive and obliging interest in our initiative, and a certain degree of criticism.

In PART SIX we describe the finds discovered between mount Bastione and mount Venere (1985-1992): the *glarea* road (archaeological zone "E") and the Roman brick kiln in

⁴ These articles appeared in the magazine entitled "Autostrade", a monthly technical and informative publication issued by Soc. Autostrade in Rome. The first three articles were published in issues 7-8-9 and issue 12 in 1985, and the others in issues 7-8-9 and issue 11 in 1986.

⁵ See document 3.

Sassorosso (Archaeological zone “F”).

PART FIVE

THE EXPLORATIONS AND FINDS FROM MOUNT BASTIONE TO THE FUTA PASS (1979-1992)

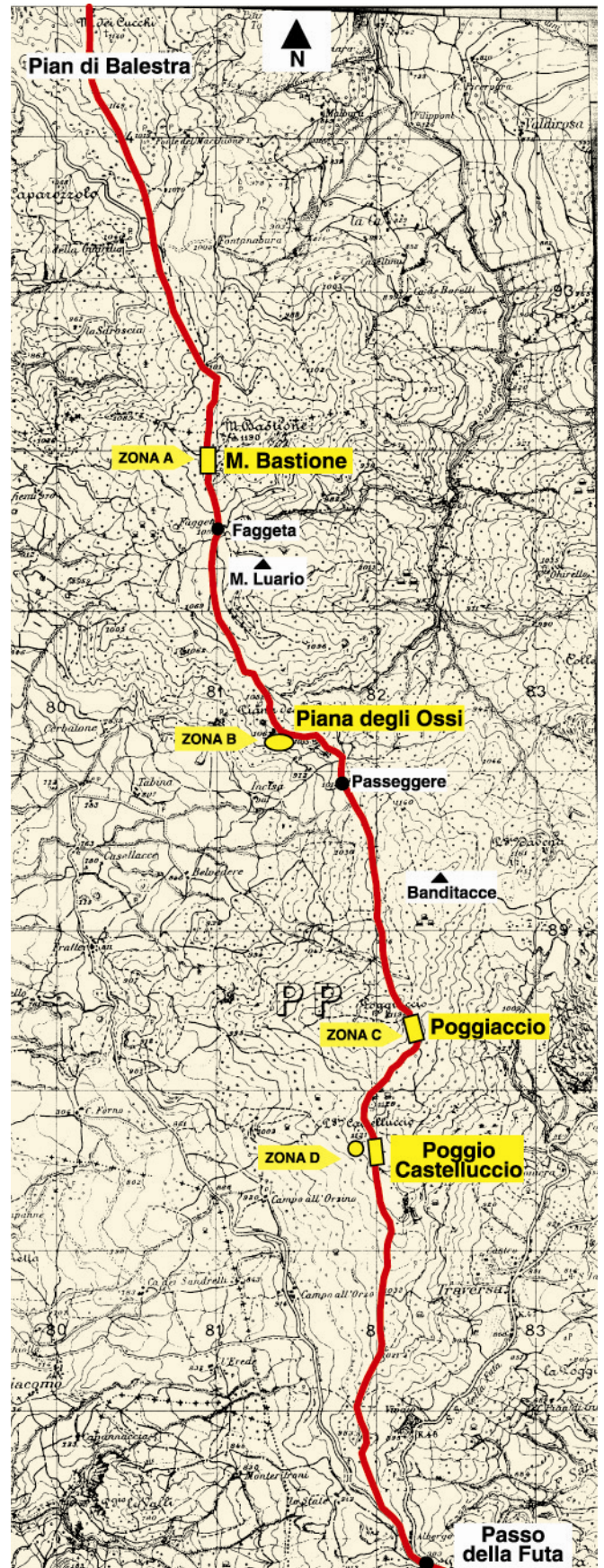


Plate 14

The Roman route and the archaeological sites from mount Bastione to the Futa pass – archaeological sites A, B, C, and D.

(Italian Military Geographic Institution (I.G.M.) authorisation No. 5034 dated 13.07.99)

CHAPTER IX

MOUNT BASTIONE (ARCHAEOLOGICAL ZONE “A”: sites A/1 - A/2 - A/3 and A/4) AND THE BEECH WOOD:

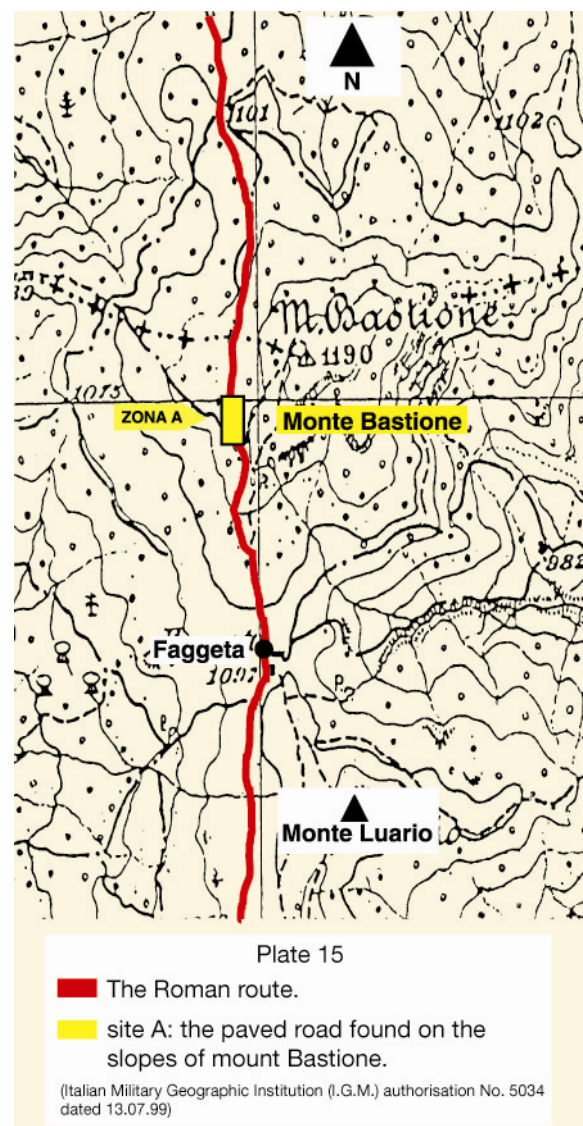
- 1 - The Roman paving stones (sites A/1 - A/2 - A/3 and A/4).
- 2 - The pre-Roman path (sites A/5 and A/6).
- 3 - In three thousand years, seven parallel road routes have been built on the western versant of the same ridge.
- 4 - The beech wood.

1 - The Roman paving stones (sites A/1 - A/2 - A/3 and A/4)

Mount Bastione is between the Savena and Setta valleys, where the border divides Emilia from Tuscany¹. Its peak (1190 metres above sea level) competes with the peaks of mount Poggiaccio, Sasso di Castro and mount Freddi. It does not have any rivals on the north side, therefore on a clear day, it is possible to see with the naked eye the Basilica of S. Luca on Colle della Guardia and beyond the low grey line of the Po Valley, the snow-capped peaks of the Alps emerge like enormous sails.

Its name leaves no doubt as to its past function as a “castellar” and fortress. The peak is shaped like an oval platform measuring some 250 square metres and it is defended by two deep circular trenches². It was probably used in the past by various rivals, from the Byzantines to the militias of the Grand Duchy. Its “castellar” origin is beyond doubt: the fragments of ceramics found here can be attributed to Apennine-Ligurian civilisations (8th - 4th centuries B.C.) and are identical to the ones also found later on mount Poggiaccio and Poggio Castelluccio.

The finds in archaeological zone “A” are about 70 metres below the peak, where the south ridge reaches the level of the north ridge. Here we uncovered about



¹ The boundary line is marked by a number of cylindrical sandstone boundary stones with the date 1789.

² Serafino Calindri: work cited, page 236. He mentions that on the peak of Mount Bastione “... there are the remains of an earth fort, with its parade ground, trench and counter trench, bastion, etc. built during the last wars between Florence and the Pope in the past century, not quite on the border between the two states”.



Mount Bastione: photograph taken from the north. The road was uncovered on the west slope, 70 metres below the peak. Pian di Balestra is in the foreground.

80 metres of 2.50 metre wide paved road, just a few metres from the ridge and whose state of preservation varies according to its position.

SITE A/1

In site “A/1”, which was where we made our first find, the paving is more or less intact for about ten metres. Therefore, it has been possible to verify the construction technique employed to build it.

Locally quarried sandstone blocks are aligned along the uphill side of the road. On average, they are 40/50 cm wide and 25/30 cm deep. The stones are positioned over a bed of fine sandstone gravel (*glarium*), which appears to be waste material from the quarries and has the dual function of providing the paving with stability and improving rainwater drainage. Every now and again, these stones are alternated by narrower stones (always 25/30 cm deep). Narrower and deeper set stones were used to construct the downhill edge, so that they offered more support to the central part of the road. Smaller stones were used to build the centre of the road. Each stone fits perfectly with the stones next to it

and the paving is compact and solid. The downhill edge of the other nine metres of road uncovered on site A/1 is very uneven and has even disappeared in some points, whereas the uphill edge preserves its original compactness.

The 60 cm thick layer of humus covering the paving on the uphill side of the carriageway surprised us. One must bear in mind that here the road is only 8/10 metres below the summit of the ridge. It is obvious that in this location near the summit, the soil and debris normally carried by rainwater is unable to deposit due to the simple fact that uphill of the paving, there is no sloping ground to encourage this micro-matter to slip downwards; therefore, the carriageway cannot have been covered by this matter after just a few centuries. Nor can the depth of the humus be attributed to small surface landslides because the road is located on the summit of the ridge. The 60 cm layer of matter covering the uphill edge is, therefore, very significant because it is the fruit of very gradual sedimentation mainly due



Mount Bastione (site A/1-north): *the best-preserved stretch of road found on mount Bastione.*



Mount Bastione (site A/1-north): *a close-up of the paving.*



Mount Bastione (site A/1): *detail of the uphill edge of the paving; the neatly fitted wide sandstones slabs and the layer of 60 cm of soil that covered them can be seen clearly. It is important to note the closeness of the ridge summit (8-10 m) which can be seen in the background.*



Mount Bastione (site A/1-north): *detail of the uphill edge of the paving; some stones are as much as 60 cm wide.*



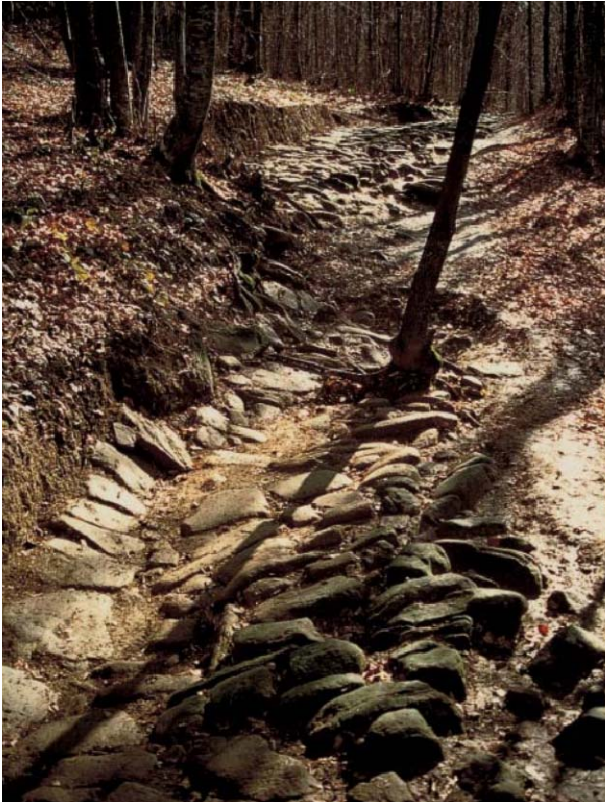
Mount Bastione (site A/1) - 16 November 1986): *Luca Fedeli, Inspector from the Archaeological Superintendency of Tuscany (centre) on his first visit to see the paving already partially covered by the autumn leaves. He is accompanied by Cesare Agostini (left) and Franco Santi.*



Mount Bastione (site A/1-north): *the entire 19 metres of road brought to light. The part in the foreground is well preserved whereas the downhill edge of other part is uneven due to slight soil subsidence. In the background, it is possible to see the completely irregular continuation of the paving towards the left caused by a surface landslide.*

to the falling of leaves and branches, and to a lesser extent to fine dust and small pieces of debris carried by the wind, thus the thickness of the sedimentation can easily be attributed to the passing of two thousand years³.

³ To give an idea of the slow increase in organic sedimentary layers, fruit of the minute maceration of leaves and branches, it is worth pointing out that in the area near mount Poggiaccio, where we found trenches dug by American soldiers in the autumn of 1944, in the area around the trenches we found tin lids, cutlery, tin foil coffee and sugar bags, etc. which were lying under a layer of humus measuring just 2-3 cm, and that was after over 50 years had passed by!



SITES A/2 AND A/3

In the adjacent sites (A/2 and A/3) located further north, the entire width of the paving is very deformed for a length of 52 metres (to such an extent that it rises and sinks). This is obviously the effect of a landslide that dragged the entire road downhill, completely misaligning this stretch from the stretch immediately before it⁴.

SITE A/4

About 10 metres of site A/4, has also been affected by soil subsidence, although this has had less effect on the layout of the paving, which is still compact. Here, the uphill and downhill edges have been built using very large sandstone slabs. This detail indicates that when the road was built, the ground was almost even (as it still is today).



Mount Bastione (site A/2-south): *the paving deformed by a surface landslide.*

⁴ This stretch of paving was unearthed with the vital help of Bruno Ciccone, who we would like to thank for his generous efforts over many years.



Mount Bastione (site A/3): the only stretch of road not deformed by the landslide on site A/3. Large slabs of sandstone re-emerge from the wood defining either edge of the road. The measuring stick lying on the paving gives a visual idea of the width of the paving stones and the carriageway.



Mount Bastione (site A/4): the edge (curbstones) uncovered 80 m north of the first find. Note how the construction technique matches the curbstone pictured in the photograph on the right (a stretch of the consular Via Salaria).

2 - The pre-Roman path (sites A/5 and A/6).

While exploring this part of the ridge, during an excavation carried out exactly on the summit, we came across sandstone paving just 1.25 metres wide, made using a much rougher technique. We then continued to dig along the summit of the ridge; just a few metres further south, the ridge turns right and starts to descend decisively for a few tens of metres. The paving follows the ridge exactly and therefore it too curves to the right and descends, always maintaining a constant width of 1.25 metres. We only uncovered two stretches measuring a total 25 metres because the downhill paving had very clearly been uprooted and disarranged. In the opposite direction (north), our test digs to discover where this paving continued, did not provide any concrete results



Left curb of the ancient Via Salaria after kilometre 53 (from “*Strade romane, percorsi e infrastrutture*” [Roman roads, routes and infrastructures] by Lorenzo Quilici from Bologna University. Extract: *la via Salaria da Roma all’alto Velino* [The Via Salaria from Rome to the Upper Velino] Published by L’ “Erma” in Bretschneider, page 103).



Mount Bastione (site A/4-south): *along this stretch, the downhill edge of the paving (right) was also made with large sandstone blocks laid horizontally.*

These two stretches of paved pathway (identified by us as sites “A/5” and “A/6”), are about 80/90 metres further south than site A/1 and follow the exact summit of the ridge, whereas the Roman paving passes 10 metres below. If you trace the ideal continuation of the Roman road southwards in a straight line, you will notice that it⁵ descends gently along the side of the ridge, getting progressively further away from the summit (almost flat here), and then rejoins the continuation of the ridge, where it slopes down steeply. By doing this, the road avoided the turn and the steep slope that the paved path rigidly follows along the summit of the ridge. In other words, it is obvious that the Roman road “shortcuts” the curve, thus avoiding the steep slope

Bearing in mind the location of the site and the position of the remains, this implies that the paved path was built before the Roman road: any other construction chronology does not make sense. In fact, if a straight 2.50 m road already existed, there was no point in constructing a path barely 1.25 m wide, which had to



Mount Bastione (site A/5-north): *The 1.25 m wide paved path found on the summit of the ridge not far from the Roman road. The disappearance of part of this path can be attributed to the centuries-old transit of charcoal burners and woodcutters, testified by a track that intersects it.*

⁵ In spite of assiduous explorations, we were unable to find the southward continuation of the Roman road near site A/1 due to the numerous landslides that have taken place over the centuries.

climb up a steep slope, turn a corner and take a longer route to connect the same two points of the ridge. Perhaps the fact that the paved pathway on the ridge fell into disuse is the reason why it has survived until today. If these observations are correct, it is possible to conclude that these are the remains of paving constructed along the transapennine route of the Etruscan pathway, in a point where it was necessary to consolidate muddy ground up a steep slope and around a bend.

3 - In three thousand years, seven parallel routes have been built on the west versant of the same ridge.

Archaeological zone “A” takes on even more importance when studying the transapennine road system because the same location features another two parallel road routes built in subsequent eras. Just 8 metres below the Roman road,



Mount Bastione (site A/5-north): *detail of the paved ridge path.*



Mount Bastione (site A/6-north): *the point where the roughly paved uphill path takes a 90° turn to the left.*

over the centuries, the unpaved medieval transapennine mule track has sunk so much that it now forms a 2/3 metre deep ditch. Here, the mule track runs more or less parallel to the Roman road. A little further south, the track and the road unite and follow the same route along the narrow watershed that descends towards Faggeta.

A fourth road runs along the same versant, 15/16 metres below and parallel to the mule track. This is a local dirt road with a gravel bed, built in 1948-50 to provide access to the house in "Faggeta", at the time inhabited by farmers.

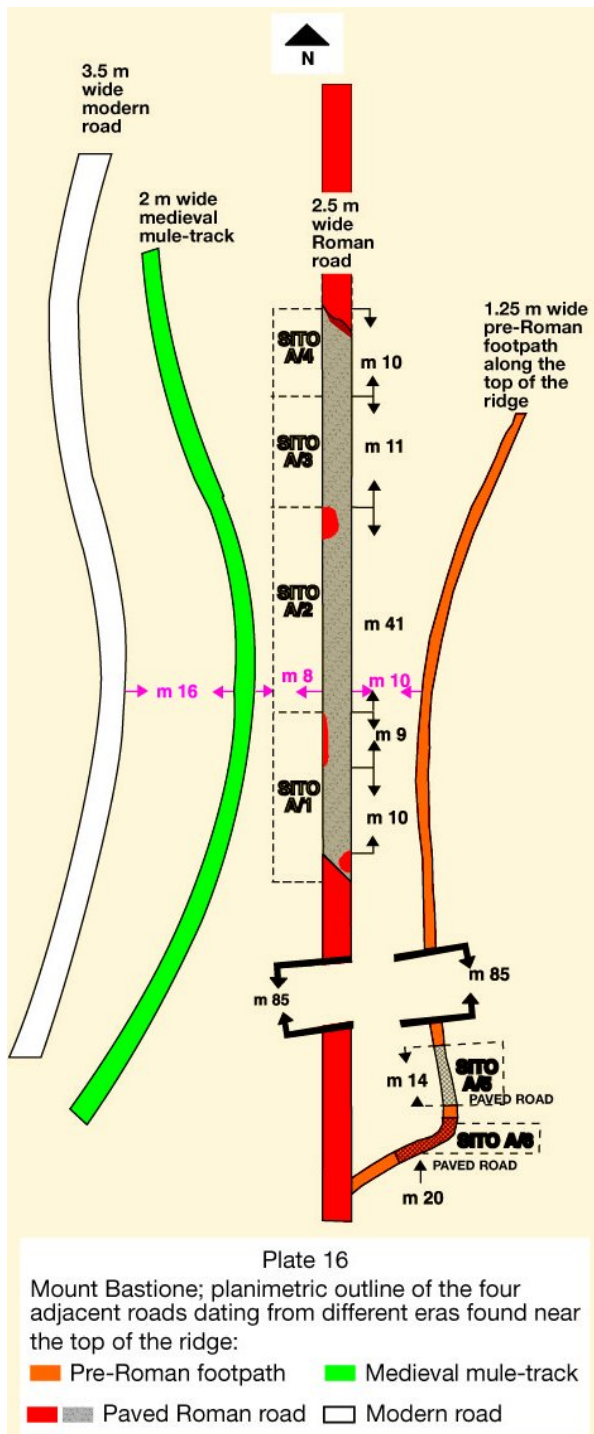
Thus, within the space of 35-40 metres, on the same west facing versant, just below the peak of mount Bastione, there is evidence of four parallel road routes used during different epochs:

- the oldest, presumably pre-Roman, exactly retraces the top of the ridge;

- subsequently the Romans built a perfectly paved, 2.40 to 2.50 metre wide road, about 10 metres below the top of the ridge;
- in the Middle Ages, the same ridge was used to cross the Apennines, but the route of the mule track is 8 to 10 metres below the Roman road;
- finally, in modern times a local dirt road was created 15 metres below the medieval mule track.

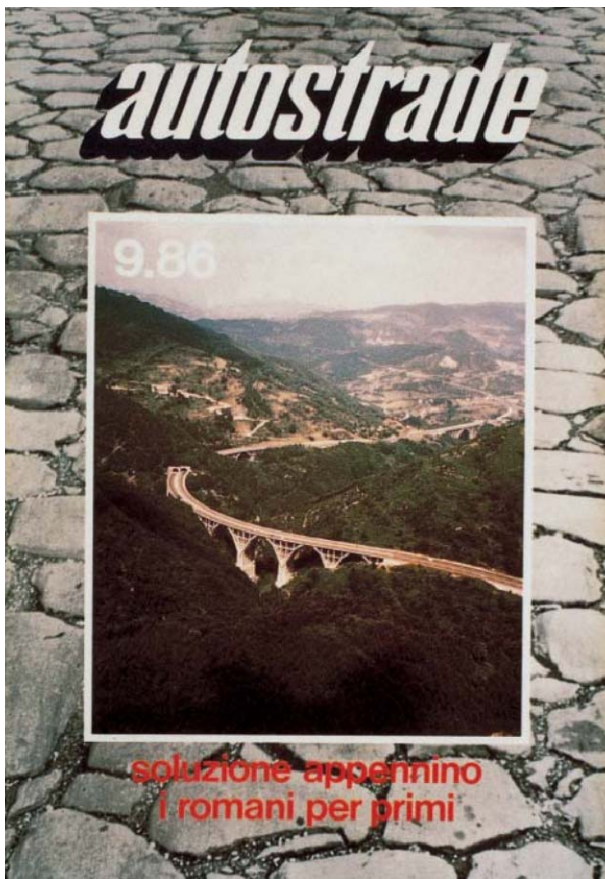


Mount Bastione: the medieval mule track covered in leaves. The track has sunk into the west versant of the ridge and is almost parallel to the Roman road, 8-10 metres above.



Therefore, man has always used the same ridge to cross the Apennines, but during each age, the route has progressively been tens of metres lower. When comparing the position of these ancient routes with the more recent road system, it is possible to note that much lower down, on the same western versant, the inter-regional road off the 325 Trunk Road in Rioveggio, passes through Montefredente, Pian del Voglio and Bruscoli, to reach the Futa pass.

Even further down is the *Autostrada del Sole* [the A1 motorway] that links Bologna to Florence. Finally, a year ago, construction of a motorway tunnel nearly 9 km long was started almost on the bed of the river Setta, on the western slope of this ridge. The tunnel will go towards improving the transapennine road system between Bologna and Florence, in a bid to get rid of the difficulties that crossing the Emilian-Tuscan mountain range still involves today in spite of the motorway, over 2,500 years since the Etruscans retraced an existing and very ancient track, choosing the exact summit of this ridge to cross the Apennines. We should not be surprised that even today, at the start of the third millennium, the same route is still used to improve the link between Bologna and Florence, the only diversity lies in the altitude of the road. The Etruscans travelled at 1,130 metres above sea level. Today the tunnel is being constructed on the lowest part of the same ridge, at 420 metres above sea level.



The cover of the monthly magazine "AUTOSTRADE" with the title: "The Apennine Solution: the Romans were the first". The magazine published an article about our first finds in its September 1986 issue.

4 - La Faggeta.

We cannot continue the description of our exploration towards the Futa pass without mentioning "La Faggeta", located just south of mount Bastione.

The name Faggeta indicates a now decayed rural building, located exactly on the top of the ridge. From here, the ridge descends to an altitude of 1,097 metres above sea level, about 500 metres south of mount Bastione.

Constructed in ancient times and rebuilt during subsequent epochs, as testified by the various architectural elements incorporated in its walls, the building stands near a compulsory point of passage where ridge narrows, leaving no other alternative.

Perhaps the building was built on this location because of this orographic feature, strategically important in terms of controlling transapennine travel from the Upper Middle Ages⁶ onwards. Its importance is also confirmed by the discovery of two aqueducts (one deeper than the other) built in different epochs. Both aqueducts are supplied by the same source that flows from the upper slopes of mount Bastione and supplies water to the building. The upper aqueduct is well manufactured with coupled terracotta pipes dating back to the 14th or 15th centuries. The aqueduct below follows the same route. It is made of rectangular sandstone slabs arranged to form a rudimental conduit, which can be attributed to a much earlier period.

The presence of the two aqueducts proves that in ancient times, this building was built for military purposes for two different reasons:

- no farm house in the entire upper Apennine area nor any home in the towns further downhill was supplied by an aqueduct before 1900. Only castles or the homes of aristocrats could afford this type of luxury:
- no farmhouse has ever been built on the top of a ridge at an altitude of over 1,000 metres. This would have meant the trouble of transporting uphill the construction materials first and all the farm and woodland products second (hay, cereals, wood, etc.); it would have been much more logical to build the house further downhill below the farmland to make carrying these items easier.

We are convinced that in the case of the building on La Faggeta, it must have started to be used as a farmhouse long after it was originally built; it was simply an opportunity to exploit an existing solid building.

The name of this solitary house was used in the Middle Ages to indicate the mule track that went from Tuscany to Bologna through the Stale pass (Futa pass). This is also confirmed by Leonardo Rombai, Professor of the Geographic Institution of the University of

⁶ The importance of this building was also testified by the coat of arms of the Medici family from Florence, installed over the entrance and unfortunately stolen about 20 years ago.



The gravel road built in the 1950s to link La Faggeta (just visible among the trees) to Pian di Balestra. Here the road coincides exactly with the ridge, and is thus superimposed on the Roman and medieval routes.

Florence⁷: “there were a dozen commonly used transapennine routes in the sixteenth century: (omissis) the “Faggeta” or “Cannove” route that ran along the left versant of the Savena valley. It then left the Bolognese Giogo towards Pianoro. It passed through Brento, Trasasso, Cedrecchia, Madonna dei Fornelli, the Monte Bastione pass, La Faggeta and the Passeggere pass where it descended towards the Stale pass and continued along the “mule track” to Barberino”.

Therefore, La Faggeta was on the transapennine axis used in the Middle Ages and, probably, because its name was handed down

with strict reference to the road, it was also a stopover and refreshment point for travellers, as was the Stale, eight kilometres further south on the same route, near the Futa pass.



La Faggeta: water conduit made of sandstone slabs found one metre below the terracotta aqueduct. Considering its position and construction technique, it is probably much older than the terracotta aqueduct.



La Faggeta: aqueduct made of coupled terracotta pipes which supplied water from mount Bastione to the building called La Faggeta found at a depth of 50 cm and which probably dates back to 1300-1400.

⁷ Leonardo Rombai: preface to “Libro vecchio di strade della Repubblica Fiorentina” edited by Gabriele Ciampi. Published by Papafava, 1987, page 18. This information comes from a map by father Giovanni Inghirami (1779-1851) purchased years ago by the Moreniana Library in Florence.

⁸ E. Repetti: work cited, volume III, Florence 1839, page 702: “STALE [from “Ospitale” meaning Hospice] in the Futa Apennines in the Val di Sieve – An ancient hospice that stood on the old main road to Bologna called “dello Stale” (omissis).

CHAPTER X

PIANA DEGLI OSSI (ARCHAEOLOGICAL ZONE “B”) MOUNT LUARIO AND THE PASSEGGERE PASS

- 1 - Our intuition regarding the existence of the kilns and the first analyses.
- 2 - The excavations carried out by the Archaeological Superintendency for Tuscany.
- 3 - The six kilns: an impressive industrial installation.
 - 3.1 - The choice of location for the kilns and the construction technique.
 - 3.2 - The processing units and the amount of lime produced.
 - 3.3 - Could the kilns date back to the second century B.C.?
- 4 - Mount Luario.
- 5 - The Passeggere Pass.

1 – Our intuition regarding the existence of the kilns and the first analyses

After the finds on mount Bastione, we continued our search southwards along the ridge. Perhaps some centuries ago, near

Faggeta and a disused farmhouse not far off called “I Capannoni” [the sheds], numerous pastures and crop fields had been claimed from the woodland. These fields are now large meadows and some are still cut to make hay.



The fields now used as pastures near the ridge above “Capannoni” look over the Apennine chain and are visited by numerous groups of tourists walking along the route of the Roman road.



Piana degli Ossi: the basin-like shape of the ground cleared of trees and the hollows on the northwest side aroused our curiosity.

The fact that these fields were farmed until the 1950s destroyed any hope of finding the remains of the road; undoubtedly, any paving stones from an unused road would have been re-cycled by the locals.

Indeed, we found absolutely no trace of the road in this area.

Beyond these fields, the beech wood reasserts its command. A little further on, always along the ridge, we found scant remains of paving about 60-70 metres north of Piana degli Ossi. Although scant, these remains are important because they confirm that the road continued in that direction.

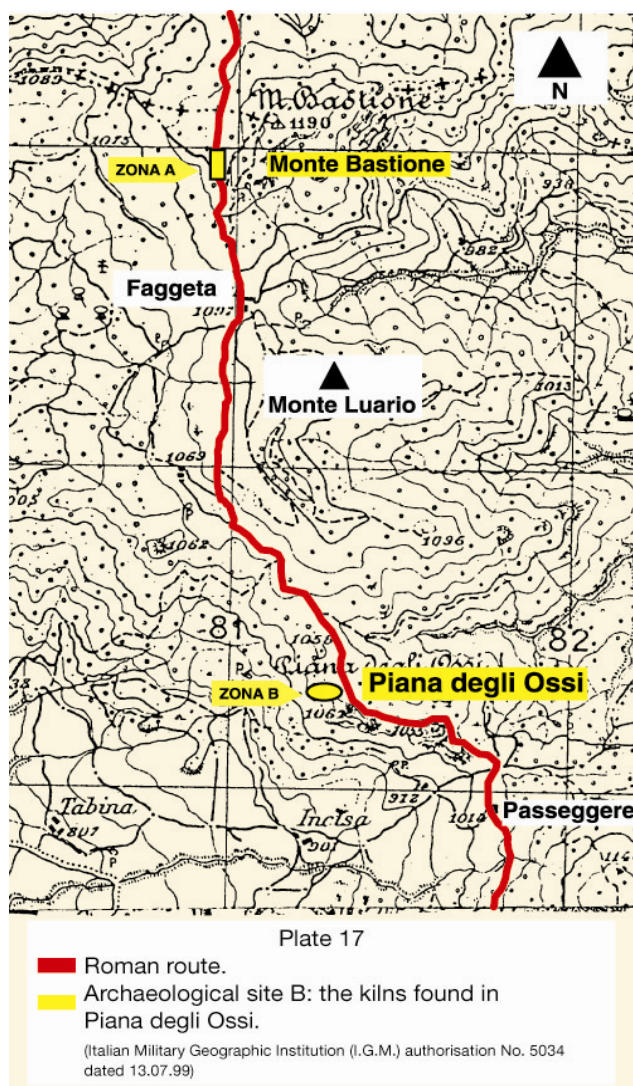
The place name “Piana degli Ossi” [Plain of Bones] is curious for its reference to human or animal remains. Furthermore, its position (1,062 above sea level) near the road does not feature any arboreal vegetation. The plain is elliptical and lies along a north-south axis; it features a series of furrows and spurs on the west side that could resemble common graves, and which anyway are obviously manmade. We hoped we would find traces of burials.

After carrying out a few sample excavations in various points, to our

surprise we uncovered small pieces of white material whose shape could, at first sight, be mistaken for bone. Once the soil covering these items had been cleared away, we realised these were fragments of limestone. The pieces varied in size, had a perfectly smooth surface and rounded edges.



Piana degli Ossi: limestone residues which were not completely fired by the heat of the limekilns. There are many such residues on Piana degli Ossi and in the past, they were mistaken for bones, thus explaining the place name given to the area.



These characteristics revealed that this was under-fired limestone. Now that we were able to carefully observe the particular ground conformation from another point of view, we realised we were looking at a series of six limekilns (five had collapsed), located near the same number of pits. The structural features of one appeared to be almost intact, considering there was a circular depression in the ground that highlighted the perimeter of the upper part of the kiln. A small excavation brought to light a number of sandstones vitrified by heat and which were part of the kiln casing.

The six limekilns at “Piana degli Ossi”, must

have fallen into disuse a very long time ago; in times so remote that all memory of them has been forgotten and even the place name does not refer to this industry.

Therefore, it was important to verify when the installation was built, or at least when it was last used. To do this we had to find carbon residues from the firebox in the limekiln. The thought of reaching the firebox of the partially collapsed kiln overwhelmed us. From our view above ground, we estimated that the kilns must be buried below at least 3-4 metres of soil.

In August 1981, we manually bored a few cores in the lowest part of one of the five kilns we believed had collapsed. After a number of attempts, we found at a depth of 80-90 cm, consistent amounts of carbon which could have been produced by the kiln fires.



Piana degli Ossi (July 1981): after an initial test excavation on Piana degli Ossi, we uncovered a number of sandstones reddened by the heat, confirming the existence of kiln walls.

We contacted the University of Florence, and the carbon samples were analysed thanks to Carlo Azzi during the first months of 1982 in the C.14 laboratory of the C.N.R. [National Research Council] in Florence. The carbon was dated back to 330 A.D. (give or take 30 years)¹.

This date was interesting in terms of providing an overall evaluation of the finds and could help

¹ Certification of this analysis was issued by Carlo Azzi in 1984, after he had been transferred to the Institute of Physics at the University of Rome (document 4).



Piana degli Ossi (August 1981): *a core is bored manually during the search for carbon from the firebox of a collapsed ancient kiln: Franco Santi starts the excavation.*



Piana degli Ossi (August 1981): *Cesare Agostini shows the carbon residues found at a depth of 80-90 cm.*

our quest. Because we had been unable to explore the remains, we were not certain that the samples came from the firebox of the collapsed kiln, although they had certainly been taken from the bottom of the presumed collapsed kiln, positioned in the lowest point of the hollow on Piana degli Ossi. We chose to look here for carbon material because we thought that when the kiln was used to fire limestone, the firebox must have been cleaned repeatedly. Although the combustion waste was then removed to a dump, some carbon residues must have remained on site, and the ones we found must have been the remains of the last fires that were lit. This consideration allowed us to evaluate 330 A.D. as an “ante quem” term, in the sense that if the last limestone firing cycles in the collapsed kiln were from the late Imperial age, the kiln must have been built before then.

This opinion was also backed up by the size of the installation compared to the isolation of the location where it was built.

As time passed, we felt the initial dating needed to be verified and the bottom of the partially collapsed kiln needed to be excavated so that we could compare our theories. We had to wait another seven years before we could take another sample, because we wanted the process to be witnessed by the authoritative presence of Luca Fedeli, Chief Inspector of the Archaeological Superintendency for Tuscany who, only as late as 1986, was entrusted to supervise our explorations and safeguard any finds. This occurred in July 1988, in the presence of Agostino Salomoni from the ENEA research centre in Bologna, who offered to make the necessary datings, and also thanks to the kind efforts of Giuseppe Longo from the Department of Physics of the University of Bologna.

The sample was again taken from the lower central area of Piana degli Ossi, but this time near the first, only partially collapsed kiln, beyond its presumed base and at a depth of 1.90 metres. The dating carried out by Salomoni in laboratory C.14 of ENEA in Bologna was as follows: 700 years A.D. (give or take 300 years)².

² The certification issued by Agostino Salomoni from ENEA is enclosed herein (document 5: sample Bo-108). It also indicates datings regarding other samples taken during 1988 in nearby areas, referred to below.



Piana degli Ossi (July 1988): *taking samples of carbon material at the foot of the first kiln. Franco Santi excavates under the watchful eye of Luca Fedeli from the Superintendency (standing) and Agostino Salomoni from laboratory C.14 from ENEA in Bologna (sitting).*

Although the time span was greater, this confirmed that the installation was probably used between 400 and 1000 A.D.

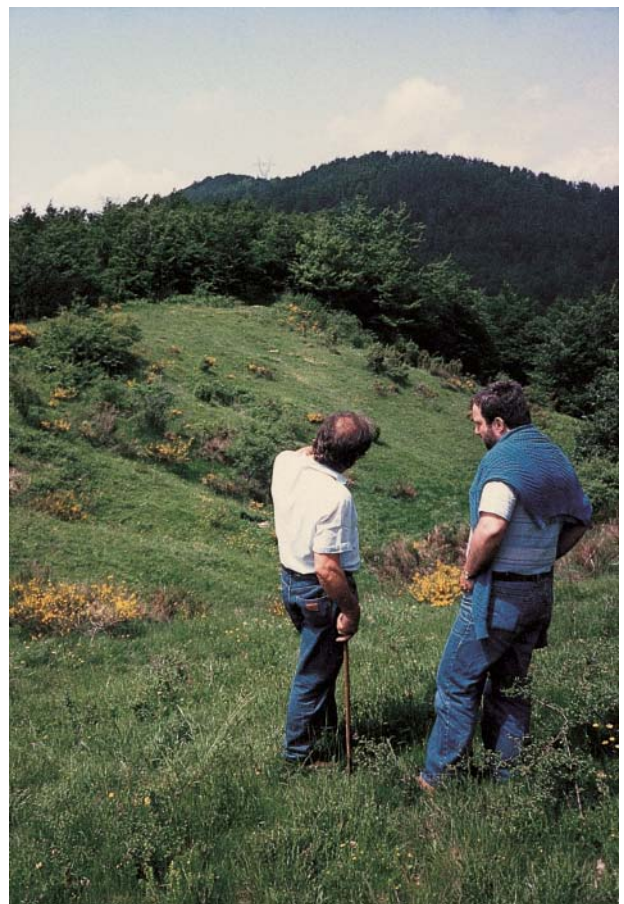
In our opinion, the carbon residues analysed should be attributed to prolonged re-use of the first kiln compared to the other five collapsed kilns. This kiln may have been re-used because its structure was better preserved, or more probably, it was rebuilt on the same site because it was nearer the road and therefore more convenient than the others.

At this point, it was important to unearth the entire complex, carrying out a dig under the direct surveillance of the Superintendency for Tuscany with a large workforce. Thanks to the efforts of Luca Fedeli and the concrete collaboration of the Municipalities of S. Benedetto Val di

Sambro and Firenzuola, who received the necessary funds from Soc. Autostrade in Rome, it took one year to carry out all the preliminary procedures.

2 - The excavations carried out by the Archaeological Superintendency for Tuscany.

On 17 July 1989, the excavation was started by members of the Archaeological Cooperative of Florence, under the direction of Luca Fedeli, and with the help of the workers from the Tuscany-Romagna Forestry Cooperative of Firenzuola. The first excavation started in the point we indicated, and where it was believed the kiln walls were well-preserved (kiln 1). Given the predicted scale of the excavation, a mechanical excavator was used to remove the first layer of soil.



Piana degli Ossi (July 1989): *Franco Santi shows Luca Fedeli the exact spot to excavate to uncover the still intact kiln.*



Piana degli Ossi (July 1989): *Franco Santi, Luca Fedeli and Cesare Agostini preside over the initial outlining of the excavation area.*



Piana degli Ossi (July 1989): *the excavator removes the topsoil. In the background, mount Luario overlooks Piana degli Ossi.*



Piana degli Ossi (July 1989): *panorama of the excavation area. In the foreground, the top stones of the kiln being uncovered.*



Piana degli Ossi (July 1989): *after a few days of excavation, the circular sandstone walls on the upper part of the kiln can clearly be seen. Note the reddish colour of the inside wall due to the intense heat developed when firing the limestone.*



Piana degli Ossi (July 1989): as the excavation proceeds, the archway of the lower kiln stoking hole and a first layer of quicklime are unearthed.

The area due to be manually excavated during this initial phase (the highest part of the presumed kiln) was then cordoned off with coloured tape. At a depth of about 50 cm, the first row of sandstone blocks appeared. They were laid in a circle and were rosy in colour due to the heat. Many pieces of limestone destined to be fired were found inside the perimeter walls; the colour of the limestone nearer the surface was natural but as the excavation deepened, the limestone closer to the heat source became increasingly pink. When we reached a depth of about 1.5 metres, we thought



Piana degli Ossi (July 1989): Luca Fedeli (second left), A. Salomoni, Marco Antonelli and Emanuele Stefanini on the edge of the almost entirely exposed kiln .

we had reached the bottom of the kiln because we found a beaten clay surface with numerous carbon residues. This turned out to belong to a more recent phase of the kiln; we reached its original base after the excavation was deepened some two metres further³.

At the end of the excavation, it was possible to comprehend the chronology with which the kiln had been used (it contained a large amount of quicklime and conspicuous remains of fire). The perimeter wall was about four metres high (perhaps it was originally five metres high to match

³ Luca Fedeli published a detailed report of the results of this excavation in the “Atti del Convegno sulla viabilità tra Bologna e Firenze nel tempo” (page 59 and following pages) to which we refer. As regards these first stages of the excavation of the kiln (conventionally named “site A”) he expressed the following (page 59):

“site “A” effectively brought to light the remains of a limekiln used during two different phases... (omissis). The more recent use of the kiln appears to be a reconstruction “in situ” of the building structures above the occluded former phase. The new kiln featured a high opening, located above the opening of the former kiln, but facing in the same direction and almost parallel (as well as almost directly above)”.



Piana degli Ossi (July 1989): an image of the entire kiln. On the left is the stoking hole to the firebox. There are still the candid remains of quicklime on the rear of the right wall.

the higher part of the installation). The carbon material found in the firebox of the lower kiln area (referable to its last use) dates back to the year 1370 A. D. (give or take 60 years)⁴. Whereas the carbon remains found in the upper level of the kiln (referable to its last use) date back to 1410 A.D. (give or take 50 years)⁵.

Furthermore, Fedeli says about this kiln⁶: “a sample of carbon material removed by myself on 10 July 1988 from the upper layers of the kiln, excavated a year later on site “A”, was analysed by Department T.I.B. of E.N.E.A. in Bologna, thanks to the kind efforts of A. Salomoni. (ceteris omissis). The material dates back to 700 A.D. (give or take 300 years).”

Thermoluminescent analysis of a fragment of the kiln wall, which dates the wall back to the year 882 A.D. (give or take 94 years), confirmed this dating⁷.

Therefore, if a sandstone block from the kiln wall was subjected to high temperatures during the 8th-10th centuries, this means that the kiln was built or rebuilt during the same period (or earlier) and it was only re-used at sometime during 1350/1400 A.D., as proved by the dating of the carbon found in the firebox.

To ascertain the existence of the other collapsed kilns, the Superintendency carried out an excavation named “site B” at the base of the sixth presumed kiln in the southernmost part of Piana degli Ossi. The remains of walls and other quicklime residues emerged, proving that in antiquity there was also

⁴ Luca Fedeli: work cited, note 18, page 88.

⁵ Luca Fedeli: work cited, note 20, page 88.

⁶ Luca Fedeli: work cited, note 13, page 87.

⁷ This analysis was carried out on request of the Archaeological Superintendency for Tuscany by the Department of Physics of the University of Milan on 05/09/1990 (document 6).



Piana degli Ossi (July 1989): the external side of the firebox stoking hole, located at the bottom of the kiln, where wood was introduced to feed the fire.



a firebox on this site too ⁸.

Finally, the lowest-lying area in the centre of Piana degli Ossi (called “site C”) was excavated to verify if it featured some sort of rainwater drainage system. This was because water never collects here and water plants do not grow in this area although it is shaped like the bottom of a bowl. The excavation drew a blank, perhaps because it was not deep enough ⁹. Nevertheless, the excavation did provide limestone and carbon remains which date back to the year 615 A.D. (give or take 55 years), as mentioned by Fedeli in note 30 on page 88

Piana degli Ossi (July 1989): the inside base of the kiln. Note the carbon residues in the firebox and, on the right, a large quantity of quicklime which has remained on the bottom. The inside of the stoking hole can clearly be seen. The firebox used to fire the limestone was fed through the stoking hole.

⁸ Luca Fedeli: work cited, pages 64-65: “Site “B” highlighted the existence of two distinct archaeological phases; the first should presumably be considered peripheral because it refers to a kiln located in an unexplored area, located further uphill (ceteris omissis); the second refers to the re-use of the excavated site. This re-use must have taken place later than the use of the kiln further uphill mentioned above”.

In note 24 on page 88, Fedeli concludes: “this kiln has not been identified or investigated but its remote existence is clearly revealed by a number of clues”.

⁹ Why rainwater is absorbed rapidly and completely remains a mystery. As mentioned, although the area is shaped like the bottom of a bowl, water never collects here (unlike in every other neighbouring area where water collects even if there is just a slight depression).



Piana degli Ossi (July 1989): view of site “B” which highlighted the collapsed remains of the sixth kiln located in the southernmost part of Piana degli Ossi.

of his report ¹⁰.

Fedeli draws very cautious conclusions about this campaign of excavations in terms of the time span within which the kilns were used, and even more so in terms of when they were first built¹¹. Nevertheless, even if Fedeli predicts that these kilns date back to late antiquity (6th-7th centuries A.D.) our opinion goes further: perhaps the first installation on this site dates back to even earlier. It is true that no archaeological remains have been found to prove this

but it is also true that the excavations carried out were very brief (from 17 July to 10 August 1989) and limited; perhaps a complete excavation of Piana degli Ossi would have revealed older remains that may have allowed a more precise reconstruction of the history of the area along a longer timeline. Nevertheless, we had reached some of the objectives that the Archaeological Superintendency for Tuscany and ourselves had aimed to achieve:

- we wanted to know if there was a well-preserved kiln and such a kiln was unearthed;
- we wanted to know if there were any remains on the southernmost site of Piana degli Ossi which may point to one of the collapsed kilns, and these remains were found.

The campaign of excavations confirmed the existence of an ancient installation of six limekilns, as we had guessed by simply observing the ground surface and as illustrated in a drawing published in our first book (before these excavations started)¹².

3 - The six kilns: an impressive industrial installation.

Before we leave Piana degli Ossi and these important finds, we would like to offer some thoughts that accompanied us while the existence of the six limekilns was confirmed. We did more than just make note of the remains uncovered or the results of the analyses; we attempted to project our minds back to antiquity when the installation was built and, especially, when the six kilns were used simultaneously. We wanted to understand the various production phases

¹⁰ Luca Fedeli: work cited, page 66: “Instead site “C” on Piana degli Ossi, carried out from 20 to 27 July 1989, excluded – at least in terms of the limited but significant excavation area – the existence of any structured drainage systems in the valley bottom of the saddle; however it did reveal (at a considerable depth) a series of layers of waste (limestone and carbon), which archaeometry locates in a later age than those found elsewhere on Piana”.

¹¹ Luca Fedeli: work cited, page 72: “however, some of the archaeometric data would suggest that Piana was being used (perhaps for reasons linked to similar later human activities) during the Upper Middle Ages or perhaps even during late Antiquity”.

¹² C. Agostini - V. Di Cesare - F. Santi: “La strada Flaminia Militare” published by Studio Costa, 1989, page 40.



An ideal reconstruction of the kilns on Piana degli Ossi drawn before the excavations in July 1989 and published on page 40 of our book "La Strada Flaminia Militare". The morphology of the area, the not completely fired limestone and the two carbon sample datings gave us an idea of their probable original structure (later confirmed by the excavations). The installation is similar to Etruscan installations found on Elba (drawing by Stefano Borelli).

required to make limestone and the work organisation needed to run an industrial installation of this type.

Not anyone, even the attentive observer, will note any great difference between this area and other neighbouring areas. It is now a meadow covered by brambles and broom bushes, shaped like an elliptical amphitheatre along a north-south axis; its eastern side starts from the adjacent road and, with a slight upwards slope, it continues around the upper edge towards the west until it is six metres above the level of the Roman road. Here the escarpment features parallel hollows alternated by spurs which leave no doubt that they are manmade. The hollows are none other than collapsed kilns used to produce quicklime.

On first consideration they seem nothing special; limekilns can be found almost everywhere on our Apennines. Numerous locations are named after limekilns, such as: Forno, Calcinaia, Fornace, Campo del Forno, etc. Other kilns were mentioned by

elders, or it is possible to make out burnt stones and limestone remains, obvious clues revealing that at least once upon a time, limestone was fired in the area. However, it must be underlined that, when researching the limekilns on our Apennines, we never found any trace (either on the ground or according to local tradition) of two kilns functioning at the same time in the same place. Therefore, six kilns located near to each other is a unique occurrence and deserves in-depth analysis.

It is important to note that the kilns on Piana degli Ossi and the other individual kilns built throughout the Apennines to provide a cement bonding agent for the scant construction work were periodical kilns.

In periodical limekilns, every batch had to accomplish a complete cycle, so efficiency in terms of fuel and time was very low compared to more modern perpetual kilns, which are continuously fired by coal. Just consider that all the lime had to be unloaded through the top of the kiln and only after

the entire production batch had cooled down.

To understand better the turnaround of these six kilns, it is necessary to observe how each kiln was built and how they functioned.

3.1 - The choice of location for the kilns and the construction technique.

The limekilns had to be built in the right location, which complied with the following requirements:

- they had to be protected from prevailing winds. A good location was on the side of a ridge top, where the wind blowing from the opposite side would be forced upwards to overcome the obstacle. This created an undertow, which encouraged combustion of the wood in the firebox and lifted smoke and gases upwards;
- they had to be built at the foot of a slope and recessed within the slope. This had numerous advantages: it provided two practical access points, one above for loading and unloading, as well as a large area where the limestone could be stockpiled, and one below for the firebox, which needed a large clearing where the firewood could be stored. The firewood was kept at a due distance from the kilns to ensure the gangs feeding the firebox with the bundles of firewood and removing the ashes had plenty of room for manoeuvre.

If the kiln could be recessed within clay-like earth, this provided a solid casing and excellent thermal insulation. Once the fire was lit, it had to be fed continuously. Therefore, the stokers had a very tough job, feeding the fire day and night, whatever the weather. Even a half-hour break would have compromised many hours' work to recover the lost calories.

It was best to locate the kiln as near as possible to the raw materials (the limestone quarries and the trees needed to provide the firewood).

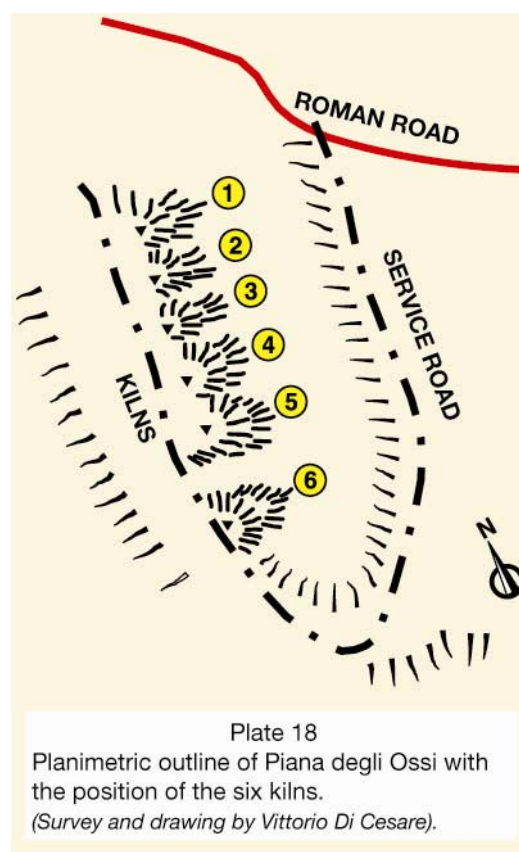
The distance from the place where the lime was needed also had its importance, because the same volume of quicklime produced weighed just over half the "raw" limestone.

Once the most suitable site had been identified,

a cylinder was then excavated. The diameter of the excavated cylinder was about 80 cm larger than the diameter of the kiln to allow space for the exterior wall of the kiln. The exterior wall was made of sandstone, which crumbles easily in freezing temperatures but also has excellent heat resistant properties.

Construction of the kiln wall did not require any particular skill; the blocks just had to be close fitting and even, and the inside surface had to be aligned with the circumference so that it formed the inner kiln wall. Clay was packed against the outside wall because it would be hardened by the heat of the kiln and thus provide the entire structure with great solidity and offer excellent insulation.

A well-built limekiln had to be shaped like two opposing truncated cones. The lower cone was upside-down (that is with the base facing upwards), and it had to be half as short as the upper cone. The stoking arch was built on ground level¹³, where the



¹³ In the kiln unearthed in 1989, on either side of the lower part of the firebox stoking arch, there are two stone protuberances measuring about 4 cm, which supported and guided the moving shelf used to push the firewood inside.

wood was burned (firebox). The kiln was loaded by piling the limestone inside it; an empty volume was left so that it formed a vault (the firing chamber). This was connected to the outside by the stoking arch (shaped like the span of a bridge to allow the firewood to be introduced). The pieces of limestone were arranged carefully so that there were gaps to allow the passage of hot gases, but also so that the weight above would be supported. If the limestone collapsed during firing, this would have spoilt all the work carried out beyond repair.

Arranging the limestone inside the kiln was a skilled job; it was necessary to ensure that the heat produced by the firebox was distributed as evenly as possible to avoid areas of insufficiently fired lime. If the lime was under-fired, the centre of some stones remained “raw” (these “raw” centres are shaped like bones and can very easily be mistaken for bones).

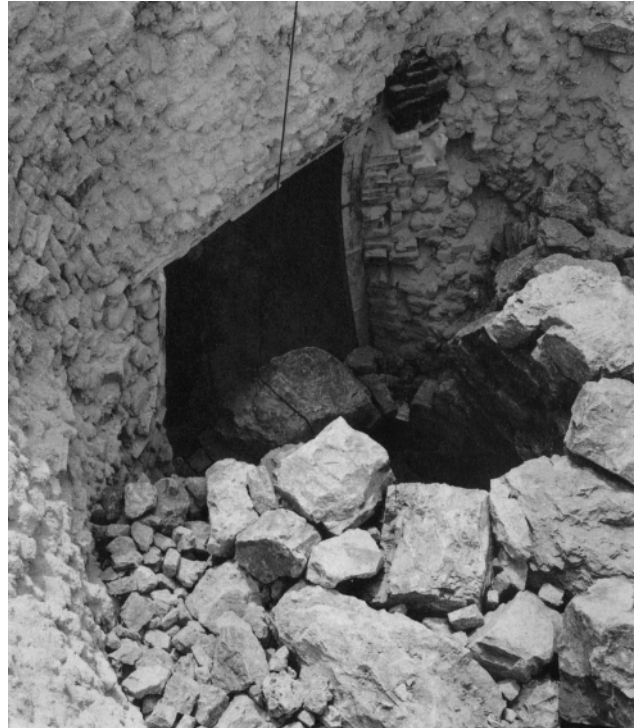
Finally, the dimension of the limestone pieces was also important; they had to be as evenly sized as possible, which was difficult due to the crumbly nature of limestone. Nevertheless, the larger pieces were placed near the bottom and the smaller pieces near the top where they required less firing time.

3.2 - The processing units used and the amount of lime produced.

Taking the kiln unearthed in July 1989 (and still partially visible) as an example, it is possible to attempt a calculation of the work force required to run the entire Piana degli Ossi installation and the amount of quicklime it could have produced by reconstructing the various production phases.

The production cycle of a kiln ranged from 18 to 20 days. The work procedures that needed to be accomplished were: repair of any heat damage to the walls while the kiln was being fired, loading the limestone, firing, cooling and unloading the lime. The lime then had to either be stored somewhere where it was protected from the rain or it had to be sent to the building sites where it was needed. Therefore, a kiln had to be fired every three or four days and the first kiln had to be relit after some three weeks.

When the first kiln was loaded with limestone, a large amount of thinly cut firewood was burned to start the firing process.



A kiln in Campania: when the kiln was loaded, the largest blocks of limestone were used to create the firing chamber (from Jean Pierre Adam: “L’arte di costruire presso i Romani - materiale e tecniche” published by Longanesi e C., Milan, 1984).



Completion of a loaded kiln near Epidauros in Greece. The same procedure has been handed down through the centuries and the similarity with the fully loaded kiln uncovered on Piana degli Ossi is striking. (From Jean Pierre Adam: “L’arte di costruire presso i Romani - materiale e tecniche” published by Longanesi e C., Milan, 1984).

Firing continued for as long as 5-6 days, so that a temperature of 800-900 degrees was reached, necessary to convert the lime (calcium carbonate) into quicklime (calcium oxide).

Each kiln had an actual capacity of some 20-22 cubic metres¹⁴, producing more or less 250 tons of quicklime¹⁵. Therefore, every production cycle of the entire six-kiln installation produced about 1500 tons every 18-20 days. Obviously, more or less the same volume of limestone was quarried by a work force which we estimate in default of about 8-10 workers, bearing in mind that layers of limestone can vary in thickness from tens of centimetres to a few metres¹⁶ and are hard to find in open-cast mines. Therefore, it would have been necessary to remove any material above such as friable loam rock (in the best cases) or even compact layers of sandstone. Added to these difficulties were the inefficient tools of the age.

Once the limestone was amassed at the foot of the quarry, it had to be transported to the upper part of the kiln by pack animals. Packsaddles featured two boxes, one on the left and one on the right. The bottom of either box was hinged on the inside and tied to an external strap. Thus, by pulling the end of the rope, the boxes opened and were emptied simultaneously without unbalancing the load¹⁷. The material was loaded into the boxes piece by piece and positioned with care to ensure the same weight was distributed on both sides. This avoided unbalancing both the packsaddle and the pack animal, which otherwise would have found it difficult to advance.

Although the kilns were fired in all weather conditions, work in the quarries was impossible when it rained or snowed. Therefore, it was necessary to ensure there was

a large amount of reserve limestone, which was extracted in excess on good days and stored in the area above the kilns. We estimate that no less than twenty workers and a large number of pack animals were employed to extract and transport the limestone.

At least another twenty workers were needed to run the six kilns. Estimating that two kilns had to be kept constantly alight by workers working in eight hour shifts per day, if two people were employed per shift per kiln, twelve people were needed to run the kilns for 24 hours, plus eight other workers (only employed during the day) needed to load and unload the other four kilns.

The supply of firewood must be added to these two production phases. Between woodcutters and "carriers", we estimate that no less than ten people were required. The same applies to this task as for the limestone above: a large amount of reserve wood was needed for rainy days as well as someone to carry out surveillance: at least a foreman and another four or five guards to cover 24 hours.

Furthermore, there were the catering and accommodation needs: considering these were all very heavy jobs, there must have been a good kitchen and accommodation where it was possible to have a good rest; no one would have survived without adequate treatment. Therefore, every day, Piana degli Ossi had to be supplied with a huge quantity of provisions and water. It is difficult to determine the number of people employed to carry out this auxiliary work, but it must have been no less than eight to ten people.

Therefore, about 65/70 people had to be employed to run the installation and the six kilns. Added to these were the carriers employed to convey the quicklime to the construction sites where it was needed. Were these building sites far off?

¹⁴ Considering that the average diameter of the kilns was 2.50 metres and the minimum height was 4 metres, this provides a theoretic volume of about 31 cubic metres. Bearing in mind that the limestone was arranged with care, leaving small gaps between pieces to allow the passage of heat and smoke, the actual volume of the limestone can be considered less than a third of the total volume and, therefore, about 21 cubic metres.

¹⁵ The specific weight of impure limestone is more or less 26 tons per cubic metre. Supposing that 80% is pure calcium carbonate (the other 20% consisting in waste: clay, silicates, etc.) there are only about 21 tons available to convert into quicklime. The conversion process determines a 44% weight loss (carbon dioxide) therefore providing 56% of quicklime (calcium oxide), which corresponds to (for every cubic metre of limestone used) a production of about 12 tons of quicklime, without considering the weight of the waste. Therefore, every kiln firing cycle produced 252 tons of quicklime (21 cubic metres x 12 tons = 252 tons).

¹⁶ In the area around Piana degli Ossi, we did not find any remains of limestone quarries; they may have run out.

¹⁷ This system continued to be used in our area of the Apennines until the mid 1900s.

They certainly were, considering there are no remains of grandiose buildings that presume the use of so much construction material. It is difficult to define how many people and animals were employed to transport the goods; certainly no less than fifteen to twenty people, bearing in mind that 80 tons of lime must have been dispatched every day¹⁸.

3.3 - Does the construction era of the six kilns date back to the second century B.C.?

In conclusion, about ninety people and a large number of pack animals must have been employed to run this industrial installation. We believe this is a fair estimate of what happened on Piana degli Ossi during those remote times.

However, many mysteries remain which will perhaps never be cleared up: who designed, calculated and constructed this large six-kiln installation? Who had enough resources to employ so many people? Where was the destination of the huge amount of lime produced?

It is difficult to answer to these questions with any certainty.

The existence of six kilns in the same place demonstrates that they were built to function simultaneously in a cycle to meet a large demand for lime. If a lower production volume had been required, only one or two kilns would have been built, as occurred in the Middle Ages on Piana degli Ossi. In fact, the excavations uncovered a single kiln (still almost entirely intact), which was evidently rebuilt during the Middle Ages to cope with a modest demand for lime.

If our ancestors who lived in the valleys of the Savena and the Setta, had handed down to

posterity tales of how they had seen the kilns on the ridge north of Passeggero, they also would have told of the long columns of carts or pack animals walking along the ridge (southwards or northwards) to reach some important city, because only large-scale constructions such as bridges, city walls or buildings could have required such a huge amount of lime.

Nevertheless, no memory of this has been handed down by our ancestors. The place has reached us with an inaccurate name (Piana degli Ossi) [Field of Bones] confirming that the kilns are so old that all memory of them has been lost. Therefore, the idea that such an installation was built by the Romans not long after the transapennine road, in a moment in history when there was a very big demand for lime¹⁹ appears reasonable (considering the probable enthusiasm to build north and south of the Apennine range after peace was finally established and Roman dominion was consolidated). It is worth pointing out that although the ancients were aware of the properties of lime, its general use as a bonding agent for building materials was introduced by the Romans²⁰. Therefore, it is reasonable to believe that they alone could have needed such a large daily production of lime requiring an industrial installation with six kilns.

Comparison with limekilns used in various Mediterranean countries (Italy, Greece, Tunisia, Syria, etc.), where the process has remained basically unchanged since antiquity, has allowed us to describe with a certain reliability the kiln construction techniques and production processes used by the Romans.

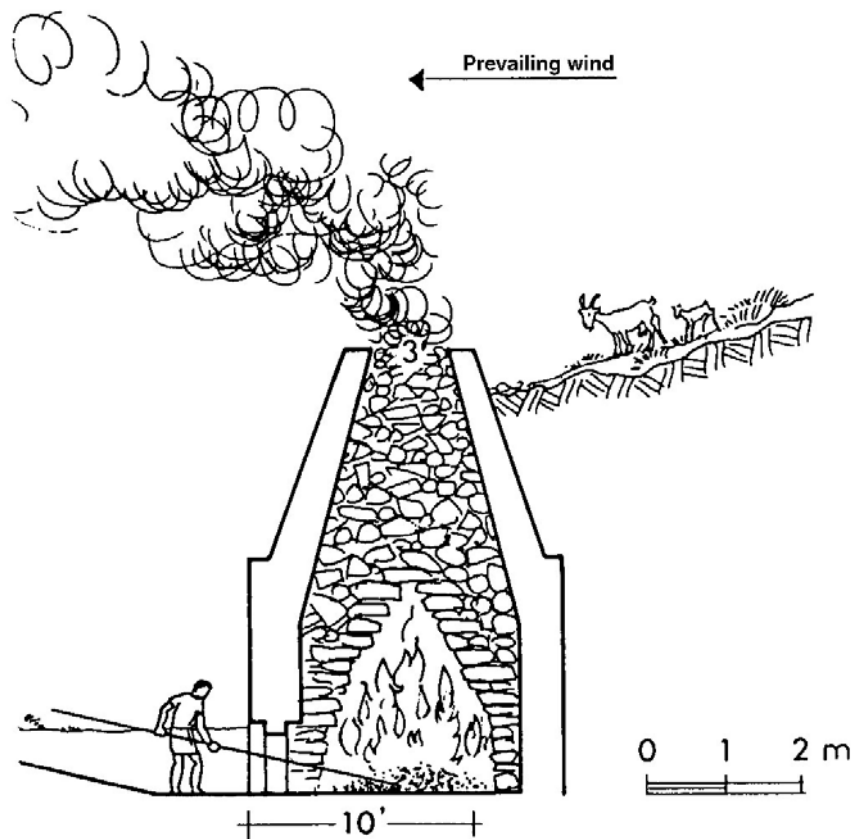
¹⁸ These calculations refer to such a remote time that they have been carried out by default, bearing in mind the dimensions of the discovered kilns still full of almost fired material. Why was this kiln prepared, fired and then abandoned just one day before the production cycle was due to be completed? We believe it was due to cruel events. Perhaps the incursions by the Company of Count Lando mentioned in Chapters V and VI?

¹⁹ Jean-Pierre Adam: "L'arte di costruire presso i Romani - materiale e tecniche". Longanesi e C., Milan, 1984). The historian, Adam, mentions the "De agri cultura" treatise by M. Porcius Cato with these words (page 734): (Omissis) "Cato, who wrote in about 160 B.C., in the precise moment when masonry constructions bonded with lime mortar began to be widely used..." (Omissis). Therefore, this period of time corresponds to a few decades after the transapennine road was built.

²⁰ Jean-Pierre Adam: work cited, page 69: "It must be said that although the Greeks were aware of lime, they used it mainly to prepare plaster, painted plaster and to cover water tanks. The Roman's fundamental contribution consisted in the systematic use of lime (instead of clay) to prepare mortar used as a bonding agent for stone masonry and thus achieving a permanent bond that allowed the use of concrete in larger buildings and to construct vaults of extraordinary size".

Our reconstruction also matches the description by M. Porcius Cato in his treatise, “De agri cultura”²¹: “the limekiln must be 10 feet wide and 20 feet high; reduce the width to 3 feet at the top. If you only use one stoking hole, ensure there is a large cavity inside, large enough to hold the ash, so there is no need to pull it out; ensure that the hearth entirely occupies the bottom surface of the kiln (omissis). Ensure that the fire never goes out, not even during the night or at any other time. Load the kiln with good quality stones, the whitest and least stained as possible. When you construct the kiln, provide the pit

with a steep slope; when you have dug down enough, arrange the firebox so that it is as deep as possible and as least exposed to the wind as possible; if there is not a suitable place for building a deep kiln, construct the upper part out of brick or stone using mortar and cover the exterior. When the fire is lit, if you see that the flames exit elsewhere other than the circular aperture at the top, close any holes with mortar. Do not allow the wind to enter through the hole, especially the south wind. This is how you will know that the lime is fired: the top stones must be fired, then the lower stones (also fired) will yield and the flame will produce less smoke”.



Reconstruction of the kiln described by M. Porcius Cato in the treatise: “De agri cultura” XLIV, “De Fornace calcarea” (taken from Jean Pierre Adam: “L’arte di costruire presso i Romani - materiale e tecniche”. published by Longanesi e C., Milan, 1984).

²¹ M. Porcius Cato: “De agri cultura” XLIV, “De fornace calcarea”.

Cato, called the Censor, was born in 234 B.C. in Tusculum (an ancient Latin city near the present-day Frascati) from a family of landowners. He soon moved to Rome where he had a successful public career. He lived through the entire period of the second Punic war and the war against the Ligurians. He wrote most of literary works in his old age: his “De agri cultura”, which has been handed down to us in its entirety was probably written in 160 B.C.

4 - Mount Luario

In this area of the ridge, the place name of a small hill called mount Luario aroused our curiosity, located about one hundred metres further north.

Its summit stands at 1140 metres above sea level and overlooks the Piana degli Ossi (1062 metres above sea level). There is not much difference in height between the two, but because they are close to each other, one has the impression that mount Luario dominates Piana degli Ossi. This sensation gave us the idea that the place name may originate from the name of the pagan goddess, Lua, the goddess of propitiation, in whose honour the Romans usually burnt the arms and corpses of defeated enemies²². The place name could be linked to theoretical pyres lit on the top of the hill, or to atone slaves or convicts condemned to carry out forced labour, probably obliged to run the kilns on Piana degli Ossi below. The men entrusted to fire the limestone had to carry out strenuous work to extract and transport the limestone, and to cut and transport the firewood. Furthermore, filling and emptying the kilns involved handling ashes and quicklime which, in such as well-ventilated place,

could easily come into contact with the eyes, causing irreparable damage.

The proximity of these places is undoubtedly suggestive and both call to mind names and situations which probably date back to the Roman age. And so driven by the curiosity that has often guided our explorations, we excavated the centre of a small upland plateau, covered in ferns, almost at the top of mount Luario; at a depth of two metres, all we found was a consistent layer of ash and carbon residues.

The Archaeological Superintendency for Tuscany also made a test excavation in the same place during the campaign on Piana degli Ossi. They confirmed the existence at a certain depth of a large amount of carbon residues, but nothing more²³.

In conclusion, no traces of burnt arms or corpses were found on top of mount Luario; perhaps there was only the idyllic presence of the goddess Lua, who watched over those who endured their punishment on Piana degli Ossi, inducing them not to attempt an escape. This may be pure invention, but the theory whereby this place name may originate from the goddess Lua is also backed up by the fact that other hills along this itinerary are named after pagan divinities such as Venus and Adonis.

²² T. Livius: work cited, book VIII, paragraph 1

T. Livius: work cited, book XLV, paragraph 33: "... when the bronze shields were loaded on board the ships, the consul (Paulus Aemilius) collected all the other arms of every type and made a huge heap. After invoking Mars, Minerva and Lua Mater and all the other gods to whom the spoils of the enemy must be solemnly dedicated, he then applied a torch underneath the heap and set fire to it. Then each of the military tribunes all around threw a brand on the heap".

Lua Mater and *Lua Saturni* (because often next to Saturn) was the name of an ancient Roman deity who presided over propitiatory sacrifices and purifications and who was later identified with *Nemesis*, the goddess of divine retribution, she was apparently the daughter of Jupiter and she persecuted the evil and those who did not know how to make good use of the gifts given to them by providence. She gave no peace to whoever had in some way upset the natural and social order of life. In Greece, and especially in Attica, she was the object of a special cult, later embraced by Rome, where a statue of her was installed on the Campidoglio. In one of his poems, Catullus describes her as violent and inexorable. This divinity is also mentioned by Marcus Terentius Varro (*De lingua latina*, VIII, 36): "... therefore many words which are formed by declining different words are the same when I use the accusative "luam" from "Lua of Saturn" and from "luo = solve" I form the future "luam".

Varro's quotation reminds us of some of the meanings attributed to the verb *luere*: undergo a punishment (*mei peccati luo poenas*: I pay the price of my error, Cic. Acts 3, 9, 1.); expiate (*aliquid voluntaria morte luere*: expiate a wrongdoing by killing oneself, Cic.). Therefore the deity's name itself (regardless of the prerogatives attributed to her by the Romans) calls to mind the concept of expiation.

(Thanks to Vittoria and Franco Bacci for their collaboration in this mythological research).

²³ Luca Fedeli: work cited, page 73. The author concludes his comment to this treatise with these words: "hopefully it will be possible to widen the investigation to good part of the plateau to find new elements to help our interpretation and, subsequently completely confirm or bring into discussion some of the theories expressed in the past".

5 - Passeggere.

Just a few hundred metres further south of Piana degli Ossi, where the profile of the ridge descends to an altitude of 1014, a number of buildings bear the name of “Passeggere”.

The buildings consist in a farmhouse with a stable and barn and a manor house, which now stand in the heart of a vast privately owned hunting reservation.

The place name “Passeggere” evidently derives from its location within a saddle and the fact that it is the most practical point of passage for those wanting to cross the ridge from the valley of the Gambellato and from the upper Setta valley to the Savena valley and vice versa.

We have already written widely about this pass and its importance within the context of the Apennine road system in Chapter V. Here we would only like to point out that since antiquity, this location has been a crossroad between the north-south transapennine Roman road and a northeast-southwest transversal mule track used by traffic from and to Castiglione dei Pepoli towards the upper Savena, towards Monghidoro and also the Raticosa pass. Very probably, this mule track was especially used from the 6th

century A.D., when the Futa pass became an impassable political-military border between the Lombards (who occupied the Tuscan versant) and the Byzantines (whose dominion included Bologna and penetrated as far as the sources of the river Savena²⁴).

The people who lived on Byzantine territory in the upper Apennines probably needed a route that by-passed the Lombard border and which allowed them direct and fast access to Romagna²⁵ and the capital, Ravenna, across the Passeggere and the Raticosa passes, without having to lengthen their route by passing through Bologna.

In the 1980's, during our explorations we often came across the old farmer who still lived on the Passeggere pass²⁶ in the farmhouse on the western versant of the ridge; he told us that the house he lived in was built after a former building on the eastern versant was destroyed by a landslide. Furthermore, he remembered that his ancestors had handed down a story whereby in very remote times the first settlement on the Passeggere pass was built on the western versant, where it stands now, and that too had been destroyed by a landslide.

²⁴ The impenetrable Byzantine-Lombard border on the Tuscan-Emilian pass continued to exist for almost two centuries; this situation ensured it was impossible to use the transapennine route and perhaps caused the Roman paving to disappear once and for all under a consistent layer of humus. N. Alfieri came up with the same theory (in reference to the route he theorised), and had the following to say (work cited, page 55): “*The doubt remains that the persistence of the Via Flaminia in Roman times was interrupted during the upper Middle Ages when this sector of the Apennines was a border area and therefore a barrier between the territories held by the Byzantines and the Lombards on opposite versants*”.

When the transit of men and animals resumed along this same ridge, an initial path was traced, followed by a mule track that retraced the Roman route (sometimes right on top of the Roman road).

Daniel Sterpos substantially shares the same opinion (work cited, page 35): “*During the long period when the territory between Bologna and Florence was divided between the Lombards and Byzantines, each armed against the other, it cannot be supposed that the two cities were linked by a well-defined, regular and continuous road, but rather that the roads that departed from either city towards the mountains were used by both sides to reach their positions and to attack the enemy's positions*”.

²⁵ At the time, this area of Romagna was called the Flaminia Region. It is interesting to note that a stretch of the road under discussion, between the Raticosa pass and Piancaldoli, on the Map by the Topographical Institute of Vienna (1851) is still called *Fiamminga*. Evidently, this name comes from Flaminia, that is, the region it was heading towards (document 7).

²⁶ Egisto Cavicchi, now eighty-five years old, who lived and worked on the farm for 60 years, as had his forefathers before him.

CHAPTER XI

MOUNT POGGIACCIO (ARCHAEOLOGY ZONE “C”: sites C/1 - C/2 - C/3 and C/4)

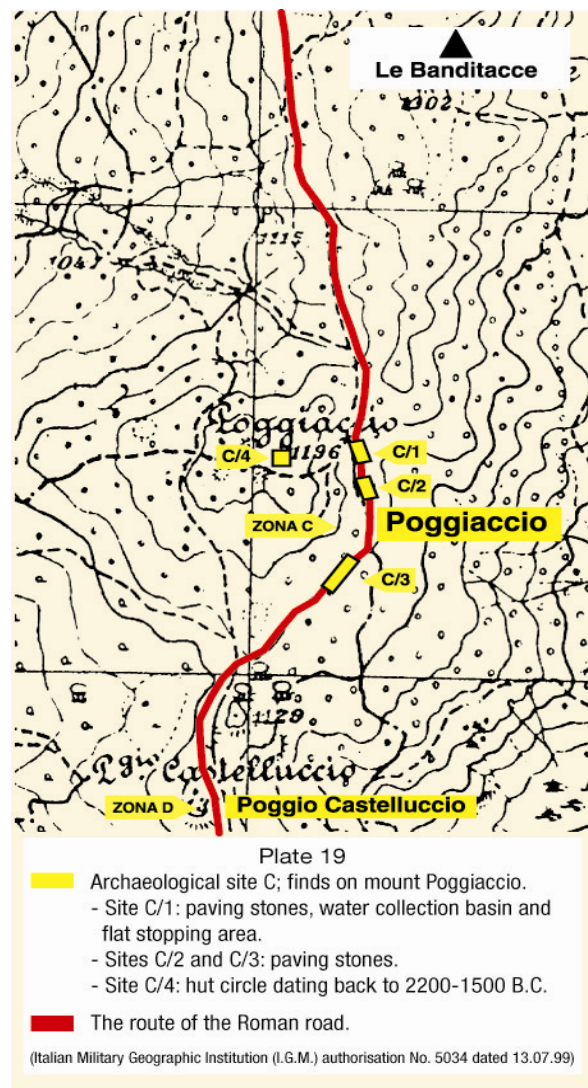
- 1 - Description of the paving (sites C/1 - C/2 and C/3).
- 2 - The construction specifications of the paved road.
 - 2.1 - The technique adopted to lay the stones.
 - 2.2 - The work phases.
 - 2.3 - The quantity of material removed and used.
- 3 - Other finds (site C/4).

1 - Description of the paving (sites: C/1 - C/2 and C/3)

The story handed down by the forefathers of the farmer who lived in the house on the Passeggere in the 1980's, whereby a landslide had destroyed the building that stood there before may appear insignificant in terms of our research. On the contrary, this story was very useful because it made us observe very carefully the morphology of the entire western versant of the ridge between Passeggere and mount Poggiaccio, where the Roman road must have continued towards the Futa pass.

We noticed that signs of an ancient, extensive and deep landslide remain, covering a width of over one kilometre. The landslide detached from the top of the ridge and slid downhill to the flat cultivated fields above the town of Bruscoli. If this large landslide occurred after the Roman road was built, there was no hope in finding any remains. In spite of this, we carefully explored the west versant of “Le Banditacce” hill, between Passeggere and mount Poggiaccio, but to no avail.

However, we did find traces of the medieval mule track which confirmed the age of the landslide. The Roman itinerary probably followed the same direction, passing under the peak of Banditacce (1302 above sea level) and heading



directly towards the upper slopes of Poggiaccio, with a minimum altitude of 1196 metres. However, Poggiaccio, stands further west compared to the summit of Banditacce, and by following the theoretical straight line of the road, you end up in a small saddle between the two summits, which represents the true orographic pass through the Apennines. In fact, this is where the ascent stops for those coming from Bologna and is where the descent begins on the Tuscan versant.

As always, we placed our trust in the straight-line principle and continued to search on the upper slopes of Poggiaccio in alignment with our point of departure, but on the eastern versant. This decision was taken after contrasting considerations which caused great doubts. We were not convinced that the

eastern versant had been the preferred one because it was more likely that it would have been covered in snow during the winter. However, the western versant would have forced a considerable diversion to the right to avoid the peak, thus compromising the brevity of the route.

During our discussions, we opted for the second theory due to two circumstances:

- the existence of a beaten track, now a bridle path, which followed the west versant to reach the Futa pass;
- the impenetrability of the woodland on the eastern versant, due to the vigorous and untidy growth of bushes and ferns.

Therefore, we decided to prefer the straight-line principle, penetrating in the woodland on the eastern versant.

SITE C/1

The first confirmation of the exactness of the direction we had chosen came when we identified traces of the ancient medieval mule track, which was very uneven and sunken in this point. By following the mule track, we found at its edge, about 100 metres south of the pass, near the original level of the wood, a number of aligned sandstone slabs, laid flat and with rounded edges, clear remains of the paved road. The mule track had clearly sunk deeper and deeper due to the centuries old

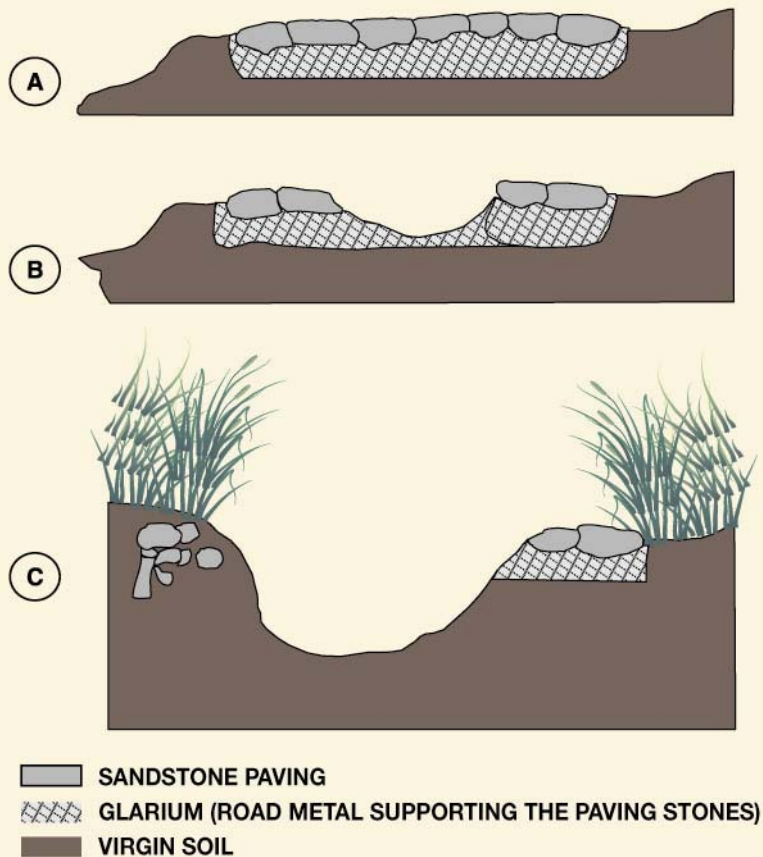


Plate 20

Mount Poggiaccio - site C/1: cross-section of the road.

B-A - Cross-section during construction.

B - Cross-section of the paved road partially uprooted by the passage of the mule-track and water erosion.

C - Cross-section of the road in its present condition: only a few stones remain in their original position.



Mount Poggiaccio (site C/1): three stones of the uphill edge of the paved road. The only survivors of the 2.40-metre wide paving, damaged and lost by the centuries-old passage of travellers and animals and by rainwater erosion.

rainwater erosion¹, which had dispersed the entire width of the carriageway. Only a few stones of the original paving were still on their original level. This very modest find was fundamental because it proved that this was the direction to follow and it confirmed that the paved road continued along the Tuscan versant.

After re-finding the route of the road, which we had lost all trace of since the last find near Piana degli Ossi, we continued, carefully scrutinising the undergrowth on either side of the mule track and the vicinity to see if we could find even the smallest indication. We carried out numerous small test excavations on the downhill side where the road should logically have remained closer to the surface. By doing this we managed to identify a number of stretches on the lower slopes of mount Poggiaccio (site C/1), but we only uncovered the edge of the paving and did not extend our excavation to avoid losing time. We thought it would be more useful to uncover other stretches of paving towards the south to trace the exact route as far as the Futa pass.

SITE C/2

About three hundred metres after these finds we noted a number of stones on the downhill edge of the road which emerged from the dry leaves at the foot of robust beech trunks (site C/2). This was the only place where no excavation was needed to identify the paving. The woodland had taken over almost the entire carriageway and the tree roots had crept between the stones, penetrating as far as the layer of *glarium* below the paving.

These were relatively young trees (40-50 years old), the latest generation of the beech trees that had grown here during earlier centuries. The edge that emerged from the leaves coasted the adjacent mule track, which just a little further on, changed direction matching the ideal continuation of the straight line of the paved road. This was a good chance to investigate how the two routes interfered with each other



Mount Poggiaccio (site C/2-south): *the beech wood has covered the entire carriageway; just the downhill edge emerges from the dry leaves.*

and establish which was the oldest. In fact, if the paving continued intact, this meant it was built after the track was used in the Middle Ages. If, on the other hand, where it coincided with the mule track it was worn, broken up or had disappeared, this meant that it had been built before the track was used in the Middle Ages.

We excavated along the right diversion of the mule track where no trees had grown, just a little further on from the beech trunks that covered the carriageway. The test excavation was carried out with great caution, and every stone uncovered was left in its original position to provide an overall view of the stones once the top soil had been cleaned away.

At the end of the work, a stretch of paved road (about eight metres long) emerged. The first five metres measured half the width of the carriageway, over last three metres it gradually narrowed towards the uphill edge, until it disappeared. The missing part of the carriageway corresponded exactly to the route of the mule track. Therefore, the partial lack of paving was caused by the centuries-old passage of travellers and animals after the paving had been built.

¹ The rain has had a determining effect in creating the sunken effect of the mule track located on top of the paving. Here the mule track follows the gradient of the slope and, therefore, the water erosion has been substantial even though the flow rate of the water is modest because of its location on the upper slopes of mount Poggiaccio.

In this area, the intact uphill edge looked as if it had been built with particular diligence. Whoever laid the stones took care to ensure they fitted tightly together, shaping the stones so that their edges matched to guarantee a perfect fit. Considering that this construction detail is still noticeable today in the parts that have not undergone subsequent repairs, it is easy to imagine how even and compact the paving must have been



Mount Poggiaccio (site C/2-south): *where the mule track and paved road coincide, the paving stones have been uprooted and have disappeared. However, the part of the paved road that did not coincide with the route of the mule track has remained intact.*

just after it was built. However, we did notice that the road paving was not always this perfect. Elsewhere, we noted less care was taken as to how the



Mount Poggiaccio (site C/2-north): *detail of the uphill edge of the road. Note how the stones of the original road are arranged with matching corners so that the sides match perfectly.*

stones were arranged, perhaps because although the construction criteria were the same, some site foremen were less strict than others, allowing the paving to be laid although the edges of the stones did not match perfectly².

SITE C/3

Our search continued towards the Futa pass on the east versant of mount Poggiaccio, here we came within 400 metres south of site C/2, where the slope takes on a steep gradient. While carefully exploring this area, we noticed that uphill of the mule track, the slope decreased unnaturally for a length of at least 25-30 metres and a width of 2-2.50 metres. A small test excavation revealed numerous perfectly aligned stones that constituted the downhill edge of the road. As usual, we excavated at a right angle with respect to their alignment, uncovering the usual 2.40-metre wide paving. We followed the road and it was easy to uncover 15-20 metres of the lower edge, which was almost on the surface due to the slope of the ground.

Because of this particularly steep gradient below the road, we

² Lionel Casson: "Viaggi e viaggiatori dell'antichità", published by Mursia, 1979, page 138: "... Every now and then, for example, we find a piece of road of first quality followed by a long unpaved tract of mediocre workmanship; it looks very much as if expert army engineers did the first part and then, called away for some reason, left the locals to finish off".



Mount Poggiaccio (site C/3): *The downhill edge of the road has remained compact and in a straight line in spite of the fact that in this position, the mountain slope is very uneven.*

were surprised that the edge was still so perfectly aligned and had not collapsed. The road appeared to be well preserved over its entire width and the stones were still lying next to each other. Evidently, we had come across a particularly solid stretch. The mule track had not caused any damage because it passed about fifteen metres further down.



Mount Poggiaccio (site C/3): *the excavation highlighted the section of the road. The paving stones came from nearby quarries. The narrower part of the stones faced downwards so that they were more solidly embedded in the layer of glarium and offered better surface resistance to the knocks they received from above.*

The surprising state of conservation of the paving in site C/3 aroused our curiosity, to the point that we excavated a section of the entire width of the road to study its structure. In a certain sense, we were sad to move those stones, damaging the well-preserved paving, but our curiosity got the better of us and we agreed to carry out a small, one-metre wide excavation. We exposed the first stone on the downhill edge with caution and much effort, because it was tightly set among the surrounding stones. We then exposed the others, one by one. These offered less resistance to the pick, which we worked underneath the stones so we could lift them up, almost in awe: we felt as if we were being disrespectful to those who had toiled so much to lay the stones.

In summer 1988, in the presence of Luca Fedeli from the Superintendency, we extended the excavation we had started previously. Under the paving, in the middle of the layer of *glarium*, we found a small metallic object, very corroded by rust, apparently



Mount Poggiaccio (site C/3): *the section of paving showed that the narrow stones were laid vertically. On this stone, it is still possible to see the chiselling carried out when it was laid. We made the small white marks.*

shaped like a large pin. Unfortunately, it broke into three parts while we were removing it. We took the find to Giancarlo Susini, Professor of Ancient History at the University of Bologna, and, thanks to his intervention, Livio Follo, lecturer of Restoration Science and Technology



Mount Poggiaccio (site C/3): *metallic object (which turned out to be a nail) dating back to the 3rd-4th centuries B.C. found in the glarium while excavating the section of paving in the presence of Luca Fedeli.*

at the Advanced School of Archaeology at the University of Bologna, was able to identify its exact original form and date it to the 4th-3rd centuries B.C.³

It turned out to be a straightforward nail and not a pin or any other clothing accessory as we hoped. Therefore, it was an item of scant archaeological interest but anyway quite significant for our research. It was used in 300-200 B.C., that is before 187 B.C. the presumed date of construction of the road. Bearing in mind the position in which the nail was found, the two dates are chronologically compatible.

2 - The construction characteristics of the paved road

2.1 – The technique used to lay the stones

The section of road excavated on site C/3 illustrated the stratigraphy of the road. The sandstones are laid so that the sides of each stone matches the sides of the other stones; the widest are laid horizontally

and are about 25-30 cm thick with a trapezoidal shape. The less thick ones are laid vertically and are often deeper set than the others. The larger and bigger stones are arranged along the edges, forming a type of curb which contains the smaller, central stones. Under the paving, there is a 20-25 cm layer of small sandstones of various sizes (*glarium*). These are obviously off cuts from larger stones from the nearby quarries⁴ which were packed into the trench dug into the ground, and had a dual purpose: they formed a robust bed and offered drainage for rainwater.

Both the layer of “*glarium*” and the paving stones are set in the ground without any supporting walls on the downhill side, in spite of the fact that the road unwinds along the side of the ridge, cutting through the steep slope of the declivity. Undoubtedly, this construction technique, without any downhill supporting wall, provided certain stability to the carriageway, which could only collapse if the entire ground underneath was carried off by a landslide.

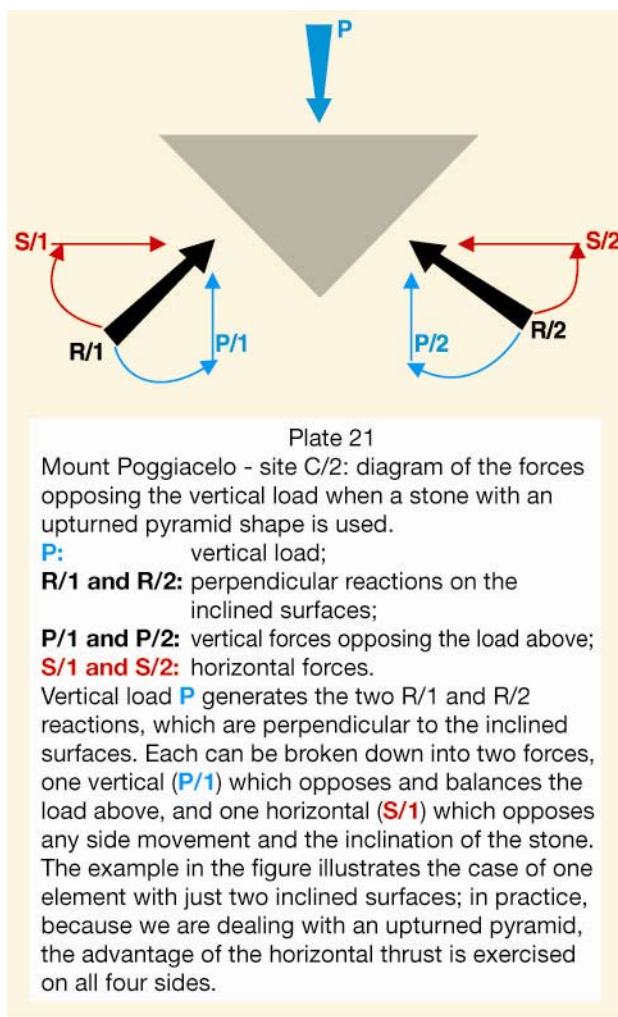
These structural characteristics, found in every unearthed stretch of paving, are profoundly different from the rare paved roads built along the mountaintops from the Middle Ages to the 19th century. These not only had a narrower carriageway, but were supported on the downhill side (when necessary) by dry stone walls or walls built using mortar which was very poor in lime. Another obvious characteristic is the shape of the stones: those laid horizontally are 25-30 cm thick. The upper part is wider than the bottom part, giving the idea of a roughly sketched wedge embedded in the layer below. This pseudo pyramid shape had two substantial advantages:

- only the upper part of the stones had to match perfectly because their sides did not touch; the empty spaces that remained between one stone and another below the surface were filled with *glarium*. This technique was a huge time saver because it was not necessary to square the side walls of the stones exactly

³ The results of the tests carried out by Livio Follo, whom we would very much like to thank, are indicated in his report dated 20/05/1989 (document 8).

⁴ Here and there along the entire route of the paved road it is possible to see the remains of the nearby quarries from where the road building material was extracted, exploiting the frequent natural outcrops of sandstone.

to achieve perfect adherence between one stone and another on the upper part of the paving;
 - unlike the parallelepiped, a pyramid shape guarantees better stability. In fact, because the reactions generated by the vertical loads are perpendicular to the oblique surfaces of the pyramid, they provide every stone with a horizontal push on all four surfaces. This guarantees that the stones maintain their original position, avoiding sideways movements, as well as any "rocking" action.



Mount Poggiaccio (site C/3): a paving stone shaped like a pyramid with the point facing downwards.



Remains of the Via Flaminia in Carsulae near S. Gemini (province of Terni) (from "Le strade romane in Italia" by Daniele Sterpos, "Quaderni di Autostrade", page 31). Note the pyramid shape of the stones.

⁵ From a mechanical point of view, the advantages of the upturned pseudo-pyramid compared to the "slab" shape are two. The first, very intuitive, is that this shape eases insertion of each stone in the roadbed and, at the same time, it compacts the roadbed ensuring a stable road surface: the deeper the pyramid penetrates the more the roadbed is compacted. The second advantage is that the paving is much more robust and the so-called "rocking" effect (typical of slab paving) is avoided. In fact, after repeated transit of loads, the roadbed in contact with the edges of the stone slabs becomes less compact, whereas the roadbed under the central part of the slab remains more or less intact. In the long-term, a hump forms below the slab which causes a "rocking" motion which unsettles the paving and causes some slabs to break. (We would like to thank Alessandro Uberti for his technical advice).

2.2 – The work phases

We now believe it would be interesting to describe the road building process and calculate the amount of material extracted and used to build the road. We only refer to these stretches of paving⁶ (*silice strata*) uncovered near the Apennine pass. The continuity of the find over a length of about 11 km, and the constant construction features allow us to base our reconstruction and the relative quantity calculations on objective and certain data.

The Romans undoubtedly encountered the largest difficulties when building the road along this barren and wild stretch of pass. As well as the hostile winter weather conditions, the legions had to face rough ground, stubborn trees deeply rooted into the ground (it is very rare to see a beech tree that has been uprooted because it has collapsed under the weight of the snow or ice).

The work required very organised building sites and synchronised work gangs to carry out the various tasks, which must have been grouped into six functions:

Route tracers: engineers and peg planters.

Tree clearers.

Excavators to dig the roadway and the trench for laying the roadbed and the paving.

Workers to extract the sandstone from the quarries.

Carriers to transport the extracted material to the building site.

Pavers.

The route tracers had the least heavy job, but undoubtedly the most important. They had to select a direct course

which was compatible with the mountains terrain. This straight course proves that the route chosen was the best in terms of costs-benefits.

Cutting down the trees was much harder work⁷ and had to be carried out before the excavators could start.

On flat surfaces, the excavators dug a trench about 50 centimetres deep; however, on hilly and mountainous terrain there are few stretches that feature a transverse line on ground level, or with a slight slope. Therefore, in rugged areas, such as the Apennines, they had to excavate a horizontal plane which considerably increased the amount of excavation required, also to provide the uphill embankment with a gradient that was unlikely to collapse without building supporting walls⁸.

In these areas, the average depth of the excavation increased to a minimum of 70 centimetres, also due to the need to flatten small humps.

Because the width of the road had to be 2.40 metres, the roadbed excavation required the removal of at least 1.70 cubic metres of earth and stones for every linear metre, equal to about 30 tons.

Furthermore, all the difficulties that the workers must have encountered due to the presence of tenacious roots and rocky outcrops also have to be considered.

Having identified the layers of sandstone outcrops scattered throughout the area, a quarry was opened nearest to where the stones were to be used. First of all the ground had to be cleared of any large outcrops, any suitably sized rocks

⁶ As outlined later, the road was only paved where strictly necessary. Where the ground was solid and compact the road was built using just *glarea*.

⁷ The wood not only had to be cleared in terms of the width of the road, but also to make way for the verges on either side. The Romans expropriated the land on which they built their roads as well as any adjacent land to create a verge of a certain width to ensure the route and the horizon was perfectly visible (also for security). Therefore, the clearing work was carried out in different widths according to requirements. Radke (Gerhard Radke: *Viae publicae romanae* published by Cappelli, Bologna, 1981, pages 22-23) mentions a quote from Strabo according to which during the mid 2nd century B.C., when the Romans were building a road in Liguria, they expropriated a verge measuring twelve “stadiums”. Therefore, it is likely that when building the transapennine road, the Romans forced an identical, if not broader verge on their enemies, particularly necessary due to the asperity of the area. Very probably, the entire area was cleared, reaching as far as the banks of the rivers that outline the slopes of the ridge along which the Romans built their road.

⁸ We noticed that along the entire length of the road, there were no supporting walls, either uphill or downhill, in spite of the considerable gradient of the slope it often intercepted.



An important stretch of the Egnatia consular road in Macedonia, built by the Romans in the 1st century B.C. which linked Durrës to Thessaloniki. Local material was used to build the road paving.

were used to build the road; these could be large or small and were heaped at the edge of the trench within reach of the pavers.

Pavers were selected from the most skilled workers, able to judge at a glance the dimension and the shape of the stones so they could be laid tightly one next to another. They also had to be able to shape the sides of the stones and lay them so they were firmly embedded in the layer of *glarium* (prepared beforehand). They used three lines to ensure they followed the established route and to ensure the road was in a perfect straight line. Two lines indicated the edge of the paving and another indicated the middle of the road.

2.3 – The amount of material removed and used

Considering that the trench was filled with 50 centimetres of material (20-25 cm of *glarium* + 25-30 cm of stones), for every metre

of road, about 1.7 cubic metres were used, corresponding to about 30 tons⁹. In fact, it is necessary to bear in mind that, even if the stones were laid with care and the *glarium* was well compressed, the small gaps that remained in terms of volume, reduced the overall weight by at least an estimated 30%. Therefore, it is correct to consider just 30 tons average weight of material used to build each metre of road. Thanks to this data, we can easily calculate how many tons of material were excavated, carried and laid to build one kilometre:

trench excavation work:

30 tons x 1,000 metres = 30,000 tons

extraction, carrying and laying the stones:

30 tons x 1,000 metres = 30,000 tons

total = 60,000 tons

Thanks to the archaeological proof that the paved road went from mount Bastione to

⁹ Compact blocks of sandstone (pietra serena), weigh 27 tons per cubic metre.

mount Poggione along a continuous 11 km course, the weight of the excavation and construction material along this stretch alone was equal to 660,000 tons!

In the face of these figures, which refer to about one tenth of the route from Bologna-Fiesole, it appears obvious that such demanding and costly work can only be attributed to the organisational, economic any military power of Rome.

3 – Other finds (site C/4)

Even if our main objective was to find the road paving as far as the Futa pass, we did not fail to explore the areas next to the route and especially the nearby peaks. Thus, the peak and upper slopes of mount Poggiaccio did not escape our scrutiny. On the peak, at an altitude of 1,196 metres above sea level, we noted a hollow, undoubtedly a manmade defence, which can be dated back to the “Ligurian Castellars”, the same as the one on mount Bastione and in Poggio Castelluccio.

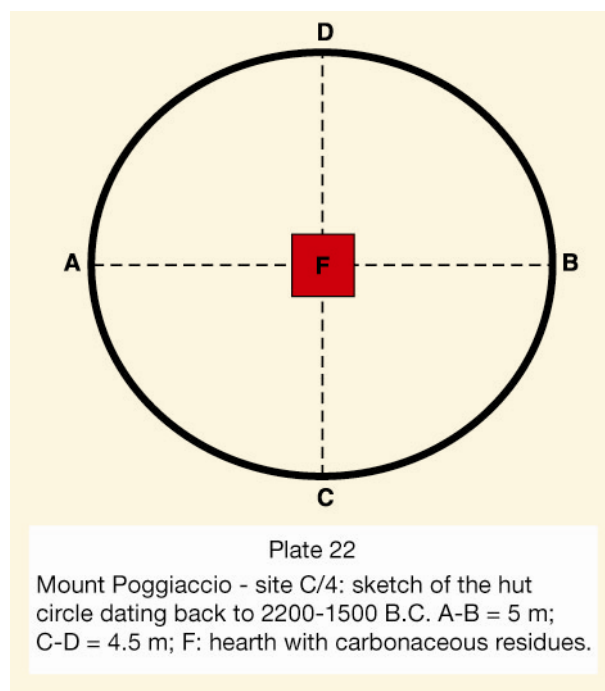
Significant finds have confirmed the existence of very ancient settlements on the eastern and western slopes near the peak of mount Poggiaccio.



Mount Poggiaccio (site C/4): ceramic fragments made of very rough and unevenly fired clay dating back to the 8th-4th centuries B.C. (which can be attributed to the Apennine-Ligurians) found in large numbers on the upper slopes of mount Poggiaccio.

We were surprised to note that wherever we made a small test excavation, at a depth of 50-60 cm, unglazed ceramics emerged, typical of the Apennine-Ligurian civilisation. This abundance demonstrates that the area was inhabited by Apennine-Ligurians for a long time.

During one of our numerous explorations, where the slope decreases until it almost becomes horizontal, we noticed a slightly raised circle on the ground which reminded us of the perimeter of an ancient hut. We excavated thin horizontal layers around the perimeter. At a depth of 30-35 cm, we noticed the ground was a different colour; perhaps it was a faint trace of ancient pile-work. In fact, at a distance of about 5 cm it was possible to distinguish small, darker circles in the ground, with a diameter of about 5 to 8 cm, which appeared to be the organic remains of buried piles. We followed these indications and identified the perimeter of a hut, which did not appear to be perfectly circular. In fact, the diameter was 5 m from north to south and 4.5 m from east to west. However, it was easy to find the centre and we dug with care. At a depth of just 40 cm, we found abundant carbon remains, obvious testimony of the last fires lit by the ancient



hut dwellers. There were not any stone remains resembling a hearth and due to the lack of any other significant remains, all we could do to get an idea of the age of the hut was date the carbon remains.

In July 1988, Agostino Salomoni from the ENEA C/14 Laboratory in Bologna, in the presence of Luca Fedeli, tested the carbon remains of the presumed central hearth of the hut. The results of the analysis dated the combustion date of the carbon as 1860 B.C. (give or take approximately 320 years)¹⁰.

This result took our minds back to the onset of the bronze age and made us try to imagine what life was like for these resilient people and wonder how tough survival must have been on the inhospitable peaks of the Apennine ridge. Perhaps they were forced to settle here to defend themselves from their enemies more efficiently. We know nothing about them; perhaps they were the forefathers of the Ligurian tribes of whom archaeological proof has been found.



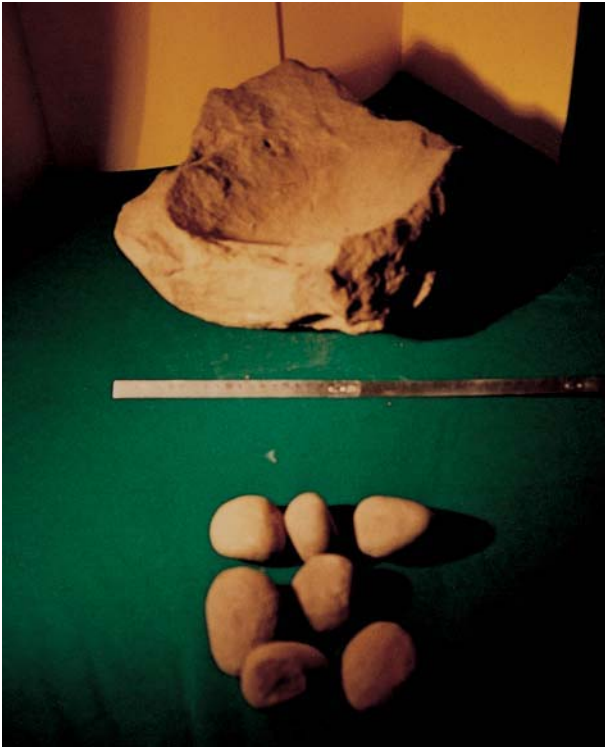
Drawing of a hut used by the Ligurian tribes (Archaeological museum of Ligurian civilisation in S. Remo).

In the surrounding area, we found a considerable number of oval shaped pebbles collected from the beds of the torrents and carried up on the peaks to be used as missiles.



Mount Poggiaccio (site C/4-August 1986): excavation on the peak of mount Poggiaccio; Franco Santi in the pit helped by Francesco Ferrari, Cesare Agostini's nephew.

¹⁰ The written certifications of these analyses were sent by ENEA to Luca Fedeli from the Archaeological Superintendency for Tuscany with a letter dated 23/05/1989 (document 5, sample BO 104).



Mount Poggiaccio (site C/4): lytic mortar found on the peak of mount Poggiaccio dating back to the Apennine-Ligurians (8th-3rd centuries B.C.). Sandstone pebbles found in large numbers on the upper slopes of mount Poggiaccio. They were thrown by hand or using slings.

Because of their shape and weight (about 200/300 g), they were particularly suitable for being thrown by hand or with a sling and were very likely an effective weapon for those times.

Considering that the Ligurian tribes lived in this area for centuries, it is likely

that these missiles date back to this epoch. This is confirmed by another find: during a new excavation carried out on the peak of mount Poggiaccio, we found a large pebble-shaped piece of sandstone with notched edges, measuring about 30-32 cm in diameter. This is a lytic mortar, very similar to another in the Archaeological Museum of Ligurian Civilization in S. Remo dating back to the 8th-5th centuries B.C.



A lytic mortar very similar to the one found on the peak of mount Poggiaccio. (Archaeological museum of Ligurian civilisation in S. Remo – 9th-3rd century B.C.).

CHAPTER XII

THE FINDS ON THE SLOPES OF POGGIO CASTELLUCCIO ARCHAEOLOGICAL ZONE “D”: SITES D/1 - D/2 – D/3 and D/4)

- 1 - Description of the paving remains (sites D/1 - D/2 and D/3).
- 2 - The excavation by the Archaeological Superintendency for Tuscany to investigate the stratigraphy of the road construction (site D/4).
- 3 - The opinions and inspections by Giancarlo Susini and Raymond Chevallier.

1 - Description of the paving remains (sites D/1 - D/2 and D/3)

From mount Poggiaccio, the ridge descends continuously as far the Futa pass and through the Mugello valley.

The summit of Poggio Castelluccio is one kilometre south of mount Poggiaccio and three kilometres north of the Futa pass; it reaches an altitude of 1,131 metres above sea level (65 metres less than Poggiaccio). Like on mount Bastione and Poggiaccio, the transapennine route follows a constant course avoiding the peak of Poggio Castelluccio, which is 25-30 metres higher than the average altitude of the ridge. The peak is about 90-100 metres further west compared to the straight-line of the route, and by continuing along a direct course, ancient voyagers avoided it by passing below the peak on the eastern versant. The medieval mule track also adopted this route and we exploited its obvious traces to unearth the well-preserved remains of the adjacent Roman road.

SITE D/1

Without a doubt, the discovery of the paved stretches on the slopes of Poggiaccio proved the continuity of the road on the Tuscan orographic slopes. Thanks to our previous excavations, we had acquired a certain amount of experience and our trained eyes were now accustomed to perceiving surfaces clues indicating there was paving below.

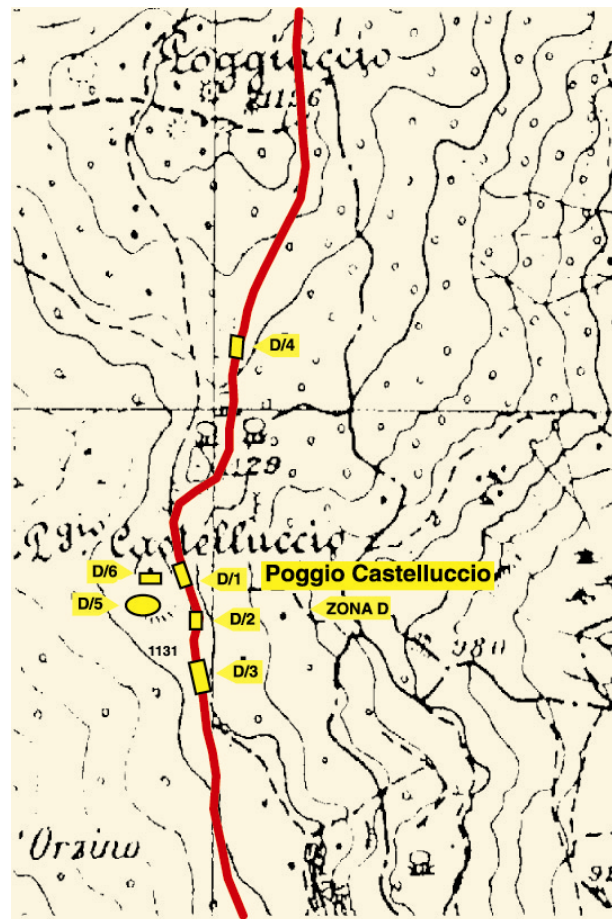


Plate 23

- Archaeological site D: finds in Poggio Castelluccio.
- Sites D/1, D/2 and D/3: paving stones.
- Site D/4: cross-section of road.
- Site D/5: castellar.
- Site D/6: remains of a building.
- The route of the Roman road.

(Italian Military Geographic Institution (I.G.M.) authorisation No. 5034 dated 13.07.99)



Poggio Castelluccio (site D/1- south): Cesare Agostini and Franco Santi at work: The slope of this stretch has not encouraged the usual considerable sedimentation that covers the paving; therefore, it was straightforward to reveal.

Poggio Castelluccio (site D/1): the straight line of paving stands out in the wood, which has covered and protected it for centuries after it fell into disuse.



SITE D/3

A few tens of metres below site D/2, the beech wood opens onto a small flat clearing covered by lush ferns. Its ideal alignment with the already uncovered paving inspired us to dig right below the ferns. As soon as we started the excavation, we realised that we were in a clearing used by woodcutters in the past as somewhere to pile wood before it was converted into charcoal. The ground was blackened by the charcoal residues. We were familiar with these very frequent clearings. Our grandparents had told us that many of their fellow villagers still carried out this type of work up to the 1930's – 1940's² and they had told us about the toil this occupation involved. They had also told us that the *carbonai* [charcoal burners] always used the same clearings as their forefathers in antiquity. Although these types of jobs had ceased to exist by the mid twentieth century, they probably dated back to centuries ago, and we hoped to find road paving below the charcoal burners' floor. It would have been yet more proof of the age of the road; the charcoal burners could not have used the road surface as a work floor³ if the road was still used by transapennine traffic.

At a depth of 60 cm, our excavation revealed the paving stones (site D/3): this was an important confirmation.



Poggio Castelluccio (site D/3): Franco Santi and Cesare Agostini start to dig among the ferns along the continuation of the ideal straight line of the already uncovered road, when they realise this was a clearing once used by charcoal burners.



Le Banditacce ("Il Passeggere" Farm- 11 August 1999). Setting up a charcoal burner – phase one: the wood was arranged on two levels forming a cone shape. An aperture was left in the centre to act as a chimney. It was then carefully covered with pieces of turf. (Photograph by Leandro Gualtieri).

Le Banditacce ("Il Passeggere" Farm- August 1999). Phase two: the charcoal burner after it has been lit. Burning brands are thrown through the chimney from above and set the mass of wood alight. The wood must burn slowly for 5-6 days in an almost airless environment where it is transformed into charcoal

² Stefano Casini: work cited, page 15: "*The trees in these solitary woods, are now farmed by fixed rotation and produce from 13 to 14 thousand tons of charcoal*". The author points out that this data refers to the Municipality of Firenzuola in the year 1914 over 7,257 hectares of woodland.

³ It is well known that to produce charcoal it is necessary to build a wooden cone using a special technique. The cone is then covered with pieces of turf and a fire is lit through a circular access point left open at the top. The wood must burn without producing any flames for about one week. This would not have been possible on a road still being used by traffic. We would like to thank Leandro Gualtieri, owner of "Il Passeggere" farm in Bruscoli (Municipality of Firenzuola) who in August 1999, had an excellent idea and set up an authentic charcoal burner, inviting everyone to a festival where they could see for themselves how charcoal was once made.





Poggio Castelluccio (site D/3): at the end of the excavation, the paving re-emerges in all its glory. Note the 60 cm layer of sedimentation covered for centuries by the charcoal burners' clearing.



Poggio Castelluccio (site D/3): a glimpse of the still well aligned paving stones that constitute the downhill edge of the road.

The stratification of the sedimentation above was clearly different and on two levels. An upper level measuring about 30-35 cm consisted in black earth mixed with charcoal. The lower level measured about 15-20 cm and was similar to yellowish lime. This diverse stratification proved that at first, after prolonged disuse, the paving was gradually covered by alluvial lime⁴ that slid down from the then treeless slope above. Later the wood regained the verge created by the Romans on either side of the road, and the leaves and branches deposited on top of the lime forming a layer of humus.



Poggio Castelluccio (site D/3): *the stratification above the paving highlights two sedimentary levels with very distinct colours: the lower yellow ochre layer consists in alluvial lime. The top dark brown layer consists in humus, which formed after the centuries-old falling of leaves and branches, and later by charcoal burning.*

During a later age, an unknowing charcoal burner selected this flat area to

carry out his work. He was followed by other generations of charcoal burners who used the ready-made clearing. The age of the paving is also proved by the mule track, which makes a curve here to avoid interfering with the charcoal burners' work place. Consequently, the paving below has been well preserved. The downhill edge especially, made with wide, well hewn stones, appeared to be very skilfully made and we decided to uncover this entire stretch of road. Over the following years, with the help of willing friends⁵, sixteen metres of 2.40-metre wide road saw the light of day. However, in a spot where the ground beneath had obviously yielded, the paving has become loose and the width of the carriageway is now 2.80 metres.

We left 5-6 square metres of the above sedimentation to show where the charcoal burners' clearing was.

2 - The excavation by the Archaeological Superintendency for Tuscany to investigate the stratigraphy of the road construction (site D/4).

During the excavation campaign in the summer of 1989, under the direction of Luca Fedeli, the Archaeological Superintendency for Tuscany, carried out a test excavation, dissecting a stretch of paving between Poggiaccio and Poggio Castelluccio (site D/4).

In the descriptive account published by Fedeli⁶, the area is identified as "Excavation C" and is located in the area of Poggio Castelluccio⁷, although to be more precise, it is in the intermediate area between Poggio Castelluccio and Poggiaccio. The test dig consisted in an excavation at a right angle to the road and it aimed to highlight the different levels of the road structure.

Below are some significant passages from his account ⁸: *"In the area of test excavation "C", the paving on the road surface (stratigraphic unit 301) was partly covered by humus and at the edges consisted in*

⁴ The Romans completely cut back the vegetation growing by the roadside to ground level to avoid ambushes; especially wise in a treacherous place like this. Therefore, it is likely that the rainwater washed down the slope above, leaching the clayey soil that was unprotected by vegetation.

⁵ Our friends in Bruscoli contributed in particular: Emanuele Stefanini, Andrea Vignoli and Marco Antonelli.

⁶ In the Minutes of the Conference "La viabilità tra Bologna e Firenze nel tempo" published by Costa, pages 84-85-86.

⁷ Luca Fedeli: work cited, page 84 ... (omissis) *the stretch of road involved in the excavation chosen was a few hundred metres from the peak of Poggio (Castelluccio) along its highest north-eastern slopes...*

⁸ Luca Fedeli: work cited, page 85.



Between Poggio Castelluccio and Mount Poggiaccio (site D/4-August 1989): members of the Archaeological Cooperative in Florence, under the direction of Luca Fedeli, carrying out a survey of the surface of the paving before starting the excavation to reveal the road section.

sandstone blocks with an irregular quadrangular-trapezoid shape, well-made and different from the rest of the paving stones due to their larger size”.

Continuing with his description of the stratigraphy, Fedeli points out: “Below stratigraphy unit 301 (the paving), a sandy levelling bed (stratigraphy unit 303) appeared, on top of which the paving stones were laid”. Fedeli found a carbon fragment above the sandy bed, which was analysed in Zurich⁹, and dates back to more or less 596-140 A.D. “Even further below there was another layer (stratigraphy unit 304) made up of sand and coarse medium to small stones. The stones came from local sandstone material, probably a by-product from shaping the native rock. Stratigraphy unit 304 created a bed on which to set

the paving so that it would be sufficiently stable and well-drained”¹⁰.

The same construction technique was used here as noted by us on Poggiaccio (site C/3):

- the edge paving consisted in solid quadrangular-trapezoid blocks with smaller stones in the centre;
- the stones lay on a bed of rough sandstone gravel, mixed with sandy earth measuring from 25 to 90 cm deep, offering support to the paving as well as rainwater drainage;

- the test excavation also provided some indication of the probable era in which the road was built, if nothing else as an indication of *ante quem*. In fact, Fedeli, inspired by the dating of the small carbonaceous fragment pointed out¹¹: “Nevertheless, although very scant, the presence of carbonaceous material made it possible to pinpoint a date, thus excluding some of the theories suggested so far (see for example note 9).

In note 9, he mentions the theories advanced by some enthusiastic archive researchers¹², who, on hearing about our first finds, upheld that these were the remains of a mule track built in the late Middle Ages, or even in modern times. Here, Fedeli categorically excludes that the road could have been built any later than the 5th, 8th centuries A.D.: “the layer in which this material was found (stratigraphy unit 303) is an integral part of the road surface and, therefore, it is undoubtedly a structural part of the Castelluccio paving; nevertheless, this does not mean it is possible to establish exactly when the road was built, considering how close this layer is to the road surface, and material may have been added later for various reasons (water seepage, infiltrations, local tampering with the road surface, road maintenance or repairs

⁹ Luca Fedeli: work cited, note 60, page 89: “The analysis of the sample I took of the only, very small carbonaceous fragment (from a twig) was carried out at the Eidgenössische Technische Hochschule (E.T.H.) in Zurich - Honggerberg, of the Institut für Mittlere Energie physik” (document 9).

¹⁰ Luca Fedeli: work cited, page 86. In note 61, page 89, Fedeli points out: “The layers (stratigraphy units 303-304) placed between the paving and the native rock feature a variable thickness between 25 and 90 cm”.

¹¹ Luca Fedeli: work cited, page 86.

¹² The enthusiasts we allude to are the supporters of the theory formulated by Nereo Alfieri we have already mentioned.

of varying degree, etc.). I would also say that the archaeometric datum that fixes the date from the 5th to the 8th century A.D., could be plausibly used to establish a date ante quem the road surface was built. Therefore the road was either built during this epoch or during an earlier age”.

This *ante quem* term is very important, but not enough to establish exactly when the road was built. As we shall see, there are other clues and more proof to suggest that the road was built in the 2nd century B.C.

3 - The opinions and inspections by Giancarlo Susini and Raymond Chevallier.

If it is true that our discoveries were initially considered with scepticism by some in the academic circles of Bologna, it is also true that others expressed a positive opinion, confirming the Roman origins of this impressive thoroughfare.

Among these, was Giancarlo Susini, Professor of Ancient History at Bologna University and at the time, head of the Faculty of Literature and Philosophy, who we met during a conference at the Bologna-Centro Rotary Club on 16 February 1988.

After our talk, accompanied by the projection of numerous slides, Susini's comments and his substantial approval was a source of profound satisfaction for us ¹³: “... (ceteris omissis) ... I would like to know who would dare to criticise your considerations because, in my opinion, there is no way that anyone can doubt the value and the validity or the critical exactness of the information you have provided. There is no doubt from an archaeological point of view; (...) in some ways I am “an expert” in this area and therefore it is understandable that I may express certain opinions;

there was no need to draw so many comparisons because the information presented absolutely speaks for itself: there is not the least doubt! This is a Roman road, there is not the least doubt about its being a Roman road, there is not the least doubt that this is a Republican Roman road (...); I could go on quoting countless other data regarding the production of paving stones, etc. which further confirm the enormous amount of information you have collected and illustrated this evening. I believe the results achieved are truly a precious gift to historians and archaeologists alike.

I would also like to add something else, and then I shall move on to the third part, which is perhaps slightly non-critical and has a more general character. I realise that someone who is not actively involved or employed in this field and who is unaware of the problems of ancient history, cannot fully perceive the correctness with which you have presented your information when you place the construction of these roads within a Ligurian context; this idea is a “quid novi” for ancient history, which until now has placed the construction of these roads within an Etruscan, Etruscan-Celtic context, etc. This is incorrect! The Apennine context is also a Ligurian context, and somehow, because the Ligurians were not alphabetised or cultured, and due to the scant information that we and ancient sources have about them, we have certainly been very slow to realise this; however, there is no doubt that this is the historic picture, the frame of reference.

Having said this, just one point I do not wish to contradict and I do not wish to judge is the connection with the Via Flaminia, which remains a question mark. Why is it a question mark? I must explain this documentarily. These transapennine roads had no continuation during the Roman imperial age, or they did, but they slowly fell into diuse. You yourselves referred precisely to the start of the 4th century;

¹³ The words in italics are the exact words taken from the recording of Giancarlo Susini's comments kindly made available to us by the Chairman of the “Bologna-Centro” Rotary Club in 1988, Luigi Heilmann, formerly Professor in Historical and Comparative Linguistics at the University of Bologna.



Poggio Castelluccio (site D/3 – 24 September 1988): *Giancarlo Susini from the University of Bologna and Franco Santi on the Roman road on the slopes of Poggio Castelluccio.*

these roads fell into disuse; because they did not become consular roads, they were not maintained by the Roman Magistrates called “Curatores viarum”. And this was because when the Republic became an Empire, it was the main thoroughfares and heavy vehicle traffic that counted, therefore the Via Flaminia (the Flaminia Maior from Rome, Fano to Rimini), the Via Aemilia and the roads over the Alps. Although these minor roads were built as public highways thanks to consular initiative, exploiting the energies of armies and “ironmongers”, almost as if there were civil engineering departments, they fell into disuse. This had an unhappy consequence, and what you said at the beginning is perfectly right, they are not documented, they are not documented on ancient road maps, they are not documented in itineraries, no transapennine road has ever been documented... (ceteris omissis).

This substantial recognition that that paving certainly dated back to the Roman Republic rewarded our many toils and encouraged us to continue our research. It is true that Susini does not mention the exact date of the construction, nor does he attribute the road to C. Flaminus Nepos, but his words gave our morale a decisive boost; from that moment on, we had proof that the most authoritative exponent of the Bolognese academic world, and one of the most distinguished European scholars of Roman history appreciated the results of our research and shared our opinions, at least by 90%.

In September 1988, we welcomed Susini, accompanied by Angela Donati¹⁴ and Carlo Alvisi¹⁵ to the excavation site. He attentively visited every stretch of paving unearthed on Poggiaccio and Poggio Castelluccio, confirming that the road was built during the Roman Republic.

¹⁴ Angela Donati is Professor of Ancient Roman Epigraphy and Antiquities in the Department of Archaeology of the Faculty of Literature and Philosophy at the University of Bologna.

¹⁵ At the time, Carlo Alvisi was Professor of Neurosurgery at the University of Bologna.

Raymond Chevallier, Professor of Archaeology in the Roman World at the University of Tours (France) and chairman of the French Society of Photogrammetry expressed the same opinion during his visit on 30 September 1989 during the Conference "La viabilità tra Bologna e Firenze nel tempo"¹⁶.

Especially impressed by the straightness of the route although it crossed a mountain pass over rough and difficult ground, he told us: *"It is clear that only the Romans could have conceived the construction of such a solid, impressive and straight transapennine road"*, a concept that he later confirmed when he spoke at the Conference. A few months later, he published a report of the Conference in the French magazine, "Archeologia" (issue 252 in December 1989) where he wrote the following words: *"The participants at the congress were able to see these impressive remains nestling in very beautiful greenery"* ¹⁷.

In January 1999, ten years after our last meeting with Chevallier, we sent him the photographs of the paving found south of the Futa pass and the remains of the bridge in Colombaiotto, which were still buried in 1989. His answer confirmed that he shared our opinions.



Poggio Castelluccio (site D/3 – 30 September 1989): Raymond Chevallier (left) Professor of archaeology of the Roman World at the University of Tours (France) on the site on the slopes of Poggio Castelluccio. In the centre stand Mrs. Rauty and Cesare Agostini (right).

¹⁶ The Conference "La viabilità tra Bologna e Firenze nel tempo" was held from 28 September to October 1 1989 in Firenzuola and San Benedetto Val di Sambro. The conference is discussed in more detail in the appendix.

¹⁷ See document 10.

CHAPTER XIII

THE FINDS ON THE PEAK OF POGGIO CASTELLUCCIO: A “CASTELLAR” (SITE D/5)

1 - The “castellar”: a Ligurian fort

2 - Were the tactics used by the Romans to conquer Poggio Castelluccio the same as the ones used to conquer mount Olympus?

1 - The “castellar”: a Ligurian fort

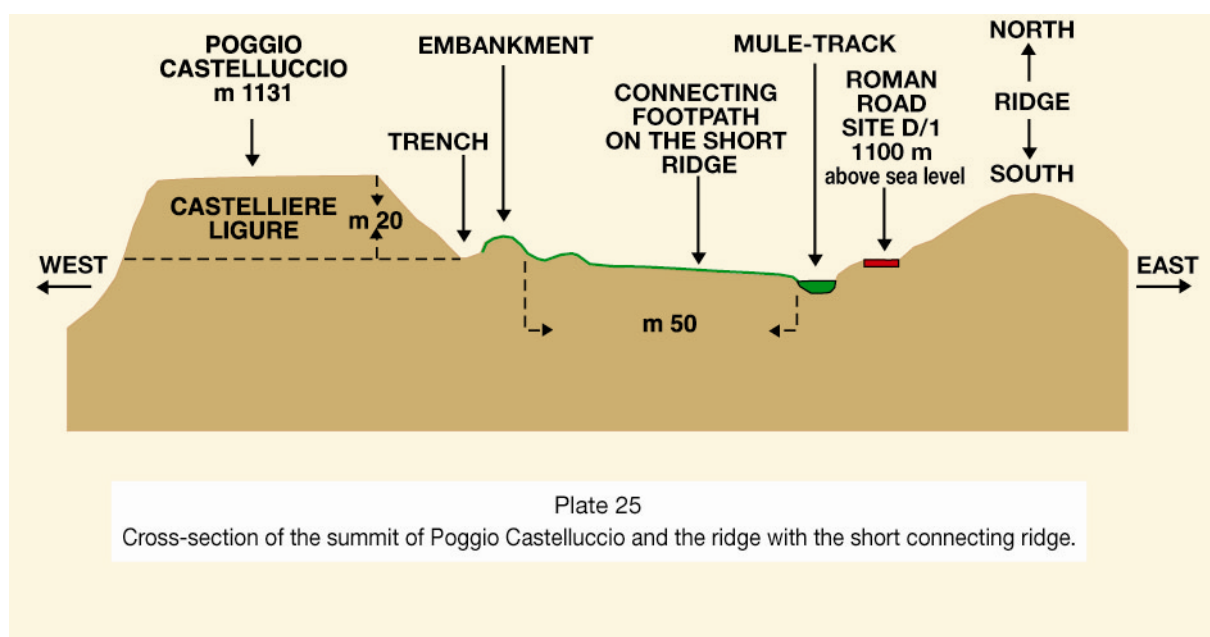
Poggio Castelluccio is three kilometres north of the Futa pass and reaches an altitude of 1,131 metres above sea level; a few metres higher up, the line of the ridge descends southwards. Its peak is about 100 metres west of the road and is linked to it by a small, slightly uphill ridge. Therefore, to reach the peak of Poggio Castelluccio, it is necessary to abandon the road and proceed along this brief ridge towards southwest. When, during the first years of the 1980's we came to this place to look for the road paving, the name of this peak reminded us of a castle, a “castellar”, or anyway a fortification. As we set off for the peak, we found ourselves in front of a deep hollow bordered by an embankment which surrounds its slopes by about 270 degrees. It was obviously a

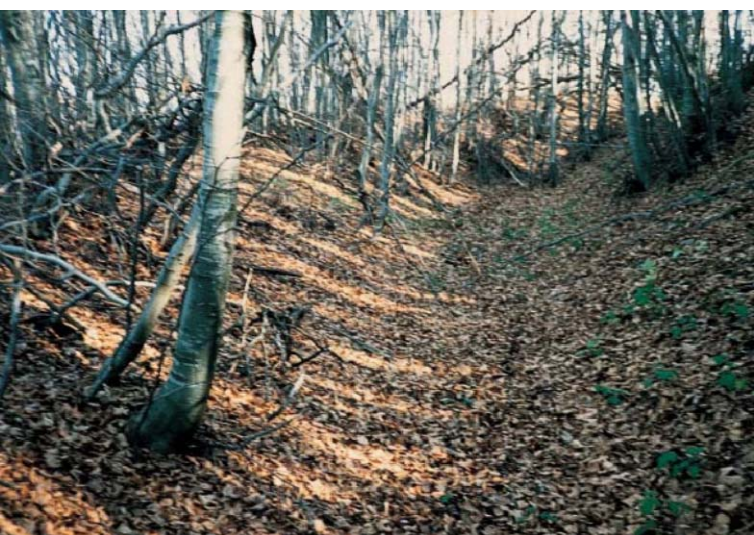
manmade defence structure.

The elliptical east-west peak has a surface area of about one thousand square metres and it is perfectly level. Suspecting that it had been levelled on purpose, we carried out a few test excavations, which at a depth of 50-60 cm, revealed numerous Apennine Ligurian ceramic fragments, made with the same clay and with the same aspect as the fragments found on Poggiaccio.

These finds, together with the morphology of the area, convinced us that this peak had a “castellar” function and it probably had the dual aim of acting as a defence fort guarding the transapennine route below.

Not satisfied with finding these significant ceramic fragments, in themselves sufficiently indicative that this peak was used in antiquity,





Poggio Castelluccio (site D/5): a view of the trench that surrounds 270 degrees of the upper slopes of Poggio Castelluccio. This defensive work and the ceramic finds on the peak confirm the function of this place as a Ligurian castellar. Considering the ditch must have been much deeper if it is still visible today in spite of the centuries old sedimentation of leaves and branches which have made their way down from the slopes.

in summer 1988, in the presence of Agostino Salomoni and Luca Fedeli, we took a sample of carbonaceous residues found at a depth of 90 cm. The analysis carried out in the C/14 laboratory of E.N.E.A. in Bologna gave the following result: 850 B.C. (give or take 50 years) ¹. This confirmed the presence of Apennine Ligurian settlements from the 9th century B.C. and it is very probable that these Apennine Ligurians continued to live on the Apennine ridge without showing any hostility towards the Etruscans², until the arrival of the Romans. This persistence of Ligurian settlements on Poggio Castelluccio, was confirmed by the excavations carried out during the following August by the Archaeological Superintendency for Tuscany. In summer 1989, following our indications, Luca Fedeli carried out a few sample digs on the peak, the results of which were published by him in the Minutes of the Conference “La viabilità tra Bologna e Firenze nel tempo”. These are some of the most



Poggio Castelluccio (site D/5): ceramic fragments made using rough clay belonging to the Apennine-Ligurian culture (8th-4th centuries B.C.) found in large numbers on the peak of Poggio Castelluccio.



Poggio Castelluccio (site D/5): other fragments of Apennine Ligurian ceramics.

significant points of his report³. “test excavation A at Poggio Castelluccio was carried out in a small clearing free of vegetation on the mountain peak, almost where the eastern slopes of Poggio slope down to the Setta valley (ceteris omissis); therefore the investigation initially unearthed a series of layers of leaching and sedimentation under the woodland humus (ceteris omissis). Two further layers were found underneath

¹ The results of this dating are indicated in the enclosed certification (document 5 - sample BO 43).

² In the excavations carried out on Poggio Castelluccio we also found (as on Poggiaccio), vase fragments made of black clay of Etruscan origin (bucchero).

³ Luca Fedeli: Minutes of the Conference “La Viabilità tra Bologna e Firenze nel tempo”, page 74.

(the second stony) both may have been waste from the presumed settlement. There were other layers below these, two probable ground floors (stratigraphy units 207 and 210), the second of which showed signs of fire in the form of scattered carbonaceous frustules and the remains of baked material”.

These carbonaceous fragments date back to 490 B.C. (more or less 90 years)⁴, confirming that the location was used during the 6th and 5th centuries B.C.; “In effect, stratigraphy units 200, 201, 203 and 205 - 210 featured ceramic material (fragmentary) which is relatively homogeneous from a chronological point of view and, as seen, attributable to a nearby settlement. (ceteris omissis). The clay used to make the ceramics consists entirely in clays commonly used in northern Etruria from at least the 9th to the 8th centuries B.C. (ceteris omissis) Comparison with products from the same age allow parallels to be drawn with Tuscany-Latium, the Po Valley and Liguria”⁵.

In note 48, on page 89 of his account, Fedeli points out the following with regard to the type of ceramics found: “A comparison can also be drawn with the types present in Liguria a few centuries later”.

And finally, in note 52 (also on page 89), he does not exclude the possibility that this type of ceramic was also used in the 4th century B.C.: “The utterly local character of the ceramics found on Poggio Castelluccio could confirm the possibility of a chronological delay compared to the usual dating of the typologies seen. The archaeometric examination of a ceramic fragment by the Department of Physics of Milan State University, (ceteris omissis) has for example fixed the dating at 566 (give or take 200 years) B.C. (8th - 4th centuries B.C.)”.

The vicinity of probable settlements just a little further north, on the slopes of mount Poggiaccio, where we found identical ceramic materials, suggests that Poggio Castelluccio and Poggiaccio were



Poggio Castelluccio (site D/5 - August 1989): members of the Florence Archaeological Cooperative excavating on the summit of Poggio Castelluccio.

linked and perhaps had two different functions in terms of defending the track. Mount Bastione was also part of this same context considering that it lay along the transapennine track. In fact, Poggio Castelluccio controlled the south versant in the same way as Bastione controlled the north versant. Inserted between these two fortified peaks, Poggiaccio must have had an intermediate function and acted as a visual link.

These archaeological discoveries made our thoughts turn to Guido Achille Mansuelli, who in 1976, thirteen years before these finds, wrote ⁶: “Even vaguer is the information about the Ligurians who bordered with the Gauls on

⁴ Luca Fedeli: work cited, note 45, page 89 “a sample I took from stratigraphy unit 210 was analysed by department T.I.B of E.N.E.A. in Bologna. The dating was fixed at 490 give or take 90 years) B.C.”

⁵ Luca Fedeli: work cited, pages 74 and 76.

⁶ Guido Achille Mansuelli: “Profilo geografico culturale dell’Emilia preromana” in “Storia dell’Emilia Romagna”, University Press, Bologna 1976, page 38.

the Apennines; only the Apuani and the Friniates are mentioned because according to sources, they led a primitive lifestyle. (*ceteris omissis*) The interesting hypothesis whereby the Apennine “castellars” were military defences set up against the Romans perhaps requires archaeological verification in terms of chronology and stratigraphy. However, during the Roman age, the entire Ligurian-Gaul Apennine area resisted urbanisation”.

Our finds confirm the presence of Ligurian civilisation in the areas south of Emilia and bordering with Tuscany. In fact, the Ligurians



Poggio Castelluccio (site D/5): *all the pebbles found have a length that varies from 6 to 7 cm (200-300 grams), ideal size and weight for being re-used as thrown weapons.*

still used vase-like ceramic shapes and Bronze Age tools⁷. In Poggio Castelluccio, as in Poggiaccio, we also found numerous oval-shaped pebbles used as missiles.

This entire area, with its pair of “Castellars”, abundant remains of Apennine-Ligurian ceramics and stone missiles, calls to mind the places described by Livy during the battles held in 187 B.C. by the Roman legions against the Ligurians: “*Loca montana et aspera quae et ipsis capere labor erat et ex praeoccupatis deicere hostem; ... oppugnatio necessaria munitorum castellorum laboriosa simul periculosaque*”⁸.

We have spent days and weeks in these “mountainous” and “austere” places, walking along tracks that are still “impervious” and “narrow”, carefully scrutinising the ground covered with the thick undergrowth of ferns and brambles.

We also found it difficult to reach the remains of the “well fortified positions” on foot and we understood how difficult it must have been to storm those “castellars”.

Thanks to Livy’s description, while walking through these wild woods it is possible to relive the emotions and the anxieties the Roman soldiers must have felt when approaching enemy strongholds. The fear of falling into an ambush is still a tangible sensation and gives anyone climbing upwards a sense of inferiority, not because one expects an enemy attack, but because of nature’s hostility. The terrain is as arid now as it was then, providing “*little hope of plunder*”. It was necessary to “*skimp on food because there were no camp-followers*”, and the same applies today if you climb up there without a well-stocked rucksack.

⁷ The lack of medieval ceramics suggests that neither mount Poggiaccio, nor Poggio Castelluccio were used during later ages.

⁸ Titus Livius: History of Rome, book XXXIX, paragraph 1: “*mountainous and forbidding places, positions difficult to storm if already occupied by the enemy... forced to attack with effort and risk well-fortified castellars*”.

2 - Were the tactics used by the Romans to conquer Poggio Castelluccio the same as the ones used to conquer mount Olympus?

To integrate Livy's brief account of the conquest of the Ligurian castellers, we tried to imagine the assault by Marcus Aemilius Lepidus against the Ligurian positions using Livy's description of the conquest of mount Olympus by the consul, Gnaeus Manlius Vulso, who defeated the Gaul-Greeks after they took refuge on the sacred mountain.

This occurred in 188 B.C., that is, one year before the bellicose events we are interested in. The Romans undoubtedly used the same weapons, tactics and strategy to conquer other peaks occupied by their enemies. From his account⁹ it emerges how effective it was to conquer fortified peaks with weapons such as arrows and javelins, but especially "shot"¹⁰ and stones for slings; just like those we found in abundance on mount Poggiaccio and Poggio Castelluccio.

The circumstantial description by Livy is worth quoting: *"When the Greek-Gauls¹¹ entered into battle, they believed that by occupying the highest mountains in the area and collecting sufficient supplies for an indefinite period, they would have worn down their enemy - or so they believed: the Romans would certainly never have dared to dislodge them by climbing such precipitous and steep terrain; and if they did try, just a handful of men would have been enough to block their route and disperse them; they certainly would not have set up camp and waited for the onset of cold and hunger at the foot of the mountain. Therefore, although the height of their position constituted a good defence, they ran a ditch and other defence works around the peaks they had occupied*

They paid very little thought to providing themselves with a supply of weapons to throw, convinced as they were



Poggio Castelluccio (site D/5): pebbles used as missiles by the Ligurians and the Romans. The account of the battle of mount Olympus, described by Livy (quoted in the text in this paragraph) highlights the efficacy of these weapons in clashes that took place at a distance.

that the rough ground would itself furnish them with an abundance of stones. The consul realised that there would be no hand-to-hand fighting, and that the battle would involve long range attacks which would place the enemy positions under siege; he therefore prepared a large quantity of javelins, skirmishing spears, arrows, shot, and small stones that could be launched with slings: well-armed with these missiles, he marched his men towards mount Olympus and set up camp about five miles away. (ceteris omissis) On the third day, he set off with all his cavalry on a reconnaissance mission of the area. (ceteris omissis) After taking note of every possibility, on that day he set up his camp at the foot of the mountain. The day after (ceteris omissis), he divided his army into three columns and advanced on the enemy. (ceteris omissis) The Gauls were confident that at least on two sides there was no possibility of access; to block with armed force access from the south, they sent about four thousand soldiers to seize a hillock that overlooked

⁹ Titus Livius: work cited, book XXXVIII, paragraphs 19, 20 and 21.

¹⁰ "Shot" consisted in small lead missiles produced directly by the military company. The missiles were about 6-7 cm long and they were launched by slingers during assaults. They featured various types of engravings; at times, the name of the military company which founded them (legion, cohort, etc.), other times curses addressed to the enemy commander, or inciting the shot to hit the enemy in a certain part of the body.

¹¹ These were Gauls belonging to the Tolostobogian people, descendants of the Gaulish tribes who had moved into Greek territory during the 3rd century B.C.; this is why the Romans called them the Greek-Gauls.

the access route (which was less than a mile from the camp) convinced that they would block the route just like the fortifications of a castle. When the Romans realised what they were doing, they prepared for battle. (ceteris omissis) The infantry companies advanced at a very slow pace, given the steepness of the slope; the soldiers held their shields before them with the aim of only warding off missiles and giving the impression that they wanted to avoid hand-to-hand fighting. The fight commenced while the enemies were at a distance with the hurling of missiles and, initially the fight was even because the Gauls were advantaged by their position, the Romans by the variety and quantity of their weapons; then as the fight progressed, the evenness disappeared. The Gauls were inadequately protected by their oblong shields which were too narrow for their large build and also flat. They also had no other weapons except for their swords, which were utterly useless because they were not engaged in hand-to-hand fighting. They tried throwing stones, but this was no use because they had not made any preparations earlier and they could only throw the stones that in the heat of the moment happened to come into their hands; they had no experience in this type of fighting and did not have enough skill or strength to assist the throw. They were wounded from every side by arrows, shot and javelins; and with their souls overcome by rage and terror, they no longer understood what to

do, involved in a type of conflict for which they had absolutely no aptitude”.

This episode proves that the greater number of available stones helped Gnaeus Manlius Vulso to win the battle. Can the success of M. Aemilius Lepidus against the Apuani Ligurians in Poggio Castelluccio, Poggiaccio and mount Bastione be attributed to similar circumstances? History makes no mention of it, but the stone missiles have remained, reminding us that they were used in cruel battles and perhaps contributed towards the victory of the Roman legions.

With this thought, we left Poggio Castelluccio, the castellar, trench, ceramics and the oval pebbles behind us and we continued our journey towards the Futa pass along the Roman paving unearthed beforehand.

Just a few hundred metres further south, the beech wood is replaced by a dense fir wood that was so dark we abandoned our search. We decided to be content with the paving found on Poggio Castelluccio, seeing as it was obvious that the route could only continue along the same ridge, descending towards the Futa pass.

We had reached the objective we had set ourselves after the first find on mount Bastione. Therefore, we decided it would be more useful to dedicate our time and efforts to searching for the continuation of the paving south of the Futa pass, in the Mugello valley.

CHAPTER XIV

THE MYSTERIES OF MOUNT POGGIACCIO AND POGGIO CASTELLUCCIO

- 1 - An artificial reservoir on mount Poggiaccio and an area suitable for a camp.**
- 2 - The small pillars.**
- 3 - The fruitless search for a Ligurian necropolis.**
- 4 - The remains of a large building on Poggio Castelluccio (site D/6).**

Before describing our explorations on the slopes of the Mugello valley, we would like to mention a number of finds that are difficult to interpret and remain shrouded in mystery.

The theories we have formulated about these finds are based on the other Roman and pre-Roman remains unearthed nearby and illustrated earlier. Excavation work well beyond our means would have been necessary to provide a more certain interpretation. Nevertheless, we hope the basic information we offer will inspire interest and future explorations.

1 - An artificial reservoir on mount Poggiaccio and an area suitable for a camp (site C/1)

On the eastern slope of mount Poggiaccio, just below the peak, about 150 metres south of the Apennine pass (that is just a few tens of metres south of site C/1), in the middle of the dense beech wood, there is a perfectly circular clearing with a diameter of about 15 metres. The clearing looks like a shallow basin, where aquatic plants some 30-40 cm high grow in the summer; during the winter, the basin fills with water which lingers until late spring. Downhill it is clear to see that the water is contained by an artificial

embankment, which coasts the route of the Roman road. The intention of the builders was to create a reliable water reservoir, ready to be used simultaneously by a large number of people and animals, considering that at this altitude almost on top of the ridge, there are no important sources of water.

We first noticed the small reservoir at the beginning of spring when it appeared to be full of water. We returned many times because it lay along the route of the Roman road and in May, we noticed that the water had drained away leaving a clearing full of aquatic plants.

Convinced that the reservoir must once have been deeper, we decided to excavate the centre during the driest period of the year. We hoped to uncover finds on the bottom that would help us to date when it was first used. Unfortunately, although the test excavation was carried out in August when the basin was dry, at a depth of 30-40 cm, the pit filled with water and this prevented us from continuing any further. We realised that the basin was supplied by a small spring and not just by rainwater. Therefore, it guaranteed the Apennine pass an abundant reserve of water even in full summer, considering it had a capacity of some 250 cubic metres; this was an important certainty for anyone travelling along the road.



Mount Poggiaccio (site C/1): *the small artificial reservoir located just under the peak of mount Poggiaccio. During the winter, the water still reaches a modest level.*



Mount Poggiaccio (site C/1): *the water completely disappears during the summer months leaving room for marsh plants.*



Mount Poggiaccio (site C/1): *In August 1986, we carried out a test excavation in the middle of the ancient, semi artificial reservoir but water seepage forced us to abandon the task. At work from left: Andrea Fanti, Francesco Ferrari, Franco Santi (inside the excavation hole) and Alberto Bargiotti.*



Mount Poggiaccio (site C/1): *a vast flat plain (unique to the area) next to the Roman road and the artificial reservoir may indicate that this was a stopover and campsite for military garrisons in transit.*

Such a large water reservoir could only be justified by the need to supply water to a large number of people or animals, for instance a large settlement or an army on the move.

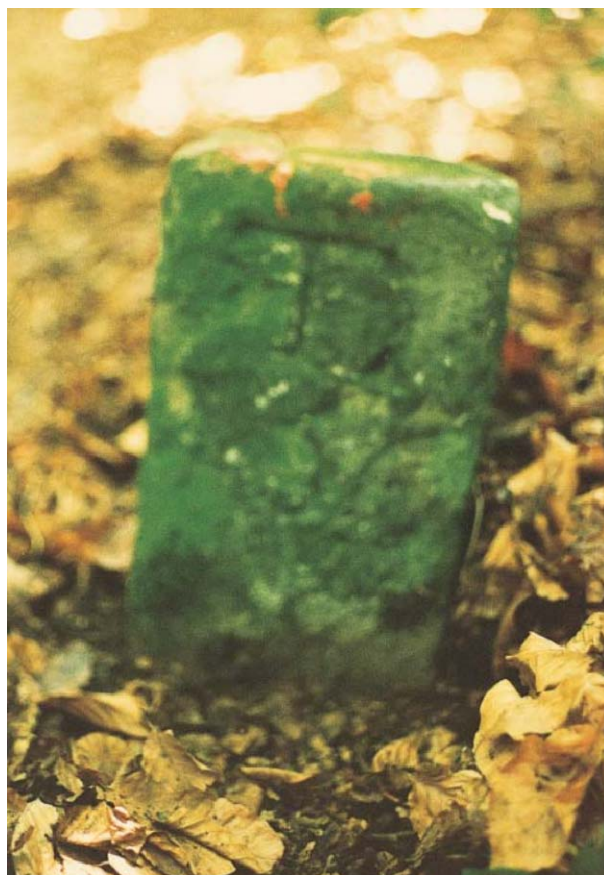
Immediately downhill of the basin, the gradient softens to the point that it almost becomes flat over a large area. On reaching this area, just 200 metres from the pass, one feels obliged to stop for a while in the ample grassy shade of the tall beech trees.

The specific environmental configuration of this plain, separated from the artificial reservoir by the road, gave us the impression that perhaps it was used as a stopping area where a camp could be pitched. Its dominant position offered a sufficient guarantee of safety, and it could have been a stopping area for military garrisons. Furthermore, it is about the same distance from Fiesole and Bologna, and nothing would be more logical than choosing it as an intermediate stopover. A number of test excavations carried out on the plain revealed that below a 40-45 cm layer of humus, there was a ground level made up of numerous extremely compacted and small sandstone fragments, which formed a solid and rustic flooring.

But who built the small reservoir and who flattened out the ground to make it suitable for pitching a camp? Was it perhaps the resident Ligurians, or the Etruscans who assiduously used this mountain pass, or the Romans to guarantee a comfortable overnight rest for their legions? These are no more than theories supported by the nearby presence of certain Ligurian and Roman remains, and which require archaeological verification.

2 - The small pillars.

During the first years of our explorations, next to the road at the foot of Poggiaccio and Poggio Castelluccio, we found three small sandstone pillars with a rectangular section, partially submerged in the topsoil. They were spaced about 200 metres away from each other. The sides of each differed in size but they were all sculpted with a letter "T" followed by a triangular full stop and a straight line was sculpted



Monte Poggiaccio and Poggio Castelluccio: *the three small sandstone pillars on the side of the road, spaced about 200 metres away from each other with the mysterious letter "T" sculpted on their side*





across the top. At first, we thought they were boundary stones defining Tuscan territory (T = Tuscia); then we noticed they followed the road route from north to south, while the borderline between Emilia and Tuscany runs in an east-west direction. We thought there was a strict correlation between these sandstone pillars and the transapennine road.

Our research into Latin epigraphy led us to suppose that these could be *Tabellae*, pillars the Romans placed at intervals between *miliari*.¹ An inscription on the base of a statue called the *miliarium Popillianum* mentions *Tabellae*; the epigraph also mentions the construction of the road from Reggio Calabria to Capua with these words in the first person: “I travelled the road from Reggio to Capua and along the route I installed every bridge, milestone and tabular... (ceteris omissis)”². Therefore, *Tabellari* or *Tabellae* were already being placed along Roman roads during the Republican age; the T sculpted on the pillars next to our road could have been an abbreviation for the word *Tabellarius* - *Tabella*.

We did not think they could be boundary stones because the border between Tuscany and Emilia is five kilometres further north (as it was during the past centuries), where it is still

possible to find cylindrical boundary stones bearing the date 1789, aligned from east to west. All these elements convinced us that these stones were Roman, and this is what we expressed in our first publication³.

These days we are no longer so convinced of this idea, especially because (following information provided by our friend, Carlo Alvisi), we have realised that there are another two pillars with the same characteristics on the ridge of mount Gazzaro, also part of the great Apennine range. However, mount Gazzaro is located about 3 km further east of the Futa pass and therefore completely removed from the road route. Furthermore, the east-west direction of the ridge – and therefore of the two pillars – is compatible with the theory that they are Tuscan-Emilian boundary stones, used in very remote times, when the boundary was located along this ridge.

These observations have inspired the theory that they are boundary stones dating back to the 6th - 8th century A.D. when the Lombards and the Byzantines faced each other on



This inscription was probably part of the base of a statue. It is called the “*Miliarium Popillianum*” because Mommsen attributed it to P. Popillius Laenas, consul in 132 B.C. It mentions the construction of the road from Reggio Calabria to Capua and the installation of the relative *miliari* and *tabellari*.

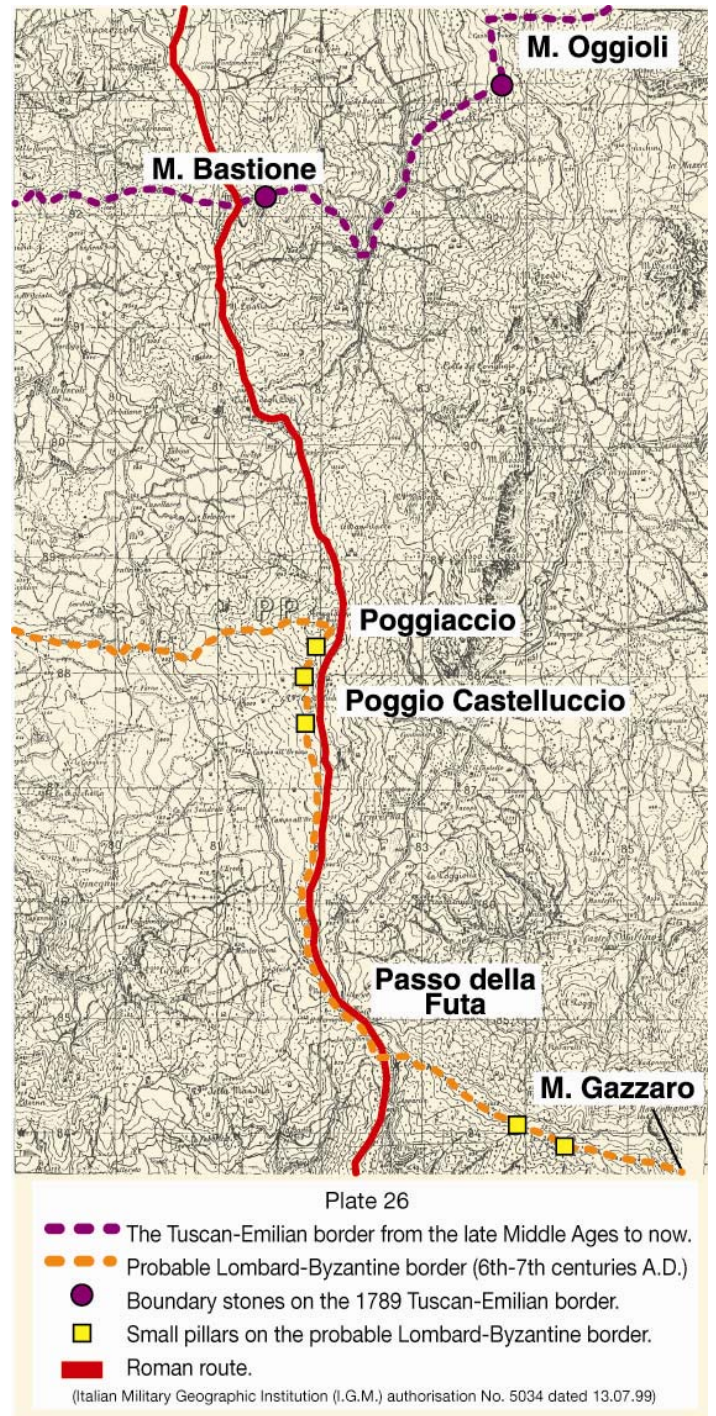
¹ Ida Calabi Limentani: “Epigrafia latina” published by Cisalpina Goliardica, 1967, page 285: “Milestones were located along roads at every thousand paces; we do not know with what regularity minor distances between them were signposted (by *Tabellae*)”.

² Mommsen attributes this epigraph to P. Popillius Laenas, consul in 132 B.C.

³ C. Agostini - V. Di Cesare - F. Santi: “La strada Flaminia Militare” Published by Costa in 1989, pages 47 and 48.



M. Gazzaro (1,125 metres above sea level): two sandstone pillars on the slopes of mount Gazzaro, about 3 km east of the Futa pass, on the great Tuscan-Emilian Apennine range. They have the same parallelepiped shape and letter “T” sculpted on the side as the ones on mount Poggiaccio and Poggio Castelluccio.



these Apennine passes. In this case, the “T” should stand for “Tuscia”, as Tuscany was called during the Lombard age. And although the three small pillars on the side of the road in Poggio Castelluccio and Poggiaccio are aligned from north to south, they may have indicated a point where Lombard dominion penetrated the Byzantine border to control the Poggiaccio pass.

This theory is supported by the fact that a number of cylindrical boundary stones, installed in 1789 outlining the border between the Papal States



Mount Oggioli (west versant): one of the cylindrical pillars made of sandstone used to mark the boundary between the Papal States and the Grand Duchy of Tuscany. They were located along the mount Bastione and mount Oggioli axis. It is clear to see the sculpted letters "SS" and the date, 1789.



Mount Oggioli (west versant): the rear of the cylindrical pillar where it is clear to see the sculpted letter "T" and the letters "NA", probably an abbreviation for Tuscany.

and the Grand Duchy of Tuscany, feature the letters SS and the date 1789 on the Bolognese side, and the letters "T" and "NA", an abbreviation for Tuscany, on the other side.

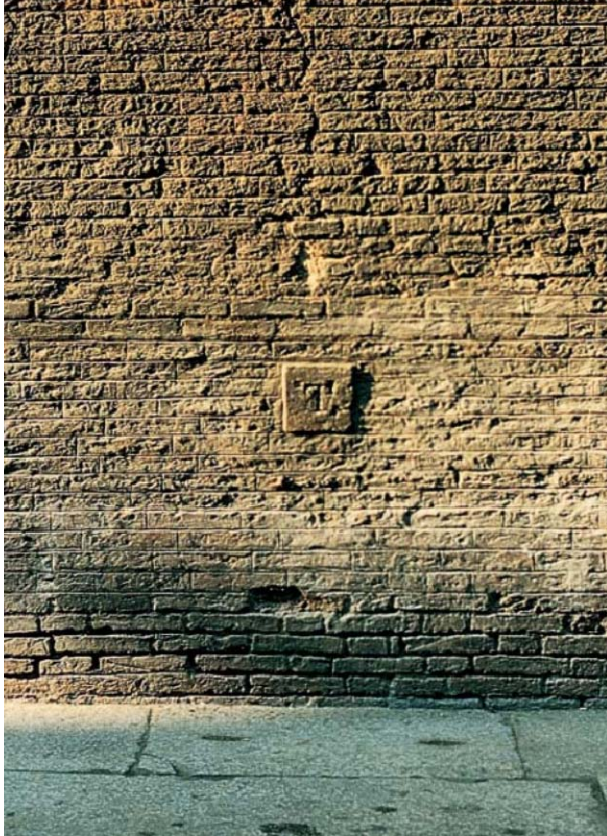
If this is the case, these two types of pillars, about 5 kilometres apart, are boundary stones that refer to two different epochs: the older, located further south, belong to the Lombard-Byzantine age, when the boundary was on the Futa pass-mount Gazzaro axis (with a penetration point that reached as far as Poggiasco); the more recent pillars, located five kilometres further north, belong to the Grand Duchy-Papal States age, along the mount Bastione-mount Oggioli axis where the boundary between Tuscany and Emilia is located.

However, doubts regarding the dating and the function of these small pillars remain, especially after we were told that on the lower part of the massive external walls of a 16th century palazzo located at number 1

Via Rolandino in Bologna ⁴, among the terracotta bricks on the side of the building overlooking Via De' Poeti, there is a 20 by 20 cm square sandstone block with a letter "T" sculpted at its centre. The character is the same as the one on the boundary stones and it features the same triangular full stop next to the foot of the "T".

Bearing in mind the construction era, it is presumable that this small square stone was used in 1500. But what significance can be attributed to a solitary letter sculpted on a stone in the wall of a building with no other inscription? Furthermore, what type of connection can this stone have with the small pillars on the Tuscany-Emilia Apennine border? Our doubts remain and we leave them to those who in future may want to solve these mysteries.

⁴ The building is called the Berò or Carracci house, later the Gradi house. We would like to thank Daniele Moretto for the information and the photograph he sent us.



Palazzo at number 1 Via Rolandino in Bologna: *the solitary sandstone block set in the base of the external wall facing Via De' Poeti on the 16th century palazzo located at number 1 Via Rolandino in Bologna. The letter "T" sculpted at the centre of the stone is very similar to the letter sculpted on the small pillars found on the Tuscany-Emilia Apennine pass* (Photograph by Daniele Moretto).

3 - The fruitless search for a Ligurian necropolis.

We spent many years exploring the slopes and summit of Poggio Castelluccio.

The finds uncovered induced us to extend our search to the surrounding areas to see if there were other examples of Roman and pre-Roman remains. We also wanted to find a Ligurian necropolis, convinced that one must exist given the centuries-old presence of Ligurian settlements in the area.

We dedicated considerable time to this investigation; we also used a metal detector, which proved to be counter-productive. The entire area is scattered with residues of the last world war (shards from shells, cartridge cases, wire, empty cans, etc.) now covered by two or three centimetres of humus, which were picked up by the metal detector and consequently misled our explorations and caused a great loss of time. Therefore, we had to resort to a

visual search of the surface in spite of the fact there was no hope of seeing any burial monuments because they were not used by the Ligurians.

Thus, in spite of our efforts, we did not locate the necropolis. Neither could we expect to find any Roman burials; it is very unlikely that the Romans established a settlement of any importance that involved the burial of the dead near an Apennine pass and at such an altitude. If any Romans unexpectedly died here, they were probably taken to burial grounds elsewhere in the cities.

4 - The remains of a large building on Poggio Castelluccio (site D/6):

Poggio Castelluccio offers an ideal panorama overlooking many kilometres of the road coming from the Mugello valley and heading towards Bologna, therefore, we thought the Romans had probably set up a stable military garrison here to control the area (at least during the first years after their conquest).

Therefore, we concentrated our efforts on finding the remains of a building, convinced that it would have been easier to make out the remains of a ruin rather than finding a necropolis.

However, our numerous explorations were fruitless until 1991.

In August of that year, we were working with a number of friends on Poggio Castelluccio to uncover further metres of the paved road. After our usual packed lunch, we had a break and wandered around the nearby surroundings. It was while doing this that we noticed a rectangular clearing where the beech trees did not grow.

The usual ferns did not grow in the clearing although it was a sunny spot. The ground appeared to be slightly raised around the perimeter compared to the surrounding area. When we noticed the perfect geometric alignment of the four sides of a rectangle, we realised we were looking at the remains of the perimeter walls of a building.

We started to excavate and at a depth of just 25-30 cm, unearthed an 80 cm wide wall, constructed with hewn sandstone blocks. Anxious to discover

the dimensions of the building, we localised the four corners and confirmed its (approximately) 14 x 10 metre rectangular shape. Given the dimensions, this must have been an important building, considering the distance from other settlements and its 1,100-metre altitude above sea level. Its position also suggested it was closely related to the summit of Poggio Castelluccio, and the nearby road. In fact, it lay within the angle formed by the main ridge (facing north-south) along which the Roman road passed and by the short ridge connecting to the peak of Poggio Castelluccio. Constructed just below the top of these two ridges, the building nestled in a hollow where it was protected from the wind and had comfortable access to the road just 70 metres away. Its closeness to the Roman road suggests that it may have been used as a place to stop for the night and where messengers and their horses could get refreshment.

After allowing our imagination to wander through these suggestive conjectures, we soon faced up to the archaeological reality before us. Large-scale excavations were required before we could establish with any certainty when the building was built, and its foundations had yet to be uncovered. While waiting to organise an excavation campaign, we continued to investigate the surroundings searching for a waste site and a water supply. We did not find the former; however about 80-90 cm west of the building we found a spring which even today in full summer still has a water flow rate capable of meeting the daily demands of a number of people and as many horses. The presence of a water supply confirmed the possibility that this building could have been lived in on a permanent basis.

In February 1992, we invited the architect, Franco Bergonzoni ⁵ to the location, hoping he would provide an initial opinion



Poggio Castelluccio (site D/6 – February 1992): *the inspection by Franco Bergonzoni (right) in the area where it was possible to discern the walls of a building; Carlo Alvisi (left) and Franco Santi (with his back to the camera) were also there.*

⁵ See the note in Chapter VIII, paragraph 5.

regarding the geometric shape of the foundations. He very kindly accepted our invitation and carried out a summary review of the perimeter walls, using the four unearthed corners as a reference and drawing up the plan we have enclosed herein (document 11).



Poggio Castelluccio (site D/6 – February 1992): *another moment during the survey made by Franco Bergonzoni: in the foreground the north-west corner of the still completely submerged building.*

The two longest sides of the rectangular building measured 14 metres and the shortest 10.10 and 10.40 metres respectively⁶; we noticed that these measurements are compatible with other Roman buildings and corresponded respectively to 47 feet on the longest sides (14 metres), 34 feet on one of the shortest sides (10.10 metres) and 35 feet on the other side (10.40 metres)⁷. Inside the perimeter walls, it was possible to make out the presence of two dividing walls, constructed perpendicularly and at the same distance from the longest walls and which appeared to form a long central corridor. However, given the scant remains, Bergonzoni did not express an opinion regarding the probable age of the building and deferred any decision until all the masonry remains had been uncovered as far as floor level.

Therefore, to uncover more information, we asked the Archaeological Superintendency for Tuscany for authorisation to carry out an extensive dig over the entire surface of the building helped by numerous volunteers and friends. We were granted authorisation but we only had three working days to excavate given the limited time available to Luca Fedeli, who had to direct and control the work. The excavation was carried out on 12, 13 and 14 September 1992. We started on the northeast side of the building with the aim of uncovering the wall facing the road where the entrance door was probably located. During the three days, we managed to uncover the two entrance doorjambs and the entire side wall as far as the northeast corner of the building for a length of 3.60 metres; we also uncovered a further 2 metres of the perimeter wall starting from this corner and which faces west.

We had to remove many stones from the collapsed perimeter walls (which had fallen inwards) to reach the floor level, located at a depth of 90 cm below the upper level of the wall. Numerous iron nails were found on the sandstone floor (they were obviously

⁶ The slight 30 cm difference between the two shorter sides is a consequence of ground subsidence.

⁷ A Roman foot measured 29.7 cm. Therefore, when the measurements of the sides of the rectangle are compared to the Roman foot, the following result is obtained: 29.7 cm x 47 = 13.96 m; 29.7 cm x 34 = 10.098 m.

made long ago) and a few fragments of medieval ceramics. The doorjambs are 2.80 metres away from each other, proving that the door was very wide; we did not find the lintel, which would have provided us with important information.

Overall, the excavation covered a total area of 12 square metres; very little compared to the total surface of the building which measures 143 square metres. This was also due to the obstacle posed by numerous beech trees, which had grown on top of the perimeter wall and in the empty space between the two entrance doorjambs.

A small excavation carried out below the floor near the south jamb revealed some fragments of Apennine-Ligurian ceramics made from the same clay and the same colour as the ones found in abundance on the summit of Poggio Castelluccio.

In conclusion, the three days of excavation did not provide sufficient evidence to establish when the building was constructed, nor



Poggio Castelluccio (site D/6): the doorjamb and the east perimeter wall of the building.

what it was originally used for. The only significant architectural information was the 2.80 metre wide entrance door; if it had been the entrance to a stable, which probably occupied the ground floor, it was presumably used for horses because it was wide enough to allow access to a pair of horses; stables for cattle (and more so for sheep) have always had (and still have in mountain regions) much narrower entrances.



Poggio Castelluccio (site D/6 – September 1992): the northeast side of the building where the excavations took place. From left, Fabiola Martin (her back to the camera), Luca Fedeli (sitting), Antonella Marchini, Francesco Ferrari (standing with his back to the camera), Franco Santi (sitting) and Cesare Agostini (bending over with his back to the camera), Franco Bacci and Andrea Agostini.

The numerous nails found indicate that the area above the first floor (made of masonry), was made of wood. Indirect confirmation of this theory comes from the fact that there was not enough stone from the collapsed walls to justify a two storey building.

Unfortunately, after 1992 the Superintendency did not authorise any further excavations and the remains of the building are still 90% buried; therefore all the enigmas we encountered when we found the remains have yet to be solved.

We also leave this testimony of a remote past to those who have the determination and strength to complete the excavation. Perhaps they will be able to unveil the mystery surrounding when the construction was built and its original use.

For the time being, we shall limit ourselves to making a few considerations.

We do not think this building was constructed for agricultural use: nor as a farmhouse, stable or barn. Its position on top of the ridge justifies our opinion; no farmer would have built his home or stable in such an isolated and unpractical position

which would have first forced him to carry the building materials uphill and then all the wood and other products necessary to survive. Furthermore, snow lingers longer at high altitudes, increasing hardship.

However, it cannot be excluded that during subsequent ages, when the circumstances that motivated its construction ceased to exist, the building was re-employed for other uses, including farming, thus changing its original use⁸.

Its construction probably dates back to when the paved road was still in use and perfectly maintained. In fact, if it had been constructed during subsequent centuries, when the paved road was no longer used, the builders would have removed the hewn and readily available paving stones from the road and used them to construct the building. Instead, the nearby paving is still intact. On the other hand, if the building dated back to more recent times, when the paving had already been covered by sedimentation (and therefore hidden from predators) the memory of its existence would have been handed down to us as was the case of Stale, Passeggere and Faggeta.

⁸ Stefano Casini: "Dizionario geografico, storico del Comune di Firenzuola", page 89: *"In 1292, the men from Castro and Montale, whose earnings especially came from their herds, rented the woods and meadows of Badia dello Stale and extended their territory beyond the very ancient road which ascended from Gagliano, and crossed the mountain and probably descended along the ancient Via Cassia to Baragazza and Bologna"*.

This historic testimony by Casini confirms that the building may have been rebuilt and reused at the end of the 13th century as a stable for cattle and sheep.

PART SIX

THE EXCAVATIONS AND FINDS FROM MOUNT BASTIONE TO MOUNT VENERE (1985-1992)

CHAPTER XV

THE *GLAREA* ROAD IN PREDOSA (Archaeological zone “E”)

In paragraph 2 of chapter VIII, we pointed out the reasons why we decided to search for the road along the stretch of ridge between mount Bastione and the Futa pass. We were convinced that if C. Flaminius had chosen this itinerary, he would have had to lay solid paving along this stretch of Apennine ridge to guarantee the transit of legionaries throughout the year.

These considerations proved to be founded not only because we discovered

the Roman road, but also because it was entirely paved as we had predicted on the basis of the geological characteristics of the area.

Furthermore, this indirectly confirmed our considerations in the opposite sense about the other long stretch of ridge that from mount Bastione heads northwards to Bologna. We believed that the different characteristics of the soil, substantially compact and solid as far as Pieve del

The ridge descends from Pian di Balestra towards Madonna dei Fornelli (centre) where the glarea road was found.



Pino with its initial outcrops of limestone followed by sandstone and gravel, had eased the work of the Romans. In this area, it was not necessary to lay paving stones to ensure the road could be used all year round. Therefore, there was no point in looking for the remains of the paved road.

This conviction remained substantially the same for many years. Then we gradually began to think that perhaps there might be some slight indication to be found along that stretch of ridge north of Bastione. It was true that to achieve a compact and solid roadbed where the limestone outcrops coincided with the road route, it would have been enough to flatten the soil for the desired width without having to lay any paving. Because limestone crumbles easily under the feet of passing people and animals, it would have become so compact that it would have formed a rolled surface; and in this case, there would be nothing to find.

Nevertheless, the Romans must have consolidated the muddy ground where the

limestone outcrops did not coincide with the route wanted by their engineers.

Therefore, we decided to guess what could have been the most practical, fastest, and at the same time, sufficiently solid and long-lasting technical solution adopted by the Romans in this type of situation.

They logically would have used the most readily available material; in this case, there were limestone outcrops that could supply a large quantity of material suitable for constructing the roadbed. However, limestone crumbles easily and a curb would have been necessary to ensure it did not disperse at the edges. The most straightforward system was to dig a 2.60-2.80 metre wide trench, deep enough to reach a layer of solid ground. The Romans then placed the necessary amount of limestone in the trench. This technique ensured the edges of the road were sufficiently contained and avoided the instalment of sandstone curbs (the nearest supply of sandstone was some distance away).



A typical example where an outcrop of limestone has been flattened to create a practical and solid roadbed. This one is 600 metres north of Predosa (archaeological zone "E") along the Roman route. It is obviously impossible to tell when the road was flattened. In the background lies the village of "Bonacca".

Furthermore, continuity was provided by simply flattening any limestone outcrops.

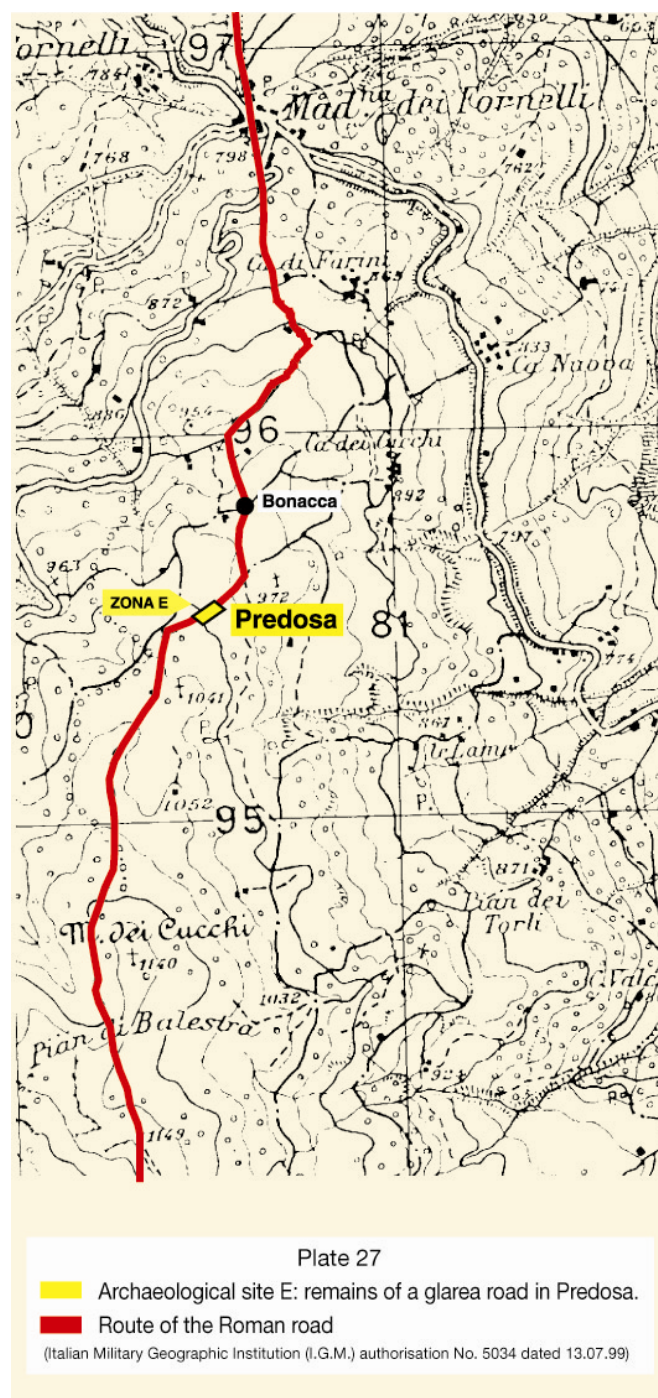
We were convinced the Romans adopted this construction technique along the points of the route near limestone outcrops. Therefore, any stretches of the “*glarea*” road retraced over the years by the mule track on the ridge must have sunk (we had noticed this phenomenon elsewhere) highlighting the edges of the “*glarea*” road.

In 1986, with this vague hope we started a number of explorations along the stretch between mount Bastione (Pian di Balestra) and mount Venere.

As usual, we started by trying to identify the route of the ancient transapennine mule track that winds along the ridge. It was fundamental not to confuse it with the numerous alternative routes created to complete the local road system or because of natural events. The straight-line principle was an essential element during this process to retrace the remains of the “*glarea*” road at the edges of the sunken hollow created by the mule track. The mule track had to follow a straight course because it retraced the middle line of the Roman road, leaving the clues we were looking for at the edges. If this was not the case, we certainly would not have found any clues. We also used the line of the ridge top as a reference, knowing that the Romans preferred to build their roads on top of the ridge, as proved by the paved road unearthed further south.

Bearing in mind these circumstances, we explored the ridge that descends from Pian di Balestra (1,149 above sea level) towards Madonna dei Fornelli (798 above sea level). We did not pause in places where it was obvious that there was a natural outcrop of limestone, almost certainly flattened by the Romans. We hoped to find the areas between these outcrops where the nature of the soil would have required a consistent layer of limestone.

Finally, in Predosa¹, about 1.5 km north of Pian di Balestra, we identified a long straight furrow, lying along our route,



completely blocked by dense and varied vegetation consisting in a wall of impassable thorny plants.

We noticed that this area substantially coincided with the ridge (which was also very wide in this area) and we decided to clear a stretch of the furrow and carry out a series of test excavations.

In March 1987, before the plants had begun to shoot, we toiled to clear an opening about 20 metres long,

¹ It is still possible to see the remains of a brick house called Predosa, which was inhabited until 1950 by local farmers.

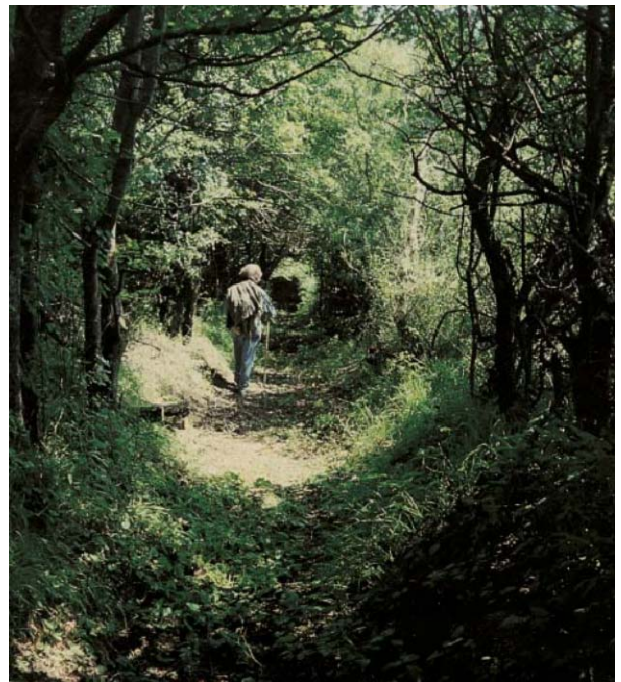


Predosa (archaeological zone "E"): *the long-abandoned mule track was completely obstructed by thorny bushes and plants before we started our search for the glarea road.*

taking care to remove all the bushes from the side of the track. After removing the sods of earth, small limestone fragments appeared; we noticed that the layer of limestone was only 30-35 cm thick: below was untouched soil and above a layer of earth and humus about 25-30 cm deep. We continued along the furrow lengthways and cleared about 10 metres on one side to ensure the limestone "lens" continued at a constant level and with an identical thickness.

This was not natural sediment because the soil was untouched below the layer of limestone; it was material installed on the site to create a road surface.

This theory was then confirmed by the fact that the lower part of the layer consisted in larger fragments compared to the upper part, in compliance with the construction techniques of "glaree" roads: Larger stones were placed below and smaller stones on the surface. Sand was often spread on top to ensure the road surface was perfectly compact.



Predosa (archaeological zone "E"): *the tunnel opened in the thick vegetation providing access to the mule track that follows the usual perfectly straight Roman glarea road exactly.*



Predosa (archaeological zone "E"): after carefully clearing the side of the hollowed mule track, a layer of small limestone fragments appeared which continues along the track: obvious remains of the glarea road.



Predosa (archaeological zone "E"): the remains of the glarea road. Note that: 1) the larger stones are on the bottom; 2) the untouched soil beneath; 3) a layer of earth and humus above testifying the centuries-old sedimentation.

These were certainly the remains of a “*glarea*” road built to perfection.

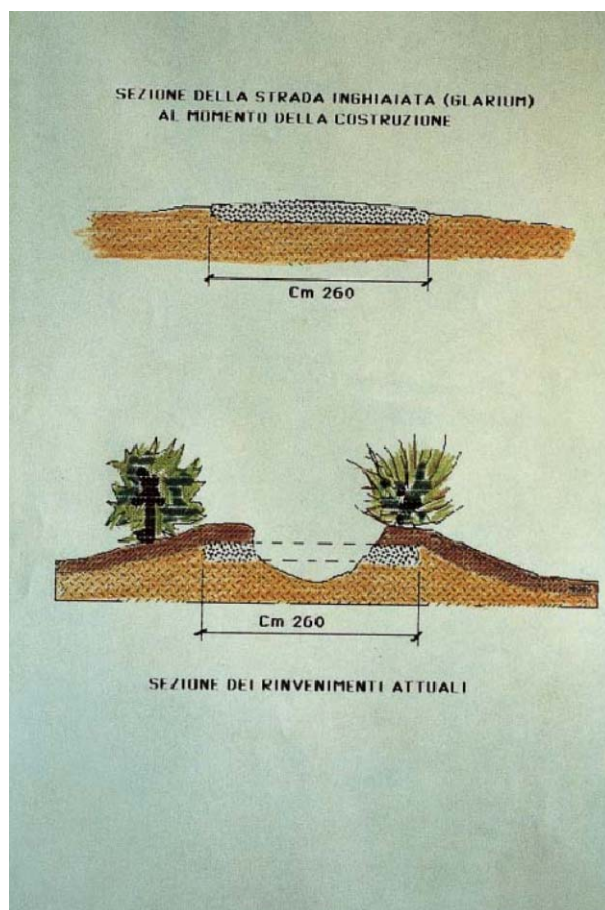
This type of road was easy to maintain: if the surface was damaged by traffic or the rain, it could be remade by spreading more limestone from the nearby quarries.

When maintenance was no longer carried out on the “*glarea*” road, it rapidly deteriorated. Over the centuries, it progressively sunk at the centre due to the constant transit of people and animals and was washed away by rainwater. Thus, the solid road became impracticable, a sunken furrow between two high banks of earth. It now looks more like the bed of a torrent than a road, but its edges have preserved proof of its original structure and it still follows a straight line.

To highlight the straightness of its line, in 1996-1997, we reopened this entire stretch of “*glarea*” road, providing continuity to the Roman route interrupted by the growth of wild trees, bushes and thorny plants. The vegetation was so dense that it took some ten days for us to open a 600-metre long tunnel through the thorny greenery².

Nowadays, when travelling along the road, as it unfurls along the top of the ridge, one truly has the sensation of being on the axis of an important transapennine route, offering an incomparable view and allowing the eye to wander far into the distance.

Although our conclusions may appear unmotivated due to the scant finds and their purely circumstantial validity, such scepticism is only justified if



Predosa (archaeological zone “E”): *above: graphic representation of the glarea road when it was built. Below: the present-day section of the glarea road.*

these finds are viewed in isolation, ignoring their orographic, topographic and environmental context; forgetting the foundation on which our certainties stand, and that is all the archaeological Roman finds unearthed along the same route further north and further south.

² We would like to thank our friend, Amos Lelli, whose great efforts helped us to carry out this tiring work.

CHAPTER XVI

THE ROMAN BRICK KILN IN SASSOROSSO (archaeological zone “F”)

Along the ridge declining northwards towards Madonna dei Fornelli¹ we found no other clues to testify the presence of the *glarea* road, probably because limestone outcrops near the route are much more common. The road was probably made here by simply flattening the limestone sediments and, logically, it is no longer possible to prove whether this was done during Roman, medieval or modern times.

The intense urbanisation around Madonna dei Fornelli prevented us from carrying out any explorations. All we could do was give credit to local tradition, whereby the Roman road passed through the centre of the town, exactly along the straight road that heads north towards the watershed between the torrents Savena and Sambro, called “Via Romana Antica” [Ancient Roman Road]².

We continued to explore northwards, but the limestone terrain banished any hope of significant finds. The unvarying straightness of the present-day road to the village of Le Croci, across mount Galletto, is the only testimony of the Roman ascendancy of the route. In fact no other dirt road or mule track linking the numerous and isolated mountain villages on our Apennines is as straight as this road.

When we were convinced that there were no other links to add to the chain of finds we had uncovered, news reached us of a very important casual discovery made on this ridge,

south of mount Venere, thanks to the sharp spirit of observation of Nello Benni from Monzuno.

In the summer of 1990, work was being carried out by A.CO.SER (a company based in Bologna) to lay a gas pipeline from Monzuno to Madonna dei Fornelli. The planned southward route of the pipeline was along the straight ridge top (the shortest route). Therefore, it retraced the



The straight road named “Via Romana Antica” which goes through the centre of Madonna dei Fornelli and which coincides with the Roman route.

¹ Madonna dei Fornelli is in the Municipality of S. Benedetto Val di Sambro; it is a charming summer holiday village located on the same ridge as the Roman route and has now become a stopping point for everyone walking along the route from Bologna to Fiesole.

² See note 5 in the preliminary chapter.



The name of the main road through Madonna dei Fornelli codifies an ancient oral tradition handed down through the centuries.

Roman road, now consisting in a gravel road to “Le Croci”, where it becomes a cart road which is only accessible to four-wheel drive vehicles. The excavation work took place before the pipes were laid, so that a 200-300 metre stretch remained open and on view to everyone for a number of days.

On Saturday 4 August 1990, Benni went to look at the work in progress to see if any remains had been uncovered from the last World War.

When he reached a place called “Sassrosso”, south of mount Venere, near

a large Telecom antenna installed on top of the ridge, he noticed that inside the excavation there were a number of fragments of curved and flat roof tiles, which turned out to be the remains of a brick kiln. Furthermore, a large sandstone block measuring about two metres by 15 centimetres thick emerged from the uphill wall of the excavation.

Mr. Benni was surprised by the existence of a brick kiln in this location, because although he was from Monzuno, no memory of it had ever reached him. Thus believing that it must be very old, he returned to the site the next day equipped with suitable tools to enlarge the excavation, taking advantage of the fact that the site was closed. In just a short time, he unearthed numerous flat roof tiles, shapeless fragments of fired clay and some small wood charcoals taken from the presumed firebox.

During the following days, thanks to Dante Sabattini, who worked for E.N.E.A. in Brasimone, we were informed about the find.

Unfortunately, when we reached the place, A.CO.SER. had already laid the pipelines and closed the excavation. Our disappointment was great, well aware that we could not reopen the excavation on our own initiative,



1995: The cart road from Madonna dei Fornelli heads north in a straight line over mount Galletto retracing the Roman route. In 1998, ten wind turbines were installed on the peak of mount Galletto for the production of electricity.



also because this would have affected the municipal road to Le Croci. Fortunately, Benni was still in possession of the carbonaceous fragments and Dante Sabattini sent them to the C/14 laboratory of E.N.E.A. in Bologna. Agostino Salomoni (who we would like to thank) carried out

the dating and these are his exact words ³: “there was a very small quantity of clean carbon (less than 0.3 grams) and therefore, it was not possible to obtain a good dating (the margin of error is 35 years). The results of the dating are as follows: 100 B.C. give or take 250 (that is the age of the find is between 330 B.C. and 130 A.D.)”.

The wide margin of the time variable pointed out by Salomoni dates the find between 350 B.C. and 150 A.D. and this is very significant for our research. We certainly hope that a second dating will one day be possible, based on a sufficient quantity of carbon samples to provide more precise results. Nevertheless, thanks to these results it is possible to make a number of considerations proving that this ridge was used in antiquity.

If the oldest theorised date is considered reliable, the construction of the brick kiln must be attributed to the Etruscans or Celts. This would prove that this ridge road was used in pre-Roman times and that it is an archaeological treasure that must not be lost⁴.



Sassorosso (archaeological zone “F”): Mr. Nello Benni indicates the exact point where he found the remains of the Roman kiln when, in August 1990, A.CO.SER carried out a series of excavations to lay a gas pipeline between Monzuno and Madonna dei Fornelli.

³ The results of the dating were sent in a letter on 18 February 1991 by Agostino Salomoni (document 12).



Sassorosso (archaeological zone “F”): *the excavation by A.CO.SER to lay the gas pipeline unearthed the remains of a Roman brick kiln* (photograph by N. Benni).

However, the kiln was very probably Roman. It was evidently built here because there was an abundant supply of the clay needed to make the bricks and wood to fire the clay. Furthermore, it was on a transapennine road that made it easy to carry the bricks to the rapidly expanding cities on the plains.

The basic date of 100 years B.C. is probably the most reliable for a number of reasons:

- the carbon sample evidently refers to one of the last fires lit in the kiln (that is, when the kiln was abandoned); therefore, if the installation was abandoned in 100 B.C., it must have been built at least 30-40 years earlier;
- considering the year 100 B.C. as “*ante quem*”, the installation must date back to

several decades earlier and that is, just after the construction of the road in 187 B.C. It is probable that the Romans set up artisan activities along their new thoroughfare, in locations near the raw materials needed by the construction industry, such as lime, bricks and wood. Readers will remember that the limekilns on Piana degli Ossi⁵ were also next to the Roman road.

The abandonment of the kiln could be attributed to market requirements.

After decades of activity, the demand for construction materials may have diminished or even dried up, due to competition from other kilns built later on the plains, nearer to the urban centres undergoing expansion in the 2nd century B.C. along the axis of the Via Aemilia. This perhaps made the market price drop and the cost of carriage from mount Venere to Bologna and the surrounding area meant these installations were no longer profitable.

It is worth underlining that the place where the kiln was found is called “Sassorosso” [Red Stone]. This name was certainly coined during past centuries when in the surrounding fields



Sassorosso (archaeological zone “F”): *a piece of flat roof tile found by Nello Benni at the base of the Roman kiln. It is 60 cm long, corresponding to two Roman feet.*

⁴ We do not think it can be attributed to the Apennine-Ligurians due to their known lack of industrialisation and for the aspect of the clay and the technique used to fire the unearthed flat roof tiles.

⁵ Refer to our account of this location in chapter X (archaeological zone “B”).

numerous pieces of brick (flat and curved roof tiles, etc.) were turned up by the plough and which farmers believed to be red stones⁶.

This mistake proves that no memory of the kiln survived: otherwise, the place would probably be named after this type of industry, such as "fornace" [kiln], "forni" [kilns], etc.

This means the kiln was abandoned in antiquity and thus makes the dating more reliable (100 B.C.)

Even in terms of place names, the parallel with Piana degli Ossi is surprising.

Here as on Piana degli Ossi, the memory of the kilns has not been handed down to prosperity. The name of both places comes from the emergence of residues on the surface, which distinguish the areas from their surroundings: in the first case, the presumed "bones" were lime residues; in the second, the presumed "red stones" were pieces of flat and curved roof tiles.

However, regardless of any subjective considerations, the fact remains that a Roman kiln was identified in Sassorosso, which is still completely buried and we hope it will soon be excavated.

⁶ Even now, it is still possible to see these brick fragments sticking out from the grass in the surrounding fields.

PART SEVEN

THE FINDS FROM THE FUTA PASS TO THE RIVER SIEVE (1993-1998)

INTRODUCTION TO PART SEVEN

The results achieved thanks to the finds from 1979 to 1992 on the 21 km long stretch of ridge between mount Venere and the Futa pass amply rewarded all our efforts.

The widespread acknowledgement we received (as well as some criticism), motivated us to continue our search (in the beginning judged impossible by many) even though the task was very demanding due to the multitude of difficulties involved.

The echoes of the first finds aroused the awareness of the Municipalities of Firenzuola and S. Benedetto Val di Sambro. In September 1989, with the scientific support of the University of Bologna, the Municipalities organised a national conference¹ to make the finds known and take an in-depth look at various aspects in terms of the many structures the transapennine road system has assumed during the ages.

We also held other conferences in various circumstances that contributed towards letting people know about our archaeological adventure. Many people were enthralled by our discoveries and this common interest helped us to forge numerous friendships. We remember with pleasure the new acquaintance and happy friendship established in 1987 with a number of young people from Bruscoli² who were so excited to learn that the remains of such an ancient transapennine road system passed through their area. In November 1989 we established with them and other friends from Bologna, the “Bruscoli Archaeological Group” with the aim of joining forces to extend explorations and to safeguard

the finds. We also wanted to constitute a legal organisation and obtain official recognition as such from the Archaeological Superintendency³.

The voluntary association proved to be very useful and active and it often received the formal praise of the Superintendency. One of the most important results achieved was without doubt the unearthing of stretches of paving south of the Futa pass.

When in 1989 we published our first book, we had already achieved our objective to find the remains of the paving as far as the Futa pass, demonstrate the continuity of the road as far as the pass and its transapennine role. We should have been satisfied with the results we had achieved, especially considering that during the conference in the autumn of 1989, we received substantial recognition of the Roman origins of the road; its date of construction was the only topic still under discussion.

We could have finished our search, limiting ourselves to carrying out activities to safeguard and enhance the finds. However, as often occurs with man’s endeavours, we were not content yet; we wanted to extend the search both north of mount Bastione⁴, and south of the Futa pass, in the more mountainous area. This was because there was no hope of finding any testimonies of the Roman road in the mid and lower Mugello valley due to the frequency with which this area was used in the Middle Ages.

¹ The conference was held on 28-29-30 September and 1 October 1989 and its theme was “La viabilità tra Bologna e Firenze nel tempo - problemi generali e nuove acquisizioni”. [The road system between Bologna and Florence in history – general problems and new acquisitions]. Further information about the conference can be found in the appendix.

² Bruscoli is a large village in the Municipality of Firenzuola, on the western side of the ridge used by the Roman road, near Piana degli Ossi - Passeggere, and the border between Tuscany and Emilia.

³ In the appendix, there is a summary of the main activities carried out by the “Bruscoli Archaeological Group”.

⁴ Please refer to chapters XV and XVI for our explorations north of mount Bastione.

Furthermore, historic sources indicated various routes through the Mugello valley, nearly all of which converged at the Futa pass. Therefore, we thought it was reasonable to concentrate the search within a radius relatively close to the Futa pass, in the hope of intercepting the route (it was very probably the only route near the pass).

When deciding on which area to explore, we always bore in mind that the route must have pointed towards Fiesole, discarding other theoretically feasible routes that contrasted with the Roman principles of straightness and convenience. We also had to study the orography of the area south of the pass, which must have certainly influenced the choice of the best route. By simply observing the ridges, we were able to discern which turned out to be the correct one.

Two ridges leave the Futa pass that could have been used for the route to Fiesole. One heads east and ascends from the 903 metre altitude of the Futa pass up to the 1,125 metres on top of mount Gazzaro, it then re-descends to the Osteria Bruciata

pass at an altitude of 917; here, it abandons the Apennine ridge and heads south, remaining at a high altitude as far as mount Linari (876 metres); from here it starts to descend to S. Piero in Sieve (205 metres) passing through S. Agata di Mugello. Along this itinerary from the Futa pass, it is necessary to ascend 222 metres and then descend 207 metres and then maintain the altitude of 800-900 metres as far as mount Linari; therefore, it is necessary to overcome a 432-metre difference in levels and remain at an altitude of about 850 metres above sea level for 11 kilometres.

However, the other ridge heads south from the Futa pass along a constant descent to the river Sieve at 233 metres above sea level.

This considerable difference in altitude between the two itineraries convinced us to choose the latter without a second thought. When coming from the north, at the Futa pass it was natural to continue straight on towards the south, entering the Mugello valley along a route that descended continuously, leaving the Apennine peaks behind for good. This avoided a 432-metre difference in level and lengthening the journey some 11 kilometres at a high altitude.

CHAPTER XVII

MOUNT POGGIONE - S. LUCIA (archaeological zone “G”)

- 1 - The start of the search south of the Futa pass.
- 2 - The remains of the paved road (sites G/1, G/2, G/3, G/4 and G/5).
- 3 - The unusual and sudden slope between mount Poggione and S. Lucia.

1 - The start of the search south of the Futa pass

We started our explorations about one kilometre south of the Futa pass, following the top of the ridge from Apparita (on trunk road 65) southwest towards the mountain called “Il Poggione”, which descends to the village of S. Lucia, where it re-joins trunk road 65.

There is a road in Apparita that heads southwest. The first part of the road is gravelled; it then becomes a dirt track, which ends after about one kilometre near the peak of Poggione, at an altitude of 857, after crossing the upper northeast slopes of a hill (901 metres) called “I Trogoli”. At the southeast foot of the hill, Monte di Fò lies at an altitude of 764 metres, on trunk road 65.

When travelling along this dirt track on the ridge, one has the sensation that it belongs to an ancient itinerary. However, its present state, width and surface condition gives the impression that it is a modern dirt road simply offering access to the woods. It is then followed by a footpath indicated by the C.A.I. (Italian Alpine Club).

There was no trace of an ancient route; our only reassurance was the direction of the ridge. We also consulted military cartography (I.G.M. sheet 98 of the map of Italy: Barberino di Mugello) which showed the existence of a mule track. It was possible to acknowledge

that the first stretch coincided with the dirt road, which had evidently been widened and smoothed out in modern times, but the second was impossible to trace due to the impenetrable vegetation covering the area. Nevertheless, we made a number of fruitless explorations. We were disappointed but not disappointed enough to give up, because we were convinced that this was the only ridge in the Mugello valley the Roman road could have continued along. It was only here, in this still uninhabited place covered with dense vegetation that we could hope to find the remains of the paving. We would certainly not have had any better chance further south, where in S. Lucia (altitude: 700), the present day trunk road 65 follows the top of the descending ridge as far as the river Sieve. In those rare cases where the route of the trunk road avoids the small hillocks on the ridge, there are fenced and inaccessible farmhouses.

Therefore, we persevered with our capillary explorations in the area between Apparita and S. Lucia, primarily to trace the mule track. We also referred to the research by Giovanni Uggeri¹ who attempted to identify the route of Flaminus’ road in Tuscany and who had the following to say about the route through the pass: “*north of S. Lucia (altitude: 902) the route of the ancient road can be identified in the straight mule track that remains to the west of the trunk road; it is still used as a municipal boundary and this is indication of the antiquity of the track*”.

¹ G. Uggeri: “La via Flaminia “minor” in Etruria” from: “Studi di antichità in onore di Guglielmo Maetzke”. Published by G. Bretschneider, 1984, page 591.

Giovanni Uggeri is now Professor of Ancient Topography at the Faculty of Literature of “La Sapienza” University in Rome.



The village of S. Lucia (left) and the profile of the ridge that rises steeply to Poggione and “I Trogoli”, photographed from the southeast; the buildings of Monte di Fò are just below the ridge, on the right.

His intuition was later confirmed by the Roman paving found exactly in the area he described.

2 - The remains of the paved road (sites G/1 - G/2 - G/3 - G/4 and G/5:

SITE G/1

Finally, one Sunday in February 1994, our friends, Emanuele Stefanini, Andrea Vignoli and Luigi Vannini, all members of the Bruscoli Archaeological Group, while walking along a footpath that descends from Poggione to S. Lucia, noticed two narrow sandstone blocks lying next to each other which emerged from the soil and interfered with the path (they had probably emerged due to the leaching of the surrounding soil).

Their attentiveness was rewarded because the two stones were the tip of the Roman road edge, later unearthed over its entire 2.40 metre width.

As soon as we heard the news, we immediately went to look at the find, noting that the dimensions and construction technique were the same as the paving

found north of the Futa pass. Just one metre of paving had been unearthed, but it was more than enough to confirm the continuation of the Roman road south of the Futa pass.

We did not wait for the onset of spring to continue the excavation. Fortunately, the sedimentation that covered the first metres of paving was not very deep: on one side, it measured about 30 cm and on the other 50-60 cm. However, numerous beech trees had grown above the road and their roots hindered our progress a great deal. Some had penetrated between one stone and another and were difficult to uproot. When we came across tree stumps it took us hours and hours to cut through them by hand (we could not use a power saw because the small stones incorporated in the wood damaged the blade).

In the spring, we uncovered about 7-8 metres over the entire usual 2.40 metre width. We hoped we would be able to count on the collaboration of a number of friends during the summer months. We also promptly informed Fedeli from the Archaeological Superintendency about our new find. In March, he carried out an initial inspection.

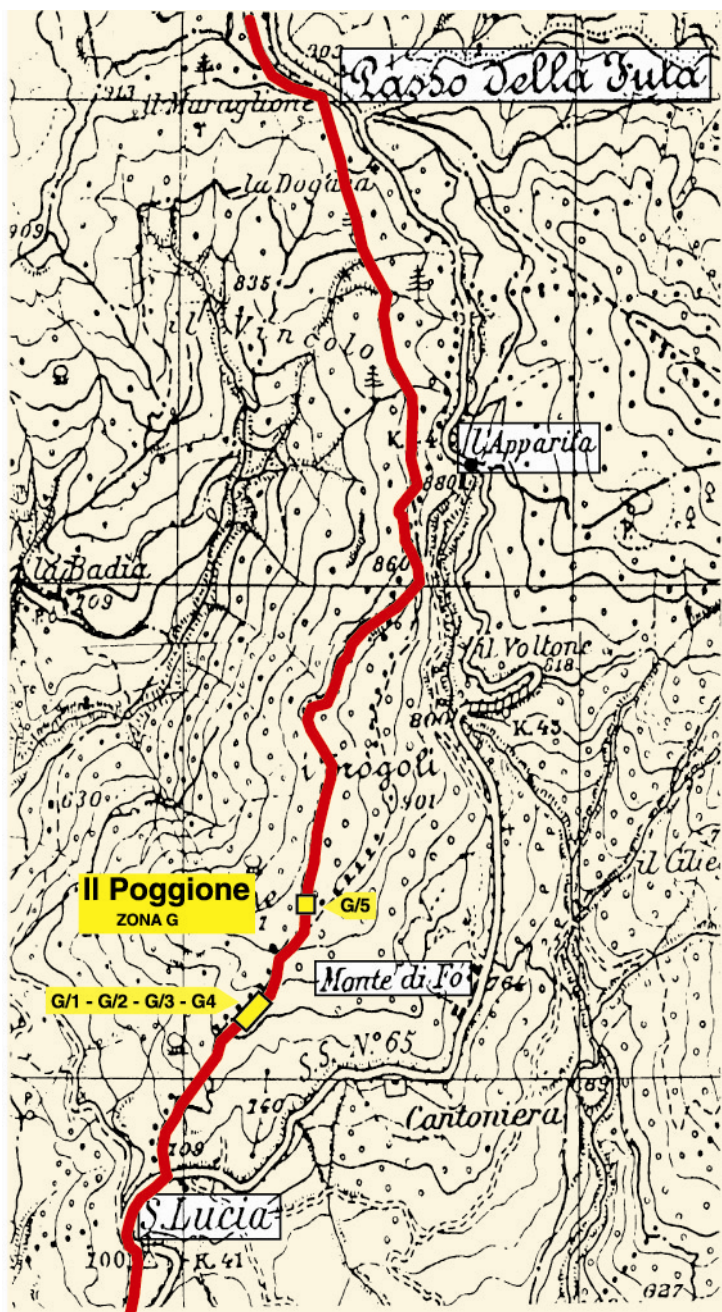


Plate 29

- Archaeological site G: finds on mount Poggione (in Monte di Fò)
- Sites G/1 - G/2 - G/3 - G/4 and G/5: stretches of paved road.
- The route of the Roman road.

(Italian Military Geographic Institution (I.G.M.) authorisation No. 5034 dated 13.07.99)

Mount Poggione (site G/1 - March 1994): from left:
L. Fedeli, Emanuele Stefanini and Andrea Vignoli at
the first find south of the Futa pass, formulating
theories about the probable route of the road hidden
below the wood.



Mount Poggione (site G/1 – February 1994): the first
metre of paved road unearthed south of the Futa pass.
Note how the thick undergrowth of thorny bushes and
plants prevent access.





Mount Poggione (archaeological zone “G” - March 1994): *Franco Santi and Emanuele Stefanini hack their way through the mass of thorny plants on the ground with a great deal of effort to uncover the road.*



Mount Poggione (site G/1 – August 1994): *a beech stump that has grown on the road doggedly resists the efforts of our three friends attempting to remove it: Fioravante Montanari (bending over), Corrado Peli and Luciano Grassi.*

In 1994, excavation continued and by the end of the summer, we had uncovered sixteen metres of perfectly preserved road. The road had compact edges and the stones lay at their original level. The width², straightness and structure was identical to the numerous stretches of paving already found north of the Futa pass and confirmed that this belonged to the same road system.

The excellent state of preservation and the perfect adherence of the edge stones demonstrated the exceptional care taken to lay the road; even today, it is not possible to insert a knife blade between one stone and another. Even the capillary roots of the trees encountered an obstacle impossible to overcome along these edges; they either developed beyond the carriageway or grew horizontally over the surface of the paving, only penetrating in the centre where the stones adhere less. However, two tree stumps remained in the centre of the road, which we were not able to remove completely. Other tree stumps did not grow on top of the road but had partially spread as far as the edge. We were not able to uproot these trees completely and because they partially covered the edge of the road, they created the impression that the road was not perfectly straight.

² This stretch of paving has a constant 2.40 metre width (corresponding exactly to 8 Roman feet); the average width of the other stretches of road ranges from 2.40 to 2.50 metres. This difference can very probably be attributed to the different state of preservation of the structure: the 2.40-metre wide stretch is as perfectly compact as when it was built, whereas the stones in the 2.50-metre wide stretches may have become loose due to soil subsidence. This theory is confirmed by the stretch of paving found at the foot of Poggio Castelluccio (chapter XII, site D/3), where, near the usual 2.40 metre width, the carriageway widens to as much as 2.80 metres, caused by the subsidence of the ground on which the road structure was laid.



Mount Poggiaccio (site G/1): numerous beech trees had grown above the soil covering the paving. Their roots had penetrated between the stones, greatly hindering excavation and making our task considerably more demanding.



Mount Poggione (site G/1 – August 1994): excavation continues with the help of our friends, Emanuele Stefanini, Franco Bacci and Luciano Grassi under the supervision of Franco Santi, sitting while he takes a break.



Mount Poggione (site G/1 – 3 September 1999): Giancarlo Susini from the University of Bologna observes the Roman road stone by stone.



Mount Poggione (site G/1): the 16-metre stretch of road paving after excavation. The right edge remains partially covered by stubborn tree stumps and gives the incorrect impression that it is not perfectly straight. Two beech stumps remain on the carriageway. (Photograph by V. Cavara).

SITE G/2

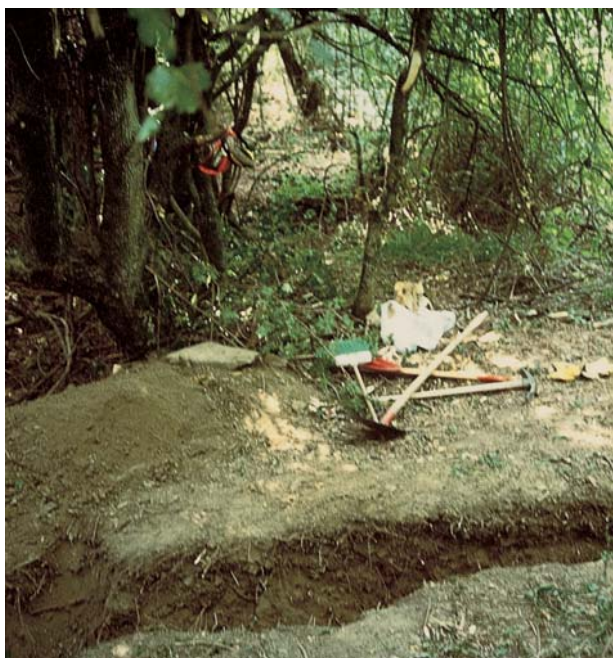
Along the stretch uncovered previously, the gradient of the road is modest and the morphology of the terrain towards the north continues along a slight slope for at least 60-70 metres.

Thanks to the almost flat nature of the ground, we hoped to find equally well-preserved stretches of paving, having noted during our previous experiences that the best-preserved stretches were on flat or softly sloping ground.

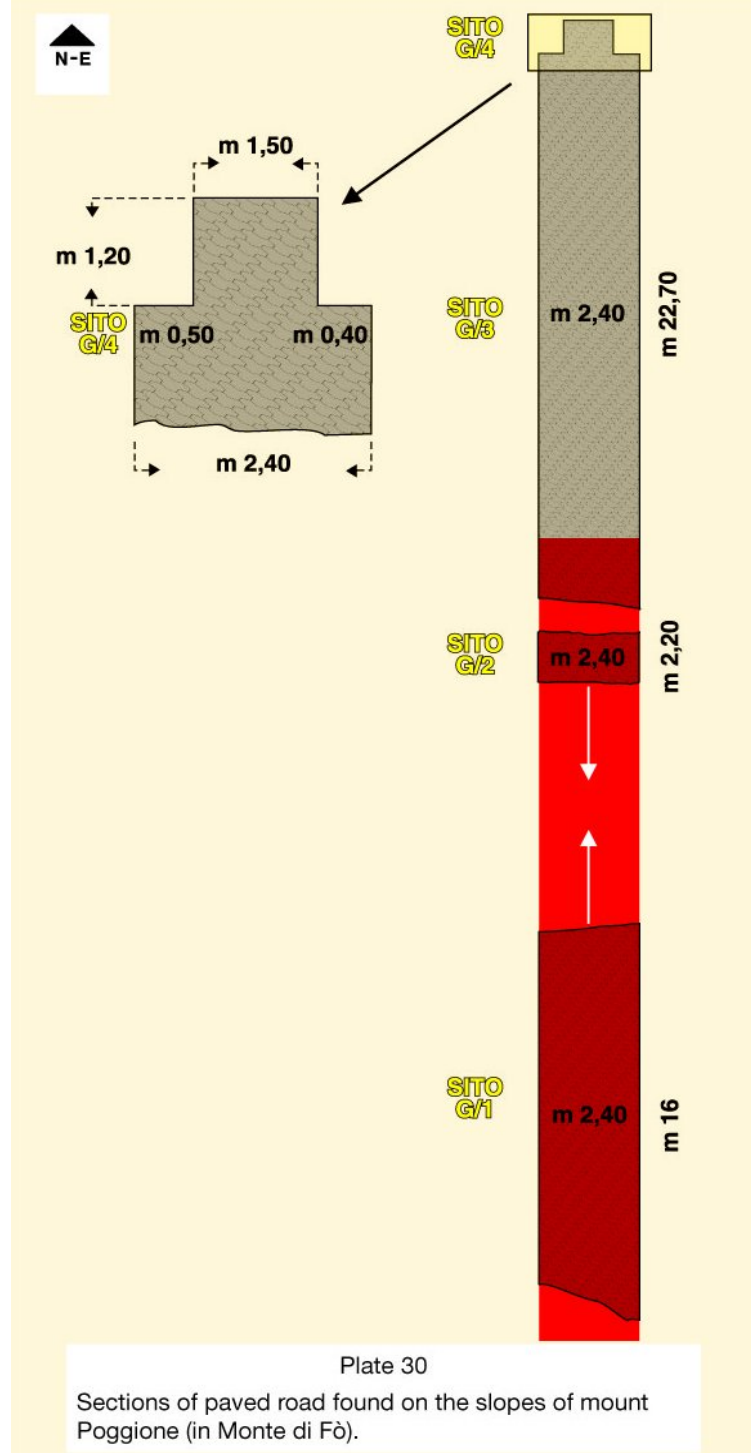
This depended on two obvious natural factors:

- in steeply sloping areas, rainwater does not allow any protective humus to deposit, and it disturbs the paving by firstly eroding its edges and then the soil below.
- on flat ground, the paving is not disturbed by these factors; the opposite occurs and the sedimentation creates a protective layer.

In the summer of 1995, with the help of a number of friends, we identified the area of the wood that probably obscured the continuation of the paving we had uncovered the year before. Here the vegetation had grown with particular vigour to the extent that it had become impenetrable due to thorn bushes and every type of scrub tangled with old man's beard. We managed to open a passage along the straight line indicated



Mount Poggione (site G/2): the narrow trench dug in the thick wood, perpendicular to the direction of the road, in an attempt to intercept the road below the considerable layer of earth.



by the carriageway we had already unearthed (this took much time and effort). We then made some 20 metres of headway as far as where we wanted to carry out our test excavation.

Before we started the excavation, we checked that we were aligned with the straight line of the already unearthed road using two pieces of twine. Then, with the help of a number of friends³, we started to excavate at a right angle to

³ We would particularly like to thank the people listed below for their help during this excavation: Franco Bacci, Alberto Bargiotti, Gianguido Giovannini (Ghigo), Luciano Grassi, Antonella and Giampaolo Marchini, Fioravante Montanari, Corrado Peli, Giampietro and Alessandra Pizzo and Giancarlo Rivelli.

the route of the road, digging a 35-40 cm trench, wide enough for a pick and shovel.

At a depth of 70-80 cm, we had still not found anything, whereas during our previous experiences the paving had been at a maximum depth of 60-70 cm.

The group of “diggers” began to feel discouraged and someone suggested interrupting the excavation and retrying further north. After a brief discussion, we agreed to continue digging to a depth of 120 cm.

Our perseverance was rewarded; at the depth of one metre, the pick hit a stone; next to this lay another stone and then yet another. In just a short time, the ground covering the bottom of the narrow trench was removed and the paving appeared over its entire 2.40 metre width.

Having achieved our objective we eagerly ate our well-deserved packed lunch.

Mount Poggione (site G/2): *the paving appears at the bottom of the narrow trench, at a depth of one metre.*



Mount Poggione (site G/2): *after locating the paving at a depth of one metre, work to enlarge the excavation continued happily beneath the luxuriant vegetation. In the photograph are Giancarlo Rivelli (with his back to the camera), Corrado Peli, Antonella Marchini, Cesare Agostini and Franco Bacci.*



Mount Poggione (site G/2): the dark green, vigorous and wild vegetation seems to want to protect from the rays of the sun the re-awakening of this road: a testimony of ancient splendour.



Mount Poggione (site G/2): at the end of the excavation, when the road surface had dried, the light grey sandstone blocks illuminated the site, giving the sensation of a pleasant reawakening after centuries and centuries of forced hibernation below one metre of soil.

The next day, we enlarged the excavation over a length of 2.20 metres and removed the one metre layer of sedimentation. The paving below was perfectly preserved, its edge stones still aligned as they were when the road was built.

When the road surface dried, the light coloured sandstone blocks illuminated the excavation area, giving the sensation of a magic reawakening after centuries of hibernation. Its geometric shape resembled a painting framed by the surrounding brown earth, sculpted by the clean cut of the excavation. All around, the dark green vegetation, pierced by scant sunlight, seemed to want to protect from indiscreet eyes the reawakening of a work that was a reminder of ancient splendour.

These sensations inspired us not to enlarge any further the excavation, so that others could enjoy the emotion of seeing the unexpected and sudden vision of the Roman paving in the dense woodland for themselves.

SITE G/3

After the finds in sites G/1 and G/2, we were satisfied with the results we had achieved; therefore, we suspended the search in this area, as we were also advised to do by the Superintendency. Sometimes, to safeguard archaeological finds it is better to leave them buried below the soil and on occasion, remains can even be re-buried (as with the kiln on Piana degli Ossi). We also wanted to save the trees from being cut down. The proof provided by the presence of the unearthed road was more than enough to prove that it continued into the Mugello valley.

In the following spring (1996), during the usual annual trip to clean away the fallen leaves from the unearthed stretches of paving, we noticed that during the autumn and winter, the trees had been cut down in this area. Without the trees the area appeared desolate but

the clearing that had been created revealed the gradient of the downhill slope.

We immediately noticed that along the route of our latest excavation (site G/2), the almost flat ground continued for about 25-30 metres north, and then the faint traces of the ancient mule track started to climb steeply upwards; it was easy to perceive that the paving continued below these few metres because the ground level was the same as the soil that buried the already unearthed stretch.

We soon wanted to carry out another excavation now that the moral obstacle of having to safeguard the trees no longer existed since they had been cut down.

In May 1996, we carried out a test excavation 24 metres north of site G/2. We found the paving below 70-80 cm of soil on the same axis as the previously discovered stretch; as always, it was magnificently preserved.

This discovery stirred us to attempt to unearth the entire stretch of paving in between. The idea was appealing but involved exceptional effort considering the great amount of very compact soil that needed to be removed (about 35-40 cubic metres)⁴.

At the start of August 1996, having convinced a number of hesitant friends who were worried about the toil involved, we started to dig from the test excavation site, with the intention of continuing as far as site G/2 only if the gradually uncovered paving was perfectly preserved. If this was not the case, we were to suspend the work.

As the excavation advanced, the paving we uncovered was always perfect; the stones on the edges were aligned with the straight line of the carriageway without the minimum deviation to the side; even the blocks on the downhill edge, more exposed to soil subsidence, had not moved from their original position.

Once we had removed the soil above, it was a real pleasure for us to clean the paving stones, removing with caution the last veil of earth that covered them and



Mount Poggione (site G/3 – August 1996): a colourful team of voluntary diggers busy unearthing the road. It is possible to recognise from the left: Corrado Peli, Giampaolo Marchini, Giampietro Pizzo (with his back to the camera), Giangiacomo Giovannini (bending over), Francesco Cappelli and Alessandra Pizzo.

which had also seeped into the joins on the surface.

When we had finished, it was possible to admire the compactness of the paving, formed by a mosaic of stones skilfully laid so they fitted closely against each other, and still perfectly level.

⁴ Consider that one cubic metre of compact earth weighs some 20 tons; this meant excavating with a pick and moving with a shovel about 700-800 tons of material.



Mount Poggione (site G/3): after the trees had been cut down during the autumn and winter of 1995-96, we decided to continue the excavation. In August 1996, we unearthed the most beautiful stretch of the paving. In this panoramic photograph, it glows in the sunlight framed by the intense green of the wood.



Mount Poggione (site G/3): the light of the sunset illuminates the paving, which looks like a mirage in the boundless green of the woods covering the Apennine range.



Mount Poggione (site G/3): this image highlights the magnitude of the road construction and its perfect straight line, even though it is located in an impervious Apennine mountain pass, at an altitude of 800 metres above sea level.



Mount Poggione (site G/3): an “eye level” view of the Roman paving gives the exact idea of the thickness of the 80 cm layer of ground that covered it (highlighted on the right).

The paving that gradually emerged was so well preserved that no one dared to suggest interrupting the excavation before we had reached the objective we had set ourselves ⁵.

By the end of August, we had uncovered 22 metres of paving. We suspended the excavation about 2 metres from site G/2, to highlight the depth of the sedimentation that had accumulated on top of the road over the centuries. All our strenuous efforts were amply repaid by the gradual appearance of the paved road, which turned out to be the best preserved of all the tracts we uncovered in our twenty year search for the paving.

SITE G/4

In August 1997, we spent a number of days continuing the excavation we had suspended in 1996 northwards to uncover a few further metres of the magnificent paving.

Here we had no doubt regarding what we would find, and this assurance from a certain point of view was negative: we were not fired by curiosity.

At the end of the day, after the last clean up, the paving reserved a great surprise for us: the downhill edge was no longer aligned with the former edge; it was about 40 cm narrower. We also checked the uphill edge and this appeared to be about 50 cm narrower too. In other words, the carriageway suddenly shrank by 90 cm, reduced

⁵ The work team was not always made up of the same people; day by day, we recruited any friends and acquaintances who offered to help. Some, after a long hard day of digging, could not return due to personal commitments; others did not want to repeat the experience, not being used to working with a pick and shovel. Everyone always worked with enthusiasm, including the young boys and girls who were entrusted with less arduous tasks, such as sweeping away the last layer of earth covering the paving. On this excavation we received the most help from friends on holiday in Valserena and Pian di Balestra, whom we would like to thank, along with Carlo Ginepri for his photographic advice.



Mount Poggione (site G/4): *the carriageway suddenly narrows, testifying a later repair after soil subsidence had dragged the paving downhill. The reduced 1.50 m width proves that this rough repair was carried out when the original width of the carriageway was no longer necessary.*

to a width of just 1.50 metres. We continued to excavate for a further 1.20 metres and noted that this narrower stretch of carriageway was obviously a repair carried out after the road had been damaged by a landslide; the stones were positioned with less care and only the downhill edge featured blocks similar to the original stretch. Rather than a deep and extensive landslide, this was probably just modest subsidence of the soil beneath because 15-20 metres further north, the route of the ancient mule track continued straight on uphill.

This observation convinced us to check if there were any remains of the collapsed road just little further on. Therefore, we excavated ten metres further north, along the declivity

below; at a depth of some two metres compared to the height of the road, we found the still aligned stones used to form the downhill edge of the original paving. This proved that the soil subsidence had caused the entire width of the paving to collapse over a length of at least 15-20 m. The narrow part of the carriageway was, therefore, a repair carried out during a later age to restore road use, when a carriageway measuring 1.50 m was sufficient.



Mount Poggione (site G/4): *the edge of the collapsed paving was found at a level about 2 metres below the road surface.*

SITE G/5

The finds described confirmed that the route of the Roman road passed through the southeast slopes of Poggione.

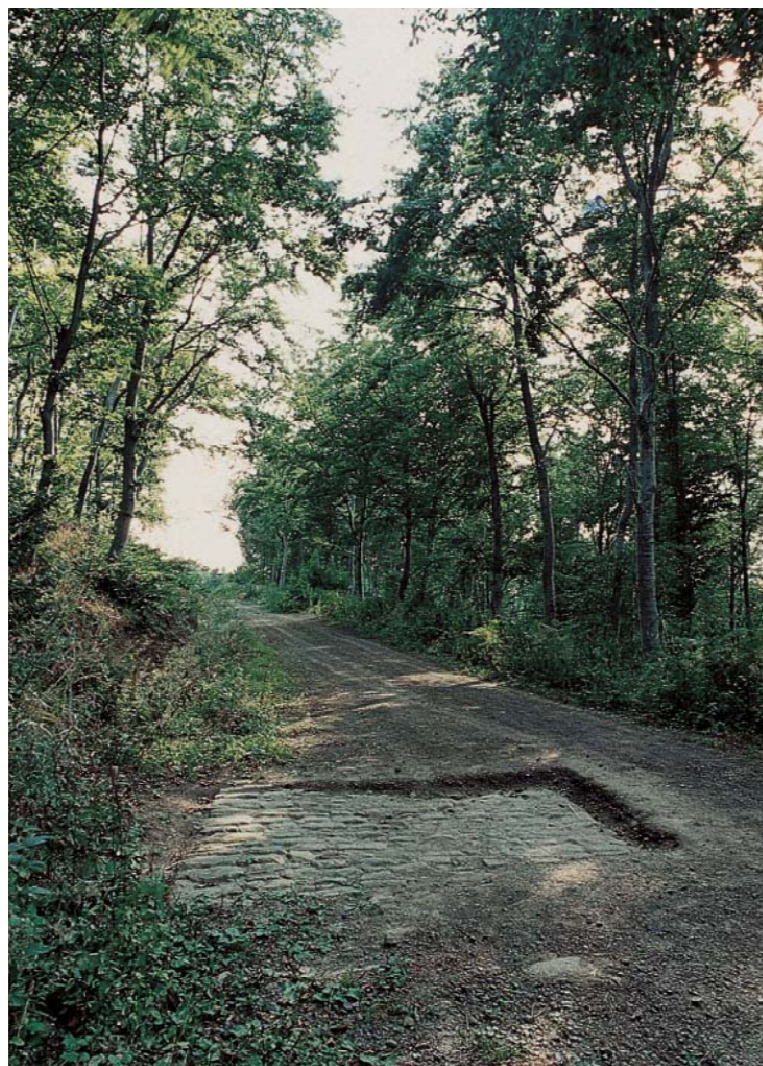
We continued to follow the line of the uncovered paving stones northwards along the mule track, which continued in a straight line along a steep upward slope, its bed more similar to that of a torrent than a road.

A few isolated and well-aligned blocks at its edges were the obvious remains of the paved carriageway. Following these modest clues we eventually joined up with

the wide dirt track we described at the beginning of this chapter (during our first explorations we did not consider the track because of its modern aspect). However, when the finds further south brought us back to this same place, we decided its route deserved a specific archaeological verification.

The track follows the west versant of the ridge along a relatively flat route, a few tens of metres below its summit: characteristics that correspond to a Roman road. However, its road surface it did not give any clue to its being part of an ancient road system. It looked like any of the typical dirt roads opened through the woods in modern times to allow the transit of lorries. The present-day condition of the road gave little hope of finding any stretches of paving because it had obviously been created by widening, digging and flattening the ancient mule track. Therefore, we feared that if any stretches of paving had been saved from the centuries-old use of the mule track, they would probably have been dug up and scattered by the mechanical shovels. Thus with great scepticism we decided to carry out a few test excavations.

One morning in June 1997, while we were carefully examining its edges, we saw the tips of three sandstone blocks, one next to each other, emerging on the uphill side, half covered by the weeds that grow on the hillocks. We removed the vegetation and below about 5-6 cm of earth, we completely uncovered the upper face of the three stones; a few slight knocks with a small pick uncovered about a dozen matched and aligned stones that were unquestionably the edge of a paved road. We were truly surprised and incredulous. It was the road we were looking for, covered by just a few centimetres of soil and gravel. After removing the entire layer of soil and gravel covering it, we ascertained that it was exactly 2.40 metres wide; it was the miraculously intact continuation of the Roman paving, with the same structure and compactness of the road found 400 metres further south.



Mount Poggione (site G/5): the flattening and widening of the ancient mule track carried out about a dozen years earlier to allow access to lorries used to transport wood, has miraculously spared the Roman paving in this point, which has remained hidden below a few centimetres of earth and gravel.

We only uncovered two metres of the road over its entire width, to avoid damage by the transit of tractors and lorries⁶. This was more than enough to definitely confirm that at least some stretches of the Roman paving was hidden below the dirt road.

When we pass through this area, we feel a sense of gratification for that fortunate chance whereby the paving was saved by a few centimetres of soil when the mechanical shovels flattened the ancient mule track.

⁶ We would like to thank Davide Giovannini for his help during this excavation.



The Futa pass: at the start of the 20th century, reaching the Futa pass was such an event for passengers that it deserved a souvenir photo.

3 - The unusual and sudden slope of the ridge between mount Poggione and S. Lucia.

When searching for the road on the south versant of mount Poggione, we noticed that the ridge above S. Lucia featured an unusual and sudden downhill slope compared to the harmonious descent of the ridge towards the river Sieve. It was possible to see a clear break that hinted at a vast and deep landslide. When the road was subsequently discovered on the southeast versant of mount Poggione (archaeological area "G") this event was indirectly confirmed. Following the direction of the road south, we found a few remains for 60-70 metres, proving the road continued in a straight line. Then, where the

ridge drops above S. Lucia, the remains disappeared completely.

We were convinced that the landslide took place after the road was built, dragging it downhill and not just upsetting the road but the entire area around S. Lucia. In fact, if this precipice had existed when the Roman road was built, the straight line of the road would have had to deal with an unnatural and insurmountable difference in level.

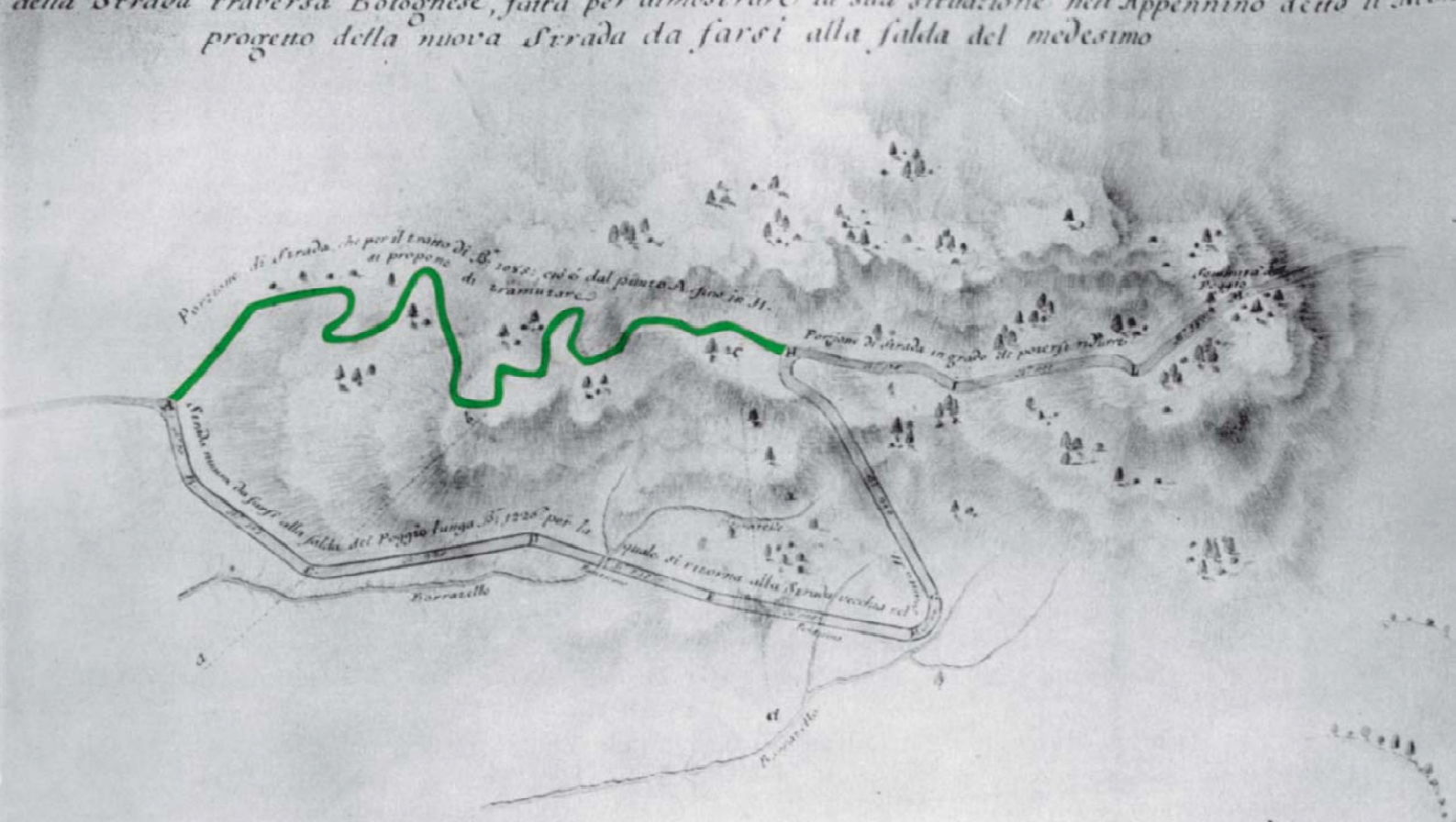
This was improbable, especially considering that just a few metres before the precipice, we found almost flat and perfectly straight stretches of paving.

To avoid the steep precipice, the medieval mule track (created along the same route after the landslide), followed a diversion riddled with hairpin bends as proved by the drawing and the words of the engineer, Anastagi. In 1745, Anastagi was asked by the Grand Duke of Tuscany to draw up a plan for a carriage road from Florence to Bologna through the Futa pass. He mapped out an alternative route in this point (Monte di Fò) to avoid the steep gradient that did not allow the transit of carriages⁷.

Daniele Sterpos also mentions this project⁸: "After Montecarelli (altitude: 522) the typical structures used to build mountain roads increased: supporting walls and rock-fill to create an artificial plane. A very ancient mule track from Barberino passed through Montecarelli; it was once used to reach the Stale pass and to go to Bologna. The new road had no other choice than to follow the route of the mule track as far as the pass. Some stretches of the mule track were widened, flattened and the roadbed was provided with additional support and then linked to entirely new stretches of road. According to Anastagi, the longest diversions were along on the stretch after Montecarelli and

⁷ Francesco, Duke of Lorena and Grand Duke of Tuscany had married the Archduchess, Maria Teresa, daughter of the Emperor of Austria. As of 1745, the Grand Duke of Tuscany often resided at the court of Vienna and felt the need for a practical carriage link across the Apennines, the only existing break in the road system between Florence and Vienna. Study into the construction of a new road to Bologna started in Tuscany in 1745. The general specifications of the road and the route were decided in 1746; the engineer, Anastasio Anastagi was immediately told to define the work actually required to build the road. In January 1749, Anastagi presented a complete and detailed list of the work needed to carry out the general project; the work included the Monte di Fò deviation. The road was opened to traffic in 1762. It was the first time that it was possible to cross the Apennines in a carriage.

⁸ Daniele Sterpos: "Comunicazioni stradali attraverso i tempi: Bologna-Firenze" published by Soc. Autostrade - Istituto geografico De Agostini, 1961, page 134.



Monte Poggione (Monte di Fò): in 1745, Anastagi was asked by the Grand Duke of Tuscany to engineer a carriage road from Florence to Bologna across the Futa pass. He planned a diversion for the ancient mule track in the Monte di Fò area "which tortuously lies on the ridge of the knoll" (Excerpt from "Comunicazioni stradali attraverso i tempi: Bologna-Firenze" by Daniele Sterpos).

to Monte di Fò , where the entire road that "tortuously lies on the ridge of the knoll" was replaced; in fact the tenth section or lot consists in a single "transformation" between Monte di Fò and the pass (omissis). According to the estimate, the new stretches (the tenth and eleventh) from Montecarelli to Traversa, were the most demanding. The list of required work is very long: as well as the road surface (mostly built *ex-novo*); there are thousands of stretches of wall and just as many parapets, very many bridges

large and small, spanning the various "borri" (furrows) that the route encounters along the left of the mountain".

This description of the scheduled work demonstrates the construction difficulties required to overcome the last 2 or 3 kilometres before the Futa pass.

Therefore, it is more than a guess that the early abandonment of the Roman road was also due to the interruptions caused by the large scale and destructive landslides that took place along its route.

CHAPTER XVIII

THE BRIDGE IN “COLOMBAIOTTO” in Bilancino (Archaeological zone “H”)

- 1 - The route from S. Lucia to the river Sieve.
- 2 - Theoretical crossing place on the river Sieve.
- 3 - News about the remains of a bridge near Bilancino and its whereabouts (“Colombaiotto”).
- 4 - What should the unknown bridge be called?
- 5 - Our first inspection and the excavations by the Superintendency (archaeological zone “H”).
- 6 - Historic investigation regarding the era of the first bridge built in Colombaiotto and the dating of wooden remains.
- 7 - The remains of the bridge (archaeological zone “H”) as described and dated by Vittorio Galliazzo.
- 8 - Our conclusions.

1 - The route from S. Lucia to the river Sieve

Orography also helped us to identify the route of the road on the Mugello versant.

From the Futa pass, a ridge reaches Poggione; from here, as mentioned, it descends steeply down the southern versant as far as S. Lucia, covering about 300-400 metres; it then continues along a constant and slight descent as far as the river Sieve. Except for the steep interruption above S. Lucia¹, the most practical route is along the top of the watershed. This route is about 12 km long with a 464-metre difference in level and a 3.8% average gradient.

As the ridge descends, the gradient of its two versants gradually decreases, reducing the risk of landslides.

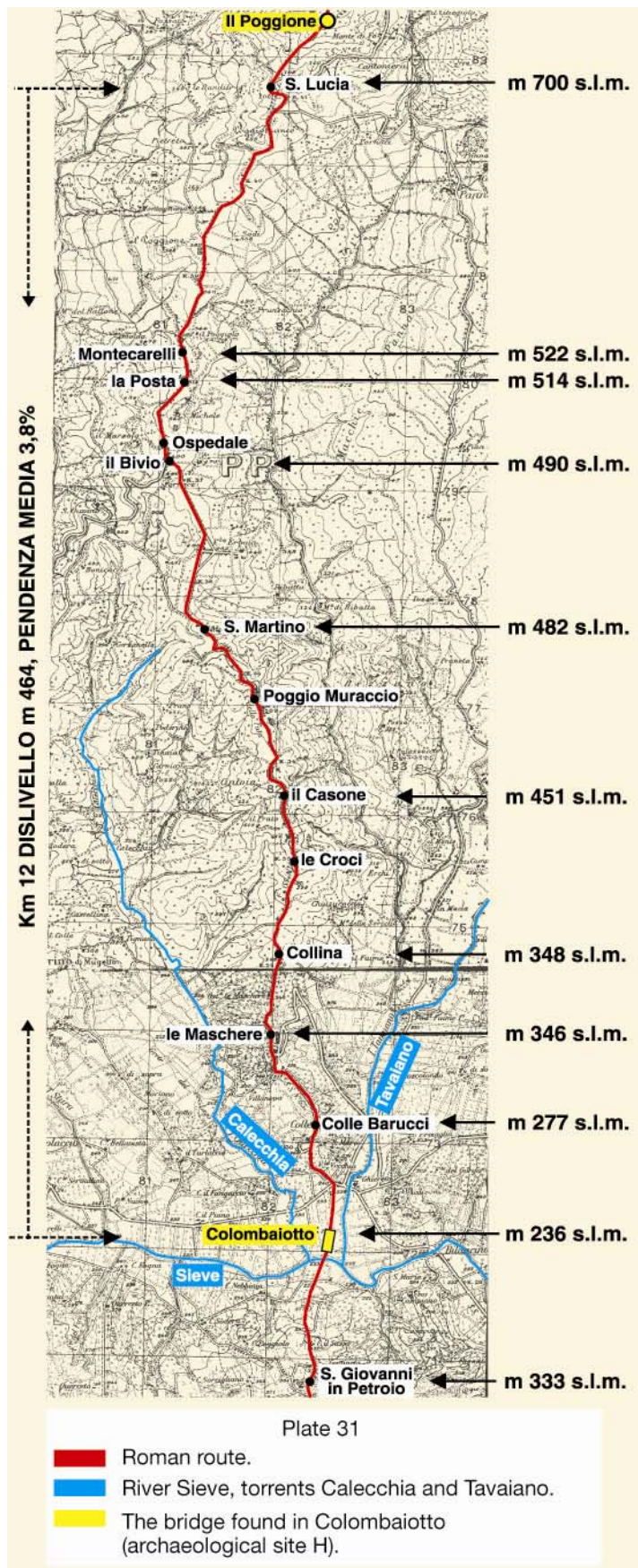
On reaching S. Lucia, even the present-day trunk road 65 from Bologna that wearily crosses the Apennines with its multitude of bends, nimbly passes along the top of the ridge, with numerous straight stretches of road that pass through Montecarelli, Il Bivio, S. Martino, Poggio Muraccio, Le Croci, Le Maschere, Colle Barucci as far as the river Sieve, which it crosses in Bilancino. This is the most practical and scenic route

because it maintains a dominant position, allowing the eye to wander over the mountains crowning the Mugello valley. The same sensation can be felt when pursuing the Roman route on the top of the ridge towards Bologna. We are convinced that during Roman times (as in the Middle Ages), this ridge was used to descend from the Futa pass to the river Sieve, considering there are no alternative routes that are just as practical and direct.

However, this conviction means that the mule track first, the 1762 carriage road and finally, the present-day trunk road all exactly followed the route of the Roman road. Consequently, there was little hope of discovering any finds on this watershed, where the Roman paving has certainly been destroyed and scattered by thousands of years of traffic² and road works. Nor could we attempt any test excavations in the few areas where the trunk road “cuts” across small hillocks on the ridge, taking a lower route. These areas are now dotted with villas or farmhouses of rare beauty, surrounded by carefully maintained gardens and fencing that cannot be trespassed; thus dissuading us from seeking authorisation to carry out test excavations.

¹ See our discussion on this topic in paragraph 3 of chapter XVII.

² In fact, all the stretches of paving we discovered were found in isolated places, and only where the route did not coincide with the mule track.



2 - Theoretical crossing place on the river

Having guessed the Roman route as far as the river Sieve, we had to identify where the Romans would have crossed it to continue to Fiesole.

The source of the Sieve lies in the Calvana mountains, it flows from west to east cutting across the Roman route. After S. Piero in Sieve, it reaches Borgo S. Lorenzo and Vicchio in the east; it then accomplishes a large semicircle towards the south and flows through Dicomano and Rufina and then flows into the Arno at Pontassieve, 18 kilometres east of Florence.

Therefore, the Sieve is an obstacle some 50 kilometres long (from Barberino del Mugello to Pontassieve), which cannot be avoided by following its course along the left bank, because it has to be crossed anyway to reach Fiesole which lies within its semicircle. Considering this hydrographic context, it was logical that the crossing must have been on the exact route of the road, which as well as being straight also featured two other advantages compared to other nearby locations:

- it crossed the upper course of the Sieve, where the flow rate of the river is lower; furthermore, following the straight line between Colle Barucci and S. Giovanni in Petroio, the road crossed the river upstream of its convergence with the torrent Tavaiano, which collects the abundant water flowing down from the Apennine ridge between the Futa and Osteria Bruciata passes.

- this avoided the large marshes formed by the river further down and mentioned by many Mugello historians³. In the map published at the start of the work by Johan Plesner (mentioned in the footnotes), Plesner indicates the plains along the river from S. Piero to Sieve as far as Dicomano as being marshland.

However, there were no remains to prove any of these considerations nor were there any historic sources that mentioned the existence of a bridge in this location.

³Daniele Sterpos: "La viabilità romana e la prima storia del Mugello". Historic-Territorial Documentation Centre of the Mugello. Printed at the print works of the Florence Provincial Administration, page. 4.

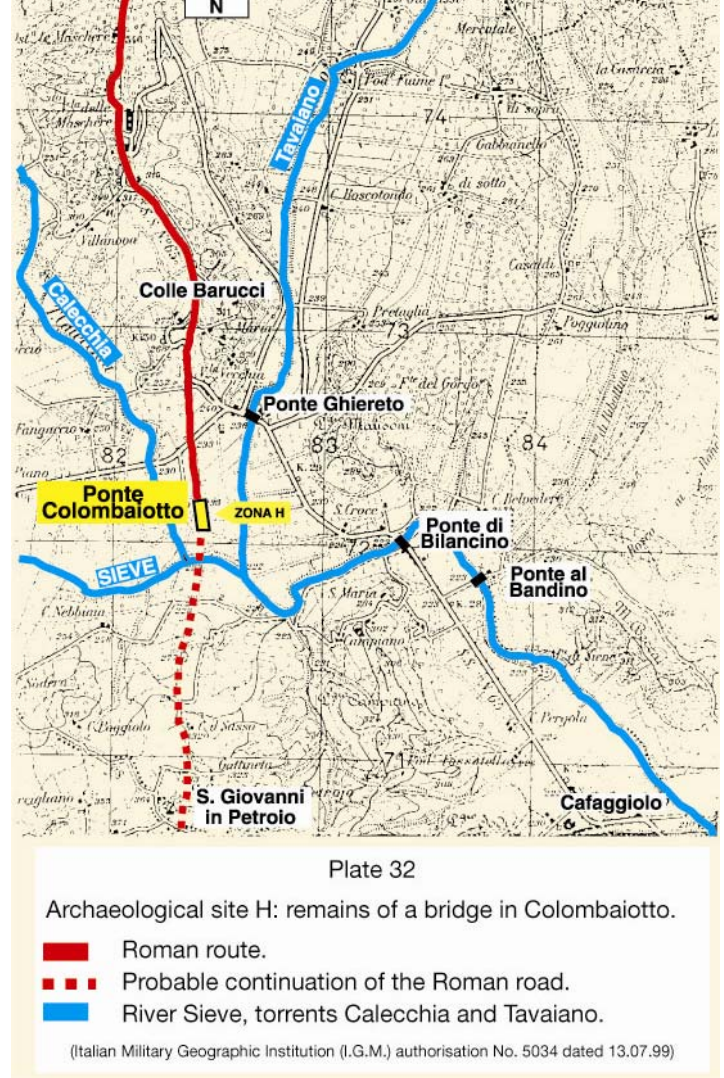
- Johan Plesner: "Una rivoluzione stradale del dugento". Published by Francesco Papafava 1979, page 33: "as can be seen from the map, the road did not entirely avoid the Mugello, just the plains of the river Sieve, undoubtedly because its waters transformed most of the valley in an impracticable marsh".

Medieval history has only handed down the memory of a bridge in S. Piero a Sieve, one in Ghiereto and another in Bilancino (this was not the bridge built in Bilancino when the first carriage road to Bologna was opened in 1762, called the “new bridge”, but it was the bridge in “Al Bandino”⁴). The latter crossed the Sieve for centuries 300 metres downstream of Bilancino, linking Campiano with the road heading north towards Galliano and southeast towards S. Piero a Sieve.

The first bridge cannot be considered because it is removed 4 kilometres towards the east; the second is on the torrent Tavaiano, an affluent of the river Sieve and, therefore, it bears no relation to the crossing over the Sieve; the third actually crossed the Sieve but one kilometre east of the straight line of the Roman route. This position did not match because the road would have had to take a diversion towards the east, following the left bank of the river for one kilometre (heading straight towards the marshes, which it was logical to avoid). After it crossed the bridge, it would have had to return westwards covering another kilometre on the right bank, and then ascend as far as S. Giovanni in Petroio. There was no sense in lengthening the route like this considering that in the 2nd century B.C. the bridge could be built in whatever was the most convenient location.

Therefore, we had no elements to support our theory because the bridge was not where it should be and there was no information indicating there had ever been a bridge there either.

We decided to contact Daniele Sterpos in Florence, an acknowledged scholar and author of numerous publications about ancient and medieval road systems, to inform him about our first finds on mount Bastione and to ask his opinion about the stretch of road built by C. Flaminius after the latest archaeological developments. He answered immediately with the utmost politeness, fixing an appointment with us at his home in the spring of 1981. We went to Florence, proud to be able to show him the photographs of the first stretches of paving found, but also excited about meeting such an important scholar of the subject. We had read his book about road communication between Bologna and Florence and



Bilancino (Municipality of Barberino del Mugello): the ruins of the “Al Bandino” medieval bridge, damaged during the 1943-45 war; a few years ago the ruins were completely demolished to make way for the drainage ditch of the waters from the Bilancino reservoir (photograph by Filippo Bellandi).

⁴ This bridge was partially destroyed during the 1943-45 war and was never reconstructed. Its ruins were recently demolished to make way for the drainage ditch of the waters from the Bilancino reservoir. (We would like to thank Filippo Bellandi for providing us with this information and the photograph of the ruins of the bridge).



Colombaiotto – the Bilancino reservoir: today the river Sieve flows 200 metres further south compared to the remains of the unknown bridge. This photograph was taken in 1997 from the right bank, on the route of the Roman road and where the remains of the bridge were found. This stretch of river is now (March 2000) submerged below the reservoir.

therefore, we were aware of his studies and doubts about the route of C. Flaminius between Bologna and Fiesole⁵. The interview was characterised by his spontaneous cordiality and his willingness to accept our finds as useful factors in unravelling the great problem of the Roman transapennine road system. He believed that on the Tuscan versant, the route of the road descended from the Osteria Bruciata pass, along the course of the torrent Taviano, finally crossing the river Sieve near Bilancino.

The route through the Mugello followed by our road, which continued in a straight line after the Futa pass, could not join the route theorised by Sterpos, although the two theoretical routes both crossed the river Sieve in the same place.

This authoritative opinion confirmed the crossing place. He also informed us that he had changed his initial opinion and promised he would send the

text of a conference he had held in Borgo S. Lorenzo, just a few months earlier (7 February 1981), where he illustrated the conclusions he had reached about the Roman road system in the Mugello.

We soon received the entire text from the conference where he expressed his ideas with these words⁶: “*In my opinion the Roman road, that is the “Flaminia Minore”⁷ descended along the Tavaiano to the Sieve and met the Sieve more or less near Bilancino (omissis). I believe that, once he entered the Mugello valley, Flaminius headed towards Fiesole. He may have crossed the Sieve near Bilancino, where the river banks were probably more solid, thus avoiding an area towards the east which was perhaps marshy*”.

Sterpos’ intuition, pronounced in 1981, later proved to be prophetic when in the 1990s, less than one kilometre west of Bilancino, the grandiose remains of an unknown bridge were discovered.

⁵ Daniele Sterpos: work cited, page 11 and later.

⁶ Daniele Sterpos: “La viabilità romana e la prima storia del Mugello”, page 4.

⁷ Here Sterpos calls the road built by the consul, C. Flaminius the “Flaminia Minore” because he considers it to be the Tuscan continuation of the route theorised on the Emilian versant by Nereo Alfieri (and which Alfieri calls the “Flaminia Minore”).



Bilancino reservoir (autumn 1997): *panoramic view of the Sieve valley a little west of Bilancino where the dam was built (left). The reservoir is still dry but the remains of the Colombaiotto bridge at the centre of the reservoir cannot be seen because covered by the trees in the foreground.*

3 – News about the remains of a bridge near Bilancino (in Colombaiotto) and its whereabouts

1994 was undoubtedly a particularly prodigious year in terms of results for our research.

In February, the first stretch of the paved road on Poggione (south of the Futa pass) was found, where we unearthed the most compact and majestic blocks of paving.

In April, we heard about the casual find of a number of piers belonging to an unknown bridge, discovered during excavation work

to construct the “Bilancino” reservoir on the river Sieve.

Bilancino is a small village in the Municipality of Barberino del Mugello, where trunk road 65 from Florence to Bologna crosses the river Sieve, a little north of the famous Medici Cafaggiolo villa. About 400 metres west of the village, the Sieve valley is squeezed between two hills. A plan had been drawn up to build a dam here to create a large water reservoir to serve Florence and to manage the course of the river Sieve, which due to its torrential nature often caused widespread damage when abundant rain fell. Upstream of the dam, the Sieve valley widens considerably, to the extent that it becomes a reservoir capable of holding millions of cubic metres of water. Work to create the reservoir started during the 1980s, with the construction of the dam as well as a number of super-elevated viaducts to ensure the continuity of the roads that would end up under water once the reservoir was filled.

Imposing excavation work was also carried out upstream of the dam to quarry material useful for the construction work and at the same time to increase the capacity of the reservoir. In the spring of 1992, while carrying out this work on the “Colombaiotto” farm, about 200 metres north of the present-day course of the river Sieve, the remains of six piers belonging to an unknown bridge were discovered. They were buried 5-6 metres below surface level, where within living memory, only cultivated fields had ever existed.



Bilancino dam (April 1994): *the remains of an unknown bridge were discovered about 200 metres upstream of the dam.*



This discovery was a great surprise for everybody, even Luca Fedeli from the Archaeological Superintendency (the person in charge of the area), during a recent conference expressed the following words⁸: *“The ruins were inspected on 6 July 1992. You can hardly imagine my amazement considering that they stand in an area where no-one (in living memory) has ever mentioned the existence of any such ruins in the Mugello valley, nor the existence of a branch of the Sieve (which flows a few hundred metres further south)”*.

We added our curiosity to everyone’s surprise and immediately went to have a look at the place.

Thus, we saw for the first time the stubs of the piers emerging from the low-lying marsh formed by the rain in the large and deep excavation carried out during former years upstream of the dam construction. The upper part of the piers lay 4-5 metres below ground level, where just a few years before there had been pastures and crops. The pentagonal shape of two piers appeared to be intact, whereas the third was partially broken, but anyway sufficiently preserved to reveal the same pentagonal shape. The others had been partially buried and demolished by the excavators before anyone suspected the existence of the ruins of a bridge so far from the present-day riverbed.

Although the ruins were by no means

spectacular, they were very exciting because we felt we had stumbled across the missing piece in the Roman route from Bologna to Fiesole. Their position and layout coincided perfectly with the route we had theorised through the Mugello, confirmed by the paving found south of the Futa pass the preceding February.



Colombaiotto bridge (archaeological area “H”): *the ruins of the bridge as they were in April 1994 when we carried out our first inspection. Note the dirt track on the left made by the Consortium building the dam to allow access from ground level down into the large and deep excavation.*

⁸ Extract from the text written by Luca Fedeli for the minutes of the 1997 Convention in San Sepolcro, Badia Tedalda and Sestino, page 2.



Bilancino dam (April 1997): *The Bilancino dam and the dry reservoir photographed from the south. In the foreground stands the bell tower of the church of S. Giovanni in Petroio and, in the background, the new viaduct on trunk road 65 (Florence-Bologna), built to replace the former route submerged by the reservoir water.*

Our thoughts went to the words of Daniele Sterpos who, thirteen years earlier, had guessed that the consul, C. Flaminius, must have crossed the Sieve near Bilancino.

However, these feelings and coincidences had yet to undergo archaeological verification: the discovery was anyway very important because the unexpected location of the find was irrefutable proof of its age.

4 – What should the unknown bridge be called?

The bridge obviously did not have a name, some called it “Bilancino” (which referred to the reservoir under construction) and others called it “Colombaiotto”, after the name of the farm and farmhouse very close by (demolished because destined to be submerged by the reservoir water).

The Tuscan Superintendency also initially called it “Colombaiotto”, it then

decided to call it after the village of S. Giovanni in Petroio, south of the Sieve on the hill overlooking the reservoir ⁹.

We do not agree with the choice of this name, although the village of S. Giovanni in Petroio is on the axis of the Roman route coming from the north.

There are two reasons for this:

- the exact location of the find is in “Colombaiotto” and therefore it is right to remember the bridge with the place name that suffered the same fate as the bridge: both submerged by 30 metres of water. Furthermore, S. Giovanni in Petroio is not in the reservoir area but on the hill facing the reservoir, 1.5 kilometres south of the present-day course of the Sieve:

- the historic sources that induced the Superintendency to make this choice are apparent from Fedeli’s words. Fedeli has assimilated Plesner’s opinion who refers to S. Giovanni in Petroio as a “*plebato*” (parish) defined as “*pontificio*”, that is responsible for looking after bridge maintenance. Linking this specific task entrusted to the parish of S. Giovanni in Petroio to the discovered bridge may be confusing to some. It implies that

⁹ Luca Fedeli: work cited, page 2: “At the time the latter was named “*del Colombaiotto*” after the name of the nearest farmhouse (which had already been demolished); it now appears appropriate to call it “*di S. Giovanni in Petroio*” after the name of the parish (defined as “*pontificio*”, that is responsible for bridge maintenance).



Colombaiotto bridge (archaeological zone “H” – April 1994): the remains of two of the piers that emerged during the excavation work to build the Bilancino dam (in the background) as they appeared on the day of our first visit to the location.

Plesner defined the parish of S. Giovanni in Petroio as “*pontificio*” in reference to this unknown bridge, whereas it is obvious that the Danish scholar was referring to Bandino bridge, near the village of Bilancino, one kilometre further east and in use from the Middle Ages¹⁰.

Plesner’s thoughts are clear and unequivocal¹¹: when he states that the main lay task of the parish of S. Giovanni in Petroio was to maintain the bridge, he is referring to Bandino bridge, slightly downstream of Bilancino, in use during the 13th-14th centuries, and not the bridge which had just been discovered and which was utterly unknown at that time¹². That

Plesner intended the bridge that at the time stood 300 metres downstream of the village of Bilancino (and which therefore he called “del Bilancino”) and not the newly discovered bridge, is confirmed in his conclusion when he points out that “*there is still a good mule track from Bilancino bridge, passing through S. Giovanni in Petroio, upwards... (omissis)*”.

Plesner’s “today” is the 1930s, when the bridge had yet to be discovered.

Due to these considerations, we think “Colombaiotto”, the name of the exact place where the bridge was found, is more appropriate.

¹⁰ See note 4 in paragraph 2 of this chapter.

¹¹ Johan Plesner: work cited, pages 35 and 36: “*like the S. Agata road, the Bilancino bridge road was a shortcut to the older Roman road (omissis). The existence and the route of this road are clearly due to the size and the “pontificia” status granted to the parish of S. Giovanni in Petroio. The church stands on the hills south of the Sieve; its parish includes the entire northern versant of the Canibiate hills down towards the most western plain of the Sieve, whose entire south bank belongs to the same parish. Beyond the river, only the Bilancino bridge area belongs to S. Giovanni in Petroio and the position of the parish on the southern hill above the bridge clearly demonstrates that the maintenance of the bridge was the principle lay task of the parish (omissis). There is still a good mule track from Bilancino bridge, passing through S. Giovanni in Petroio, upwards towards Cupo, and downwards through the parish of Legri and on to the parish of Calenzano, where it joins up with the main Florentine Valdarno road*”.

¹² When Plesner, mentions the Bilancino bridge in reference to the bridge maintenance entrusted to the parish of S. Giovanni in Petroio (13th-14th centuries), he could certainly not have intended the bridge on the Sieve in Bilancino constructed in 1762, when the first carriage road to Bologna was built, called the “new bridge”.

5 – Our first inspection and the excavations by the Superintendency (archaeological zone “H”):

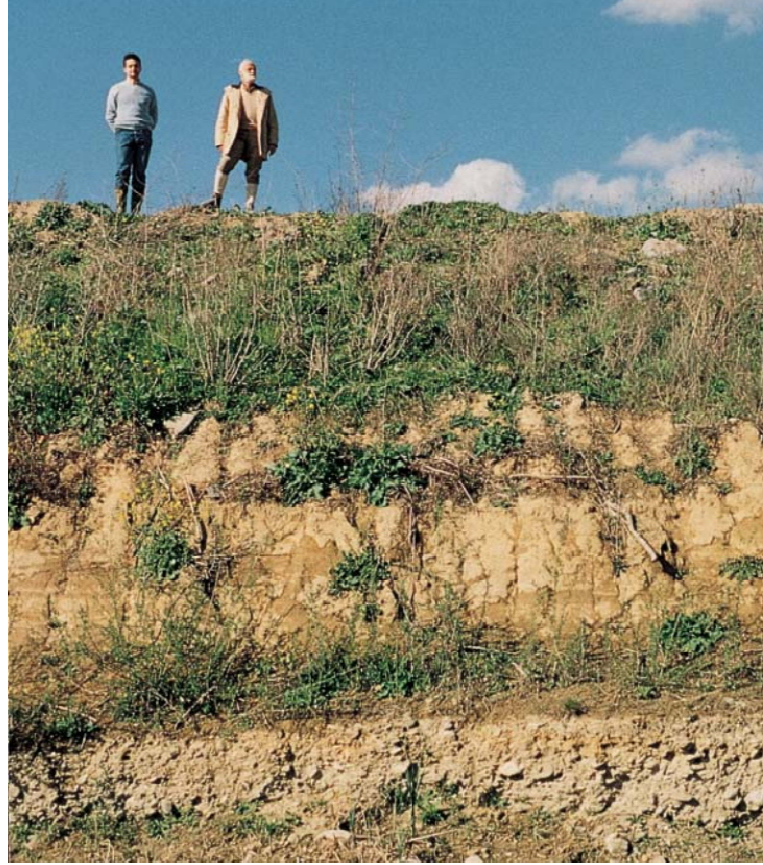
In April 1994, when we saw the remains of the bridge, only 120-130 cm of the ruins emerged from the bottom of the huge excavation, covered by scattered puddles, which had formed after the rain. The remains were nothing special from a monumental point of view, but were of great archaeological importance, especially for our research.

We climbed down to the bottom of the excavation, taking care not to slip down the uneven path over the sedimentation, which formed the edge of the 5-6 metre deep excavation. We then climbed onto a pier and looked around us: we were about 4-5 metres below ground level; northwards was the clean cut of the excavation revealing the various layers of sediment. The lowest layer consisted in a one-metre thick *lens* of gravel and pebbles. Towards east, at a distance of about 200 metres, the pale wall of the almost finished dam blocked the view of the village of Bilancino; towards south, the other equally clean cut of the excavation outlined a strip of land about 200 metres wide, covered by dense vegetation and not affected by the excavation, beyond which flowed the present-day bed of the river Sieve.

We then wondered how many centuries had been needed for a 5-6 metre layer of alluvial material (carried by the torrents Tavaiano and Calecchia from the north) to submerge the bridge and shift the bed of the river Sieve 200 metres further south. The present-day position of the bridge in relation to the function it was built to perform, convinced us that it must have been constructed long ago and certainly at a date compatible with the Roman age.

These sensations were doubtlessly the result of the excitement caused by the unexpected appearance of the remains and we eagerly awaited archaeological verification.

In fact, only the remains that had escaped the excavators (and the remote natural catastrophes that preceded them) emerged from the ground. Fortunately, the Archaeological Superintendency immediately cordoned off



Colombaiotto (archaeological area “H”): *the clean cut of the excavation to construct the Bilancino reservoir highlights the 5-6 m depth of the excavation where the remains of the bridge emerged. Note the “lens” at the bottom consisting in about 1 metre of gravel and pebble sedimentation indicating the level of the ancient bed of the river Sieve, which now flows some 200 metres further south. Andrea Agostini and Carlo Alvisi are standing on the edge of the excavation*

the area, and scheduled archaeological digs to unearth the remains of the piers and whatever else lay below the remaining undisturbed soil. These campaigns were carried out from 1995 to 1998 and took about 5-6 months of actual work. The most demanding and important digs were carried out on the north side of the reservoir excavation, and unearthed the abutment of the bridge. Another dig near the better-preserved pier encountered numerous difficulties due to water seepage and consequent flooding.

In spite of these problems, very satisfactory results were achieved which gave us an idea of the architecture of the bridge, although some doubts persist because we were unable to uncover the complete structure.

For an exact and detailed description of the bridge by Vittorio Galliazzo, please refer to paragraph 7 in this chapter.

6 - Historic investigation regarding the era of the first bridge built in Colombaiotto and the dating of the wooden remains.

With the unexpected discovery of this unknown bridge came the problem of establishing when it was built and when it was last used.

It was immediately clear that the importance of the structure could only be justified by the existence of a busy main road. Its position along the ridge route descending from the Futa pass affirms that it belonged to the transapennine road. Seeing as the bridge was unknown to living memory, historic archives were immediately investigated

to see if there was any information regarding its construction or at least its existence. Building a bridge of this size must have undoubtedly been demanding in terms of economics and technology, and could not have escaped medieval chronicles about the history of the Mugello valley. Unfortunately, archive sources rarely date back to earlier than the 12th-13th centuries and so it was necessary to be content with searching for direct and indirect information from later documents. However, an attentive study of works by past Tuscan historians¹³ who investigated the events of the Mugello mentioned in the oldest available documents, revealed nothing¹⁴. Cristina Ducci¹⁵ was asked by the Archaeological Superintendency for Tuscany



“Colombaiotto” (archaeological zone “H” – September 1997): archaeologists from the Superintendency for Tuscany investigating the north abutment of the bridge.

¹³ We refer to: E. Repetti, P. Lino Ghini, G.M. Brocchi and the most recent scholars: Johan Plesner, Gabriele Ciampi, Leonardo Rombai.

¹⁴ We would like to remind the reader that we do not share the same opinion as the Superintendency for Tuscany, already mentioned in terms of the name to give the discovered bridge. We are convinced that when Johan Plesner mentioned the parish of S. Giovanni in Petroio as “*pontificio*”, (that is responsible for bridge maintenance) he was referring to the “al Bandino” bridge which existed in the 13th century in Bilancino and not this new, unknown bridge.

¹⁵ Chairlady of the “Lega di Tagliaferro” Archaeological Group in S. Piero a Sieve.

to carry out specific research in the archives and arrived at the same conclusion. The oldest map found dates back to the 16th century and does not provide any information about the bridge. Fedeli had the following to say about this¹⁶: “the oldest maps of the area found (that is those from the archive of the maps of the “Popoli e Strade dei Capitani di Parte Guelfa”) date back to the second half of the 16th century and they make no mention of the bridge (nor do any later maps). However, it would be untrue to uphold that these maps were not useful: they are. Their “e silentio” or silence implicitly attests that the bridge of S. Giovanni [that is Colombaiotto] was not only older than the map but also had already disappeared when the map was drawn”.

He goes on to mention¹⁷ another significant item of “silent” information which appears in a 1385 deed of purchase by a member of the illustrious Adimari family (Luigi, son of Roberto) regarding a house and farmland called “Colombaia” located on the map of the “Carta dei Capitani” in the area of “Colombaiotto”, in the exact place where the bridge was found. Therefore, if in 1385, the house and farmland already stood where the bridge was found, this means that the bridge had already been submerged by a consistent layer of alluvial material and the course of the river had shifted further south, so much so that it was possible to build the Colombaiotto house and farm the surrounding area without the risk of flooding.

While this historic research was being carried out, samples from wooden beams found in the bridge area were also analysed. On 9 June 1994, we took part in the removal of two samples by Agostino Salomoni from the E.N.E.A. C/14 laboratory in Bologna, in the presence of Fedeli. A number of small wooden beams emerged from a block of conglomerate made of pebbles and stones (part of pier II). The beams were so firmly encapsulated that it was necessary to smash the masonry.

The other sample was taken by sawing a piece of a large wooden beam found on the bottom of the excavation, near pier VI.



Colombaiotto bridge (9 June 1994): a sample of wood material is taken from a conglomerate of pebbles and limestone which was probably part of the remains of pier II. Franco Santi removes the sample (Bo 381) under the attentive eye of Luca Fedeli and Agostino Salomoni from E.N.E.A. in Bologna. Note the uneven wall of the deep excavation in the background on the bottom of which the remains of the bridge were found.



Colombaiotto bridge (9 June 1994): a sample of wood is taken (sample Bo 396). The sample is sawn from a large beam lying on the bottom of the excavation near pier VI. Franco Santi is assisted by Luca Fedeli from the Archaeological Superintendency and Agostino Salomoni from E.N.E.A in Bologna.

¹⁶ Luca Fedeli: Report for the minutes of the 1997 Convention in San Sepolcro, Badia Tedalda and Sestino, page 5.

¹⁷ Report cited, page 6.

The first sample of wood (BO 381) was dated back to 907 B.P. years (give or take 60 years), that is between 1027 and 1147 A.D. Instead, the other sample (BO 396) was dated back to 2820 B.P. years (give or take 40 years), that is between the years 866 and 786 B.C.¹⁸.

On 19 August 1994, another sample was taken by Giuseppe Longo, from the Department of Physics of Bologna University, from another piece of wooden beam buried in the same conglomerate (pier II) from where sample BO 381 was also taken; he sent the sample (BO 394) to the "Isotrace" laboratory in Toronto (Canada) which sent the following dating: 979-1028 A.D.; thus confirming the dating on the first sample (BO 381) by the E.N.E.A. laboratory in Bologna.

7 - The remains of the bridge (archaeological zone "H") described and dated by Vittorio Galliazzo.

The results of the analyses carried out on the two different samples of wood, whose date swings between 900 B.C. to 1000 A.D., opened the way for interpretations that will not fail to arouse debate and discussion.

What was the function of the beams encased in the remains of pier II? Moreover, what relation was there between the masonry bridge and the wooden beam dating back to the 10th, 9th century B.C. found near pier VI?

In spring 1999, we turned to Vittorio Galliazzo, Professor of Archaeology and Greek and Roman History of Art at the University of Venice, to see if he could answer these questions, being the most authoritative scholar of this specific subject and author of a monumental work about Roman bridges ¹⁹.

Although, he had not seen the finds in person nor was he able to visit the location because the reservoir was already full of water, he was very willing to express an opinion, based on the survey and drawings carried out to represent the exact dimensions of the remains of the bridge, numerous photographs and the results of the C/14 carbon testing on two different samples of wood, used during eras distant from each other.

After examining the documentation, he sent us a detailed report with an exact description of the structure of all the finds, his relative technical evaluations and his conclusions.

To provide an in-depth knowledge of these vestiges and for the pleasure of all those specifically interested in ancient travel, we have included the entire text of his report.

¹⁸ The certificates of these analyses carried out by E.N.E.A. in Bologna are enclosed herein (documents 14 and 15).

¹⁹ Vittorio Galliazzo "I Ponti Romani". published by Edizioni Canova, Treviso, 1995, volumes I and II.

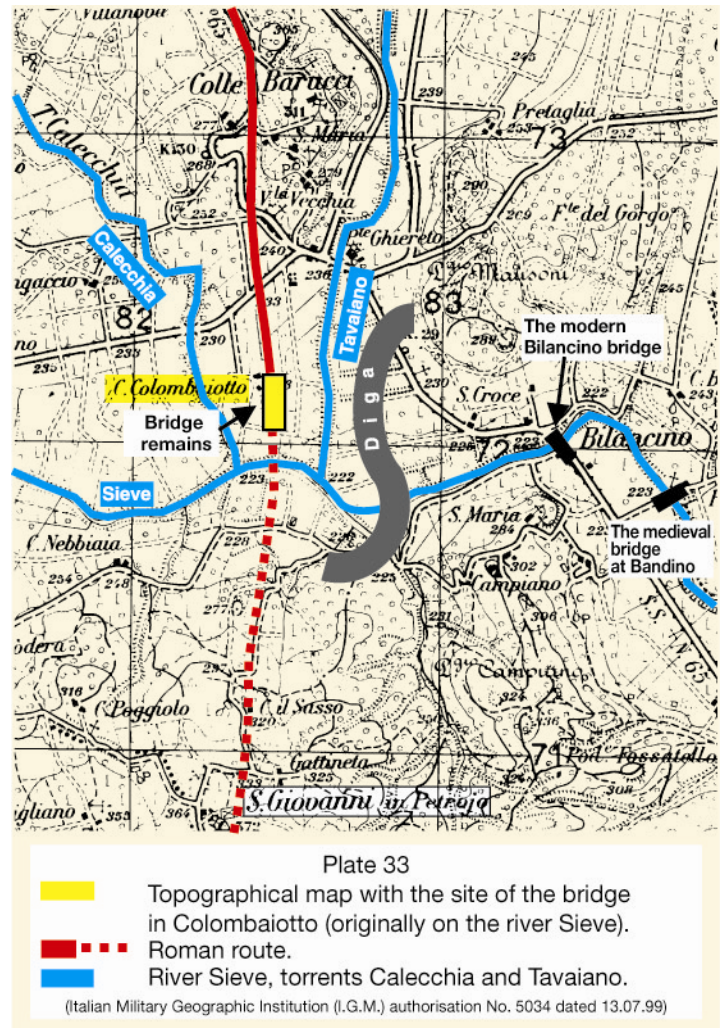
This work consists in 1265 pages with 535 photographs and drawings. It researches and illustrates the structure of 1560 Roman bridges. Raymond Chevallier made the following comments during the presentation of the book: "*The first volume is an excellent summary, solidly constructed, very detailed and exhaustive, and it deals with every possible historic and archaeological problem: pre-Roman experiences which may have inspired Rome (even in original ways), the role of bridges in history from antiquity to the present-day, architectural analysis and types of bridge, the various work phases from design to construction...* (omissis). Worthy of particular appreciation is the detailed analysis of the various construction elements, from their structural role, from the foundations to the road surface, without overlooking decorative elements, complementary devices and defences. The methodological conclusions regarding the dating and symbolic significance of bridges as a means of communication at the heart of Roman civilisation... (omissis). The catalogue in the second volume, the foundation of the work, provides the reader with a huge amount of precise documents and is of great use : 931 information sheets deal with preserved or certified bridges; 460 of these are in Italy, 72 in France, 142 in Spain, 30 in Germany, 29 in Great Britain... (omissis).

**THE SO-CALLED “COLOMBAIOTTO” BRIDGE
ON THE RIVER SIEVE IN MUGELLO
(FLORENCE). A grandiose medieval bridge built on
ancient remains.**

In 1992, during large-scale excavation work to enlarge and create a level area for the artificial reservoir created by the Bilancino dam with the waters of the river Sieve in the Municipality of Barberino di Mugello in the province of Florence, about 200 metres upstream of the dam and at a depth of some 5-6 metres compared to the present-day ground level, the remains of an imposing medieval bridge were unearthed²⁰. Because the bridge was located near an old farmhouse (now demolished) called “Colombaiotto”, the bridge was (rightly in my opinion) called Colombaiotto bridge, although others have decided to call it the “Bridge of San Giovanni in Petroio” due to a nearby parish located further south, once defined as “pontificio”, that is responsible for bridge maintenance”²¹(table 33).

Colombaiotto bridge turned out to be a discovery of exceptional interest because it lay a few hundred metres north of the present-day course of the river Sieve, where no document has ever recorded that the main course of the river Sieve nor any secondary branch of the river flowed.

At the moment, the entire reservoir created by the Bilancino dam is full of water; therefore, this analysis of the bridge in question is based only on verbal, written, graphic and photographic



indications provided by Cesare Agostini and Franco Santi from Bologna, who

²⁰ I owe this information, the measurements, the graphic and photographic records to the kind efforts and the passion for antiquity of Cesare Agostini and Franco Santi from Bologna who I would warmly like to thank. As regards the bridge in question, consult especially: L. Fedeli: “Il ritrovamento di un ponte a San Giovanni in Petroio sulla strada Regia romana”, in the Minutes of the '97 Convention in San Sepolcro, Badia Tedalda and Sestino, page 9 and elsewhere, currently being printed: this also includes a detailed report regarding two test digs carried out. As regards the restoration work on Colombaiotto bridge, refer to G. Scotti: “Il ponte di San Giovanni in Petroio; i lavori di consolidamento e restauro delle strutture superstiti, effettuati nel 1995”, also currently being printed.

²¹ As for San Giovanni in Petroio “pontificio” please refer to V.J. Plesner, “Una rivoluzione stradale del Dugento”, in Acta Jutlandica (Aarskrift for Aarhus Universitet, X.1), Koebenhavn 1938, page 26.

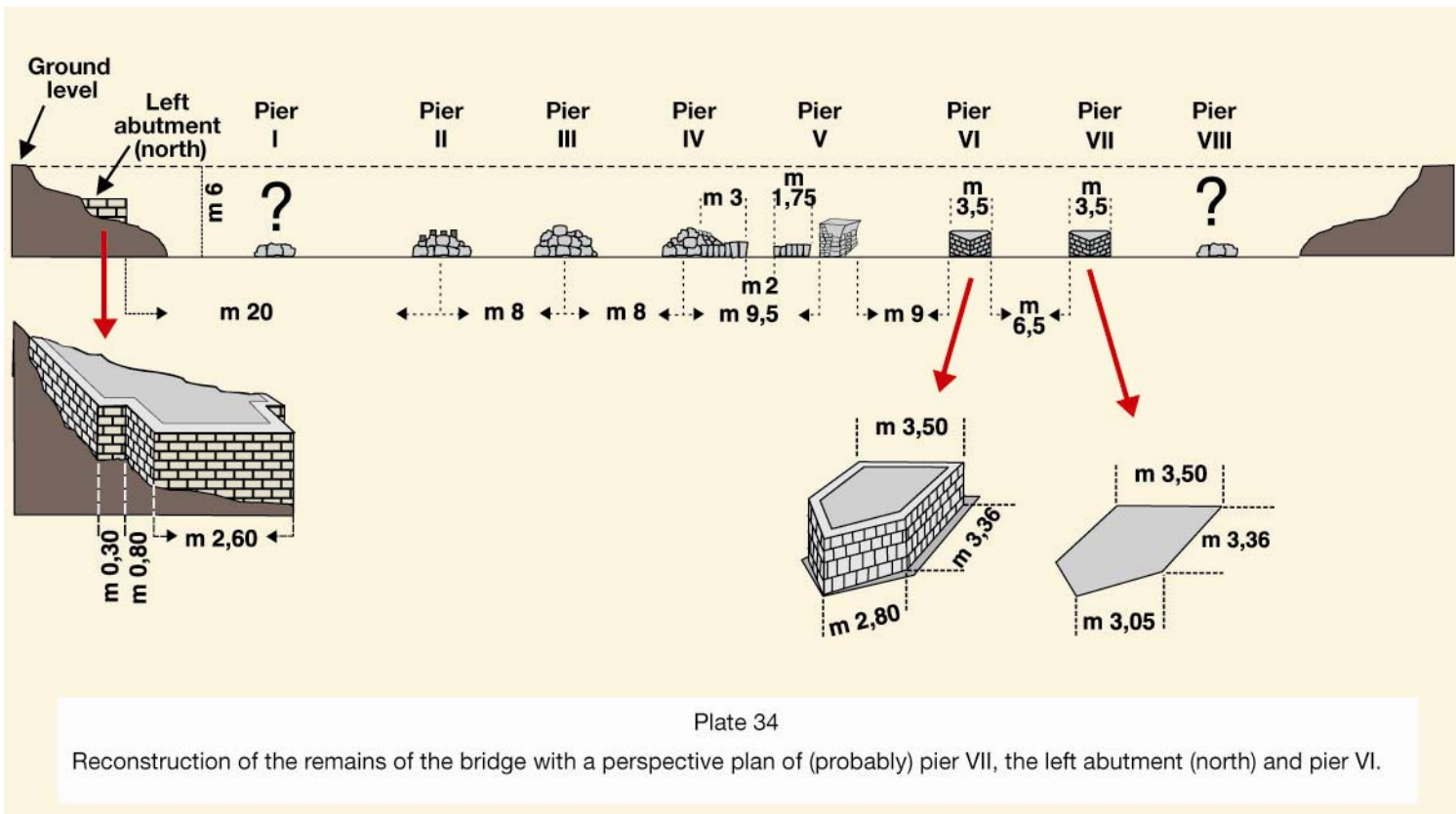


Fig. 170 – Colombaiotto bridge. General view of the bridge from the probable pier VII towards the surviving left abutment.

with thoughtful and careful attention for ancient remains and as members of the Bruscoli Archaeological Group (Florence), for over twenty years have been investigating the route of the ancient road from Bologna to Florence that leads to the bridge. More recently, they have also been investigating the Colombaiotto bridge, which evidently must have crossed an abandoned branch of the fast-flowing river Sieve.

As shown by this stretch of riverbed, this torrential watercourse once flowed from west to east and then descended southwards converging with the Arno in Pontassieve²².

As for the imposing remains of the construction under examination, when discovered the remains proved to have an alignment that spanned a length of some 90 metres (a length of 90-100 metres cannot be excluded considering that its southern

right abutment was never found), while its width was presumably about 3 metres (table 34). The following remains of this structure were found: (proceeding from left to right, that is from north to south) the remains of at least six pentagonal piers (or better, with a rectangular body and a triangular forestarling) about 3.50 metres wide and overall about 4.20 metres long, and indication of at least another two, equalling a total of eight more or less preserved piers (especially piers V, VI and VII from left) supporting 9 spans which proved to have an average span (equal to the distance between adjacent piers) of about 7 or 8 metres, except for span VI from the left which reached about 9 metres and span VII which reached about 6.50 metres (fig. 170).

More particularly, the north abutment on the left (figures 171-173) showed a



Fig. 171 – Colombaiotto bridge. *Left abutment (north) general view from downstream.*

²² Unfortunately our investigation failed to collect any great quantity of data or information because it was not carried out by bridge experts (as regards cavities in the piers, the dimensions of keystones and wedges, the quality of the materials, assembly cavities or holes, the structure of the wing walls and more). As for the profile of the intrados of the spans, from the few indications that we have, it is believed that they were “flat arched” to avoid an excessive crown on the road surface, of which there was absolutely no trace.

dual articulation: the larger portion connected to the road was about 2.90 metres wide and about 2 metres deep, while the part facing the river featured an 80 cm projection and was 2.60 metres wide, creating with the former part an offset measuring 30 cm (only upstream). From a technical-construction point of view, the entire abutment consisted in a dry stone nucleus with mortar poor in lime and aggregate made of crushed stone and pebbles from the river. The masonry facing made of small to medium limestone blocks had clearly been installed using two different techniques: the regular square technique used to build the lower part features alternate dry stone courses of hewn stones with a modest thickness followed by a course of very thick stones. This technique was used in antiquity as well as later;

Fig. 172 – Colombaiotto bridge. *Left abutment (north): general view of the road that reaches the artificial lake of Bilancino, below whose waters lie the remains of the bridge.*

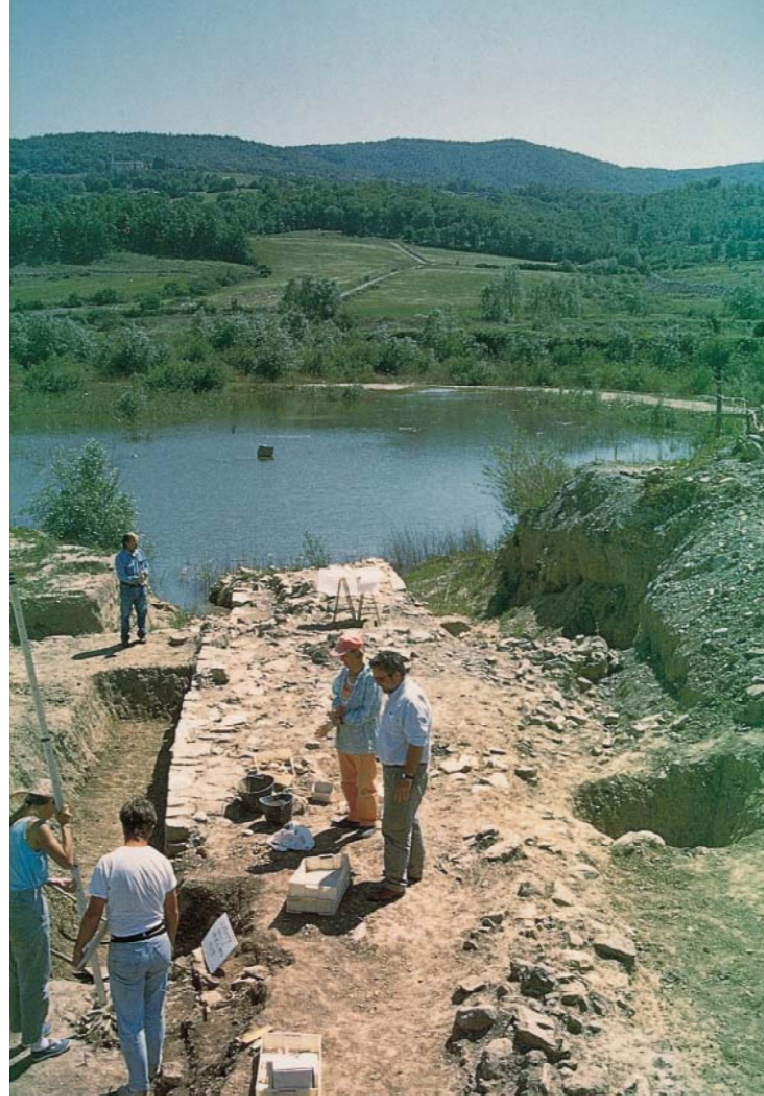


Fig. 173 – Colombaiotto bridge. *Left abutment (north): downstream view of the abutment with the start of an arch and three cavities on the level of the springers.*

whereas on the upper part, the courses of hewn stones and the stones themselves are extremely irregular. Therefore, this is clearly a medieval structure, also affirmed by the abundant use of earthy mortar between one stone and another.

Two other details worthy of note can be seen in the façade of the abutment facing the river: the two upper courses (the lower modest, the upper of large proportions) consist in voussoirs which were part of a span (now collapsed). On the level of the springers it is possible to note three somewhat deep cavities (one central and two lateral) which were either used to house the beams of the wooden centre used to build the span, or as cavities to house the ends of the main beams supporting the wooden bridge, or the beams of a wooden bay constructed after the span had collapsed (however these cavities may have been used to build the stone span and then re-used later to make the wooden bay during restoration work).



Fig. 174 – Colombaiotto bridge. Remains of probable pier II with the piles encased in its nucleus.

The extremely modest remains of pier I (from the left) appeared to stand about 8 metres from the abutment described above, but it was not possible to glean any knowledge about their construction. Pier II was more interesting. All that remained was the nucleus in opus incertum made of hard mortar and aggregate consisting in crushed stone and pebbles. The nucleus featured various wooden piles (at least 4) without



Fig. 175 – Colombaiotto bridge. The collapsed span between piers IV and V from left.

pile shoes. The piles were encased and consolidated in the body of the nucleus: when one of these was subjected to C.14 dating at the "Ente per le Nuove Tecnologie, l'Energia e l'Ambiente (E.N.E.A.)" [Organisation for New Technologies, Energy and the Environment] in Bologna in 1994, the result was calibrated (with 95.4% confidence) between 1020 and 1260 A.D.; therefore this proved to be wood from the Middle Ages ²³ (Fig. 174). Piers II and IV consisted in piles of opus incertum with remains of hewn stones whose distance between centres measured some 8 metres.

Of great importance was the discovery of a collapsed span between piers IV and V from left (right at the centre of the bridge), as well as a section (from the springer to one rein) which was still standing in terms of 5 courses of voussoirs on the left flank of pier V (see figures 175-176). Therefore, we know that the probable span V of the bridge (the most important because on the presumable axis of the current) was certainly made of wood with well-made head arches consisting in voussoirs of varying thickness but with a more or less regular height, even if all were laid using lime as a bonding agent, although of minimum thickness. Furthermore the portion of span still standing on pier V did not appear to feature any cavities for supporting the wooden centre on the level of the springers, nor any other cornice, whereas at least one voussoir on its arch head clearly featured a cavity to house an iron or lead cramp (now disappeared) which had no structural significance in this position. As concerns the surviving header walls of the tympanum supports (especially those in direct contact with the extrados of the header arches of the collapsed span), these covered the nucleus of the bridge which was also made of dry stone (as was the rest of the bridge): furthermore these featured hewn stones bonded using mortar in a masonry fabric consisting in small hewn stones with somewhat irregular sizes.

Pier VI was very interesting for various reasons: it was the only clearly legible pier from its foundation through most of its elevation: furthermore, its foundations were later excavated



Fig. 176 – Colombaiotto bridge. Remains of courses of voussoirs still standing on the left flank of pier V downstream (they belong to the span illustrated in figure 175).

revealing the complete absence of any supporting pile-work, which is always the case in indirect foundations (see figures 177-178). From what can be understood today from this surviving pile, we know that it (and presumably the others too) had a pentagonal plan with an average width of about 3.50 metres and a length of 3.36 metres



Fig. 177 – Colombaiotto bridge. The probable pier VI seen from the south on the foundation plinth.

²³ In fact, there is no reference made in the report sent by E.N.E.A. in Bologna to Fedeli-Agostini about the quality of the wood (defined as "externally semi-charred and damp"). The B.P. dating is indicated as 907 + or - 60 B.P.



Fig. 178 – Colombaiotto bridge. *The impressive rostrum (forestarling) upstream of pier VI.*

to which we have to add a triangular starling (forestarling) about 80-85 cm long with 2.80 metre sides. Its nucleus was made of opus incertum as described earlier, while the outer layer appeared to made of hewn limestone blocks which were large in the lower portion and of modest volume in the upper portion, even if both parts had been constructed fairly regularly (a large hewn stone on the southwest side of the forestarling features a non-functional cavity which housed a cramp). The entire body of the pier was supported by a foundation socle consisting in aligned limestone slabs which project outwards (compared to the plan of the pier) by about 25 cm (downstream) and about 35 cm upstream (near the starling).

The presumed pier VII was structured in the same way (although smaller): the only difference could be seen in the forestarling whose oblique side measured 3.05 metres on either side (fig. 179). We know little or nothing about pier VIII, while no excavation was carried out near the presumable southern abutment on the right: this area was not included in the excavation to create the water reservoir.

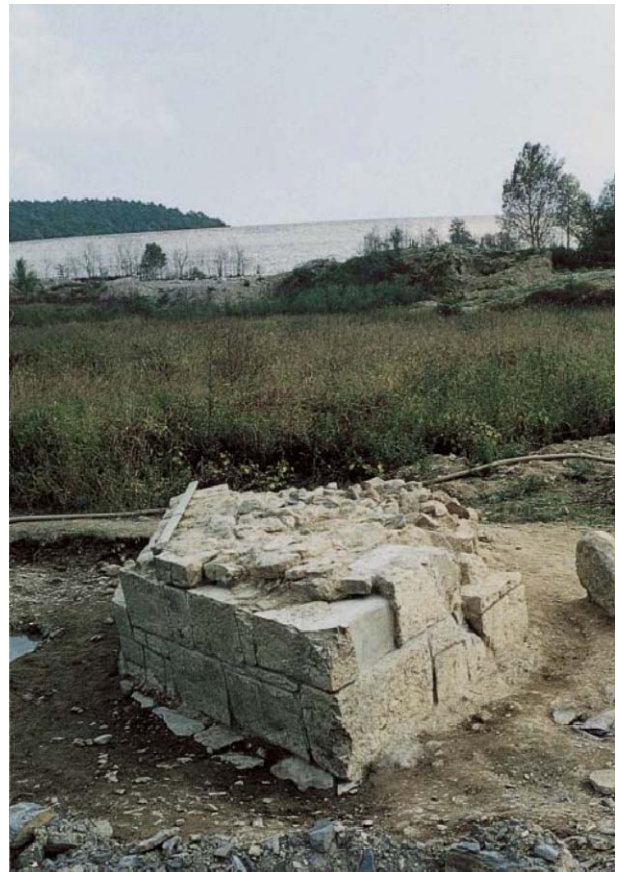


Fig. 179 – Colombaiotto bridge. *The probable pier VII seen from upstream.*

Finally, near pier VI from the south and left, a large beam was discovered which was about 3 metres long and with a quadrangular transversal section measuring some 0.30 by 0.25 metres (fig. 180). In 1994, this beam was also subjected to C.14 dating in the E.N.E.A. laboratory in Bologna which provided an age calibrated (with 95.4% confidence) between 1060 B.C. to 840 B.C.²⁴

The exact age of the road is still open to discussion. The road came from the north, crossed the river Sieve over this bridge and probably continued onwards to Florence, not far off. The twenty years of study, research and discovery by Cesare Agostini and Franco Santi, confirmed by impressive stretches of almost certainly ancient road (which can be dated back to the 2nd century B.C.), as well as the opinions (sometimes critical) of extremely competent scholars such as Raymond Chevallier and Giancarlo Susini, would date some stretches of the route to the Roman age and more precisely the mid-republican age, although considering the lack of more consistent proof, I do not wish to identify in this road route the via Flaminia minor, that is the military road opened according to Livy (XXXIX, 2) in 187 B.C. between Bologna and Arezzo²⁵.

An interpretation of the remains of this extremely important bridge (at least in terms of its proportions) appears difficult. Almost certainly, the remains of the abutments and the piers recently discovered can be dated back to the Middle Ages (probably the 11th or 12th centuries when Florence became increasingly important from the point of view of trade and politics²⁶. During this period, the entire structure must have been made of local stone or stone that was partly recuperated from nearby monuments (as proved by the cramp cavities which had no functional use in their present location) and it must have stood on direct and indirect foundations depending on the quality and



Fig. 180 – Colombaiotto bridge. Wooden beam found near pier VI.

consistency of the riverbed (the piles in the nucleus of presumed pier II - which was partly upturned - were probably part of indirect foundation pile-work). It is possible that during the 12th or 13th centuries, this medieval work of great beauty for its time, collapsed at least in part due to a flood. Perhaps the ruined spans were then replaced by a wooden beam truss system creating a "mixed" bridge, that is with a masonry under-structure and a wooden super-structure (could the three visible cavities on the abutment springer have been used to support one such wooden structure?).

It is possible to imagine (although also backed up by valid analogical and documentary evidence) that the important medieval version of the bridge was preceded by a wooden bridge of the "wooden pier or pile" type (*pons sublicius*) dating back to Roman times at least. Therefore, it is possible that the lower, well-constructed part of the left abutment of the medieval bridge is none other than the ancient abutment which contained the road and supported the first wooden bay from left. It cannot be

²⁴ The report sent by E.N.E.A. in Bologna to Fedeli-Agostini does not include any reference regarding the quality of the wood (it is defined simply as "wood"). The B.P. age is indicated as 2820 ± or - 40 B.P.

²⁵ As regards the road system that served the bridge in question, please refer to: G.A. Mansuelli: "La rete stradale e i cippi millari della Regione Ottava", in "Atti e Memorie di Storia Patria per l'Emilia e la Romagna", volume VII, 1941-1942, pages 33 and later: including the illustration with the route; D. Sterpos: "La viabilità romana e la prima storia del Mugello", Historic-Territorial Documentation Centre for the Mugello, Councillorship for Culture of the Province of Florence and the Municipality of Borgo S. Lorenzo 1982, especially page 4; C. Agostini, V. di Cesare, F. Santi: "La strada Flaminia Militare", Bologna 1989; R. Chevallier, in "Archeologia", 1989, p.74; Fedeli: work cited, *passim*.

²⁶ For further information regarding mixed and masonry medieval bridges (including in Florence), their specifications and the relative bibliography refer to: V. Galliazzo, "Ponte" in "Enciclopedia dell'Arte Medievale", (Enciclopedia Italiana Treccani), volume IX, Rome 1998, pages 626-634.

excluded that an even earlier pre-Roman bridge once stood here which can be dated back to the 10th or 9th century B.C. (a forerunner of the “Ponte Sublicio” in Rome): the large beam dating back to this period found near pier VI would appear to confirm this²⁷.

8 - Our conclusions.

According to Galliazzo, the remains of the discovered structures date back to the Middle Ages (11th-12th centuries).

However, at the base of the north abutment, he noticed a square work technique of probable Roman ascendancy, and goes as far as to say that... *“it can be supposed that this important*

medieval version, was preceded by a wooden bridge of the “pier” or “wooden pile” type (pons sublicius) at least dating back to Roman times...” He then goes on to theorise that the Sieve was probably crossed here in even more remote times: *“It cannot be excluded that an even earlier pre-Roman bridge once stood here which can be dated back to the 10th-9th century B.C. (a forerunner of the “Ponte Sublicio” in Rome); the large beam dating back to this period found near pier VI would appear to confirm this”.*

Therefore, this confirms the persistence of an important Etruscan, Roman and medieval route along the Fiesole-Futa-Bologna axis which always crossed the Sieve in the same point and where the remains of Colombaiotto bridge were unearthed.



Colombaiotto (August 1995): on the edge of the excavation where the remains of the bridge were unearthed, Franco Santi (sitting) discusses when the bridge was probably built with a number of friends and acquaintances. Standing from left: Emanuele Stefanini, Paolo Gucci, Marco Bellini, Carlo Bandini and Andrea Vignoli.

²⁷ For more information regarding the typology and construction techniques of wooden, mixed and masonry bridges in the Roman world, as well as the relative bibliography, refer to: V. Galliazzo: “I Ponti Romani”, volume II, “Catalogo Generale”, Treviso 1994; volume I. “Esperienze preromane - Storia - Analisi architettonica e tipologica-Ornamenti-Rapporti con l’urbanistica- Significato”, Treviso 1995, especially pages 316-326 (wood), 326-327 (mixed), 328-516 (masonry).

This archaeological evidence confirms the intuitions of Daniele Sterpos and Johan Plesner ²⁸ and the opinion of Fedeli from the Superintendency who, although believing the structures to be medieval, considered probable that this crossing was used by the Romans: *“A series of motives, induce one to remember that the latter [the excavation area] must have been used very frequently from Roman times, perhaps in the actual place where the ruins were discovered”* ²⁹.

Therefore, we are convinced that, when the transapennine road was built, Flaminius’ legions followed, improved and straightened the existing Etruscan route, paving it where necessary and they probably used (perhaps reinforced) a wooden bridge that already spanned the river Sieve, as often occurred when military roads were first built near enemy territory.

²⁸ Johan Plesner: work cited, page 33: *“but already during the times of the Lombards, or perhaps even earlier, there were at least two or three direct routes that crossed the river Sieve in the centre of the Mugello valley, where the northern and southern hills meet near the river. One bridge was located at S. Piero a Sieve, at the western end of the largest plain in the valley; another bridge was located further west, near Bilancino at the eastern edge of the smallest plains in the Sieve and which naturally were the least accessible; the third was in Borgo S. Lorenzo di Mugello”*. It is worth pointing out that Plesner is referring to the Lombard period (6th-7th centuries) and even earlier (that is Roman times) and he realises (as did Sterpos) that there must have also been a bridge across the Sieve to the west of Bilancino; underlining that *“at the western edge of the smallest Sieve plain”*, Plesner is referring to the bottleneck in the Sieve valley, where the Colombaiotto bridge was unearthed.

²⁹ Account cited, page 4.

Bilancino reservoir (January 1999): *the rays of the early winter sunset lap the water of the reservoir, which now covers the remains of Colombaiotto bridge. The same fortunate fate which temporarily unearthed its remains has also submerged the bridge forever, as if to honour its centuries-old rest.*



This affirmation is not based on rigorous epigraphic proof, but it is backed up by numerous converging archaeological clues, the authoritative opinion of Galliazzo and the so-called “common sense” that has always advised us to evaluate a discovery within the general context of where it should be logically placed.

For twenty years, we have searched for and uncovered material remains of the Roman road, guided by the route the nature of the area indicated as the most practical and direct way to cross the Apennines. We stopped when we reached the left bank of the river Sieve because of a missing bridge and because all memory of its existence had disappeared.

Then, casual circumstances revealed its remains right where we thought it must have been built.

For this reason, we are profoundly grateful to that fortunate

“fate” which caused these remains to come to light when it was so important to be aware of its existence. Unfortunately, the remains of the bridge saw the light of day for only a few years, nevertheless long enough to document their precious presence.

That same fate later wanted this testimony of ancient civilisation to be sacrificed on the altar of modern civilisation, making the remains disappear once again, perhaps for many centuries, below the 30 metres of water of the Bilancino reservoir.

Now when we stop on the banks of this huge reservoir, we cannot help but feel a great sadness because those submerged ruins will never be seen again. However, their image will remain impressed forever on the pages of this book where they can be admired and viewed by those who unlike us have not experienced the thrill of seeing them.

PART EIGHT

IDENTIFICATION OF THE REMAINDER OF THE ROMAN ROUTE FROM BOLOGNA TO FIESOLE AND PROBABLE ALTERNATIVE ROUTES DURING THE IMPERIAL AGE

CHAPTER XIX

THE ROUTE FROM COLOMBAIOTTO BRIDGE TO FIESOLE

1 - Difficulty in perceiving clues and caution in the interpretation of place names.

2 - The morphology of the area alone indicated the most probable route of the road from Colombaiotto bridge to Fiesole.

1 - Difficulty in perceiving clues and caution in the interpretation of place names.

Prior to the discovery of Colombaiotto bridge, we explored the hills south of the Sieve, searching for the continuation of the Roman route towards Fiesole. Ancient historic sources all mentioned the existence of extensive marshland in the river valley east of Bilancino. Therefore, common sense suggested that the Roman road would have avoided the marshland and ascended towards the hills of S. Giovanni in Petroio and Trebbio. After the fortunate discovery of the bridge, right where we had predicted, any remaining doubts regarding the continuation of the road in a straight line were dispelled. We dedicated our efforts to finding the route towards Fiesole, observing the orography and ignoring existing roads and buildings.

For those who live in the midst of sprawling residential and industrial settlements, it is a huge effort to imagine what the landscape must have looked like two thousand years earlier. Everything manmade has to be ignored because it simply did not exist two thousand years ago.

In intensely inhabited areas, such as the Sieve and Carza valleys (and even more so near Fiesole and Florence), there is a network of roads linking a mass of large towns and small hamlets; it is extremely difficult to delete these presences and they unconsciously influence our thoughts. In particular, the present-day road system distracts anyone attempting to guess the route of a road that has long disappeared.

We found it difficult to observe

the valleys, hills and ridges without ignoring the web of tarmac and dirt roads. Undoubtedly, our search in the uncontaminated woods on the Apennine range was much easier. For centuries, only hurried wayfarers had travelled through these woods, doing nothing to modify nature. Here, nature had not quite hidden the traces of an ancient presence, allowing us to read the remains of a distant past.

The area south of the Sieve was extremely different. We immediately gave up any hope of finding tangible proof of the road; at most, we could evaluate whether any causal discoveries unearthed in the past (and perhaps mentioned in archaeological guides or hinted at by local clues) could be linked to the road.

We learned of nothing. After all, this was not surprising, considering that the Roman road did not need to be paved in this area as it did on the high altitudes of the Apennine range. Very probably, once the *glarea* road was no longer used for long-distance journeys and no longer needed to be maintained, it soon lost its main road status, was downgraded to a local road and subjected to the modifications and improvements forced by the requirements of new settlements.

We also considered the place names but with due caution. With the passing of time, if the same place has seen a sequence of settlements and events of varying weight, the name of the most recent event is often handed down. Just as one



S. Giovanni in Petroio: *a very recent image of the church.*

one settlement can be superimposed on another; the same can apply to place names, so that one cancels the other.

Therefore, to avoid falling into interpretational errors, it is necessary to identify the exact age being referred to, otherwise one risks depending on clues that are too distant from each other in terms of time and which fail to provide a correct historic reconstruction.

The concept of “distant from each other in terms of time” requires explanation.

Just as when one looks at the horizon and distant images are superimposed on each other and appear to be close together, when studying events in ancient history we tend to reduce temporal space without perceiving the modifications that took place over 50 or 100 years. For example, when we think of an event that occurred in 200 B.C. or 100 B.C., we do not give the correct weight to the temporal historic, political and environmental differences that occurred during those 100 years because we have the impression that little change took place.

However, we have a different perception of more recent time. In fact, when considering an event that dates back to 1900, although 100 years have passed we instinctively capture the multitude of events that distinguished the past century and the enormous developments and differences matured in every area of human activity. This utterly instinctive flattening of remote events creates

a false idea of those distant events, especially as concerns intervention on the ground.

Therefore, the layout of the settlements and road system between the one hundred years from 150 B.C. to 50 B.C. cannot be considered stationary; huge changes took place that must be considered according to their chronology. This means a place name must not only be considered in its local context, but it must also be correctly placed in its original historic context, so that the chronology of the area can be precisely reconstructed.

An example that anticipates a topic dealt with in paragraph 5 of chapter XXI, clarifies this concept. The place names “Terzolle”, “Quinto”, “Sesto Fiorentino”, “Settimello”, etc. are place names near Florence, that unwind towards Barberino del Mugello. Scholars have always maintained that these place names originate from Roman milestones and, therefore, map out a Roman route towards the Apennines. We have no objection to this interpretation.

However, we do object when they identify this route as the first transapennine route built by C. Flaminius, proving that they did not first ascertain the historic context and motivations for the birth of these place names. This road was built

after Florence had been founded by the Romans, therefore it was built over one hundred years after C. Flaminius' route. Obviously, these place names have been handed down to us because the second route lasted longer and replaced the first, which was abandoned and fell into oblivion.

2 - The morphology of the area alone indicated the most probable route of the road from Colombaiotto bridge to Fiesole.

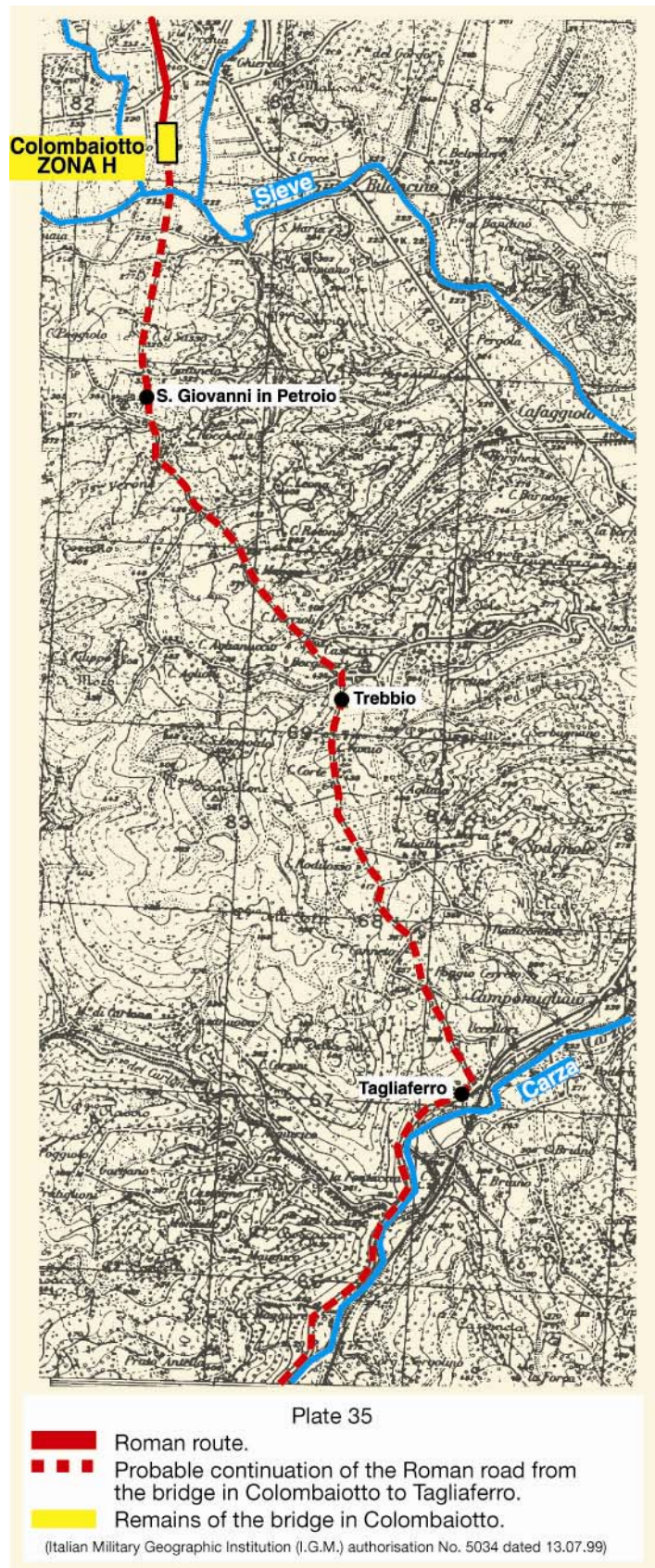
The lack of place names that definitely date back to the first half of the 2nd century B.C. and the lack of reliable archaeological finds in the area between Colombaiotto bridge and Fiesole, forced us to rely only on a detailed exploration of the area, in an attempt to understand which route "our road" could have followed in relation to the morphology of the landscape. We imagined those wild hills and valleys covered by woods and without any settlements¹ of any importance, criss-crossed by a web of paths worn only by the feet of primitive people. We believe that it was only with the arrival of the Etruscans that the road system took on a true transapennine significance.

We decided to reach Fiesole on foot, as did our ancestors for thousands of years.

Where the existence of natural obstacles allowed, the most logical thing to do was stick to the straightest route.

We were convinced that once Flaminius crossed the Sieve near Colombaiotto bridge (233 metres above sea level), he would have continued straight on, up to S. Giovanni in Petroio (372 above sea level) and onwards to Trebbio (435 above sea level), then re-descending to Tagliaferro (250 above sea level) in the valley of the river Carza. This route covered six kilometres and descended about 200 metres with an average gradient of 6.45%.

The route from Tagliaferro headed directly to Fiesole and probably coasted the left bank of the Carza from north to south. It continued along the valley floor with a very slight ascent for about 7 kilometres to beyond



¹ Undoubtedly there must have been a few Etruscan-Ligurian villages dotted around the hills, especially along the route of the pre-Roman transapennine path, but they could not have been important enough to condition the choice of C. Flaminius' route.



S. Giovanni in Petroio (April 1997): the cart track that descends in a straight line from S. Giovanni in Petroio towards Colombaiotto bridge probably retraces the Roman route. The Bilancino dam is on the right.

Fontebuona (337 above sea level), almost coinciding with the present-day trunk road 65. It then continued straight along the western slopes of Poggio Torricella and reached Uccellatoio at an altitude of 489 above sea level, where it started to descend towards Fontesecca². From here, it resumed its route along the ridge, as does the present-day trunk road, passing through the villages of Trespiano and Lastra. A few hundred metres further south (near the present-day “Il Cionfo”) it probably diverged off to the east in a straight line (like the present day tarmac road) heading along a steep downward slope as far as the torrent Mugnone, beyond which it re-ascended to Fiesole.

Although we do not deny the great importance of Fiesole at this moment in history when Rome consolidated its dominion in Cispadania, we are convinced the road did not turn towards the urban centre of Fiesole at “Il Cionfo”, but continued straight on towards the Arno where it joined the existing pre-Roman road system, heading



Plate 36
Probable Roman route from Vaglia
to Montorsoli.

(Italian Military Geographic Institution (I.G.M.) authorisation No. 5034 dated 13.07.99)

² We do not believe the Roman road followed the route of trunk road 65 through Pratinolo in this point, because it would have passed on the eastern versant of Poggio Torricella, when the Romans always preferred the western versant.

towards Arezzo³ and the centre of Etruria, towards Volterra.

In fact, when planning the route of a long distance road, the Romans always preferred the shortest route even if this meant missing important settlements. In this case, a diversion towards Fiesole would have implied more disadvantages than advantages. It would have been necessary to overcome a steep gradient (a 120-metre difference in level) from Cionfo to Mugnone, and then a steep climb (a 215-metre difference in level) to Fiesole, over a stretch of just 2 kilometres. Thus, in this case too, a short and practical long distance road, linked to Fiesole by a very short diversion was preferable. Furthermore, its continuation in a straight line joined up with the right bank of the Arno where, although “*Florentia*” did not yet exist, there was already an important trade centre whose luck had probably increased thanks to the presence of a river port and a bridge that linked the transapennine road system with Volterra.

Therefore, according to the logic outlined by the morphology of the area, after Cionfo, Flaminius’ road continued along the route of the “Bolognese road” heading towards the Arno along a route that passed through the present-day Piazza della Libertà, Via S. Gallo and Piazza S. Giovanni. We share without reservation the opinion expressed by Daniele Sterpos⁴ in the 1960’s, before the numerous archaeological finds described in this book were discovered: “*many also believe there was a Roman road from Bologna that passed through the Savena valley towards the Futa pass, which entered the Mugello valley and exited near Pratolino and then descended to Florence along the ridge between Terzolle and Mugnone: it could also have retraced a route followed by the Etruscans during their expansion north of the Apennines. The age of either end of the route appears to be proven (omissis)... towards Florence the discovery of*

funerary steles trace a road from Pratolino to the gate of S. Gallo and onwards to Piazza S. Giovanni, where a Roman gate has been recognised”.

This theory regarding the first Roman road through Florence was later confirmed by Sterpos in 1981, who after carrying out an in-depth study on the matter⁵ came to the following conclusion: *I do not believe that after entering the Mugello valley, Flaminius headed towards Fiesole. He may have crossed the Sieve near*

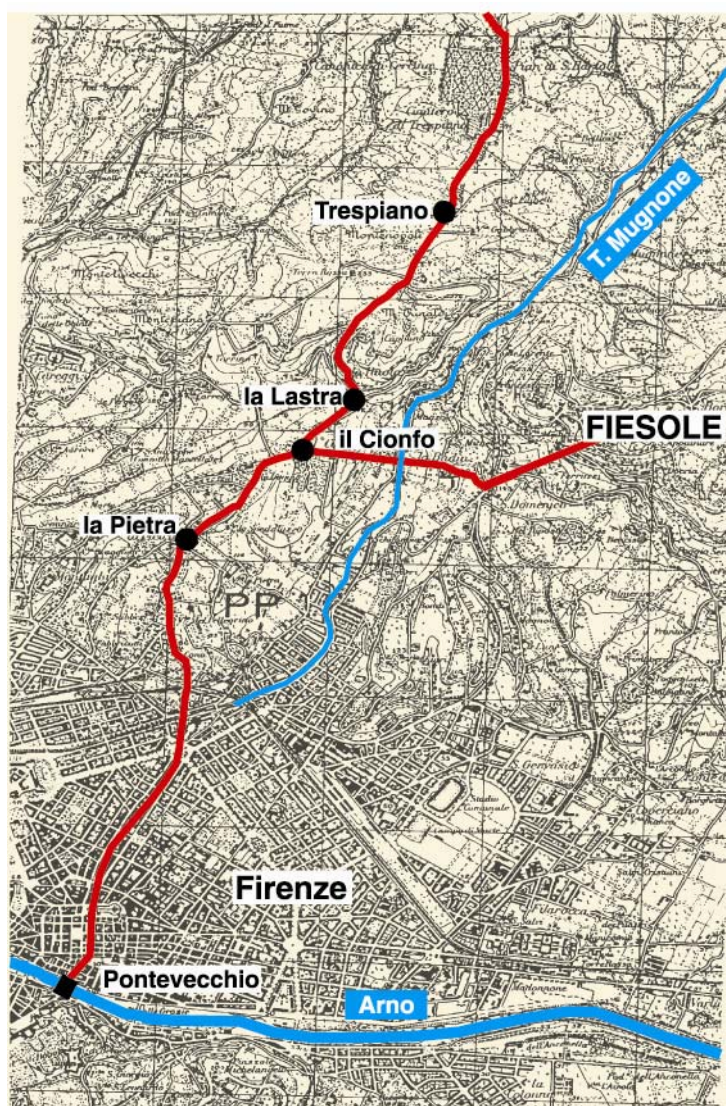


Plate 37
Probable Roman route from Trespiano to the river Arno with diversion to Fiesole.

(Italian Military Geographic Institution (I.G.M.) authorisation No. 5034 dated 13.07.99)

³ From the bank of the Arno, C. Flaminius continued to build the road as far as Arezzo, probably following the existing road system along the route, which was later called the Via Cassia.

⁴ Daniele Sterpos: “Comunicazioni stradali attraverso i tempi: Bologna-Firenze” published by Soc. Autostrade S.p.A. and by Istituto Geografico De Agostini, Novara 1961, page 11.

⁵ Daniele Sterpos: “La viabilità romana e la prima storia del Mugello”, work cited, page 4.



Westward view from Fiesole: the numerous buildings along the opposite ridge, beyond the river Mugnone, follow the straight line of the present-day trunk road 65 ("della Futa") between Trespiano and La Lastra; very probably the first Roman road retraced the same route towards the Apennine pass.

Bilancino; (omissis) [the road] then climbed towards S. Giovanni in Petroio and Spugnole, and descended towards Tagliaferro. From here it may have re-ascended the Carza as far as Pratolino and then continued towards Florence, as does the present day road, not passing through Fiesole but below, converging with the Etruscan road (and this is the important point) which certainly went from Fiesole to Arezzo and which in part coincided with the present-day Sette Ponti road".

Our search on the Tuscan versant ended here, on the right bank of the Arno, where "*Florentia*" was founded in the middle of the 1st century B.C. We leave to other enthusiasts the identification of the exact route to Arezzo, hoping that our efforts contribute towards providing certainty at least about the Apennine route.

However, we suggest seriously considering the route indicated by Antonio Bacci⁶, who has studied with particular care the traces of the stretch of road from Arezzo to Florence that can be attributed to the consul C. Flaminius. Here we limit ourselves to just quoting his opinion about the subject⁷: "*The new road from Bologna to Arezzo must have been very important if Livy mentions its construction (no mention is made of numerous other consular roads such as the Cassia or the Clodia). Therefore, this road could not have been either a path or a mule track: a consul and his legions built this road and it was evidently a memorable feat (omissis).*

Therefore, the route between Bologna and Arezzo was a road of considerable importance at least in the time of Livy, and thus already

⁶ Antonio Bacci. "Strade romane e medievali nel territorio aretino"; Grafiche Calosci, Cortona, 1985.

⁷ Antonio Bacci. "Il territorio aretino"; in Minutes of the Convention "La viabilità tra Bologna e Firenze nel tempo" published by Costa Editore, Bologna, 1992.

at the start of the Empire, it must have still been the route normally used between the two cities (omissis).

Therefore, there were two main roads from Arezzo to Bologna over the centuries:

- 1) Via Casentino, through Subbiano, Bagno di Romagna and Forlì, which joined the Via Aemilia; this road was described in detail during the 12th century in the Annales Stadenses, and indicated in maps by the Canonica Aretina in the 11th century.*
- 2) Via Valdarno, through Quarata, Ponte Buriano, Monsoglio, Pian di Laterina, Ponte Romito, Montalto, Levane, Ponte di Levane, Montevarchi, S. Giovanni, Figline, Incisa, the S. Donato pass, L'Apparita,*

Bigallo, Bagno a Ripoli, Ponte Vecchio, Firenze.

Of the two, I do not believe the Via Casentino was built by Flaminius. This road links Arezzo to Forlì and seems to presume the existence of the Via Aemilia, which we know was built at the same time as the road we are looking for. On the other hand, Forlì is too far from Bologna and this would be stretching Livy's indication "to Bononia" beyond any logic or reason.

Therefore, this leaves us with the Valdarno, which was in effect a grandiose road: it featured great bridges (the bridge at Buriano, reconstructed in 1277 features 7 spans), milestone place names (Trigesimo near Levane, Vigesimo near Figline, Quarto in Bagno a Ripoli), and a practical route".

CHAPTER XX

THE ROUTE FROM MOUNT VENERE TO BOLOGNA

- 1 - From mount Venere to mount Adone.
- 2 - The detour around mount Adone.
- 3 - The strategic position of Brento.
- 4 - From mount Adone to Bologna.
- 5 - The important pre-Roman transapennine pathway conditioned the choice of location for founding *Bononia* and showed C. Flaminius which route to follow.

1 - From mount Venere to mount Adone.

Just as on the Florentine versant from Colombaiotto bridge to Fiesole, on the Bolognese versant from mount Venere to Bologna, we were not able to use any archaeological evidence based on the discovery of stretches of Roman road. We did not even attempt to carry out any excavations because we were convinced that due to the geology of this part of the ridge, the Romans would not have paved the road but would have just flattened the already solid and well-drained ground, and therefore the road would be impossible to date¹. Only between Pieve del Pino and Paderno, due to the presence of scaly clay, would paving have been indispensable, but even if paving had been laid, it would certainly now be impossible for us to find any traces due to the constant water erosion and seepage that form the typical “calanchi” (erosion furrows).

We also thought that the numerous settlements near Bologna and the intense use of the route during the Middle Ages would have certainly destroyed any surviving stretches of the paved road.

After noting that neither archaeological cartography nor local guidebooks mention any significant finds, we intensified our surface investigations, bearing in mind the clear and obvious orography. In fact, the ridge that follows the left of the Savena torrent from its source progressively descends as far as the plain where *Bononia* was founded. Because stretches of the Roman road exist on the summit of this ridge from mount Poggiaccio to mount Venere, almost certainly its route continued northwards, along the same watershed². Thanks to its direction and altimetry, this ridge was the most convenient route to Bologna, and because it maintained a certain altitude, it was possible to control the Savena valley on the right and the Setta valley on the left below.

Thus we started our explorations from mount Venere towards the north, making good use of the experience gained from our former searches (which always forced us to follow the top of the ridge - however only when the altimetry did not present sudden slopes that would have forced a useless ascent or descent).

¹ The discovery of the remains of the *glarea* road in Predosa, described in chapter XV, was due to a rare combination of favourable environmental circumstances that have preserved them and good luck.

² This not only coincides with the elementary logic of ancient road systems, in the preliminary considerations regarding his research into the “Flaminia Militare” Nereo Alfieri states (work cited, page 56): “... In practice, if it were possible to identify the pass or a mountain stretch of the Via Flaminia “minore”, it would be reasonable to think that its continuation would follow the initial furrow and spur.

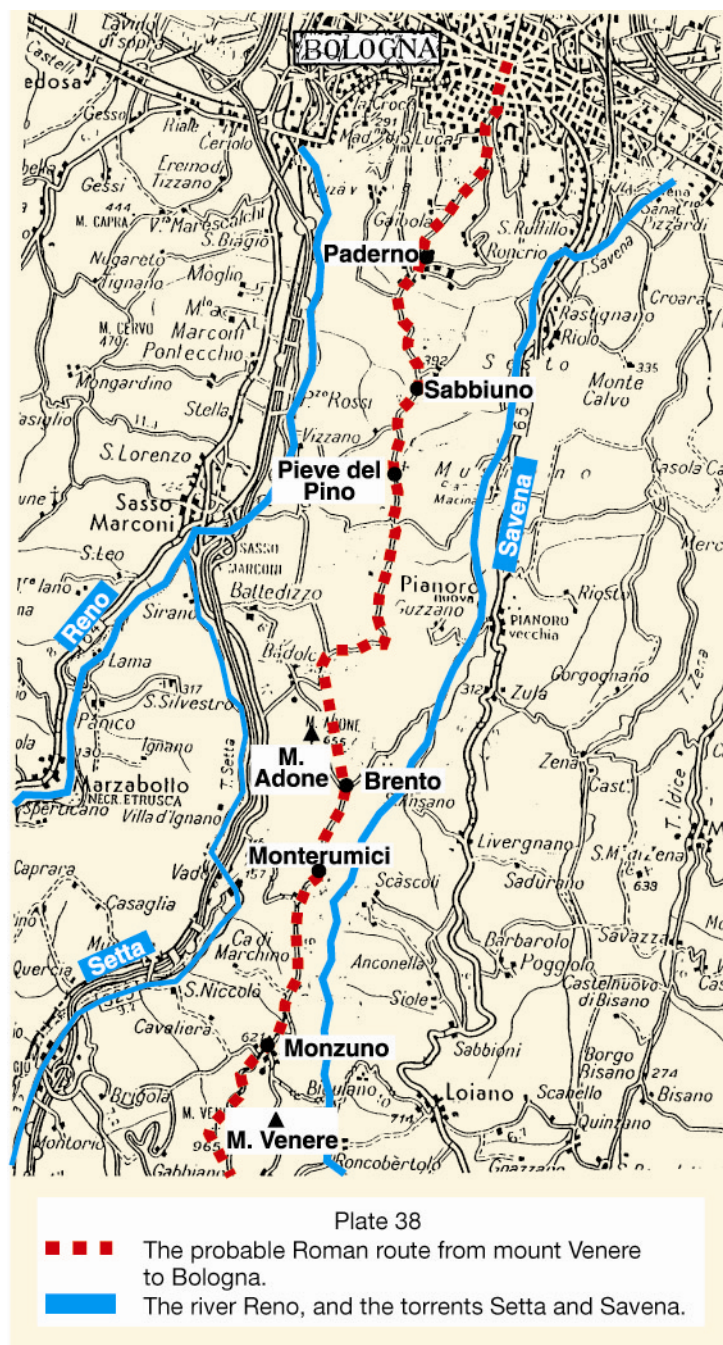


Mount Venere (965 metres above sea level): *the western versant of mount Venere. The Roman road probably passed below the peak (at the lower edge of the present-day conifer wood) maintaining an altitude aligned with the direction of the ridge to avoid ascending and then descending the peak.*

With these principles in mind, we looked for the Roman road. On the upper western slopes of mount Venere (the preferred versant because more exposed to the sun), we only found a north-south cart road which passes below the peak and rejoins the ridge descending towards Monzuno; its position, direction and straightness suggests that it runs along the ancient route³.

Instead, the present carriage road runs along the eastern versant of mount Venere and then rejoins the ridge descending towards the north. This area of the route is treeless; therefore, it is possible to see the ridge that heads straight towards mount Adone.

Just below the peak of mount Venere (at an altitude of 850 above sea level), the road descends to Monzuno (621 metres above sea level) with a gradient of about 9%; this 3 kilometre stretch features the most significant difference in level of the entire transapennine route. This proves the extreme overall convenience of the route considering that for the Romans,



a gradient of 15% along mountain stretches was considered acceptable⁴.

From Monzuno, the ridge continues its gentle descent; the Roman route must have run along the ridge as far as Monterumici

³ Unlike the fate of other stretches, we are convinced that even many centuries after its construction, this point of the Roman route has never undergone any diversions thanks to the stability of the ground. This theory may be confirmed by a 9th century document that records the passage of the Via Clodia through Gabbiano, a small village on the western slopes of mount Venere, about 1 kilometre below its peak. Chapter XXI, paragraph 4, provides more detail about this historic source.

⁴ Lionel Casson: work cited, page 138: "Grades were carefully adjusted, but were rather steep by our standards, going as high as 15 per cent. At the Maloja pass between Italy and Switzerland, for example, the modern road uses twenty-two curves to get up a slope that the ancient took in three".



Mount Venere (965 metres above sea level): *the present-day cart track on the upper western slopes of mount Venere probably retraces the straight line of the Roman route.*

where it probably avoided the peak by passing along the western slope, thus maintaining an altitude that allowed it to rejoin the profile of the ridge top without significant differences in level ⁵.

North of Monterumici, the two valleys of the Savena and the Setta draw very near to each other, to the extent that the ridge narrows so much that there is no other alternative other than the route along its summit. This orographic condition, identical today to the situation two thousand years ago, forced modern engineers to build the provincial road from Monzuno to Brento exactly along the top of this practically flat watershed.

Here too we had no doubt that the provincial road exactly retraced the Roman road and dissuaded us from carrying out any explorations beyond this route.

⁵ The western slope of Monterumici is very rough due to the repeated landslides, which have also undoubtedly swept away the Roman road.



Mount Venere (965 metres above sea level): *sheep grazing on the eastern slopes of mount Venere from where it is possible to view the Apennine chain. Loiano is on the horizon.*



Mount Venere (965 metres above sea level): *even the present-day tarmac road that descends from mount Venere towards the north follows the summit of the ridge, aligned exactly with mount Adone, which can be seen on the horizon.*

Photograph taken from the top of mount Adone: *the present-day provincial road that heads south from Brento unwinds along the exact summit of the ridge retracing the ancient transapennine route that continued towards Monterumici (in the foreground) and mount Venere (in the background). The Savena valley follows the entire ridge (on the horizon) and where we discovered the Roman road.*





Mount Adone (655 metres above sea level - south versant): *the straight line of the ridge descending from Monterumici towards Brento is still used by the tarmac road. It is interrupted by the impressive massif of mount Adone.*

2 - The detour around mount Adone

Finding the continuation of the route towards Bologna was more difficult near mount Adone, which rises imposingly on the ridge top, interrupting the descent towards north. When the present-day road from Monzuno reaches the first spurs of mount Adone, it forks off, avoiding the obstacle: the eastern fork goes through Brento and descends rapidly towards the Savena, which it reaches at Pianoro Vecchio; the western fork runs along the base of its rocky walls as far as Badolo. After numerous verifications and explorations, we were convinced that the ancient track, used first by the Etruscans and then by the Romans did not follow either of the modern routes, for two reasons:

- the present-day eastern route leaves the summit of the ridge at Brento and descends down into the bed of the torrent Savena, which it follows as far as Bologna. We do not believe that the Etruscans, coming

Mount Adone (655 metres above seal level - west versant): *the impressive and rocky western walls of mount Adone stand almost vertical; during all ages, they have constituted an impassable obstacle.*



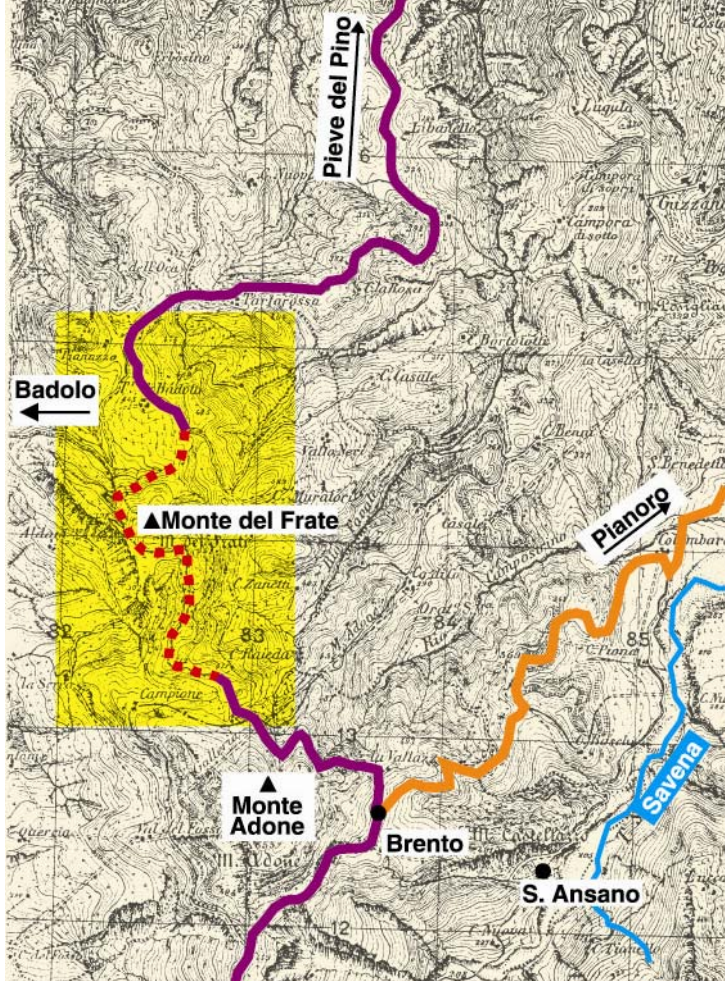


Plate 39

Probable Roman route around mount Adone:

- The present-day carriage road.
- - - Present-day footpath.
- Present-day provincial road towards Pianoro

(Italian Military Geographic Institution (I.G.M.) authorisation No. 5034 dated 13.07.99).

from Fiesole and travelling along the top of the ridge, abandoned it 20 kilometres before Felsina, when they could have continued along it as far as Felsina. Neither do we think that the Romans preferred to construct a military road in a valley; a road that was designed to police the heights and guarantee security along this important transapennine link.

- The western versant of mount Adone consists in vertical walls that rise about one-hundred metres above the Setta valley and, together with the Pliocene spur that stands over Badolo, formed an unsurpassable barrier, which would have made the construction of a 2.40-metre wide military road extremely demanding.

Furthermore, any road built below these rocky walls would have easily been open to attack by enemies who managed to take possession of the positions above. Therefore, a route along the western versant would have been illogical considering it would have been more convenient to make a detour around the massif of mount Adone on the eastern versant, where the slopes descend downhill without any rocky walls. These considerations convinced us that we had to look for the Roman route on the eastern versant of mount Adone, although the morphology of this versant also featured a few uncertainties. It was only thanks to the decisive contribution by Carlo Alvisi ⁶ (to whom we would like to express our thanks) that we were able to shine light on the probable route used by the Romans to get round mount Adone. The results of his research (with which we agree entirely) identified the following itinerary on the eastern versant:

- from the first spurs of the mount Adone massif, the route follows the present-day provincial road to Brento (at an altitude of 451 metres above sea level). After Brento,



Mount Adone (544 metres above seal level - north versant): *the present-day gravel road that heads towards mount Del Frate subsequently turns into a path that coasts its western slopes and then the eastern slopes of mount Adone, joining the dirt track to Brento.*

⁶ Professor Carlo Alvisi, professor of Neurosurgery at Bologna University and an expert Rambler, has crossed the Apennines on foot from Bologna to Fiesole on numerous occasions, following where possible the Roman route. Enthusiastic about our research, he often accompanied us in our explorations and in this case suggested to us the detour around mount Adone: he published an article about the topic in the magazine "Savena, Setta, Sambro" (Year II n.1 - 1992, I six monthly period, page 106).

the route turns left along the municipal carriage road which rises, going around the base of the eastern side of the massif, and heads towards the village of “Campione”;

- about one kilometre after Brento, the route leaves the municipal road and continues along a gravel cart road, which then turns into a dirt track coasting the eastern slopes of the Pliocene spur along level ground at a constant altitude of about 500 metres above sea level;

- after a further 700-800 metres, the cart track is reduced to a path that goes around the western slopes of mount Del Frate (at an altitude of 541 above sea level), and then joins a gravel road, that after 400 metres, reaches the tarmac road (at an altitude of 450 metres above sea level) towards Pieve del Pino.

In conclusion, by following this route, mount Adone and mount Del Frate are avoided by travelling just 3 kilometres along an almost level cart road and path, easily tackled in any weather. In fact, from the altitude of 449 above sea level at the bifurcation of the road coming from Monzuno, the road follows the Badolo-Pieve del Pino route (440 metres above sea level), after reaching the maximum altitude of 520 metres on the upper slopes of mount Del Frate.

3 - The strategic position of Brento.

The mount Adone massif interrupts the linear trend of the ridge descending from the pass at mount Poggiaccio, rising above the transapennine road like a natural bulwark defending Bologna. We have already highlighted how, for a number of kilometres to the south, the torrents Savena and Setta respectively on the right and left of the ridge, come so close together that there is no alternative route other than along the ridge. In this position, the watershed becomes a veritable viaduct that ends against the rugged cliffs of mount Adone.

It is intuitive that, from the most ancient times, such an impressive natural defence (aided by the presence of mount Castellazzo with its vertical cliffs reaching eastwards

and touching the waters of the Savena) was a carefully guarded position from where it was easy to control the compulsory passage of the transapennine track.

Brento was the ideal place for such a garrison, and is often mentioned in ancient historiography. We are certain that before the Roman conquest, Brento was a defensive bulwark used by the Gauls against enemies from Etruria, as theorised in the description of the parish of S. Ansano in Brento⁷: *“It is not known whether Brento, the ancient Brintum of the Romans, was established by the Etruscans, Boi Gauls or the Romans themselves; however, we are tempted to believe that because Brento closes the mountains belonging to the ancient Boi region, it was the most suitable place to defend the area against access from Etruria. Therefore, perhaps Brento was founded by the Boi Gauls and was home to one of the one-hundred-and-ten tribes of this Nation, and thus in the times of the Republic of Rome it was a large and well-equipped city”*.

It is normal that with time, an increasingly sprawling urban centre grew up around an initial fortified nucleus, encouraged by two essential conditions that always determined the birth and growth of settlements in antiquity:

- the security provided by the presence of military garrisons;
- the trade promoted and encouraged by the transapennine road.

And if, as appears probable, Brento was founded by the Boi Gauls, the Romans undoubtedly contributed towards increasing its importance with the construction of a true road which retraced a former route and considerably improved the conditions of the road system.

It is not surprising therefore, that Ludovico Savioli⁸ mentions Brento quoting the “*Liber Pontificalis Ecclesiae Ravennatis*” by Agnello:

“In his opinion, Brento was a city not far from Bononiensi Urbe; today it is a small village between Pianoro and Monzone beyond the Savena, located on the ancient military road mentioned in note (S) of the first Section”.

Therefore, Brento is mentioned as being a “city” so important that during the age of Valentinian

⁷ “Le chiese parrocchiali della Diocesi di Bologna ritratte e descritte “ - volume III - Bologna, S. Tommaso printing works, 1844.

⁸ Ludovico Savioli: “Compendio storico preliminare agli Annali bolognesi dall’anno di Roma 363 al 1274”; section II, page 59.

III, it was a bishop's residence⁹ located, according to Savioli, on the ancient military road built by C. Flaminius.

Its position along a main road induced the Barbarians¹⁰, to destroy Brento at the start of the 5th century A.D. because it was along their path during their first invasion of Italy. After a period of decay, Brento reacquired its ancient strategic importance and at the end of the 6th century A.D., there is news of the existence of a castle¹¹, probably built by the Byzantines as an extreme Bolognese defensive bulwark against probable attacks by the Lombards from the south along the Roman transapennine itinerary.

Mention is also made of the castle in Brento in the middle of the 8th century, proving again the strategic importance through the ages of its position at the foot of mount Adone.

4 - From mount Adone to Bologna.

In the second paragraph, we describe the detour around mount Adone which ends by rejoining the tarmac road along the watershed. The modern road system still exploits the summit of the ridge towards Bologna and goes through Pieve del



Pieve del Pino (320 metres above sea level): *the road that links Pieve del Pino to Paderno still follows the summit of the ridge more or less retracing the straight line of the Roman route.*

Pino, Sabbiuino and Paderno, maintaining an altitude between 400 and 300 metres above sea level for about 14 kilometres, along a regular descent as far as Paderno (267 metres above sea level). Then, after just a few kilometres, it rapidly descends as far as

⁹ Contemporary scholars in particular have widely discussed the authenticity of the information provided by Agnello in his "Liber Pontificalis Ecclesiae Ravennatis" as regards the decree by Valentinian III, which attributed to the Church of Ravenna fourteen Dioceses in Emilia and Romagna, including the diocese of Brento. This interpretative controversy already existed at the end of the 18th century: Ludovico Savioli (work cited, page 59) wrote the following about the matter: "*The authenticity of the same Decree published by Ughelli and Rossi has been discussed by critics. However, this has made the facts no less certain. The Decree records the fourteen Churches attributed to the Church of Ravenna, and that is : Sarsina, Cesena, Forlimpopoli, Forlì, Faenza, Foro di Cornelio, Bologna, Modena, Reggio, Parma, Piacenza, Bersello, Vicovenza, and Adria. The first Pontifical confirmation entered in the public deeds of the Church of Ravenna is given to Mariniano, Archbishop by Pope Gregory in about the year 595. Two churches were added, Comacchio and Ficcole, now called Cervia. Agnello is the only source to mention Brento in his Pontifical book, and he includes it among the fourteen [churches]. In his opinion, Brento was a city not far from Bononiensi Urbe (Omissis)*".

Savioli substantially recognises the information as authentic ("*However, the facts have been made no less certain*") that Brento was important enough to have been the seat of a diocese. Those who now question the authenticity of the document, tend to deny the status of Diocese enjoyed by Brento and even uphold that *Brintum* should be interpreted as *Brixillum* (the present-day Brescello, 27 kilometres northwest of Reggio Emilia) implying that the author of the document confused the two places (A. Benati: "I confini occidentali ed orientali della diocesi bolognese nell'alto Medioevo", in "Ravennatensia", II - 1972, page 365; P. Guidotti "Le strade transapenniniche bolognesi nel Duecento"; Bologna, 1988, page 84). With the utmost good will, we do not understand on what basis these contemporary scholars found their doubts regarding the authenticity of the document, which instead appears clear and unequivocal. So unequivocal that when the author mentions *Brintum* he specifies its location underlining that it was not far from Bologna (*non longe a Bononiensi Urbe*). Furthermore, the presumed misunderstanding is unfounded considering that the first fourteen dioceses listed already include *Bersello*, that is Brescello (the ancient Brixillum).

¹⁰ The Huns, Goths and Sarnati led by Radagaisus at the end of 405 A.D. invaded northern Italy destroying Vigesimo on the Tuscan versant as well as Brento.

¹¹ G. Ciprio: "Descriptio Orbis Romani" by H. Gelzer, Leipzig 1890, page 32.



Paderno (267 metres above sea level): the route from the Futa pass constantly follows the top of the ridge. North of Paderno, it descends steeply towards Bologna, entering the city from Via San Mamolo.

Bologna, along the narrow valley of the torrent Aposa and enters the historic city centre through the S. Mamolo gate at an altitude of 74 metres above sea level.

If the Roman road followed (as was logical) the top of the ridge, it would have more or less coincided with the present-day road, seeing as there were no alternatives on the slopes of the hills, made particularly unstable by the presence of scaly clays (erosion furrows). Due to this geological condition and the continuous usage of the area, there was no hope of finding any remains of the Roman road and therefore we did not carry out any explorations. Nevertheless, although there is no archaeological evidence, the substantially straight line of the ridge which progressively slopes down to just a few hundred metres of the southernmost limit of the first urban settlement of Roman Bononia, convinced us that C. Flaminius had no other choice than to choose this route.

5 - The important pre-Roman transapennine pathway conditioned the choice of location for founding *Bononia* and showed C. Flaminius which route to follow.

We cannot start our last reflections regarding the motives for choosing the location of Roman Bononia without quoting one of the most beautiful pages written by Giancarlo Susini¹². This illustrious Scholar of Ancient and Roman History provides a very clear idea of the extreme importance of an available water supply, venerated in the ancient world as a deity:

“Water is an essential commodity, perhaps man’s principle resource; for a number of the ancient philosophers it was the fundamental element of creation, during every age it is a condition for existence. For this reason, the most ancient popular memories, or the traces of the oldest human settlements, coincide in

¹² Giancarlo Susini: “L’acqua, risorse, usi e religione” taken from: “Acquedotto 2000 - Bologna, l’acqua del duemila ha due mila anni”; published by Grafis, 1985, pages 14 and elsewhere.

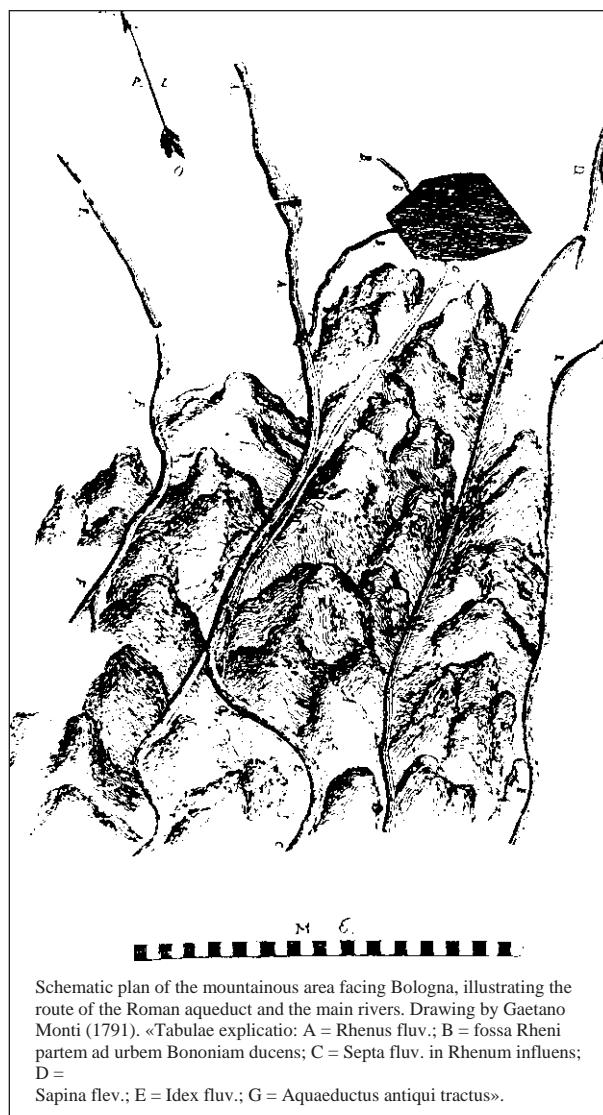
every culture with the presence and the availability of water; similarly, the oldest pathways, the footprints of men travelling from one place to another, their first "roads" coincide with the tracks of the animals they followed through the bush, through clearings and through deserts on their quest for water: to drink, to heal. Therefore, hydronymies, that is place names along watercourses, are the oldest among the names given by man to the environment and the most tenacious in terms of conservation and survival (omissis).

The water collected from urban drains and from rivers and banks also had another function; it was used to irrigate crops and vegetable gardens, and in many cases, canals and ditches marked boundaries between one plot and another in a mainly agricultural society, such was society during the last two centuries of the Roman republic – between the foundation of Bononia, in 189 B.C., and the Augustan colony - the function of the water course was closely linked to how production was organised, the distribution of society and the structure of juridical custom (omissis).

Finally, a large watercourse was an important vector, a link between the Roman city and an emporium where it was possible to set sail towards the Po Valley Delta (omissis).

It has already been said that water – often malodorous or hot – also served to heal man and beast. However, the perennial outflow of water from the ground distinctively highlights its perpetual nature whereby it is continuously replaced but remains the same, making water the authentic symbol of eternity. Therefore its gurgling produces an inexhaustible and uncontrollable voice: the voice of a god; (omissis)".

Just like every other ancient population, the Romans held the highest regard for the presence of springs and watercourses when selecting where to establish urban settlements. Just think of the European capitals such as Rome on the Tiber, London (*Londinium*) on the Thames, Paris (*Lutetia Parisiorum*) on the Seine, Vienna (*Vindobona*) on the Danube and other great cities such as Lyon (*Lugdunum*) on the Rhone and Cologne (*Col. Claudia*) on the Rhine, Florence (*Florentia*) on the Arno, etc. In addition, within Emilia-Romagna when Rome was consolidating its dominion over the Po Valley, we can mention



(Taken from: "Acquedotto 2000: l'acqua del duemila ha duemila anni"; published by Grafis, 1987, page 132.)

Forlì (*Forum Livii*) on the Montone, Faenza (*Faventia*) on the Lamone, Imola (*Forum Corneli*) on the Santerno, Claterna on the Quaderna, Reggio Emilia (*Regium Lepidi*) on the Crostolo, Parma on the same river, etc.

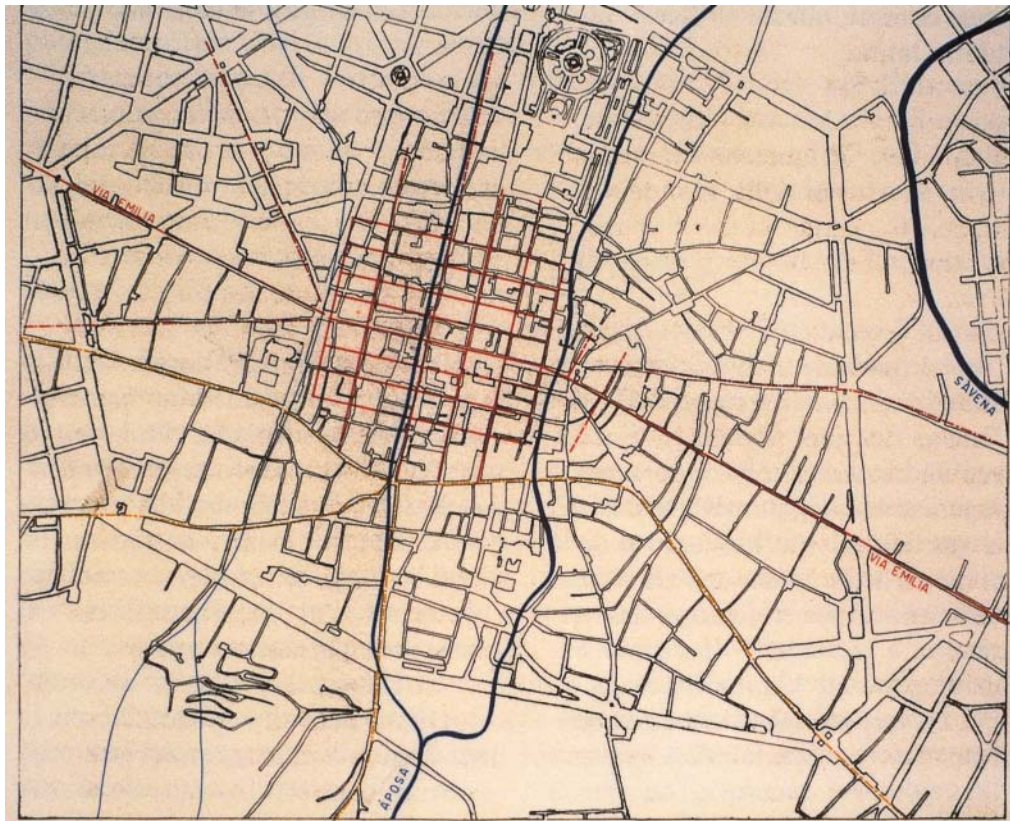
In the light of these facts, it is surprising that when the senators, Lucius Valerius Flaccus, Marcus Attilius Serranus and Lucius Valerius Tappone, were entrusted to found the Latin colony of Bononia in 189 B.C., they did not trace the first orthogonal plan of the city on the banks of the torrent Savena which flowed further east, nor on the banks of the Reno which flowed further west. It is especially difficult to explain why they did not choose the bank of the Reno at Casalecchio, where road system from the south reached its basin, or just a little further south in the present day suburb of Borgo Panigale, on the track running along the foot of the mountains

from Rimini and heading towards Piacenza, which already existed before the Via Aemilia was built.

Considering that the Romans' intelligence and capacity to utilise and exploit the land to every possible advantage is unquestionable, there must have been a very important reason (even more important that the need for abundant and convenient water) why they preferred to found a settlement on the banks of the very modest torrent Aposa¹³.

The reason may have been that they wanted to control trade from Etruria on the transapennine track along the ridge to the left of the Savena, in the exact spot where it entered the Po Valley and where it crossed the track at the foot of the mountains from Rimini towards north¹⁴.

To confirm the undoubted influence played by this pre-existing transapennine track



This plan of the first urban road system in Bononia (189 B.C.) illustrates that the cardo maximus (coinciding with the north-south Via Val D'Aposa, Via Venezian and Via Galliera) is perfectly aligned with the road that descends from the Apennines. Instead, the decumanus maximus (which coincides from east to west with Via Ugo Bassi and Via Rizzoli) forms an angle with their continuation towards the east (Strada Maggiore) and towards the west (Via S. Felice). (Drawing taken from "Storia di Bologna", published by Alfa, Bologna, 1978: Franco Bergonzoni, page 62).

¹³ The extremely scant and seasonal flow rate of the small torrent Aposa could certainly not have guaranteed a constant water supply even for the first few thousand Latin coloni.

¹⁴ Franco Bergonzoni in the volume "Storia di Bologna"; published by Alfa, Bologna, 1978: 62, writes: "in the year 189 B.C. the orthogonal layout of the city of Bononia was defined where the two ancient roads met, one descending along the valley of the torrent Aposa and the other running along the foot of the hills".

Sabatino Moscati, in an article entitled: "E il crocicchio divenne Bologna" published in the Espresso weekly magazine N. 25, year XXXIV on 26 June 1988, page 173, when mentioning the Etruscan origins of Felsina, ends with these words: "... however from the second half of the 8th century B.C., considerations differ, and this is reflected once again in the funereal finds which indicate that a dominant group had been established, holder of political power and economic wealth. Bologna discovered industry and it especially discovered its role as a great crossroads between central and northern Italy: the place where all trade had to pass. And so history is transformed from momentary to eternal because Bologna continues to be an essential and primary link, connection and switching point".

when choosing where to found Bononia, all one has to do is observe the first layout of the city reconstructed by Franco Bergonzoni¹⁵. The *cardo maximus* (present-day Via Val D'Aposa, Venezian and Galliera from north-south) was perfectly aligned with the transapennine track, whereas the *decumanus maximus* (present-day Via Ugo Bassi and Rizzoli from east-west), was offset compared to the track from Rimini to Piacenza, to the extent that it formed an angle with the roadhead of the first non-urban road system. This angle remained when two years later (and that is in 187 B.C.) the consul, M. Aemilius Lepidus traced the Via Aemilia, probably along the route of the existing track.

This observation gives the impression that in 189 B.C. the road through the Apennines was much more important than the road from Rimini. Otherwise, the founders of Bononia would have traced the *decumanus maximus* in alignment with the Rimini-Piacenza track and today, Strada Maggiore and Via S. Felice would be perfectly aligned with Via Ugo Bassi and Via Rizzoli.

Therefore, only an important pole of attraction such as control of transapennine traffic could have induced the Roman Senators to select this position, relatively distant from the rivers required to supply water to a colony destined to become the most important city in the region.

Nor could they rely on the flow rate of the torrent Aposa (extremely modest even in the winter) and which later proved to be absolutely

inadequate to meet the requirements of the community. After almost two centuries, during the reign of Augustus, an aqueduct was built which featured an underground conduit. It was about eighteen kilometres long and drew water from the Setta at its confluence with the Reno and conveyed it to Bologna, beyond the gate of S. Mamolo¹⁶.

If these considerations are founded, it is obvious that two years later, when C. Flaminius chose the route of the Bologna-Fiesole-Arezzo road, he exploited the pre-existing and important transapennine road system by straightening, widening and improving the carriageway, adapting it to Roman requirements and technical standards and paving the areas where the nature of the soil so demanded.

Numerous kilometres of paved road, discovered on the highest areas of the Apennine range, confirm this hypothesis (also supported by many other archaeological discoveries).

Livy does not detail the exact route followed by Flaminius, he just mentions the roadhead of departure (*Bononia*) and arrival (*Arretium*)¹⁷. Therefore, the road certainly started in Bologna and headed south across the Apennines.

This exact topographical indication does not explain why a number of contemporary scholars think that the departure point was in Claterna¹⁸, 15 kilometres further east, along the Via Aemilia, traced in the same year by the consul Marcus Aemilius Lepidus from Piacenza to Rimini¹⁹.

We covered this specific matter in a monograph published in 1989²⁰, where we put forward the logical reasons that openly conflict with the theory that removes the head of the road built by Flaminius from Bologna to Claterna,

¹⁵ Franco Bergonzoni: work cited, page 62.

¹⁶ At the end of the imperial age this aqueduct was abandoned and information about its existence was provided by the Abbot, Serafino Calindri, at the end of the 18th century after he had inspected and described the aqueduct (work cited, part one, page 189) and where he named it the "Augustan Conduit". In 1862, the Municipality of Bologna decided to re-use the conduit, entrusting Antonio Zannoni to carry out a survey and draw up an outline project. On 5 June 1881, the majestic conduit was officially reopened. It still contributes towards supplying water to Bologna.

¹⁷ T. Livius; work cited, book XXXIX, paragraph 2 – paragraph 2: "... *ne in otio militem haberet, viam a Bononia perduxit Arretium...*"

¹⁸ Claterna stood in the place now called "Maggio" near Ozzano Emilia.

¹⁹ The obvious division of the tasks entrusted to the two consuls also openly conflicts with this hypothesis. In fact, if C. Flaminius, who was entrusted to build the road from Bologna to Arezzo, had started in Claterna, to complete the transapennine road he would have had to first build the road from Claterna to Bologna (15 kilometres long) and two important bridges: on the Savena and Idice, a task which was the competence of M. Aemilius Lepidus. Otherwise, he would have had to wait until M. Aemilius Lepidus built the road from Bologna to Claterna and then start work on the transapennine road.

²⁰ Cesare Agostini - Franco Santi: "Analisi critica della via Flaminia Minore"; published by Costa, Bologna 1989, pages 12 and 13.

and blames this huge mistake on Livy. Here we would like to point out that Livy wrote at the end of the 1st century B.C.²¹ when this road was undoubtedly well known, still perfectly preserved and used, perhaps not by military traffic, but at least by light commercial traffic wanting a quick link to Tuscany. Claterna also existed in the same epoch. It was a large and rich city built on the important Via Aemilia. Because Livy was born in Padua, one must suppose that he had excellent knowledge of northern Italy. If the road under discussion had effectively started in Claterna, Livy would have made a

grave and obvious mistake, exposing himself to the quick criticism of his contemporaries and all the other information included in his monumental historic work would have also lost credibility.

Therefore, we give our full credit to Livy's exact indication, noting with disappointment how such a different and unmotivated interpretation is only upheld by those who today, in spite of the illuminating archaeological finds illustrated in this book, continue to claim that C. Flaminius traced the Bologna-Arezzo road along the watershed between the Idice and Sillaro, along the axis of the Claterna-Raticosa pass.

²¹ T. Livius was born in 59 B.C. in Padua where he died in 17 A.D.; he started to write the "History of Rome" in 27 B.C. and continued to write it until his death.

CHAPTER XXI

PROBABLE DIVERSIONS DURING SUBSEQUENT EPOCHS

1. **Diversions: inevitable events on mountain roads.**
2. **The influence of changed security conditions and new settlements along alternative routes.**
3. **The “milestone” place names indicate the course of alternative routes.**
4. **Sallust’s account about the circumstances of Catiline’s defeat in Pistoia (62 B.C.) provides important information**
5. **Alternative routes from Bologna to the Futa pass.**
6. **Alternative routes from Florence to the Futa pass.**
7. **The alternative route over the pass during the late imperial or upper medieval age.**

1 - Diversions: inevitable events on mountain roads.

The transapennine road certainly had to suffer its share of the consequences of natural events that often upset road routes to varying degrees. Although it is true that ridge roads were exposed to fewer risks (for example, they were less likely to be exposed to flash floods), they were often affected by landslides and rock falls which could force either a temporary or permanent route change.

If the interruption was modest, just a straightforward repair was enough to ensure continuity, but if its proportions were large, a permanent detour was sometimes necessary.

This also happened to the Roman road, as we noted by observing the morphology of the area it traversed. In fact, we came across locations where massive devastation had dragged the road downhill, considerably modifying an entire versant (as occurred between Passetegere and mount Poggiaccio and on the slopes of Poggione above S. Lucia). In other cases, modest subsidence

had simply lowered the paving, leaving it almost intact (as noted in Poggio Castelluccio - site D/3), or disrupted the paving for just 10-15 metres (later repaired, as on Poggione - site G/4).

It is easy to realise just how many natural events have affected such an ancient road over the course of the centuries, forcing local diversions or alternative routes and substantially changing the original route.

2 - The influence of changed security conditions and new settlements along alternative routes.

Changing political-military situations and new settlements in the area altered the original route.

It cannot be overlooked that C. Flaminius started to build the road at the end of victorious battles against the Ligurians, who had not yet been completely defeated. They still held the Apennine territories in the provinces of Reggio Emilia, Parma and La Spezia, as well as the whole of Liguria¹.

¹ The wars against the Ligurians continued for over another 20 years. Reminder: in 186 B.C. Quintus Marcius fought against the Apuani Ligurians on their ground (Livy, book XXXIX, paragraph 20); in 185 B.C. M. Sempronius Tuditanus attacked the Apuani Ligurians (Livy, book XXXIX paragraph 32: “*Sempronius set off from Pisa against the Ligurian Apuani, by devastating and burning their fortresses, he opened a passage as far as the river Macra and the port of Luni*”). And again in 183 B.C., Quintus Fabius Labeo sent reports to Rome outlining that there was a danger that the Apuani may invade Pisa (Livy, book XL, paragraph 1). In 180 B.C., the consul, A. Postumius fought against the Ligurians in Parma and Quintus Fulvius in Liguria (Livy, book XL, paragraph 41).

Therefore, there was a potential risk of incursions into the stretch of Apennines that had just been freed. A road that ran along the entire ridge from Fiesole to Bologna was essential to keep the area under military control. However, once these tenacious enemies were finally defeated and the whole of Italy was securely occupied and colonised, the military security required by the demands of war was no longer necessary and the ridge road lost its essential nature. Nevertheless, the particularly safe, convenient and rapid route along the ridge continued to be used and maintained until new situations forced the creation of alternative routes, which were more suited to traffic.

However, one must not think that the colonisation of the countryside around Bologna ended with the dispatch of three-thousand coloni. Once peace was brought to every province (*et quia a bello quieta ut esset provincia effecerat*),² numerous other coloni took possession of the land taken from the Gauls, settling in the most fertile and comfortable areas.

It is very likely that colonial and artisan settlements were established further south in the foothills and the valleys of the Reno and Savena especially, which benefited from the precious and abundant water supply of the two rivers, as well as other centuriated areas on the plains. Roads were created with the new settlements to guarantee communication with cities. As far as the Savena valley was concerned, from Bologna to Pianoro and as far as Brento, a new important road artery (which passed through Paderno and Pieve del Pino) was created as an alternative to the one along the parallel ridge, whose maintenance may have become problematic due to the formation of erosion furrows. A corresponding alternative to the original route perhaps developed over a longer period of time on the Tuscan versant, from its roadhead on the right bank of the Arno, near Ponte Vecchio. New settlements probably developed around this important trade junction as of 187 B.C., encouraged by an efficient road system and waterways that reached the sea. The settlements extended along the course

of the Arno, as well as on the right bank and towards Prato; areas that had been completely liberated from the regular incursions by the Ligurian Apuani.

The continuation of the Via Cassia from Fiesole to Pisa through Prato, Pistoia and Lucca, which took place during the second half of the 2nd century B.C.³, may have further encouraged the proliferation of settlements west of Fiesole, along the Bisenzio and Marina valleys.

Florence, founded during the middle of the 1st century B.C., then began to assume the strategic importance enjoyed until then by Fiesole.

After these events, which developed between 187 B.C. to the middle of the 1st century B.C., a new road axis was probably developed towards the Apennines which exploited an initial stretch of the Via Cassia towards Prato and then turned right and, in Calenzano, entered the Val Marina heading decidedly northwards. This road then became an alternative route to the initial Tuscan stretch of C. Flaminius' transapennine road. Therefore, by the start of the imperial age, there were already two alternative routes to the initial tracts of C. Flaminius' transapennine road, which ascended from Bologna and Florence towards the Futa pass.

Furthermore, we are convinced that during the same epoch, the now consolidated conditions of military safety and a number of large landslides induced the Romans to change the most mountainous stretch of the route avoiding the ascent to mount Bastione, Poggiaccio and Poggio Castelluccio. They very probably opened a road that from the altitude of 800 metres above sea level of the present-day Madonna dei Fornelli, reached the Futa pass (altitude: 903 above sea level) coasting the south-west slopes of the mountains.

3 - The “milestone” place names indicate the course of alternative routes.

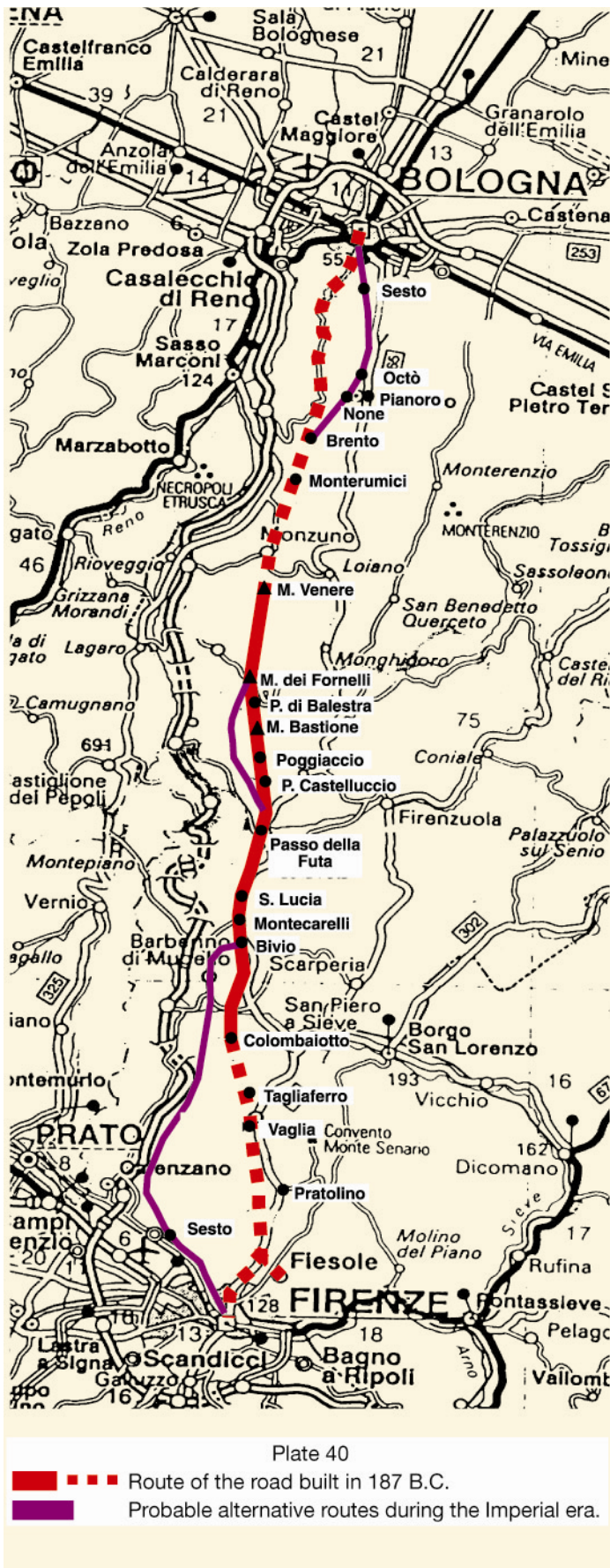
When in 1977 we decided to look for the road, the opinions of historians were based on two different supposed routes:

- almost all⁴ agreed that the axis used was the one that linked Bologna to Fiesole through the

² T. Livius: work cited, book XXXIX, paragraph 2.

³ The Via Cassia was continued from Fiesole to Pisa from 150 to 123 B.C. thanks to the initiative of the consul Titus Quintius Flaminius.

⁴ We are referring to the opinion of those who have identified the Roman road either entirely or in part: Ludovico Savioli, Serafino Calindri, Arturo Palmieri, Daniele Sterpos, Giovanni Uggeri, etc.



Futa pass. However, because their theories regarding the initial stretches of the transapennine road are based on the place names that originate from milestones, they attributed the paternity of the itinerary that entered the Savena valley from the north⁵ and the Val Marina from the south⁶ to C. Flaminius. They cannot be blamed for believing this, because according to the archaeological knowledge of the time, this was clearly the most well founded hypothesis;

- the other theory, which was absolutely new compared to the most commonly held opinion of historians, was the one upheld by Nereo Alfieri, whereby Flaminius' road ran along the ridge which acts as a watershed between the Idice and the Sillaro.

The discoveries described and documented in this volume categorically exclude the second theory and adjust the first: the stretches of road confirmed by "miliari" [milestone] place names are simply later alternatives. However, if one avoids falling into the trap of attributing them to the road built by the consul, C. Flaminius, these stretches of road are very important. They indicate a Roman route created during subsequent centuries, preferred by the people who later settled in the Savena valley to the north, and the Arno and Marina valleys to the south.

This order of events surrounding the creation of the two alternative routes through the foothills is based on pure logic.

In fact, just as today there are continuous residential and industrial settlements from Bologna to Pianoro and there are none along the ridge from Paderno to Pieve del Pino. The same must have occurred two thousand years ago. It is obvious that initially there must have been a road from Pianoro to Bologna, then

⁵ Daniele Sterpos: "Comunicazioni stradali attraverso i tempi: Bologna - Firenze" Istituto Geografico De Agostini, Novara 1961, page 11: "There appears to be evidence of the two final stretches of the ancient route. In fact, at a respective distance of six and eight Roman miles from Bologna, there are two place names, Sesto and Octò which obviously originate from milestones along a route".

⁶ Giovanni Uggeri: work cited, page 589: "The next stretch of the road corresponded to the same route as the modern artery, conditioned by the conformation of the landscape. After rounding the foot of the Cementerie, it must have crossed the Chiosina near the "autostrada del Sole" [A1 motorway]. It flanked the route of the motorway until it ascended Colle (altitude: 120 metres - probably to avoid going round Colle between S. Donato and Calenzano) and in Madonna del Facchino the route reached the left flank of Val di Marina".

a link must have been created between Pianoro and Brento to reach the transapennine ridge towards Tuscany. This new and increasingly popular route was preferred because it was built on more stable ground: It has replaced the initial stretch along the ridge and is the alternative route handed down to posterity through the milestone place names.

It is reasonable to suppose that the alternative route in Val Marina also underwent a similar evolution.

On the Tuscan versant, the chronology of historic events adds considerable support to this new theory. It is very probable that the colonial settlements founded where lasting peace had been established proliferated in the valley of the Arno, Bisenzio and Marina, rather than on the Mugello mountains. Thus, the population of Fiesole, Prato and Calenzano must have progressively increased along with artisan activities, especially after the Via Cassia was extended from Fiesole to Prato, Pistoia and onwards as far as Luca and Pisa during the second half of the 2nd century B.C. The foundation of Florence during the first half of the 1st century B.C. also substantially confirms this proliferation of settlements. This event undoubtedly shifted economic interest and trade to the Arno, just as the former extension of the Via Cassia had shifted them towards Prato and Pistoia. It was only after these events that a new stretch of road was needed. The new road branched off the Via Cassia at Sesto Fiorentino⁷, entered the Val Marina and formed a link with the Futa Apennine pass.

4 – Sallust's account about the circumstances of Catiline's defeat in Pistoia (62 B.C.) provides important information

The creation of this diversion after the middle of the 1st century B.C. finds confirmation in a historic event which took place in 62 B.C. near

Pistoia, when Lucius Sergius Catiline lost his life.

The decisive moments are narrated by Sallust⁸ who describes the movements of enemy armies on opposing versants of the Tuscany—Emilia Apennines, indirectly providing vital information for our research. After describing the plots woven by Catiline so that he could take power by cunning and force, Sallust underlines the contribution to Catiline's cause by Caius Manlius, sent to Fiesole and the surrounding area to recruit an army, (*Igitur C. Manlium Faesulas atque partem Etruriae... dimisit*) with the order to train the army and keep ready for war (... *docet se Manlium praemisisse ad eam multitudinem quam ad capiunda arma paraverat...*)

Northern Etruria, and especially Fiesole, was where Manlius' military forces organised themselves. This is confirmed in Sallust's account⁹: "... A few days later, the senator, Lucius Saenius, read a letter to the Senate, which, he said, had been sent to him from Fiesole; the letter stated that Caius Manlius had taken up arms with a large number of men... And because of this, by a decree of the Senate, Quintus Marcius Rex was dispatched to Fiesole".

If then, Fiesole was Catiline's base for setting up his military attack, it must be supposed that Fiesole was located in a strategic position, especially in view of a retreat into Cisalpine Gaul where his plot had numerous allies. Therefore, he knew that if necessary, he could use the Fiesole-Bologna transapennine road which was still in perfect condition.

However, the plot was discovered prematurely. Because Catiline could no longer rely on the surprise element of his scheme and because his position was weakened by numerous desertions, he realised that instead of attacking he had to defend himself from the reaction of the regular legions by attempting to retreat northwards with his army. He also realised that he could not hope to cross the Apennines unharmed by travelling along the most direct and convenient road (Fiesole-Bologna)

⁷ Giovanni Uggeri: work cited, page 586: "*La diramazione delle due arterie doveva avvenire a Sesto, ossia sei miglia ad ovest di Firenze*".

⁸ Sallust: "De coniuratione Catilinae", paragraph XXVII. Sallust was born in Amiternum in the autumn of 86 B.C. He lived through the episodes of Catiline's plot and was therefore able to collect first-hand accounts, describing events with precision. He wrote this work in 43-42 B.C.

⁹ Sallust: work cited, paragraph XXX: "*Post paucos dies L. Saenius senator in senatu litteras recitavit, quas Faesulis adlatas sibi dicebat, in quibus scriptum erat C. Manlium arma cepisse cum magna multitudine... Igitur senati decreto Q. Marcius Rex Faesulas... ea loca missi*".

because it was probably policed by the enemy exactly for this reason. So he decided to attempt to reach the Po Valley along secondary routes over uneven ground, which was absolutely unsuitable for an army. These are Sallust's words¹⁰: "... *Catiline led the remainder by forced march over rugged ground towards Pistoia, with the intention of secretly escaping through byroads into Cisalpine Gaul...*"

Catiline's fear of meeting the enemy army on the more practical transapennine road was exact according to Sallust's account¹¹: "... *But Quintus Metellus Celer was stationed in the Piceno with three legions; on reflecting about the difficulties of Catiline's position, Quintus Metellus Celer suspected his plan. When some deserters told him where he was heading, he immediately broke up camp and took position at the foot of the mountains Catiline would have to descend on his hurried march towards Gaul*".

Therefore, Q. Metellus Celere's regular legions drew up at the northern foot of the Apennines ready to face Catiline if he descended the better-known Fiesole-Bologna road. Instead, Catiline had already moved towards the mountains of Pistoia, where however, he found it incredibly difficult to cross the Apennines. In the meantime, Antonius' legions advanced from the south¹²:

"*Nor was Antonius very far off: he pursued the escaping enemy with the advantage of a large army which moved quickly over more even ground. When Catiline realised he was trapped between the mountains and enemy troops, knowing that the revolt in Rome had failed and that there was no hope of escape or aid... he decided to fight Antonius as soon as possible*".

These events are illuminating because they confirm that Catiline did not find an escape route across the Apennines over the mountains of Pistoia (or Prato). He was forced to descend towards the plain of the Arno, facing an open battle with Antonius during which he was killed.

It is obvious that if (as well as the Fiesole-Futa-Bologna road) another transapennine road existed across the Collina pass or towards Val Marina that could be used by an army; Catiline would have undoubtedly used it to escape Antonius' legions.

These conclusions are an important contribution towards solving another issue that has always puzzled the scholars of Roman roads. This is the famous sentence uttered by Cicero¹³ about the three roads that linked Rome to Modena. One was the Via Flaminia which joined the Via Aemilia in Rimini; another was the Via Aurelia which, to tell the truth was completely off route, and anyway needlessly long. The third, the Cassia, Cicero rightly indicates as an intermediate road. This road already reached Pisa from Rome through Arezzo, Florence, Prato, Pistoia and Lucca. From Rome, it was undoubtedly the most direct towards Modena, but it was necessary to cross the Apennines to reach Modena.

Where? We are convinced that the Romans still used Flaminius' original route (also called Cassia at the time because it was a diversion that branched off from the Via Cassia) and Catiline's episode excludes any other alternative.

In 1984, before he learned of our discoveries, Giovanni Uggeri¹⁴

¹⁰ Sallust: work cited, paragraph LVII: "... *reliquos Catilina per montis asperos magnis itineraribus in agrum Pistoriensem abducit eo consilio uti per tramites occulte perfugeret in Galliam Transalpinam...*"

¹¹ Sallust: work cited, paragraph LVII: "*At Q. Metellus Celer cum tribus legionibus in agro Piceno praesidebat ex difficultate rerum eadem illa exsistumans, quae supra diximus, Catilinam agitare. Igitur ubi iter eius ex perfugis cognovit, castra propere movit ac sub ipsis radicibus montium consedit, qua illi descensus erat in Galliam properanti*".

¹² Sallust: work cited, paragraph LVII: "... *Neque tamen Antonius procul aberat, utpote qui magno exercitu loci aequioribus expeditus in fuga sequeretur. Sed Catilina, postquam videt montibus atque copiis hostium sese clausum, in urbe res adversas neque fugae, neque praesidi ulla spem... statuit cum Antonio quam primum conflagere*".

¹³ M. Tullius Cicero: Philippicae, XII, 9: "*Tres viae sunt ad Mutinam... A supero mari Flaminia, ab infero Aurelia, medio Cassia*". This quotation by Cicero refers to Catiline's age (considering he was born in 106 B.C.)

¹⁴ Giovanni Uggeri: work cited, page 586: "*It must naturally be presumed that Florence did not exist (at least in terms of an urban settlement) when the Via Flaminia Minor (187 B.C.) was built: the road must have originally been at the foot of Fiesole and on the entire hill system facing the right bank of the Arno. However, during the imperial age, the new colony of Florence became so important that it developed into the main focus of the entire local road system, which was originally centred around Fiesole (upstream) and the ford across the Arno (downstream) where Ponte Vecchio now stands. This also means that the route of the Via Flaminia Minor must have changed following the territorial reorganisation that took place after "colonia Florentia" was founded (reconstructed by Ferdinando Castagnoli). The numbering of the road miles must have also been adapted because the count now started in Florence*".

had clearly realised that the diversion towards Sesto, Calenzano and Val Marina was created during the second half of the 1st century B.C. and, that is, after Florence had been founded.

This entire discussion proves that the “milestone” place names are the remains of a diversion created no less than 120-130 years after the construction of the road by Flaminius. Furthermore, Flaminius would never have made the transapennine road longer than necessary by passing through Val Marina, at the time uninhabited and potentially prone to enemy attack, when he could follow the practical and direct Etruscan path from Fiesole to the Futa pass.

5 - Alternative routes from Bologna to the Futa pass.

The northern alternative route started right in the urban centre of *Bononia*, near the present-day Piazza della Mercanzia, and it continued along Via S. Stefano, Via Murri and Via Toscana as far as S. Ruffillo. The route was a little to the west of the present-day trunk road. It avoided crossing the Savena and continued along the left bank which, most probably at the time, had enough space for a safe passage below the rugged slopes of Iola. It then continued to coast the left bank of the Savena in a straight line, as does the recently opened new road that almost coincides with the Roman route.

This first stretch described by us does not coincide with the view held mainly by scholars (Calindri, Palmieri) who believe the initial Roman route can be identified along the Via Castiglione - monte Donato - Iola axis. However, this would have involved a steep rise and corresponding descent as far as Rastignano on the Savena, when it was possible to reach the same point without changing altitude and only slightly

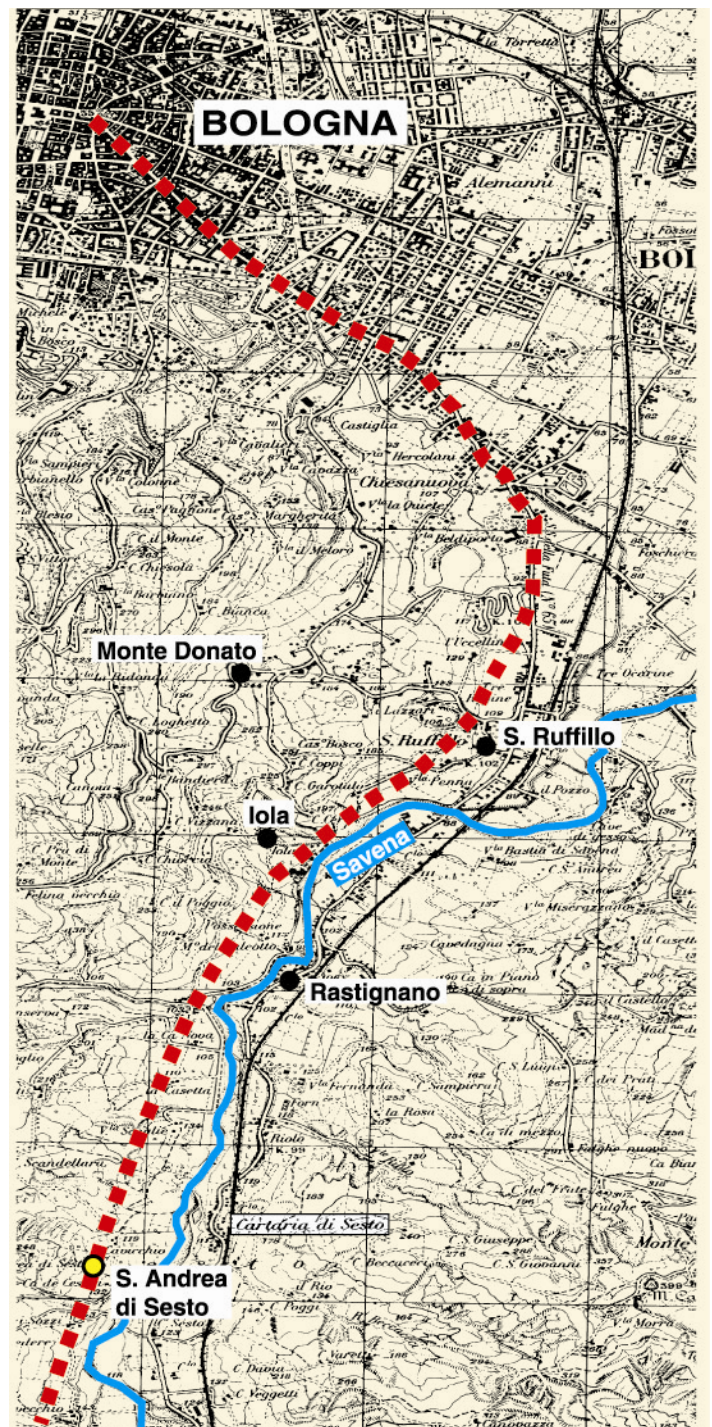


Plate 41

■ ■ ■ The probable route of the Roman road from Bologna to Rastignano during the Imperial era.

¹⁵ Consider that the straight route is the shortest and most practical and on the same level; if a route is straight but features considerable differences in level, the “virtual” distance must also be considered, that is the extra effort required to climb the gradients. We think this route was used during a later age, when a probable shift to the left of the bed of the Savena eroded the base of the slopes of Iola, destroying the ancient road and preventing reconstruction due to a lack of available space. Only after this event, to avoid crossing the Savena, the route from mount Donato and Iola was preferred.

lengthening the route¹⁵.

The road then passed near S. Andrea di Sesto¹⁶, and then the present-day farmhouses called “Octò” di sotto and “Octò” di sopra and another building called “Villa None” on a ridge suspended above the course of the Savena. Therefore, we share the opinion of Giovanni Uggeri who, in states reference to the itinerary of the transapennine Roman road¹⁷: “... *The intermediate road is the road that exited the city walls of Bononia towards the south-east and climbed up the valley of the river Savena; it is especially interesting because, seeing that it was an official Roman state road, equal to the Faentina, it was also certainly equipped with milestones as indicated by the surviving place names of Sesto (where there is a well-known Roman complex at Fornace, perhaps a mutatio), Otto and Villa Nove near Pianoro. In a 1061 document, it is simply called “strata antiqua”. It used the Futa Pass (altitude: 903), and entered the Mugello valley through Barberino, once called “ad Vicesimum”, because on the twentieth milestone from Florence, reached by crossing the Croci di Calenzano, Val Marina and the well-know sequence of place names which originate from milestones: Settimello, Sesto, Quinto, Quarto and Terzolle*”.

Thus far, the place names that originate from milestones indicate the exact route: instead, there are none in the remaining middle-valley sector, which climbed the slopes to the left of the Savena, joining the original ridge road. It is very probable that the roads united at Brento, given its strategic importance and its demographic increase during the imperial age¹⁸, which would not have been possible without a busy road. In the 5th century A.D. it is recorded as being a bishop's residence

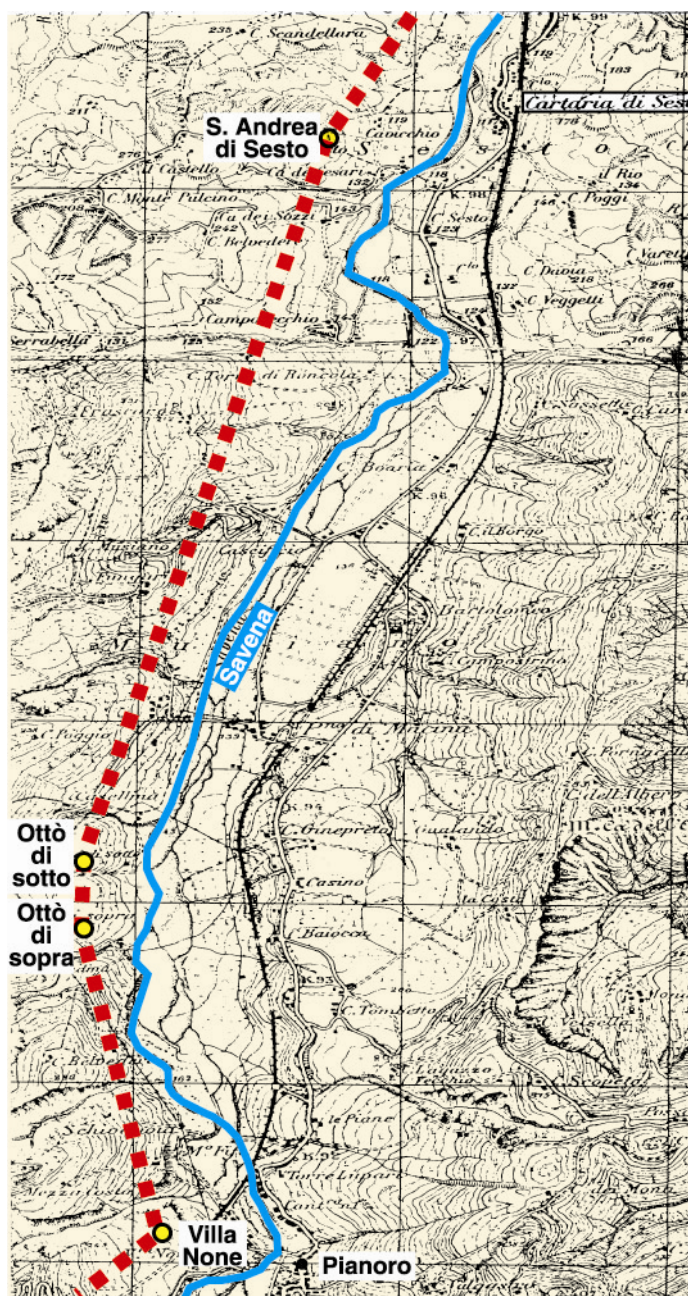


Plate 42

■ ■ ■ The probable route of the Roman road from Rastignano to Pianoro during the Imperial era.

¹⁶ G. L. Monti: “De viis publicis ac militaribus romanorum tempore per agrum bononiensem ductis” page 658. In an essay by Monti, written in Italian in 1828, he upholds that the Roman transapennine road linked Bologna to the Mugello valley along the route indicated by the milestone place names. With regard to “Sesto”, he points out: “It appears that at the start of any road, it was Roman custom to build inns and hotels at the sixth mile, which is perhaps why the name of “Sesto” has tended to be preserved more frequently than any other number... (omissis) therefore it cannot be excluded that the road was ancient and of Roman origin (omissis).”

¹⁷ G. Uggeri: “Viabilità appenninica tra la Regio VII e la Regio VIII (Mugello-Val Marina-Ombone)”; in the Minutes of the Convention “La viabilità tra Bologna e Firenze nel tempo”; published by Costa Editore, Bologna, 1992.

¹⁸ Ludovico Savioli: work cited, page 59: “...In his opinion, Brento, was a city not far from Bononiensi Urbe”.

- Arturo Palmieri: “La montagna bolognese nel Medio Evo”; published by Zanichelli, Bologna 1929, page 322: “Looking at just our region, during the late imperial age, some settlements were very densely populated and of considerable importance, comparable to the city of Bologna, whereas now only their names remain: Claterna and Brento were among these”.

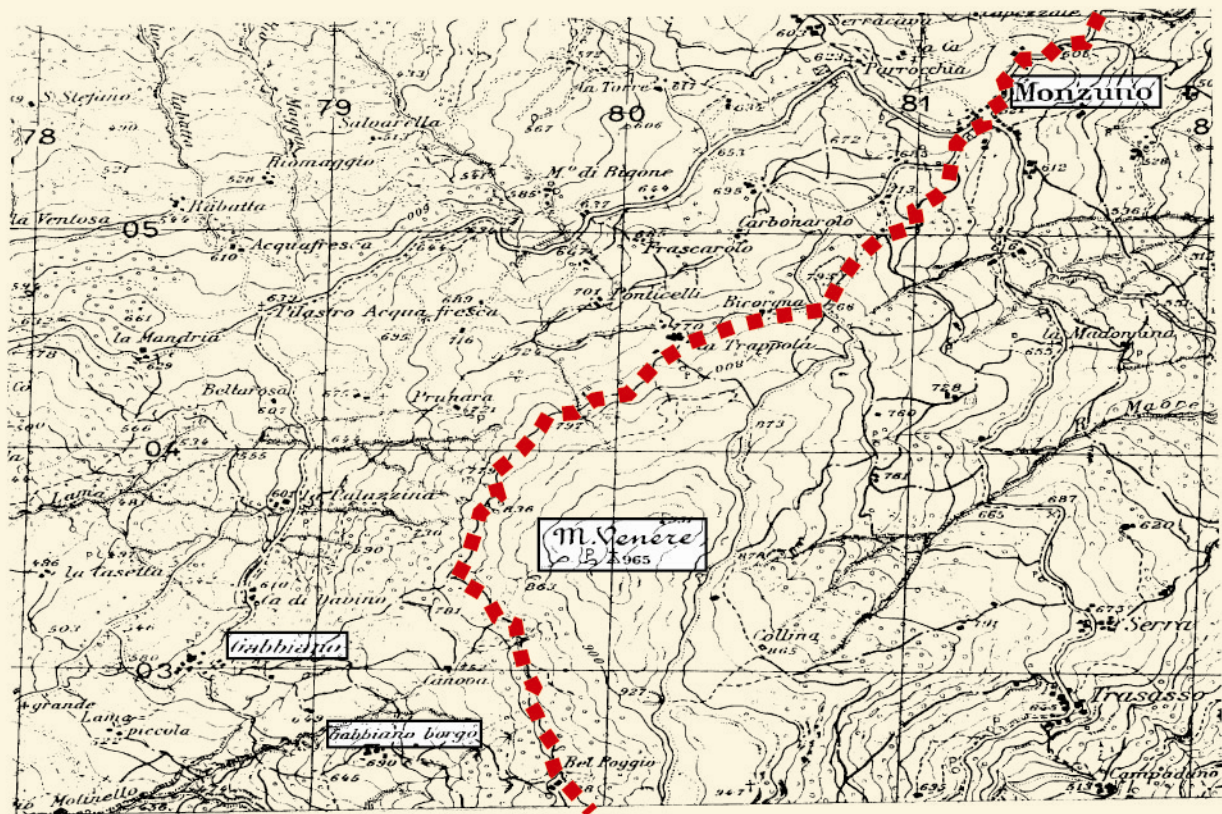


Plate 43

■ ■ ■ Probable Roman route also during the Imperial era.

A document from 793 mentions the passage of the Roman road, (also called the Clodia at the time) from Gabbiano (Gabiano inter elodia et sfrata), located on the western slopes of mount Venere on Bolognese territory (in agro bononiens).
(Italian Military Geographic Institution (I.G.M.) authorisation No. 5034 dated 13.07.99).

From Brento to Madonna dei Fornelli the route was the same as the original¹⁹. Then, during the imperial age, we believe that further south, the ridge logic was no longer used to reach the Futa pass. It is probable that a road was created half way down the southwest slopes of mount Bastione, mount Poggiaccio and Poggio Castelluccio for two reasons that depended on environmental factors.

The first could be attributed to a large and deep rock fall over one kilometre wide on the west versant of the ridge between Passeggere and Poggiaccio, which would have buried the road and changed the morphology of the area.

The second may have consisted in the increased difficulties during the winter suffered at high altitudes (over 1,150 metres above sea level) compared to a route that would have maintained an altitude of about 800 metres above sea level. Without doubt, the need for military security that called for the control of these peaks no longer existed.

Thus, from Madonna dei Fornelli (798 metres) when trying to identify the alternative route that reached the Futa pass at a constant altitude, we noted a series of villages, all aligned along a very ancient route, still clearly visible today and older than the birth of Pian del Voglio and Bruscoli:

¹⁹ Confirmation that this stretch of ridge was still used during the late imperial and early medieval ages can be found in a document dating back to the 8th century A.D., examined correctly by Don Antonio Bacci ("Strade romane e medievali nel territorio aretino"; Grafiche Calosci, Cortona, December 1985, page 276). When criticising Manneschi's interpretation, he points out that: "the document transcribed by Muratori, in *"Antiquitates Italicae Medii Aevi"*, volume III, pages 67 and 76, mentions a "Gabiano inter Clodia et Strata" and "inter Claudia et Strata", but this is located in the province of Bologna, somewhat distant I would say from S. Giustino Valdarno. This was the donation of much property belonging to the Roman Patrician, Ophilius to the monastery of S. Giustina in Padua in the year 793; donation confirmed by Pope Gregory IV in 828, as reported also by Manneschi. Among these properties is our "Gabbiano" located in "agro bononiensi", "in comitato bononiensi". Therefore, it is absolutely not possible to use these documents to sustain that the Via Clodia passed through S. Giustino, and, even less so, that this was the name of the route between Chiusi, Arezzo and Fiesole".

The "Gabbiano" in "agro bononiensi" is on the upper eastern slopes of mount Venere, exactly where the Roman road passed which, as is known, was also called Cassia, Clodia or Claudia.

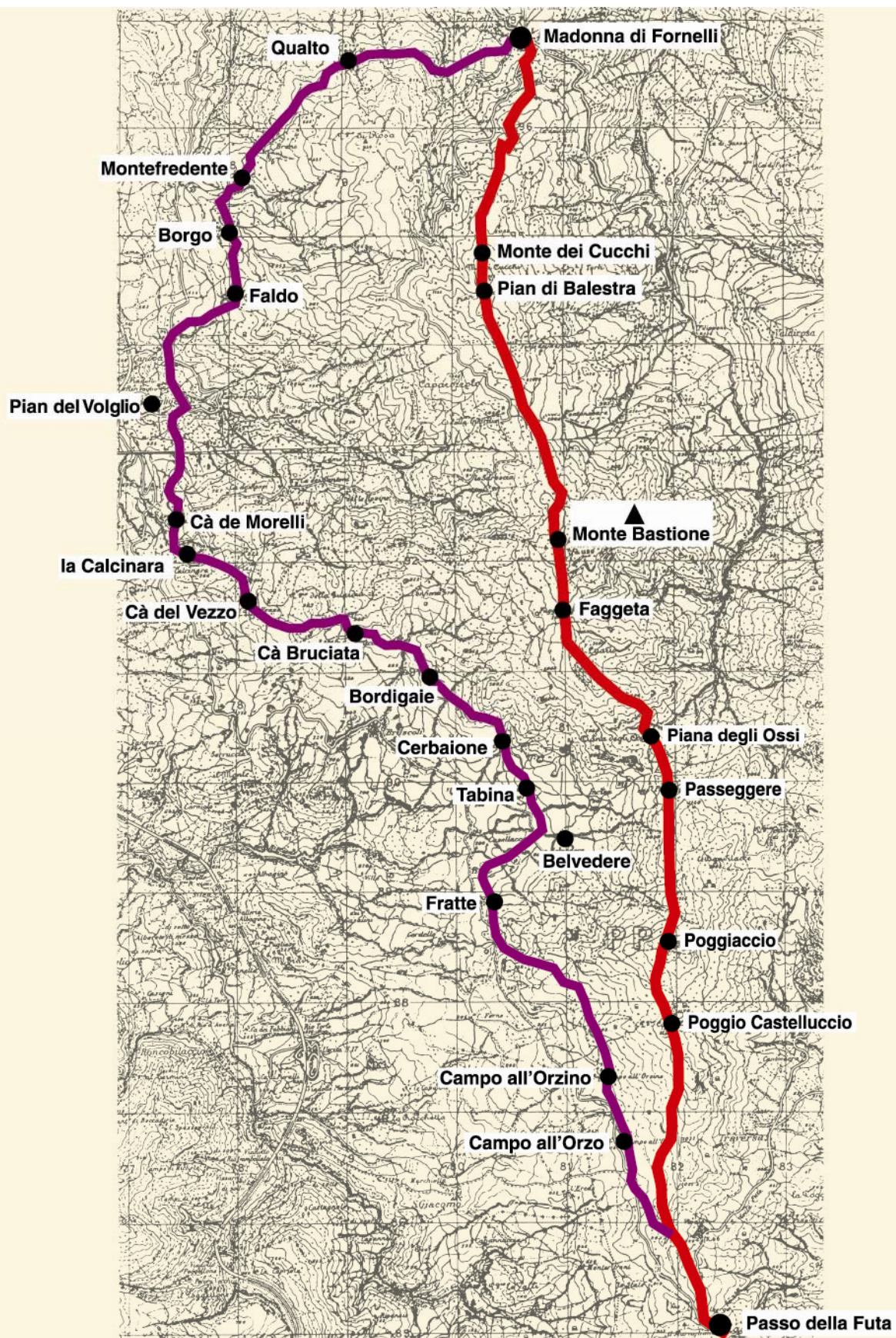


Plate 44

— Route of the road built in 187 B.C.
— Probable alternative during the Imperial era from the Futa pass to Madonna dei Fornelli.
 (Italian Military Geographic Institution (I.G.M.) authorisation No. 5034 dated 13.07.99).

Qualto (762 metres), Borgo (761 metres), just above Montefredente ²⁰, Faldo (725 metres), near the ruins of the old monastery above Pian del Voglio ²¹, on the right bank of the torrent with the same name, Cà De Morelli (691 metres), Calcinara (764 metres), Cà del Vezzo (847 metres), Serraccia (844 metres), Cà Bruciata (896 metres), Bordigaie (846 metres), Cerbaione (838 metres), Tabina (807 metres), Belvedere (846 metres), Fratte (811 metres), Campo all'Orzino (920 metres), Campo all'Orzo (914 metres), the Futa pass (903 metres).

This continuity of ancient villages, one after another over a distance of 13-14 kilometres, at an average height of 800-850 metres above sea level, could indicate an alternative route to the Roman road. Hopefully archaeological finds will one day confirm our theory.

6 - Alternative routes from Florence to the Futa pass

The southern diversion of the transapennine road started in the urban centre of *Florentia*, then, after leaving the city, it headed towards Rifredi, where it crossed the torrent "Terzolle". Here it took a slight turn towards the right as far as the foot of Panche hill, where it continued northwest in a long straight line, which after passing through Quarto and Quinto, reached Sesto Fiorentino. This initial stretch preserves four place names recognised by every historian as survivors of corresponding Roman milestones, probably placed along the Via Cassia which, as far as Sesto, coincided with the route of the transapennine

road. The place name "Castello" between Quarto and Quinto is interesting and according to E. Repetti, it is of Roman origin ²²:

"Such a circumstance induces one to believe that this location was called Castello after a receptacle or reservoir (castellum) used to collect water during the Roman imperial age. The water was then distributed into aqueducts that (according to Arcora) perhaps belonged to the aqueducts from Rifredi to Florence".

On leaving Sesto Fiorentino, the road abandoned the Cassia and headed northwards, across the Settimello, a reminder of the seventh mile from Florence, the torrent Chiosina and the torrent Marinella and La Chiusa, where the torrent Marina also flows. This place name is a reminder of the dam on the torrent that supplied water to the *Florentia* aqueduct. The archaeological map of the province of Florence ²³, mentions the discovery in 1986 of the remains of the inlet to the Roman aqueduct in La Chiusa. Further evidence of its course was found in Querceto and Villa Ginori in Colonnata, near Sesto Fiorentino; also documented in the archaeological map of the province of Florence ²⁴. Beyond La Chiusa, the road remained on the left bank of the river Marina and climbed up its valley, more or less retracing the present road. Before ascending to Croci di Calenzano, the road passes through Cassiana, which according to Giovanni Uggeri ²⁵, appears to preserve a reminder of the ancient Via Cassia. This theory is confirmed by the discovery at Croci di Calenzano, of stretches of paved Roman road²⁶. The road continued towards the Apennines

²⁰ Calindri and Palmieri mention this diversion without expressing their opinion.

²¹ Giovanni Uggeri: work cited, page 591: "Here the Stale road branched off to the left towards northwest on Pian del Voglio, a considerable settlement in the Roman age".

²² E. Repetti: work cited, volume I, page 562-563.

²³ File N. 05/20: La Chiusa, panel I.G.M. 106 IV SE section C.T.R. 263110 sheet 1; description: "a deep ploughing brought to light some fragments of concrete that can be attributed to the specus of the Roman aqueduct".

²⁴ File 43/27: Querceto, panel I.G.M. 106 I SO sheet 2: "As of the second half of the eighteenth century, there are reports of consistent remains of the Roman aqueduct in Querceto. During the course of large-scale agricultural work in 1929, remains of the conduit were discovered. Some stretches of aqueduct were also observed later".

- File 43/51 Villa Ginori: panel I.G.M. 106 I SO sheet 2: "remains of the Roman aqueduct from Val Marina".

²⁵ Giovanni Uggeri: work cited, page 590: "Especially note Cassiana which could be a normal Roman predial (omissis), but it is more probably a reminder of the ancient Via Cassia (omissis). We know that the name of the Via Cassia in Etruria, and the name of the Via Clodia were also used for the diversions and continuations reaching the Via Aemilia on the other side of the Apennines".

²⁶ Archaeological map of the Province of Florence - file 02/10: panel I.G.M. II SE sheet 2. Le Croci: "The area includes stretches of paving understood to be the remains of a Roman road system".



Plate 45

Route of the road built in 187 B.C.
Probable alternative during the Imperial era from Florence to Montecarelli.

where there is a very significant place name: Badia di Vigesimo, proof of the twentieth milestone and recognised unanimously as such by every historian²⁷.

After Barberino, the road tended to return to the ridge along the 187 B. C. route and, therefore, very probably it passed through Terzolla, Corzano and Bonicaccio, as far as S. Gavino, substantially more to the east than the present-day roads and with fewer differences in level. One kilometre west of S. Gavino lies Castel Miliari, an ancient fortress whose name preserves the

²⁷ E. Repetti: work cited, volume I, page 201: “Badia di Vigesimo. Probably named “Vigesimo” after the twentieth milestone along the ancient municipal road which goes from Florence, through the Vernio and Stale Apennines, passing across Giogo delle Croci to Cambiate through Val di Marina, between Monte Morello and Calvana”.

- L. Chini: “Storia del Mugello”; Florence 1875, volume I, chapter IV, page 136: “West of Mugello, in the small valley where the Lora and Stura flow, the first tributaries of the Sieve, there stands a church now called Badia di Vigesimo. This place, named after a pure Roman word which means the “vigesima lapide” or the twentieth milestone from Fiesole or Florence was as famous as Annejano during the fasti in the Mugello of the Roman republic (omissis). Roman armies often travelled along this road and when they reached Vigesimo, they stopped and rested. This is because, according to Zuccagni Orlandini, Vigesimo was not only a military post or stopping point but it was also a large and well-populated town where it was possible to find all types of products and comfortable accommodation. Where it exactly stood is now difficult to determine: nevertheless the most natural and probable fact was that before ascending the steep and tiring Futa pass, the troops stopped here to gather strength; therefore it is probable that this town lay on the low plain between Badia di Vigesimo and the present-day castle of Barberino. Furthermore, it is well known that the road was a branch of the road from Fiesole, Rifredi, Quarto, Quinto, Sesto and Settignano towards Pistoia and Lucca. This leads us to believe that Vigesimo was richer and more densely populated than Annejano, perhaps because it was on a more popular trade route and consequently had a larger income”.

- G. Uggeri: work cited, page 590: “Immediately afterwards, the ancient Badia di Vigesimo or “Canonica S. Marie de Vigesimo” documented by the same tithes mentioned, is further proof of the existence of the twentieth milestone on the Roman road in Barberino”.

²⁸ Johan Plesner: work cited, page 31: “The name of the ancient Badia di Vigesimo is a more or less exact indication of the location of a Roman milestone. About two miles further north lies “Castel Miliari”, which indicates the next leg of the ascent of the Roman road towards the Futa pass. Near Castel Miliari stands the medieval plebeian church of S. Giovanni Adinari”.

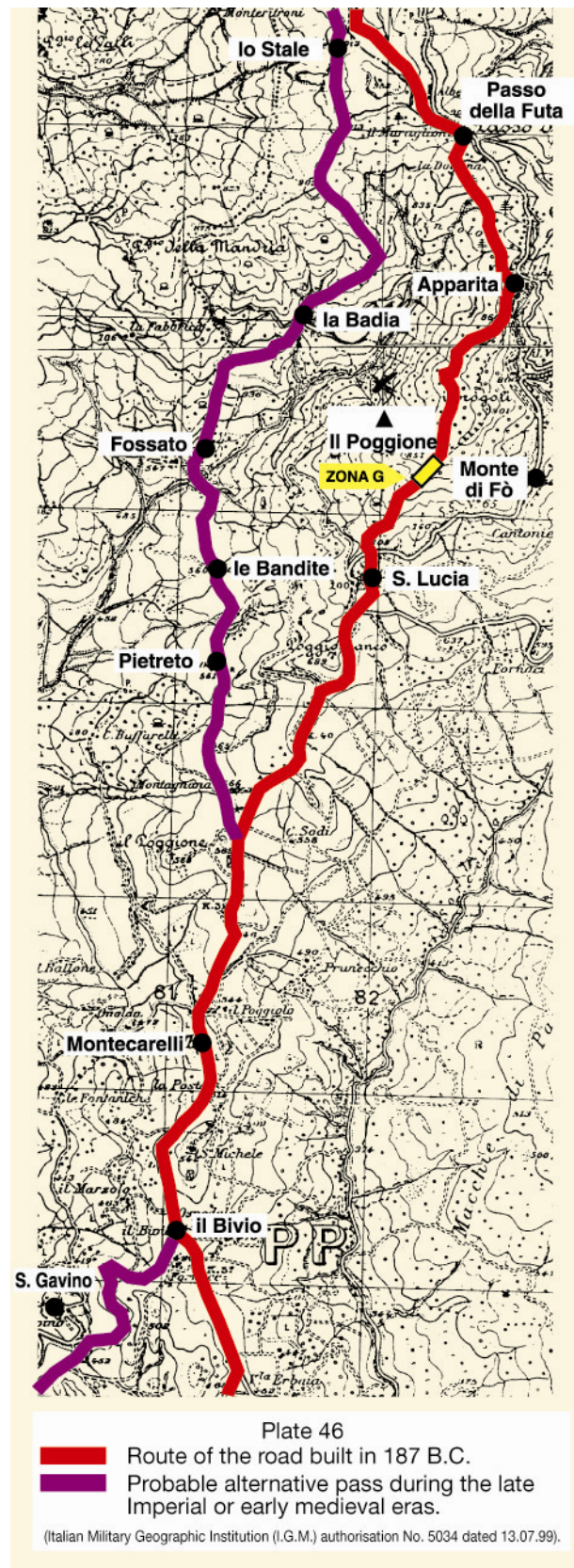
reminder of a milestone²⁸. Just after S. Gavino, in present-day Bivio, one kilometre south of Montecarelli, it rejoined the original route of the 2nd century B.C. road that continued to the Futa pass. This is where the long alternative route that started in the city centre of Florence ended.

7 - The alternative route over the pass during the late imperial or upper medieval age.

Before drawing this subject to a close, we would like to suggest one last theory regarding an alternative route of the transapennine road that may date back to the late imperial or early medieval age.

We have already described the sudden break in the paving found uphill of S. Lucia, probably caused by a large-scale landslide, which occurred on the southern slopes of mount Poggione. Therefore it is probable that following this event, the road after Montecarelli no longer continued as far as S. Lucia, but one kilometre before, a mule track was created on the western slopes of mount Poggione which passed through Pietreto, le Bandite, crossed the torrent Stura, almost at its source, reaching Badia di S. Salvatore (also known as the Stale) at 703 metres above sea level. This route would also explain the construction in 1048, of a hospice to “*accommodate travellers before hotels existed in cities, let alone in open country and on the most inhospitable mountains of the Apennines*”²⁹. From here, the mule track climbed up to the Stale, at 913 metres above sea level, just a few hundred metres from the Futa pass, from where it probably continued towards Bologna using the alternative Pian del Voglio - Qualto route, described in paragraph four of this chapter.

From the Stale, it was possible to reach the Raticosa pass maintaining a constant altitude and passing through the present-day La Traversa, Covigliaio and Pietramala. From Raticosa, it was possible to take either of two important roads: one towards Romagna, through Piancaldoli, and the other northwards along the ridge where Monghidoro and Loiano were established.



²⁹ E. Repetti: work cited, page 364.

PART NINE

A CONFERENCE, AN OVATION, A LAW ABOUT ROMAN ROADS

CHAPTER XXII

ROADS: CONSTANT PROTAGONISTS IN THE HISTORY OF ROME AND ITS LAWS

- 1 - The conference about the “*Tabula Peutingeriana*”: Ernst Gamillscheg’s opinion and visit.
- 2 - Victor von Hagen’s ovation.
- 3 - Regulations governing road maintenance and traffic restrictions applied to carts in the city of Rome in 46 B.C. (*Lex Julia municipalis*).
 - 3.1 - Regulations regarding compulsory maintenance of urban and extra-urban roads and pavements in Rome
 - 3.2 - Regulations regarding traffic restrictions applied to carts in the city of Rome

1 - The conference about the “*Tabula Peutingeriana*”: Ernst Gamillscheg’s opinion and visit

In December 1996, we attended a conference held in the Municipal Library of Porretta Terme about the *Tabula Peutingeriana*¹ held by Ernst Gamillscheg, professor at the University of Vienna and Director of the Austrian National Library, where the medieval copy of this precious document is housed.

He explained in detail the information provided by the map, illustrating the most important Roman road network in existence when the map was first drawn up (340-360 A. D.), stopover points, distances from cities, the course of rivers, etc. His lecture (delivered in perfect Italian) was highly absorbing because his words were accompanied by an actual size (6.80 m x 34 cm) colour copy of the entire *Tabula* which he gradually unveiled².

At the end, we asked him two questions:

- the first was intended to clarify why the Bologna-Arezzo road built by C. Flaminius in 187 B.C., is not indicated on the *Tabula*.

According to Gamillscheg, this road never reached the importance or “status” of the other consular roads, and gradually fell into disuse. In the 4th century A.D., when the *Tabula* was drawn up, it had been downgraded to such an extent that was not included among the most important roads. Many roads that date back to the republican age are not included on this ancient map, which represents the network of the most important roads of the Empire kept perfectly efficient in the 4th century A.D.

- the second was how to interpret the red mark next to the green mark used to indicate the course of rivers; more specifically we asked if the red line which accompanies the green line of the *flumen idex* (river Idice) south and north of the Via Aemilia, near Claterna, could be intended as a road heading towards the Apennines. He pointed out that roads are indicated with straight red lines and include indications of distance and never follow rivers, but cross them. The red mark that coasts the dark green line, representing rivers is only there for emphasis; therefore, the red line that coasts the course of the Idice absolutely does not indicate the existence of a road heading towards the Apennines.

¹ For further information about the *Tabula Peutingeriana*, see note 5 of paragraph 1 in chapter VIII.

² The conference was organised thanks to the efforts of Pierangelo Ciucci. The Municipality of Porretta took the highly commendable initiative of purchasing the copy used during the conference, now available to anyone who would like to consult the map in the Porretta library.

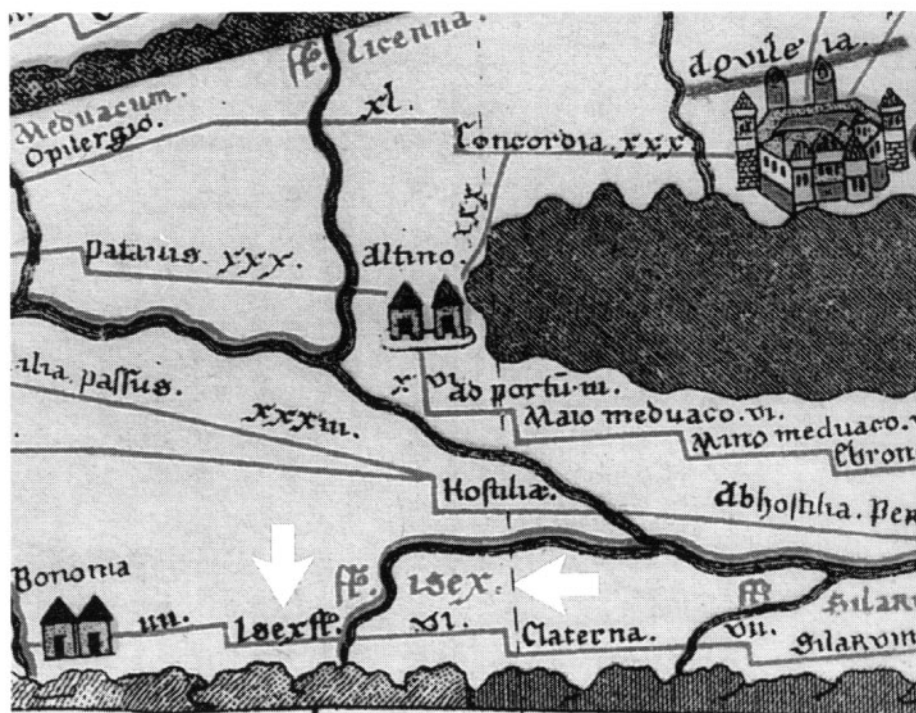


Fig. 5 - TABULA PEUTINGERIANA: detail of the Bolognese sector. In the original colour version, the river Idice (l. isex), drawn in green, is accompanied by a red line, a conventional road sign: indicating the «minor» Via Flaminia. Idice (Isex fl.) is also the name of the first stopping place east of Bologna (Bononia), along the Via Aemilia.

The subtitle below this sector of Bologna in the Tabula Peutingeriana proves that N. Alfieri incorrectly interpreted the red mark that flanks the course of the river Idice. He believed it indicated the Via Flaminia Minor. (From the Minutes of the Convention about "La viabilità tra Bologna e Firenze nel tempo" published by Studio Costa in 1992, page 98).

His first answer substantially clarified what could be understood from reading the *Tabula*: he confirmed the abandonment of this transapennine road in very remote times, which justifies its disappearance and oblivion.

The second answer surprised us, because it disagreed with Nereo Alfieri's opinion.

In fact, during the conference in September and October 1989³, to provide an element of documented proof to back his

theory, Alfieri stated that the continuous red line coasting the *flumen Isex* represented the start of the transapennine road he called the "Flaminia Minore"⁴. This opinion is faithfully recorded in his account published in the "Atti del Convegno"⁵; in the subtitle of a black and white photograph illustrating a portion of the *Tabula Peutingeriana* regarding the area between Bologna and Imola, Alfieri writes: "*Tabula Peutingeriana. Detail of the Bolognese sector. In the original*

³ This is the aforementioned "Convegno sulla viabilità tra Bologna e Firenze nel tempo" held in Firenzuola and S. Benedetto Val di Sambro on 28-29-30 September and 1 October 1989.

⁴ N. Alfieri: "In search of the Via Flaminia Minore". We would like to point out that in this study, Nereo Alfieri claims that the road built in 187 B.C. by the consul C. Flaminius between Bologna and Arezzo travelled along the ridge between the Idice and the Sillaro and started from Claterna.

⁵ Minutes from the Conference: "La viabilità tra Bologna e Firenze nel tempo - problemi generali e nuove acquisizioni"; published by Studio Costa, December 1992, page 95 and elsewhere.



Tabula Peutingeriana – the area around Bologna: Observing this “carta” it is possible to note that all the rivers between Bologna and Claterna, including the Idice (fl. Idex), are indicated by a green line flanked by a red line. The red line does not represent a road route; roads are marked by continuous straight red lines that do not coast rivers, but cross them.

in colour, the river Idice (fl. Isex), drawn in green is accompanied by a continuous red line, a conventional symbol used for roads: this is the Via Flaminia minore”⁶.

This different interpretation of the significance of that red line left us flabbergasted. In spite of Gamillscheg’s authority, the doubt stayed with us until, on our specific request, he confirmed his opinion in a letter dated 4 June 1997, which we translate here word for word: “I can provide the following response to the question you have asked me about the red line on the *Tabula Peutingeriana*. As can be seen on the copy you sent, the roads are represented as straight lines with indications of distance. The red line along the course of rivers simply confirms these topographical indications”⁷.



Mount Poggione (site G/3 – July 1997): Prof. Ernst Gamillscheg (third from left), professor at the University of Vienna and Director of the Austrian National Library which houses the original medieval copy of the “*Tabula Peutingeriana*”, visits the paving stones unearthed south of the Futa pass.



Mount Poggione (site G/3 – 27 July 1997); from left: Cesare Agostini, Pierangelo Ciucci, Gamillscheg’s son, Gamillscheg, Carlo Alvisi, Franco Santi, Angela Agostini and, kneeling, Luca Fedeli.

⁶ Minutes from the Conference mentioned above: page 98.

⁷ A photocopy of the letter is enclosed (document 13).

This convinced us once and for all that Nereo Alfieri made an interpretational error regarding the symbols used in the *Tabula Peutingeriana*.

At the end of the conference, we invited Gamillscheg to return to the Apennines the following summer to visit the remains of the Roman road.

On 25 and 26 July 1997, we welcomed Gamillscheg as our guest. We accompanied him along some stretches of paving together with Luca Fedeli from the Superintendency. He showed sincere admiration for the finds and said that in his opinion, it was in fact a Roman road, due to the solidity and grandiosity of the structure and considering its location. He thought that because it was perched on the top of the Apennine ridge at altitudes above 1,000 metres, this fully justified its abandonment during the imperial age, and consequently explains why it is not indicated on the *Tabula Peutingeriana*.

2 - Victor von Hagen's ovation.

Through all these years of research and exploration, after digging to unearth a stretch of paving, we often sat at the edge of the road and admired the work of the Romans. It was easy for us to ideally link all the stretches of paving and imagine them joined together to form a single long ribbon of road, solid and straight, able to give a feeling of security to those who had to cross the rough and wild Apennines.

However, what to our eyes was an object of admiration, was utterly insignificant compared to the grandiosity and extension of the Roman road system during the imperial age; so insignificant that those who built it soon abandoned it, having in the meantime built much more important roads.

It was while meditating on the early abandonment of this road that we realised the perfection and the magnificence that

the Roman road system had reached at its moment of maximum splendour and the words of Victor von Hagen returned to mind⁸.

"The most long-lasting monuments of Rome are not the ruins of an empire, still scattered throughout most of Europe and Asia, and not even the majestic ruins, soaked in history, which stand silent in the Forum, but the omnipresent Roman roads: these huge paved roads which ran like gigantic threads throughout the then known world. Which ran safely across mountains and marshes and even through the heart of the Sahara, linking cities, fortresses and outposts along the remotest limites of the Empire (omissis).

Roman roads are a factor of incalculable importance in the history of humanity. Rome became a mobile source of civilisation and the owner of its world because through its roads, it was able to control systematically most of the world's surface.

From the golden mile (Miliarium Aureum) in the Forum, which signposted distances, nineteen paved roads led to every province of the Empire. Running continuously as far as the Rhine and Danube they reached the lands of the Scythians on the shores of the Black Sea to the Euphrates, Africa, Arabia and even in India.

The nineteen original roads developed, branching out, growing and multiplying in time and space until under the rule of Domitian, Rome found itself administering as many as three-hundred seventy-two roads. These 53,000 miles of road communication were the tensioned chords of civilisation, great vital arteries that reached the limit of every horizon".

We, who have lived the emotion of seeing a road re-emerge, a road built by the Romans only to be soon after abandoned by them because considered modest and useless in spite of its magnificent and solid structure, can well understand and share von Hagen's opinion.

⁸ Victor von Hagen: "Le grandi strade di Roma nel mondo". Published by Newton Compton, page 13.

3 - Regulations governing road maintenance and traffic restrictions applied to carts in the city of Rome in 46 B.C. (*Lex Julia municipalis*).

In this atmosphere of reverence for the Roman road system, we would like to underline that the Romans reached exceptional standards in terms of regulations governing this aspect of public administration.

Therefore, it is worth listing a series of laws inscribed on the Heraclea Tablet (*Tabula Eracleensis*)⁹, dating back to the age of Julius Caesar (46 B.C.), which not only governed the census and *frumentationes* (free distribution of grain to the poor), but also Roman urban and extra urban road maintenance and traffic restrictions applied to carts within cities (*Lex Julia municipalis*).

These latter regulations reflect the diligence and care the State held for road maintenance and traffic organisation, laying down precise duties that private individuals and public officers had to comply with¹⁰.

3.1 Regulations regarding compulsory maintenance of urban and extra-urban roads and pavements

“(omissis)... *as regards the streets in Rome or streets within a mile of Rome, on which there is continuous settlement now or in future, each owner of property fronting on the street shall keep such portion of the street in repair at the discretion of the aedile who has jurisdiction in this quarter of the city pursuant to this law. The aforesaid aedile shall provide that each owner of property fronting on the street shall*

keep in repair that portion of the street which by this law it is proper for him to maintain and he shall ensure that no water shall stand there to guarantee convenient public passage”.

These regulations govern road maintenance where the buildings fronting on either side of the road belong to private individuals. Each owner had to repair the half carriageway in front of his or her property. The *Lex Julia Municipalis* also provided fair regulations in terms of the obligations of frontagers if there was a temple or public building on the other side of the road: “(omissis) *as regards streets lying between a temple, a public building, or a public area on one side and a private building on the other, the aedile who is in charge of this area of the city shall lease the maintenance of half of the said street, where the temple, public building or public area is situated”.*

The regulation then indicates the procedures to follow when drawing up road maintenance contracts with private individuals and to collect the relative sums owed to the treasury: “*If anyone, who in accordance with this law should maintain the public street in front of his property, does not maintain the street as he should according to the aedile concerned (omissis), the aforesaid aedile shall draw up a contract for the maintenance of said street. At least ten days before awarding the contract, the aedile shall post in front of the tribunal in the forum, the name of the street to be maintained, the day on which the contract shall be awarded and the names of the property owners on the street... (omissis). The urban quaestor or whoever is in charge of the treasury, shall ensure that said sum shall be entered in the public records of money due*

⁹ A bronze tablet found in two fragments in February 1792 near Heraclea (present-day Policoro in the province of Matera). On one side, there is an inscription in Greek dating back to the 5th century B.C. regarding the administration of property belonging to the temples of Dionysus and Athena. The other side features the provisions in Latin that constitute the *Lex Julia municipalis*. The bronze tablet, which featured an inscription in Greek from the 5th century B. C., was re-used in the 1st century B.C. The upper part of the Tabula was sold on the English antiques market and was later donated to the King of Naples. The lower part also ended up on the antiques market; it was bought by the Duke of Bovino who then also donated it to the King of Naples. Both parts are now housed in the National Museum in Naples.

¹⁰ The Latin text was translated into Italian by Paola Giacomini from the Department of Archaeology of the Faculty of Literature at Bologna University during a series of brilliant lectures held in the spring of 1988 and whom we would like to thank.

for which the contract was awarded in the name of the person or the persons whose property fronts the street in proportion to the length and width of the property ”.

It is worth noting the precise detail used to describe procedures, to avoid any misunderstanding. Calculation of the contribution that private individuals had to pay was also based on an absolutely certain parameter: it was calculated in proportion with the surface area of each building (length times width). The law also establishes the penalty owed by anyone failing to comply: *“Anyone who is awarded a maintenance contract must ensure that the person or persons responsible for the sum do not commit deception. If the person responsible does not pay his share within thirty days of notification of the amount due, he shall pay said share and a penalty of half of the amount; a judge shall be appointed or an action shall be granted to recover the amount due”.*

Public administration was particularly meticulous about pavements and wanted to ensure they were also perfectly maintained: *“Owners of buildings fronting on public pavements shall ensure that the length of pavement in front of said buildings is always and continuously paved using good quality stones to the satisfaction of the aedile who has jurisdiction over that road in compliance with this law”.*

Furthermore, there were laws governing public officers to ensure they guaranteed that urban and suburban roads (within a mile of Rome) were kept clean and to ensure that porticoes and public areas were not unlawfully occupied, unless by citizens who were authorised to do so. This is basically what we would now describe as “unlawful occupation of public areas”: *“As regards the fact that the aediles or quadrumvirates in charge of cleaning the city streets, and the duumvirs in charge of cleaning the streets outside the city walls within a mile of Rome, or whoever is appointed to cleaning public streets, (omissis) no one shall build any structure on, occupy or enclose any public area or portico which would prevent free use of these areas by the public except for those*

who are authorised to do so by statutes, plebiscites or decrees of the Senate”.

3.2 Regulations regarding traffic restrictions applied to carts in the city of Rome

Some sections of the *Lex Julia Municipalis* still apply today. They provide regulations governing the access of carts in daytime within the city of Rome: *“no one shall drive a cart along the streets of Rome or along streets in the suburbs where there is continuous housing after sunrise or before the tenth hour of the day, unless necessary to carry materials needed to build temples sacred to the immortal gods or for public works or to remove rubbish from the city from buildings whose demolition is authorised by public contracts. For these purposes, permission shall be granted pursuant to this law, to specified persons to drive carts for the reasons stated. Whenever the vestal virgins, the Regem sacrorum, or the Flamens are allowed to be carried through the city on carts to celebrate the public rites of the Roman people, whatever carts are proper for a triumphal procession when anyone triumphs, whatever wagons are proper for public games within Rome or within one mile of Rome or for the procession held at the time of the games in the Circus Maximum, it is not the intent of this law to prevent the use of such wagons during the day within the city for these occasions and at these times”.*

The regulations also govern the possibility that carts may be located within the city when the ban starts; in this case, the carts were allowed to leave the city either empty or loaded with rubbish: *“Any carts that enter the city during the night may remain in the city or within a mile of the city after sunset and before the tenth hour whether driven by oxen or horses, whether they are empty or loaded with rubbish that must be carried out of the city”.*

The year was 46 B.C., and Julius Caesar took the trouble to issue regulations to limit the access of carts to the city of Rome. Two thousand years later, the same regulations are still applied by the Municipality of Rome and the Municipalities of other large Italian cities

to limit vehicle access to city centres. Today, as then, there were exceptions: some carts were allowed to enter the city if they were carrying construction materials for temples, if they were needed to carry out public works or to transport the authorities or a “triumph”.

Even then, the latent conflict between pedestrians and carts was felt as strongly as the conflict between pedestrians and vehicles today; and as often occurs in our modern cities, the pedestrian tended to be awarded the advantage. Nothing has changed but this identity underlines the high degree of civilisation reached by Rome during the 1st century B.C.

Documents

Rgr. Signor
 Pref. FRANCESCO NICOSIA
 Soprintendenza Archeologica Toscana
 Via della Pergola n. 65
 FIRENZE

RACCOMANDA

29/9/1986

- 2 -

OGGETTO : Segnalazione di rinvenimenti d'interesse archeologico riguardante la strada costruita da C. Flaminio nel 187 a.C. (c.d. FLAMINIA MINOR)

Il Dr. Nereo Liverani, giornalista de "LA NAZIONE", mi ha informato della recente conversazione avuta con Lei sull'argomento in oggetto.

Con vero piacere Le invio subito tre numeri della rivista mensile "AUTOSTRADE" nei quali sono pubblicati tre articoli scritti da Vittorio Di Cesare sui rinvenimenti compiuti dal mio amico Franco Santi e dal sottoscritto sulla dorsale appenninica in territorio toscano, fra il Passo della Futa ed il confine emiliano.

Le ns. ricerche sono iniziate nel 1976 quando ci siamo prefissi lo scopo di trovare tangibili prove dell'esistenza della strada che, secondo quanto scritto da Tito Livio nel XIII libro della sua "Storia di Roma", venne costruita dal C. Flaminio nel 187 a.C. per congiungere Bologna ad Arezzo al termine della campagna di guerra contro i Liguri. Il motivo di questa nostra iniziativa deriva essenzialmente dalle seguenti circostanze:

- 1) - da oltre un secolo gli studiosi di questo problema, che hanno polarizzato le loro ricerche nel tratto fra il valico della Futa e Bologna, hanno sostenuto con fermezza il passaggio di quella strada lungo crinali diversi supportando le loro tesi essenzialmente su ricerche di archivio e sui toponimi delle borgate e dei paesi. Mai, o quasi mai, sono state fatte razionali ricerche "sul campo", cosicché la battaglia delle carte e delle pergamene si è cristallizzata tanto che una tesi non è prevalsa decisamente sulle altre. Ciò soprattutto perché mai prima d'ora era stato rinvenuto un metro di selciato di quella strada. Questa carenza doveva essere colmata.
- 2) - Franco Santi ed io siamo originari di Castel dell'Alpi, frazione del Comune di S. Benedetto Val di Sambro che

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- 3 -

ritrovando numerosi trofei di selciato ancora intatto, sommerso sempre da una coltre di terriccio di chiara origine organica, frutto di foglie e di rami caduti al suolo per oltre 2.000 anni.

Per altri ritrovamenti, sempre sul crinale, che hanno portato la conferma della datazione di questo selciato.

Mi scuso se mi sono dilungato a descrivere sommariamente i luoghi dei rinvenimenti ed i motivi che ci hanno indotto a focalizzare le ns. ricerche proprio lungo quel tratto di crinale dell'Appennino.

Consapevoli dei ns. grandi limiti sotto il profilo di una cultura storico-archeologica, per sfruttare utilmente la ns. perfetta conoscenza dei luoghi, abbiamo cercato di leggere tutte quelle che è stato scritto su questa strada fantasma dagli studiosi e ricercatori di archivio, cercando di verificare tutti i territori, l'attendibilità delle loro tesi.

Abbiamo constatato che molte di queste tesi crollavano miseramente di fronte alla illogicità dei percorsi sostenuti, sia per la orografia, sia per la natura dei terreni, sia per l'inutile lunghezza dell'itinerario. La tesi più logica, tenuto conto dell'orografia, dei toponimi, della natura dei terreni, della brevità e linearità del percorso, delle scarse pendenze, si è sembrata quella indicata da alcuni studiosi (Calindri, Palisieri) i quali hanno sostenute l'ipotesi che seguisse il crinale posto alla sinistra del fiume Savena, crinale che inizia al Passo della Futa (proprio nel punto in cui il Pref. Giovanni Uggeri della Facoltà di Lettere della Università di Firenze sostiene - in una monografia che Le allego - che arrivava la via Flaminia minor proveniente da Fiesole) e direttamente si dirige fino a Bologna transitando per le seguenti località:

Poggio Castelluccio, il Passagere, Monte Luaro, Piana degli Oasi, Monte Bastione, Pian di Balestra (monte citato da Tito Livio come luogo di scontro fra Romani e Liguri durante la campagna del 187 a.C.) Madonna dei Fornelli, Cedrechia, Monte Venere, Mennuno, Brento, Monte Adone, Pieve del Pino, Paderno e Bologna. (Ho segnato con evidenziatore verde questo percorso nella carta stradale che Le allego).

E' proprio su questo itinerario, nel punto più alto e sel-

ci contiguo al Comune di Firenzuola, nei cui territori si snoda un crinale in direzione Nord-Sud che si divide in parte dal valico della Futa e si pretende fino a Bologna con lievissime pendenze, tanto da costituire un naturale comodo passaggio per valicare l'Appennino. Conosciamo perfettamente questo crinale (che raggiunge l'altitudine massima di mt. 1.190 a monte Bastione) perché fin dalla ns. infanzia lo abbiamo percorso, seguendo sentieri e ruscelli, penetrando nella fitta e densa vegetazione di faggi che lo ricopre completamente tanto da renderne difficile, oggi, anche il passaggio a piedi.

Il crinale che parte dalla Futa e da lì va a Madonna dei Fornelli (sempre nel Comune di S. Benedetto V.S.) è lungo circa 15 Km. ed a memoria di uomo non si hanno notizie che su di esso siano stati fissati insediamenti abitativi di una certa importanza; si sono ritrovate soltanto tracce di alcune case di contadini che, raggiunti, hanno accettato di fissare su quel crinale la loro dimora affrontando i disagi dell'inverno ad alture di mt. 1.000/1.200 s.l.m.

Proprio questa constatazione ci ha dato la speranza di trovare tracce di quel selciato costruito oltre 2000 anni or sono; abbiamo infatti pensato che soltanto dove non è arrivata l'uomo a fissare la propria dimora stabile, dove il bosco di faggi è stato l'eterno padrone, potevamo trovare ancora quelle pietre posate da mani di schiavi Liguri sette secoli fa.

- 3) - Dopo alcuni anni di ricerche a tappeto, con la costanza di effettuare innumerevoli saggi sotto la coltre di humus spesso anche 60-70 cm., fra una macinata di radici, abbiamo avuto la fortuna di trovare il primo metro di selciato largo cm. 260, costruito con grosse pietre di arenaria non geliva, squadrate, appoggiate sopra uno strato di "glarium" dello spessore di cm. 20/30.

Dopo quel primo metro, altri metri, altre decine di metri. Fino ad oggi abbiamo individuato con sicurezza il tracciato esatto per una lunghezza di circa 7 Km.,

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- 4 -

vaggio di esse, che abbiamo trovato il selciato che cercavamo. Non si è trattato quindi del rinvenimento fortuito di un selciato ben conservato in un luogo qualsiasi, ma di una strada che poteva e doveva essere soltanto su quel crinale, a meno che si voglia disconoscere l'intelligenza costruttiva dei Romani e l'attendibilità delle notizie storiche di Tito Livio.

Mi è sembrato importante sottolineare questo concetto non tanto per arrogarci il merito dell'intuito e della tecnica, quanto per evidenziare come la prova della datazione della strada sia insita nel rinvenimento stesso del selciato, proprio in quel luogo dove era logico che fosse stato costruito e dove appunto è stato ritrovato.

Non è questo e non vogliamo che sia erudito un atto di fede, perché possiamo dimostrare la ns. convinzione con una abbondante documentazione fotografica e con il supporto di molti altri rinvenimenti, complementari fra loro, che verranno pubblicati sempre nella Rivista "AUTOSTRADE" nei prossimi mesi di Ottobre, Novembre e Dicembre.

Nel frattempo Le saremo molto grati se ci convoca a Firenze ove potremmo anticiparle succintamente le prove acquisite a conferma del rinvenimento della tanto ricercata Flaminia Minor.

In attesa di una Sua cortese risposta ci teniamo a Sua disposizione e Le porgo, anche a nome di Franco Santi, i più distinti saluti.

Francesco Nicosia

The letter with our first official report concerning the discovery of the Roman paving. In the subject, we called the road Flaminia "Minor" because at the time we had not yet decided what to call it.



Mod. 300

13 OTT. 1986

19

*Ministero per i Beni Culturali
e Ambientali*
SOPRINTENDENZA ARCHEOLOGICA
DI FIRENZE

All'Avvocato Cesare AGOSTINI
Via S. Savino, 30
40128 BOLOGNA

Prot. N. 12168/02.10.1986

Risposta al Foglio del
Dir. L. N.

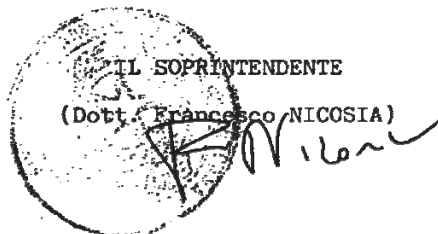
OGGETTO: segnalazione di rinvenimenti di interesse archeologico
(prot. n. 12168/02.10.1986).

Egregio Avvocato Agostini,

La si ringrazia per la gentile lettera e per gli allegati acclusi, inviati a questa Soprintendenza il 29 u.s. . Mentre cortesemente si sottolinea come non sussistano al momento (a parere di questo Ufficio) elementi sufficienti ad identificare la struttura viaria segnalataci con l'una o l'altra delle antiche strade tramandateci dalle fonti. Si comunica altresì che il funzionario di questa Soprintendenza, ispettore archeologo per il Comune di Firenzuola, provvederà a visitare appena possibile le strutture da Lei segnalate.

A questo scopo, il medesimo si porrà al più presto in contatto con Lei, nel caso Lei potesse fornirgli le indicazioni necessarie a reperire i tratti di strade da Lei segnalatici, nel corso del preannunziato sopralluogo.

Ringraziandolasi ancora, Le si inviano i più distinti saluti.



LF/lm
LF

The reply from the Archaeological Superintendency for Tuscany.

Martedì 5 novembre 1985

NAZIONE FIRENZE/PROVINCIA

Per quella antica strada

Studiosi sull'Appennino per svelare un mistero



Le tracce della strada sono state trovate a partire dall'antica Badia delle Stalle, a tre chilometri dalla statale della Futa, un tempo località isolata nel bosco e ora raggiungibile con una strada che conduce ad un piccolo centro residenziale. I segni dell'antico percorso lastricato affiorano, a intervalli, per circa sette chilometri sui prati o nelle faggete che in estate sono meta di gittanti toscani e bolognesi, e si perdono dopo Monte Bastione che sovrasta il centro di villeggiatura di Bruscoli, famoso per le rovine di un castello.

NEREO LIVERANI

Lassù, a più di mille metri di quota, il muschio dei prati e le foglie cadute dai faggi hanno nascosto per secoli una strada. Chi la costruì? Quando? Una modernissima tecnica di indagine, quella dell'uso del carbonio 14 per datare oggetti, e una campagna di ricerche compiuta dai bolognesi Franco Santi e Cesare Agostini hanno permesso di dare una risposta a molte domande. Si è diradata un po' la nebbia che ha sempre nascosto la storia delle più antiche comunicazioni stradali fra Toscana ed Emilia.

Una relazione sulle recenti scoperte è stata pubblicata da Vittorio Di Cesare nell'ultimo numero della rivista «Autostrade». A qualche chilometro dalla Futa, sui monti che sovrastano da una parte Covigliano e dall'altra il paesino di Bruscoli, sono state ritrovate le tracce di una strada lastricata che per circa sette chilometri andava dall'antica e quasi dimenticata Badia dello Stale fino a Monte Bastione, all'esterno nord della Toscana, un belvedere sulle colline e la pianura dell'Emilia, e poi proseguiva verso Nord. Qua reside la vecchia faggeta che ha dato il nome a un casolare sopra Bruscoli, un bosco fresco e verdissimo in estate, aperto e luminoso in inverno quando

le foglie cadono in un colorito tappeto.

Proprio sotto questa coltre naturale è stata scoperta la strada, in qualche punto incredibilmente ben conservata: è larga circa due metri e mezzo, in qualche punto soltanto un metro, è coperta con piccole lastre di pietra e fu accuratamente tracciata in modo da evitare pendenze e curve troppo brusche. Era molto difficile determinare l'epoca della costruzione perché la tecnica non è quella classica romana. L'enigma era entusiasmante per i ricercatori: il mistero delle antiche strade dell'Appennino non è stato risolto mai interamente neppure dopo gli studi che cinquant'anni fa dedicò a questo tema per tutta la vita il danese Plesner e neppure dopo la bella pubblicazione di Daniele Sterpos.

Ai ricercatori bolognesi sono state utili altre scoperte fatte vicino alla strada dimenticata nel bosco: hanno identificato una cinta fortificata forse costruita dai Liguri che abitavano queste cime prima degli Etruschi e dei Romani, hanno trovato due antichissimi acquedotti, anche i resti di un paese fantasma ridotto a mucchi di pietre del quale si ignora tutta la storia. Ma la scoperta più preziosa o fortunata è quella di alcuni forni che furono usati per cuocere le pietre e ottenere la calce.

Accanto ai forni c'era del carbone: le analisi compiute a Firenze nel laboratorio del consiglio nazionale delle ricerche con il cosiddetto metodo del carbonio radioattivo hanno permesso di stabilire che la legna fu bruciata nel IV secolo dopo Cristo, il secolo di Costantino, l'epoca nella quale l'Impero romano cominciò a fare i conti con le invasioni.

A questo punto si hanno già abbastanza dati per fare qualche ipotesi e dare una risposta all'enigma. Anzi, si può azzardare una risposta anche per qualche altro mistero. Si sapeva che nell'età delle invasioni una strada militare ben fortificata partiva dall'odierna Prato, risaliva la valle del Bisenzio e poi attraversava lo spartiacque dell'Appennino dove per secoli ci fu la Badia dello Stale, o Ospedale, luogo di rifugio per viandanti e pellegrini. Si conosceva poi il percorso verso Ravenna ma si ignorava un collegamento diretto verso Bologna e Milano anche se località come Sasso di Castro dimostravano la presenza di fortezze. Ora sono state trovate, a quello che ragionevolmente pare, le tracce di questa via. Era una strada militare ma di grande traffico. Nella parte meridionale le favorevoli condizioni del fiume fecero fiorire, tanti secoli dopo, l'arte della lavorazione della lana.

The first article by the journalist, Nereo Liverani, who we would like to thank for his constant interest and encouragement to continue our research and explorations.



UNIVERSITA' DEGLI STUDI - ROMA
ISTITUTO DI FISICA "GUGLIELMO MARCONI"

IL DIRETTORE

ROMA, 17/7/84
Piazzale Aldo Moro, 2
I - 00185 Roma - Italia

Nei primi mesi del 1982 a Firenze presso il laboratorio C^{14} del CNR, via del Proconsolo 12, fu eseguita un'analisi su carboni di legno provenienti da forni per la calce in un punto chiamato Piana degli Ossi in località Bruscoli, comune di Fiorenzuola. I campioni raccolti dall'Avv. Cesare Agostini di Bologna hanno dato il seguente risultato:

1620 \pm 30 anni dal presente (anno di riferimento 1950)
ovvero
330 \pm 30 Anno Domini

Si precisa inoltre che la data non è stata pubblicata su "Radiocarbon" in quanto il ciclo completo (24 date) non fu portato a termine per definitiva soppressione del laboratorio che da tempo non riceveva più regolari finanziamenti dal CNR.

Distinti saluti

Carlo Azzi
Dr Carlo Azzi

Per qualsiasi comunicazione:

Dr Carlo Azzi, lab C^{14} Ist. di Fisica, Città Universitaria
00100 Roma

Telex: 613255 ISNAFINU - Telefono: Operatore 4976-1, Diretto 4976

Certification of the analyses carried out by the C^{14} Laboratory of the C.N.R. in Florence on the carbon samples taken from an excavation in Piana degli Ossi.



Dipartimento Tecnologie Intersectoriali di Base

Prot. 372/DAM

Bologna, 23 maggio 1989



Dr. Luca Fedeli
Ispettore della Soprintendenza
Archeologica della Toscana
Via della Pergola, 65
50121 Firenze

Sig. Massimo Simoncini
Assessore del Comune di
S. Benedetto Val di Sambro (Bologna)



Oggetto: Risultati delle datazioni con radiocarbonio effettuate dal Servizio Datazioni C-14.

Segue lettera N. 372/DAM

Foglio n. 2

In risposta alla vostra richiesta, trasmetto i risultati ottenuti dal laboratorio di datazione C-14 dell'ENEA sui campioni prelevati nel corso dell'anno 1988 in diverse località nei pressi del selciato dell'antica strada tra Pian di Balestra e il Passo della Futa, in Comune di Figginezuola.

Tali prelievi sono stati effettuati dal Sig. Franco Santi e dall'Avv. Cesare Agostini, in presenza del sottoscritto e a volte del Dr. Luca Fedeli e del Prof. Giuseppe Longo del Dipartimento di Fisica dell'Università di Bologna.

I risultati sono i seguenti:

1) Campione BQ-42

Legno carbonioso raccolto in località Zuccaia, sotto il pavimento di resti di insediamenti medievali.
Età: 1310 ± 80 anni B.P.
Data corrispondente: 680 ± 90 dopo Cristo.

2) Campione BQ-43

Legno carbonioso raccolto alla sommità di Poggio Castelluccio alla profondità di circa 90 cm.
Età: 2640 ± 70 anni B.P.
Data corrispondente: 850 ± 50 avanti Cristo.

3) Campione BQ-104

Carboni raccolti in località Poggiaccio al centro di una presunta antichissima capanna, alla profondità di circa 40 cm.
Età: 3510 ± 250 anni B.P.
Data corrispondente: 1860 ± 320 avanti Cristo.

4) Campione BQ-108

Carboni incoerenti raccolti in località Piana degli Ossi nel primo forno, alla profondità di circa 190 cm.
Età: 1290 ± 350 anni B.P.
Data corrispondente: 700 ± 300 dopo Cristo.

Altri prelievi non hanno fornito una quantità di sostanza organica sufficiente ad essere datata.

ENEA
Comitato Nazionale
per la ricerca e per lo sviluppo
dell'Energia Nucleare
e delle Energie Alternative

Via G. Mazzini, 2
40138 Bologna
Telefono (051) 458111

Telegioco ENEA-BOL/DONA
Telex 51578 ENEABO I

Alcuni dati tecnici.

Tutti i campioni sono stati controllati allo stereomicroscopio e trattati con ripetuti bagni acidi e alcalini. Quindi bruciati e l'anidride carbonica di ognuno trasformata in benzene per la rivelazione della radioattività del C-14 col metodo della scintillazione liquida. Conteggio del fondo 1.310.1 cpm; attività del moderno 7.82±0.02 cpm/g. Il delta C-13 è stato stimato. I campioni sono risultati tutti e quattro in quantità insufficiente ad ottenere datazioni in condizioni ottimali (le quantità del benzene ottenuto sono comprese tra 0.7 e 1.7 grammi, invece di 3.1 minimo), per cui gli errori di misura sono abbastanza grandi.



Segue lettera N. 372/DAM

Foglio n. 3

Le età presentate in anni "Before Present" sono quelle ottenute secondo la formula di Libby e sono riferite all'anno 1950. Le date ad esse corrispondenti sono state ricavate tramite le curve di calibrazione ottenute dendrocronologicamente e pubblicate da "Radiocarbon" nel 1987.

Inviò i migliori saluti.

Agostino Salomoni
Agostino Salomoni

Documento relativo alle analisi C.14 effettuate su campioni di carboni prelevati nelle seguenti località: Zuccaia, Poggio Castelluccio, Poggiaccio e Piana degli Ossi. (Analista Dr. Agostino Salomoni, ENEA di Bologna).

Certification of the analyses carried out in May 1989 by Agostino Salomoni from E.N.E.A. in Bologna on carbon samples found on the summit of Poggio Castelluccio, on the slopes of mount Poggiaccio on Piana degli Ossi.



UNIVERSITÀ DEGLI STUDI DI MILANO

DIPARTIMENTO DI FISICA

VIA CECILIA 16 • 20133 MILANO (ITALIA)

TELEX 334687 INFN MI • TELEFAX (02) 2366383

SEZIONE STATI AGGREGATI - Tel. (02) 2392352

Sono state eseguite le datazioni dei seguenti campioni:

D635 Bruscoli-Scavo di fornace per calce- frammento di
parete sopra il forno

D639 Bruscoli-frammento di ceramica dall'area di scarico

D640 Poggio Castelluccio-frammento di ceramica

Le datazioni sono state effettuate con tecnica "fine-grain".
Il comportamento termoluminescente di tutti i materiali si è
rivelato piuttosto irregolare, e di conseguenza la valutazione
della dose totale assorbita è affetta da una imprecisione
decisamente maggiore della norma. Ne consegue un errore per-
centuale sulle età dell'ordine del 10%.

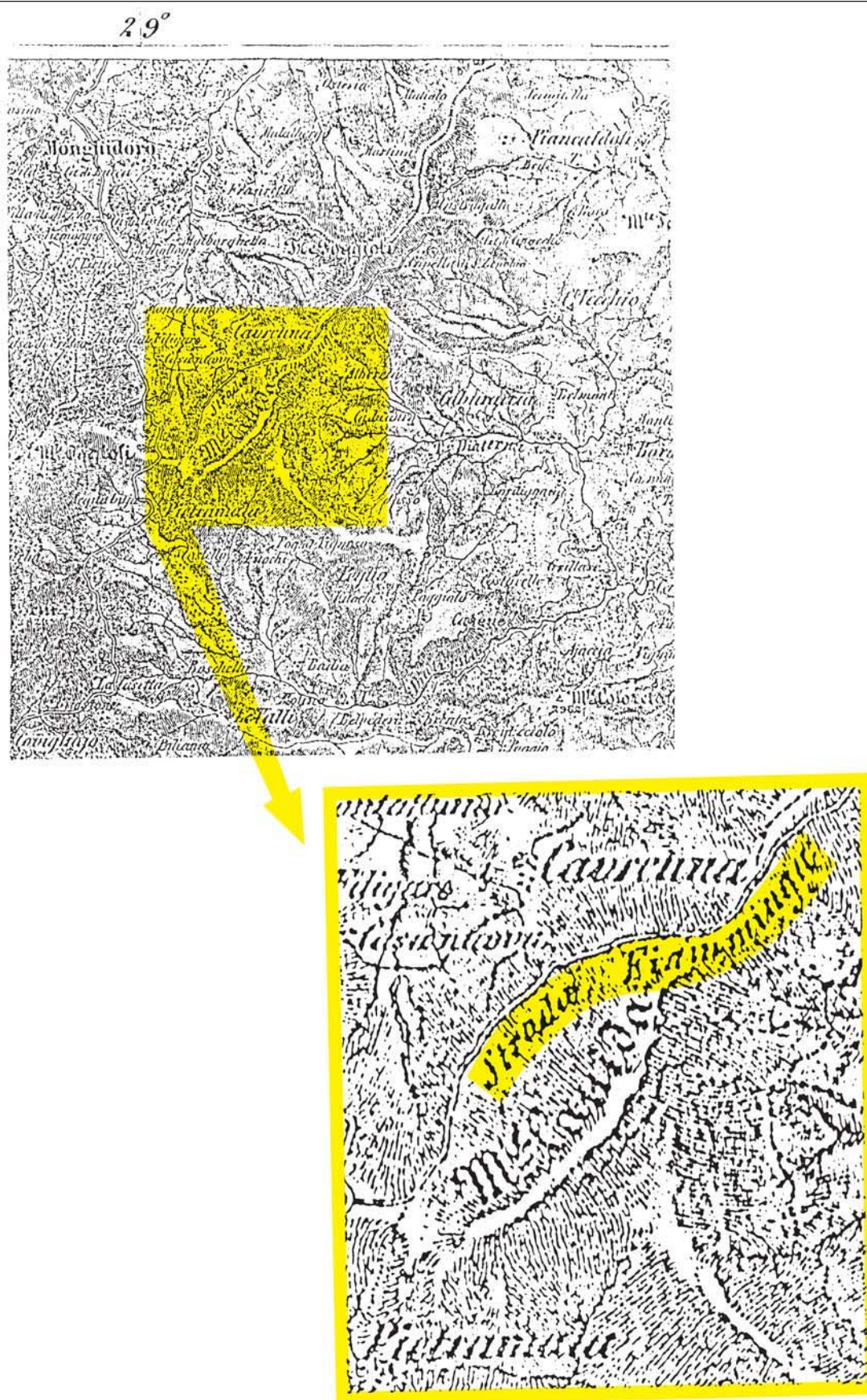
I risultati sono riportati in tabella

Campione	Dose totale (Gy)	Dose annua (mGy)	Datazione
D635	6.8+0.6	6.22+0.2	882+94 d.C.
D639	3.0+0.2	6.00+0.4	1491+50 d.C.
D640	19.9+1.4	7.79+0.6	566+200 a.C.

Milano, 5/6/90

Emanuela Sibilia

Certificate of the thermoluminescence analysis carried out in June 1990 by the Department of Physics of the University of Milan on a number of samples taken from Piana degli Ossi.



Map by the Military Topographic Institute of Vienna (year 1851) where the stretch of road from the Raticosa pass to Piancaldoli and onwards to Romagna is called "Fiamminga".

RISULTATI DEGLI ESAMI EFFETTUATI SU ALCUNI FRAMMENTI DI UN OGGETTO RINVENUTO IN LOCALITA' POGGIACCIO (Comune di Firenzuola).

A seguito di richiesta pervenutami ,nell'ottobre 1988, da parte del prof.Giancarlo Susini,Preside della Facoltà di Lettere dell'Università degli Studi di Bologna,ho preso in esame alcuni frammenti di aspetto diverso che mi risultano essere stati rinvenuti da parte Signori Franco Santi,Cesare Agostini e Vittorio Di Cesare,in località Poggiaccio (Comune di Firenzuola),in prossimità del crinale che collega il Passo della Futa a Bologna.

Il Rinvenimento di tali oggetti è avvenuto in occasione dell'effettuazione di un sondaggio stratigrafico in corrispondenza della sezione trasversale di una strada pavimentata in arenaria che si fa risalire ad epoca romana. I frammenti esaminati sono stati rinvenuti esattamente alla profondità di 50 centimetri ed erano inseriti nello strato di glarium sottostante il selciato.

Si è pensato di procedere con due metodologie distinte:la prima tendente ad appurare la forma originaria dell'oggetto,la seconda ad indagare la composizione superficiale del rivestimento dei frammenti.

Sono stati effettuati esami radiografici a potenziale,intensità e tempo di esposizione diversi che , dopo vari tentativi,ci hanno permesso di leggere con assoluta precisione la morfologia originaria dei frammenti .L'esame radiografico ,infatti, lascia intravedere con assoluta certezza , che i vari frammenti sono pertinenti ad uno stesso oggetto che risulta essere un chiodo , la testa appiattita e con lo stelo martellato terminante a punta , della lunghezza complessiva di circa 4 centimetri.

La materia originaria dell'oggetto era il ferro che,come elemento metallico non esiste se non in piccolissime tracce; rimangono inglobati nella testa del chiodo alcuni residui della parte idrata dell'ossido (ruggine) e la parte di alterazione corrosiva che si è arrestata nella zona di contatto con il terreno.Questa configurazione ha permesso il recupero dei residui trasformati della parte metallica originale compattandone la morfologia.

La fase corrosiva è senza dubbio riferibile ad una giacitura plurisecolare;confronti con alterazioni di prodotti del ferro a morfologia corrosa similare ci riportano sicuramente prima del III-IV sec.a.C.,come pure la tipologia del chiodo che può trovare riferimento in oggetti simili nell'ambito di una cultura appenninica o villanoviana.

Altri esami sono in corso al fine di completare il quadro per meglio precisare l'ambito cronologico dell'oggetto.

Dott.Livio Follo

Docente di Scienza e Tecnica del Restauro

Scuola di Perfezionamento in Archeologia

Università di Bologna

già Direttore del Lab. Restauri del Museo Arch.di Bologna

20 MAG. 1989

CODICE FISCALE: FLL LVI 87808 01417

Certificate issued by Livio Follo (professor of Restoration Science and Technology at the School of Archaeology at the University of Bologna) regarding the tests carried out on a nail found in the "glarium" under the road paving in Poggiaccio.

ETH Eidgenössische
Technische Hochschule
Zürich

Ecole polytechnique fédérale de Zurich
Politecnico federale svizzero di Zurigo
Swiss Federal Institute of Technology Zurich

Institut für Mittelenergiephysik

Prof. W. Wölfli

0970

HPK-Gebäude

Durchwahl-Nr. 01/377 2033
Telefonzentrale 01/377 44 11
Telex-Nr. 823 153 ehpk ch

Postadresse:

Institut für Mittelenergiephysik
ETH-Hönggerberg
CH-8093 Zürich

Mr.

Dr. L. Fideli

Cooperativa Archeologia a.r.l.

Via De Baldovini

I-50126 FIRENZE

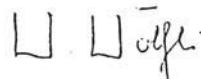
Dear Dr. Fideli

Here is the ^{14}C -result of your "Sabbio A" sample, you have personally submitted on February 19, 1990, for AMS-dating:

Lab.No.	Sample Code	AMS-Radiocarbon Age [yBP]	$\delta^{13}\text{C}$ [‰]
ETH-6022	U.S. 203 B.P.C. SABBIO A <i>calc</i>	1480 [±] 70	-27.0 _± 2.4

Dendro corrected or "calendar age range" ¹⁾ with a confidence limit of 95 % (25) : cal AD 420 (596) 670

Yours sincerely,



Prof. W. Wölfli

¹⁾ M. Stuiver and P.J. Reimer, Radiocarbon 28, 2B (1986) p. 1022

PREHISTOIRE & ARCHEOLOGIE

ARCHEOLOGIA

INFOS PRATIQUES

CONGRES

"La viabilité entre Bologne et Florence au cours du temps, problèmes généraux et acquisitions nouvelles"

Cet important congrès, organisé par l'Institut pour les Biens artistiques, culturels et naturels de la région d'Emilie-Romagne, avec l'appui des Communes de Firenzuela et de San Benedetto Val di Sambro, et la participation des Surintendances archéologiques de Toscane et d'Emilie-Romagne, s'est tenu du 28 septembre au 1er octobre 1989 dans les deux localités cernées de l'Apennin, face à des paysages magnifiques, rebossés, peuplés de coquettes résidences et animés par un tourisme écologique.

Une trentaine de communications ont traité :

- de la technique de construction des routes pour l'époque romaine, le Moyen Âge et les temps modernes,
- des données naturelles (géologie, géomorphologie, hydrographie, évolution climatique) et des conditions historiques,
- de la problématique diachronique concernant les liaisons entre Bologne et Florence,
- d'une série de comparaisons avec les autres vallées de l'Apennin.

Le géographe L. Gambi a tiré avec science et tact les conclusions de ces contributions. Les travaux se sont achevés par une table ronde animée, avec questions et réponses, devant une nombreuse assistance (jusqu'à 200 personnes).

Les participants ont été frappés par :

- le rôle du Professeur M. Alfieri (Institut d'archéologie de l'Université de Bologne), qui, avec ses nombreux élèves, a véritablement été l'âme du congrès ;
- l'apport d'amateurs passionnés (S. Agostini, F. Santi, V. di Cesare) qui, à la suite de dix années de prospections difficiles, ont découvert dans la montagne, près du col de la Futa (haut val Savena, Monte Bastione), plusieurs secteurs d'un itinéraire dallé, où ils ont proposé de reconnaître la via *Flaminia minor* ou voie mili-

taire ouverte, d'après Tite-Live, en 187 av. J.-C. par les troupes de Flaminius. Ce remarquable tracé de crête reprend probablement une piste indigène. Les congressistes ont pu voir ces vestiges impressionnants dans de très beaux sous-bois.

Cette proposition d'identification, à approfondir, s'oppose à un autre tracé, plus oriental, visant Claterna par le col de la Raticosa ;

- le mécénat de la Société italienne des Autoroutes, qui a dépensé quelque cent millions de lires pour la présentation des découvertes, mérité d'être souligné, ainsi que la collaboration de plusieurs institutions publiques et privées qui ont travaillé en commun à l'organisation du congrès. La générosité de l'hospitalité offerte fut extraordinaire.

Nous retenons aussi :

- le caractère réellement interdisciplinaire de ces recherches et leur amplitude ; elles intéressent les deux versants de l'Apennin, d'une mer à l'autre ;
- l'importance historique, économique, politique, mili-

taire, culturelle, des faisceaux de routes traversant cette chaîne, cela depuis la préhistoire jusqu'à l'époque moderne, avec des déplacements d'axes en rapport avec le contexte historique.

Toute la problématique du réseau routier a été ainsi évoquée à partir de cas concrets : sources (textes, inscriptions, iconographie et cartographie, toponymie, archéologie, archives), construction, chronologie relative et absolue. La publication des Actes sera donc attendue avec impatience.

A l'occasion du congrès a été diffusé un ouvrage très illustré de C. Agostini, V. di Cesare et F. Santi, *La strada Flaminia Minor*, Bologne, Studio Costa, 1989, 4°, 128 p., dont est extrait le document ci-contre, ainsi qu'une "Analyse critique de la via Flaminia Minor" par C. Agostini et F. Santi (même éditeur, 4°, 64 pages). Ajoutons que les découvreurs ont aussi identifié un important tour à drux, probablement médiéval, et plusieurs "castellieri" (oppida) indigènes (ligures)

où des fouilles prometteuses ont été entreprises par la Surintendance aux Antiquités de Florence. Les recherches seront sans nul doute poursuivies. Trois vœux ont été émis à la fin du congrès :

- mise à jour et poursuite de la carte archéologique d'Italie (1/100000, Florence, Institut Géographique Militaire),
- recensement à fins de comparaisons et de sauvegarde de tous les secteurs connus d'itinéraires routiers anciens (avec le concours des collectivités locales),
- diffusion de l'information à but pédagogique et didactique.

Un exemple à imiter.

R. Chevallier
La strada flaminia militare
(Poggio Castelluccio)

CONFERENCES

Centre d'étude d'Histoire de l'Art Andrée Thenot

L'art gothique

16 janvier 1990 : L'abbé Super et Saint Denis

23 janvier 1990 : Les premières églises gothiques

30 janvier 1990 : L'évolution de l'architecture gothique

06 février 1990 : La sculpture monumentale (I)

13 février 1990 : La sculpture monumentale (II)

20 février 1990 : La sculpture funéraire

06 mars 1990 : Les objets d'art gothiques

13 mars 1990 : La tapisserie

20 mars 1990 : Le vitrail

27 mars 1990 : Etude de deux grands chefs-d'œuvre :

le Couronnement de la Vierge d'Enguerrand

Quarton ; l'Agneau Mystique de Van Eyck

Le mardi à 18 h 30

Les Précolombiens depuis les Aztèques jusqu'aux civilisations pré-Incaïques

16 janvier 1990 : Les Aztèques (1) : origine

23 janvier 1990 : Les Aztèques (2) : Mexico aztèque

30 janvier 1990 : Les Aztèques (3) : art et religion

06 février 1990 : Les Aztèques (4) : écriture et calendrier

13 février 1990 : L'art précolombien des Antilles Françaises

20 février 1990 : Le peuplement de l'Amérique du Sud

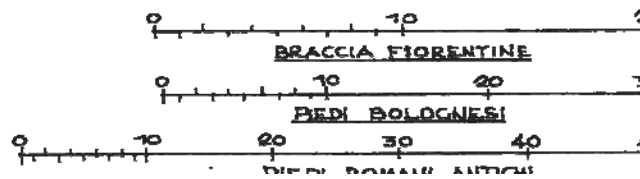
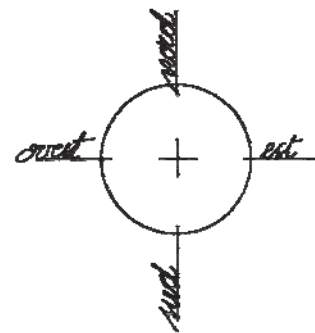
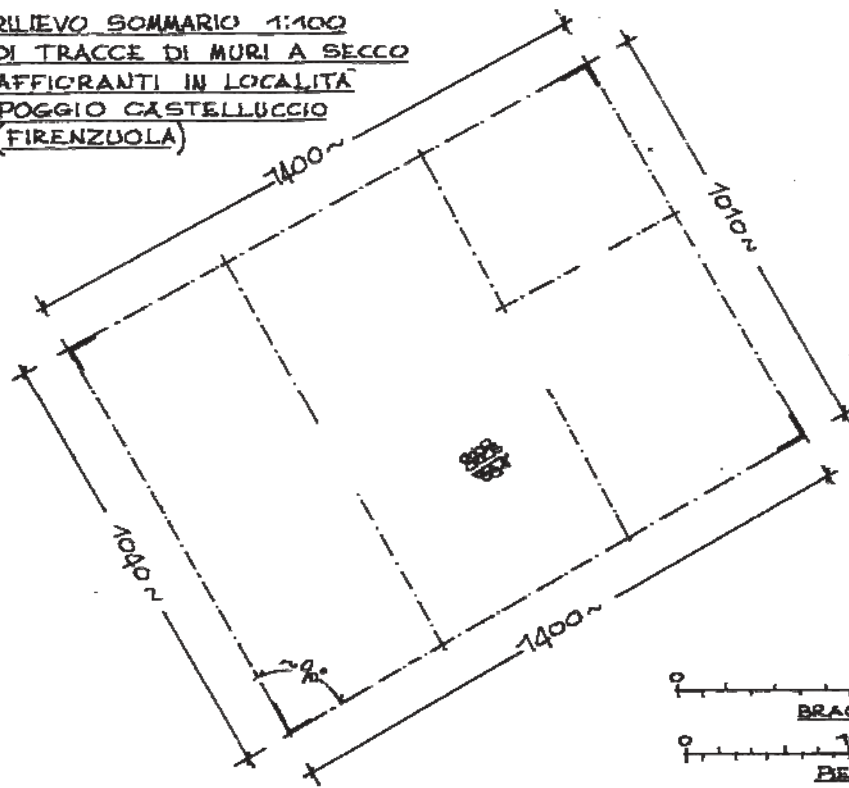
06 mars 1990 : La période Formative : Chavin-Cupisnique



La strada flaminia militare (Poggio Castelluccio)

Article by Raymond Chevallier about the Conference held from 28 September - 1 October 1989 "La viabilità tra Bologna e Firenze nel tempo" published in the French magazine "Archeologia" (issue 252, December 1989).

RILIEVO SOMMARIO 1:100
DI TRACCE DI MURI A SECCO
AFFIORANTI IN LOCALITA'
POGGIO CASTELLUCCIO
(FIRENZUOLA)



Sketch of the survey by Franco Bergonzoni of traces of dry stone walls which emerge just below the peak of Poggio Castelluccio (February 1992).



Dipartimento Tecnologie
Intersectoriali di Base

Laboratorio di Radiodatazione

Prot. 109/DAM

Bologna, 18 febbraio 1991

Segue lettera N. 109/DAM

Foglio n. 2

Rag. Dante Sabattini
VEL-BRA-SERGEN
ENEA Brasimone

Avv. Cesare Agostini
Via S. Savino, 30
40128 Bologna

Sig. Franco Santi
Via Ponte Vecchio, 74
40139 Bologna

Ing. Nello Benni
Via XXV Aprile, 1
40036 Monzuno (Bo)

Oggetto: Datazione reperto archeologico di Sassorosso.

Il 4 agosto 1990, in occasione di scavi effettuati dall'ACOSER per la posa di condutture del gas nel Comune di Monzuno, in località Sassorosso a circa 500 metri a sud di Monteverene, sono stati rinvenuti i resti di una fornace per la cottura di coppi ed embrici (tali manufatti si trovano in abbondanza nella stessa fornace e sparsi nei dintorni). In tale occasione sono stati prelevati, presente l'Ing. Nello Benni, alcuni grammi di sostanze carboniose consegnatemi poi dal Sig. Dante Sabattini per un parere.

Ho interpellato l'Avv. Cesare Agostini ed il Sig. Franco Santi in qualità di scopritori e studiosi della Strada Flaminia Militare, che si presume costruita nel 187 a.C. e si è considerato importante il fatto che il punto di rinvenimento della fornace si trova sul crinale alla sinistra idrografica del Torrente Savena e quindi sulla direttrice ove si ipotizza dovesse passare la suddetta Strada Militare.

Ho quindi ritenuto opportuno datare col metodo del Carbonio 14 i pochi carboni consegnatimi, a titolo di saggio; il risultato potrà essere preso in considerazione dagli Organi Competenti per la decisione su eventuali scavi di carattere archeologico.

La quantità pulita di carbone è risultata molto piccola (inferiore a 0,3 grammi) e quindi non è stato possibile avere una buona datazione (normalmente l'errore è di 35 anni). Il risultato della misura di datazione è il seguente:

100 a.C. \pm 250

(cioè l'età del reperto è risultata compresa tra il 330 a.C. ed il 130 d.C.).

Nel caso di un'indagine archeologica ufficiale, che mi auguro venga effettuata data l'importanza storica che rilevarebbe, sarà presa in considerazione dal mio Laboratorio la possibilità di interventi per le datazioni con radiocarbonio che si rendessero eventualmente necessarie.

Con i migliori saluti.

Agostino Salomoni
Agostino Salomoni

ENEA
Comitato Nazionale
per la ricerca e per lo sviluppo
dell'Energia Nucleare
e dell'Energia Alternativa

Comitato Nazionale
per la ricerca e per lo sviluppo
dell'Energia Nucleare
e dell'Energia Alternativa

Comitato Nazionale
per la ricerca e per lo sviluppo
dell'Energia Nucleare
e dell'Energia Alternativa

Certification by Agostino Salomoni of E.N.E.A. in Bologna of the C/14 analysis of a number of carbonaceous fragments taken from the kiln used to fire bricks found in August 1990 in Sassorosso – Municipality of Monzuno.

ÖSTERREICHISCHE NATIONALBIBLIOTHEK
HANDSCHRIFTEN-, AUTOGRAPHEN-
UND NACHLASS-SAMMLUNG

A-1015 WIEN, 4. Juni 1997
Josefsplatz 1
Tel. 0222 53 410/287
FAX 00431 / 53 410 296

53410 287

Herrn
V. Cesare AGOSTINI
Via S. Savino 30
I-40128 Bologna
ITALIA

Sehr geehrter Herr Kollege!

In Beantwortung Ihres Schreibens vom 18. Mai 1997 teile ich mit, daß ich am 25. Juli um 6.25 Uhr mit dem Nachtzug aus Wien in Bologna eintreffen werde. Ich hoffe, daß sich diese Ankunftszeit im Sommerfahrplan nicht wesentlich ändert.

Die von Ihnen angeführte Frage der roten Linien aus der Tabula Peutingeriana kann ich folgendermaßen beantworten. Wie auch auf der von Ihnen übermittelten Kopie ersichtlich ist, sind die Straßen als gerade Linien mit Entfernungsangaben dargestellt. Die rote Linie entlang der Flußläufe ist wohl nur als Bestätigung dieser topographischen Angaben zu verstehen.

Mit herzlichen Grüßen

Univ.-Dozent Dr. Ernst Gamillscheg
Direktor



Letter from Ernst Gamillscheg, Director of the Vienna National Library where the original medieval copy of the *Tabula Peutingeriana* is housed.



ENTE PER LE NUOVE TECNOLOGIE, L'ENERGIA E L'AMBIENTE

LABORATORIO DI DATAZIONE C-14

Via dei Colli, 16 - 40136 Bologna

tel. 051 / 60.98.168 fax 051 / 60.98.187

Ente misura	ENEA	Ente proponente	
Cod. Campione	BO381	Referenti	Fedeli/Agostini
Sigla Campione	SW381B	Cod. Campione	Ponte 2

Data ricevimento	9/6/94
Tipo ricerca	Archeologia
Località	Barberino del Mugello/Colombaiotto
Tipo di sito	ponte pseudo-romano
Quantità ricevuta	850 g
Età presunta	
Natura e aspetto	legno semicarbonizzato esternamente ed umido
Note	

PRETRATTAMENTO:	Fisico	essiccazione e riduzione in stecchetti/eliminazione sostanze estranee
	Chimico	trattamento acido
	Note	

Note E' stata datata la frazione insolubile in soluzione acida

$d^{13}C$ (stimato) -24 ± 3 ‰

Età B.P.: **907 \pm 60 BP**

Età calibrata :	68.2 % di confidenza	95.4 % di confidenza
	1040-1210 AD [1.00]	1020-1260 AD [0.99]

L'età è stata calibrata con il programma OxCal v. 2.18 [M.Stuiver, A.Long and R.S.Kra eds. 1993 Radiocarbon 35 (1)]

R. Campen

Certification from the E.N.E.A. C/14 Laboratory in Bologna regarding the result of the analysis of a sample of wood taken from the remains of pier II of Colombaiotto bridge.



ENTE PER LE NUOVE TECNOLOGIE, L'ENERGIA E L'AMBIENTE

LABORATORIO DI DATAZIONE C-14
Via dei Colli, 16 - 40136 Bologna
tel. 051 / 60.98.168 fax 051 / 60.98.187

Ente misura	ENEA	Ente proponente	
Cod. Campione	BO396	Referenti	Fedeli/Agostini
Sigla Campione	SW396B	Cod. Campione	Ponte 3

Data ricevimento	9/6/94
Tipo ricerca	Archeologia
Località	Barberino del Mugello/Colombaiotto
Tipo di sito	ponte pseudo-romano
Quantità ricevuta	19 g
Età presunta	
Natura e aspetto	legno
Note	

PRETRATTAMENTO:	Fisico	essiccazione e riduzione in stecchetti/eliminazione sostanze estranee
	Chimico	trattamento acido
	Note	

Note E' stata datata la frazione insolubile in soluzione acida

$d^{13}C$ (stimato) -22.4 ± 3 ‰

Età B.P.: 2820 ± 40 BP

Età calibrata :	68.2 % di confidenza	95.4 % di confidenza
	1000-910 BC [1.00]	1060-840 BC [0.99]

L'età è stata calibrata con il programma OxCal v. 2.18 [M.Stuiver, A.Long and R.S.Kra eds. 1993 Radiocarbon 35 (1)]

R. Campi

Certification from the E.N.E.A. C/14 Laboratory in Bologna regarding the result of the analysis of a sample of wood taken from a beam near the remains of pier VI of Colombaiotto bridge.

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APPENDIX

1979-1999

NOT JUST A QUESTION OF RESEARCH, EXPLORATION AND EXCAVATION

- 1 - Private and public meetings.
- 2 - “La viabilità tra Bologna e Firenze nel tempo” conference.
- 3 - Foundation of the Archaeology Group and the opening of the Museum of History and Ethnography in Bruscoli (Firenzuola).
- 4 - The photographic exhibition in Valserena (S. Benedetto Val di Sambro)
- 5 - News of the discovery of the Flaminia Militare reaches the United States of America.
- 6 - Guided tours along the Flaminia Militare.
- 7 - The Flaminia Militare in the press.

1 - Private and public meetings.

News of our first discoveries aroused the curiosity of many, who not only wanted to see the unearthed paving but also wanted to learn about the history of the road and listen to a description of our research and explorations.

Thus, during the initial years we held private meetings organised by the particularly enthusiastic. During these meetings, we gave brief informative lectures and especially answered any questions from those present. At times, we were confronted by opinions that challenged ours, firing debate and contributing towards ever-increasing interest. The evenings became particularly animated when there were two sides with different opinions: in this case, the debate nearly always boiled down to when the paving was built, which some thought must have been during the late Middle Ages or even modern times, in open conflict with our theories.

From the outset, we noted that our most convinced supporters were those who lived or had lived on the Apennines, or who had in-depth knowledge of the area, who easily understood that a road system of this type could not have been built during the dark years of the Middle Ages (also considering the areas it crossed, which had always been uninhabited and

included the highest altitudes of the Apennines). The most doubtful were the young or those who, regardless of their level of education or culture, lived in cities and had no idea of the precarious conditions of the existing Apennine road system up to the 19th century. When, however, we were able to get across the enormous difference between a medieval mule track and the structure of a Roman paved road, their scepticism was often transformed into agreement.

The biggest difficulty was when we were asked to prove that the road was built in 187 B.C. In these circumstances, we noted the silent rebuke that clouded the eyes of our supporters, because we had not found a commemorative stone celebrating the inauguration of the road, or at least a *miliario* bearing the inscription “*C. Flaminius consul fecit*”. And we must confess, we would have loved to come up with such a find, if only to reward those who have always believed in our ideas.

After the first years of private meetings, the local authorities affected by the route realised the importance of the discovery and asked us to hold public meetings to publicise our finds.

The first was organised by the Municipality of Pianoro in the hall of the Library in Rastignano on 12 December 1986.



Rastignano (Bologna) 12 December 1986: the first public conference held by Cesare Agostini and Franco Santi regarding the discovery of the *Flaminia Militare*.



Rastignano (Bologna) 12 December 1986: the first public conference held by Cesare Agostini and Franco Santi regarding the discovery of the *Flaminia Militare*. A view of the hall in the Municipal library. First row from left: Adriano Simoncini, Giorgio Brighetti and Paolo Guidotti.

When at 9.30 pm we started the conference, the hall (which holds 80-100 seats) was packed with numerous people standing. We were both delighted but also anxious to see such large numbers, worried we would not be concise enough. Nevertheless, the benevolent words of the Deputy Mayor, Generali, and the Head Teacher of Pianoro, Adriano Simoncini, reassured us and we were able to hold everyone's attention for three hours.

After this first conference, we received invitations from numerous municipalities, cultural associations and clubs, etc. who wanted to meet the increasing demand from members curious about the ancient road system.

Two conferences held at the Rotary club introduced us to two professors who for many reasons were an important contribution to our research. The first was held on 9 February 1987, following an invitation by Luca Malisardi and Carlo Cacciari, then Chairman of the Bologna Ovest Rotary Club. At the end of the conference,

Carlo Alvisi, then lecturer in Neurosurgery at Bologna University took the floor in the role of untiring rambler. He informed us that he had walked from Bologna to Florence on numerous occasions, more or less along the route described by us. He pointed out that when planning his route across the Apennines, he had drawn a straight line from Bologna to Florence on a modern road map with the intention of following the line. By applying the "line of sight" principle, he made the same choice as the Etruscans and Romans when they had to cross the Apennines. However, unlike them, he came across numerous natural obstacles such as dense vegetation and, at lower altitudes, fencing around private and industrial properties.

After this first meeting, Alvisi was so interested in our project, that he often came with us during our explorations on the ground, helping to excavate and offering precious advice. Thanks to autonomous initiatives he also contributed towards identifying some



Mount Poggiaccio - (August 1995): Alvisi, left, also offered manual help during some excavations when looking for the remains of the Ligurian civilisation. The effort needed to carry out the dig induced him to work bare chest, as did Franco Santi, in spite of the freshness of the air at an altitude of 1,100 metres.

unclear areas of the route¹. And so, a profound friendship was born, not just because of our common interest in the search for the road.

A second conference took place on 10 February 1988 at the [Bologna] Centro Rotary Club, thanks to an invitation by the then Chairman, Luigi Heilmann. At the end of our lecture, Giancarlo Susini, Professor of Ancient History and Chairman of the Faculty of Literature and Philosophy at the University of Bologna spoke. His approval regarding the discoveries we illustrated² gave us a profound sense of satisfaction because we knew that we had been taken seriously by one of the most authoritative scholars on the subject, a distinguished exponent of that academic world that had initially and continuously demonstrated scepticism.

In the same year, on 6 December, we held a third conference following an invitation from the Chairman of the Bologna Sud Rotary Club, Luigi Montuschi. And another at the Bologna Est Rotary Club on 5/04/90 (chaired by Lodovico Barbieri) and at the Bologna Nord Rotary Club on 11 April 1990, following an invitation by the Chairman, Gavino Onida.

We were also invited to speak at a number of “Lions” clubs: such as on 4 March 1990 at the Valle Savena and Sambro di Monzuno Lions International, on 21 March 1997, at the Bologna Pinaro degli Ariosto Lions Club following an invitation from the Chairman, Gianfranco Gulminelli, and in September 1998 at the Pieve di Cento Lions Club.

We also accepted with pleasure invitations from the Municipalities of Firenzuola on 26 May 1987, Loiano on 5 August 1988, Porretta Terme on 6 September 1991.

Many of the people who attended these conferences asked us to accompany them to the locations where we had found the road, which we did by organising excursions during the summer months.

2 - “LA VIABILITÀ TRA BOLOGNA E FIRENZE NEL TEMPO” Conference. General problems and new acquisitions” (28-29-30 September / 1 October 1989)

In the face of the general interest aroused by our discoveries, during the years 1987-88, the Municipalities of S. Benedetto Val di

Sambro and Firenzuola thought it necessary to organise a historic-scientific Conference with the participation of eminent scholars of ancient road systems, in an attempt to establish when the road we unearthed was built. This initial idea of a monographic research theme gradually developed into an opportunity to broaden the topics worth covering, and eventually included the problems faced by travellers on the various transapennine roads during every age. This considerably expanded the topics to discuss, which ranged from Etruscan pathways to the modern motorway.

Therefore, the organisers were able to count on the participation of wide-ranging and competent scholars of road systems during different ages.

The Conference title reflected this intention: “*LA VIABILITÀ TRA BOLOGNA E FIRENZE NEL TEMPO. Problemi generali e nuove acquisizioni*” [TRAVEL BETWEEN BOLOGNA AND FLORENCE THROUGH THE AGES. General Problems and New Acquisitions].

To ensure the Conference was attended by high level scholars, the two organising Municipalities asked the Universities of Bologna and Florence to nominate a committee to deal with the scientific organisation, drawing up a list of scholars to invite and establishing with them which specific topics to cover. Nereo Alfieri, Professor of Ancient Topography at the University of Bologna and an authoritative scholar on the subject, was appointed Chairman of the Scientific Committee.

When drawing up the list of speakers to invite, the Scientific Committee wanted to exclude us. However, the two municipalities insisted on our participation on the grounds that, although amateur archaeologists, we had made the discoveries that were the reason for organising the Conference and, therefore, we had the right and duty to inform the participants about the discoveries made and express our opinion.

In light of this, we would like to quote some passages from the summary of the Conference written by Luca Fedeli from the Archaeological Superintendency for Tuscany (member of the Scientific Committee) in a magazine published in Mugello³: “*From 28 September to 1 October 1989, at Firenzuola and San Benedetto Val di Sambro a conference was held on*

¹ See his contribution described in chapter XX, paragraph 2.

² Refer to chapter XII, paragraph 3.

³ Luca Fedeli: “*The paving stones on the Setta – Savena - Santerno ridge in the Conference on travel between Florence and Bologna through the ages*”; in “*Studi e tradizioni Mugello, Alto Mugello e Val di Sieve*”; a four monthly periodical on historic, economic and geographical culture, year I, issue 1, May 1990.

“Viabilità tra Firenze e Bologna nel tempo”.

(...omissis) *The Scientific Committee, chaired by Nereo Alfieri, also included experts selected by each of the two organising Municipal Administrations (Firenzuola and San Benedetto Val di Sambro) and by a representative of each of the two Archaeological Superintendencies (Tuscany and Emilia-Romagna). The Organisational Committee was also extended to the political representatives of the two Municipal Administrations and the Mountain Communities of Vergato and Borgo San Lorenzo. Società Autostrade sponsored the Conference (part of the Iri-Italstat Group – and which also financed the archaeological campaign in the summer of 1989) as did the Cassa Rurale ed Artigiana di Loiano and the Cassa Rurale ed Artigiana di Mugello. The Conference was also supported by the Provincial Administrations of Florence and Bologna.*

The initial inspiration and the local focus of the Conference was the discovery in August 1979, of a series of paving stones in the Municipality of Firenzuola, positioned along some six kilometres of the transapennine ridge between the rivers Setta (to the west), Savena and Santerno (to the east) (between the Futa pass and the regional boundary) by Agostini and Santi from Bologna.

This important discovery was first disclosed in 1985 and has since aroused considerable interest. In particular, the fact that the discoverers of the paving stones identify the road as part of the road between Arezzo and Bologna described by Titus Livius, has aroused particular attention and some controversy, especially in the Bolognese academic world. In fact, the Bolognese academic world in former years had studied at length the “Flaminia Minor” (as the road mentioned by Livy, built in 187 B.C. by the consul C. Flaminius Nepote is now conventionally called). The Bolognese academic world suggested the route went from the ancient Claterna (in the present-day Municipality of Ozzano, in the province of Bologna) along the mountain ridge between the Idice and Sillaro and then across the basin of the Santerno, towards the Apennine watershed and the Mugello valley. The interest in the finds and, why not, the clamour caused by the controversies, inspired the organisation of a Conference regarding the road system between Florence and Bologna through the ages. As underlined by Alfieri in his introductory lecture on 28 September, for too long the regional boundaries now, and formerly between the Grand Duchy and

the Papal States, have represented a curious and depreciable barrier in terms of exchange of information between the two versants of the Apennines. This has, therefore, prevented the homogenous collection of data regarding the road system between Florence and Bologna through the ages. This bitter ascertainment was made some time ago by the Scientific Committee which, therefore, decided from almost the outset to widen the theme of the Conference from the discovery of the Setta – Savena - Santerno paving stones to the Bologna-Florence road system “tout court”... (omissis). Thus, during the subsequent meetings of the two preparatory committees, the final structure of the conference was drawn up. Initially the conference was to last three days but was then extended to four to allow for a visit to the Setta – Savena - Santerno road paving. Thus, an excavation campaign along the new paving stones appeared to be a necessary preliminary issue: with great long-sightedness the Società Autostrade financed the excavations on the ground, directed by myself in July-August 1989 and which I referred to in the Conference on 29 September at the Postiglione, at the old Stale pass.

In fact, the Conference was held in various locations, from the Ex-Magistrate’s Palazzo in Firenzuola to the Postiglione and, from the morning of 30 September, in Valserena in Emilia... (omissis). During the first day, on the afternoon of 28 September, after various introductory lectures, the session regarding the “Technical-Construction Aspects of the Roads” took place, followed with particular interest by the participants due to the themes of the three lectures (which aimed to illustrate ancient, medieval and modern technical aspects respectively) and the importance and relevance of the topics. I directed an excavation in August 1989 along the stretches of ancient road along the Setta – Savena - Santerno ridge and was particularly reassured by the lecture by Giuliani from the University of Rome, who when discussing the road making techniques used by the Romans, pointed out the various structures used in different times and places, and how difficult the techniques are to define .

*In fact, except for the sole ancient source that mentions the subject (Statius, *Silvae* IV, 3, 40 and elsewhere), there are no other ancient texts and little modern research that can be used in an in-depth archaeological investigation. After the session held on the morning of 29 September regarding the “historical aspects and*

naturalistic aspects of the road system between Tuscany and Emilia Romagna" in the afternoon the discoverers of the road spoke at length about technical and topographical aspects and the timeline of the discovery itself, also illustrating the reasons that induced them to identify the stretches of road they found as the "Flaminia Minor" (which we call the Flaminia Militare).

Perhaps it is in reference to this and other identifications – which Mannoni from the University of Genova underlined to the general approval of all - that the stretches of the Setta-Savena-Santerno road are of great interest regardless of whether they are ancient, medieval or modern. Anyway, identification of the name of a road, however important, is in some ways secondary compared to the fact that it exists and the discovery of stretches of a road about which all trace had been lost... (omissis). The same Mannoni, echoed by Chevallier from the University of Tours, expressed his utter respect for the Setta – Savena - Santerno paving stones, observed two evenings before during the visit... (omissis). As regards these general theories, often exciting (or at least stimulating), my lecture regarding the "New archaeological finds" which took place on the evening of 29 September, was much more arid. My task was not easy: I had to explain the summer excavation campaign from which a series of clarifications was expected regarding the nature and dating of road components. However, the scarcity of material that emerged, the fact that the excavation was carried out so near to the date of the Conference and the fact that the archaeometric analysis was still taking place made this difficult... (omissis). The data in question shall be published in the Conference Minutes printed thanks to the far-sightedness of the Mugello Mountain Community".

We would like to add that over the four days, 27 speakers took the floor to discuss diverse and interesting topics. We would like to mention the themes dealt with by the most authoritative speakers (listed in their order of appearance at the Conference):

- Fulvio Giuliani: *The construction of Roman roads.*
- Tiziano Mannoni: *Medieval road construction techniques.*
- Alberto Riparbelli: *Technical and technological aspects of modern road construction.*



Valserena (S. Benedetto Val di Sambro): "La viabilità tra Bologna e Firenze nel tempo" Conference; 28 September / 1 October 1989: Nereo Alfieri gives his lecture illustrating the route of the Via "Flaminia Minore".



Valserena (S. Benedetto Val di Sambro): "La viabilità tra Bologna e Firenze nel tempo" Conference; 28 September / 1 October 1989: Cesare Agostini illustrates the route of the "Flaminia Militare" and describes where the Roman paving stones were found.



Valserena (S. Benedetto Val di Sambro): “La viabilità tra Bologna e Firenze nel tempo” Conference; 28 September / 1 October 1989: view of the Conference hall. In the first row, Raymond Chevallier (second from left) and Giovanni Uggeri (first on the right).

- Antonio Veggiani: *The geomorphic features of the Tuscan-Emilian Apennines in relation to the origins of the road system .*
- Guido A. Mansuelli: *Historic aspects of the transapennine road system in ancient times.*
- Daniele Sterpos: *Alternating passes in past journeys between Bologna and Florence.*
- Vittorio Di Cesare: *New documentary evidence of the Setta-Savona ridge road. Technical and topographical aspects.*
- Luca Fedeli: *The 1989 excavation campaigns along the stretches of road on the Apennine ridge between the Setta, Savona and Santerno.*
- Marco Milanese: *Mineralogical examination of ceramic finds from the pre-Roman site in Poggio Castelluccio (Bruscoli - Florence).*
- Nereo Alfieri: *The Via Flaminia “Minore”.*
- Giovanni Caselli: *The “natural” Bologna-Florence route (the Setta-Savona ridge) on the ground and in local tradition.*
- Renato Stopani: *The “Florentine Alps” and links to the Po Valley.*
- Natale Rauty: *The medieval road system across the Pistoia Apennines.*
- Leonardo Rombai - Lidia Calzolai: *The transapennine road system of modern Tuscany.*
- Antonio Bacci: *The territory of Arezzo.*
- Giovanni Uggeri: *The Apennine road system between “Regio VII” and “Regio VIII”.*
- Jacopo Ortalli: *Caesena -Sassina - Balneum: ancient roads and road infrastructures in the Savio valley*

On the afternoon of 29 September we held

our lecture with the theme: *“Timeline of a discovery (the Flaminia Militare)”*.

Raymond Chevallier, professor at the University of Tours (France) and an eminent scholar of Roman roads expressed words of approval regarding the discovery of the paving (which he visited during the Conference).

The Conference was concluded by Lucio Gambi from Bologna, who summarised the various trends that emerged during the numerous presentations and the two opposing theories upheld by N. Alfieri and ourselves in reference to the route followed by C. Flaminus. He stated that he tended to agree with our theory, although he had some reservations:⁴ *“But between these two routes, was the preferred route the western one along the rib of mount Bastione or the eastern one along the rib of mount Canda? Leaving aside archaeological proof that can only be used as evidence after it has been definitely assigned to an age... (omissis) by basing my opinion almost solely on topographic circumstances, I believe that between the two, the preferred route was the western path. The circumstances (which could not have lasted for more than fifty years) are the following: from a military point of view, in a situation that sees Pisa and Bologna playing the role of outpost and base in the conquest of Liguria, and Fiesole being the focus point that united them, a road drawn atop the rib of mount Bastione, which dominated the basin of the Reno but was also some distance from its valley bottom and well protected by its high altitude, was in the best position to act as a lateral line of communication and supply during the war operations conducted west of the Reno against the Friniates and the Apuani.*

In the search for the road opened through this area by the consul Flaminus, this solution, inspired by considerations of military logic, pushes one to discard the other pre-Roman route from the basin of Firenzuola along the rib between the Idice and Sillaro.

To summarise, the prevailing opinion emerged from the Conference whereby the paving found on mount Bastione, mount Poggiaccio and Poggio Castelluccio belonged to a Roman road.



Valserena (S. Benedetto Val di Sambro): Conference about “La viabilità tra Bologna e Firenze nel tempo” 28 September/1 October 1989: Raymond Chevallier complements Cesare Agostini for the explorations carried out with Franco Santi, discoverers of the transapennine Roman road.



Valserena (S. Benedetto Val di Sambro): “La viabilità tra Bologna e Firenze nel tempo” Conference; 28 September / 1 October 1989: Franco Santi (right) with Tiziano Mannoni (facing) and Massimo Simoncini (standing) Councillor for the Municipality of S. Benedetto Val di Sambro.

The only doubt that remained was the exact date of its construction.

N. Alfieri substantially arrived at the same conclusions, and wrote in his report published in the

⁴ Lucio Gambi: *“Qualche considerazione in vista di una prossima riapertura del discorso”* in the Minutes of the Conference about “La viabilità tra Bologna e Firenze nel tempo”; published by Costa Editore, Bologna, 1992, pages 268-269.

Minutes of the Conference⁵: “A series of interdisciplinary research projects was developed on this basis which better defined the route of the Via Flaminia on the Emilian versant, clearly distinguishing it from that of the road – also Roman – of the adjacent Savena valley and proposing the links between these transapennine roads and longer distance itineraries between the peninsula and Cisalpine region”.

The four days of the Conference ended with great success, not just for the scientific standard of the themes discussed but also in terms of organisation and logistics. This was thanks to the initiative and the efforts of the Municipal Administrations of San Benedetto Val di Sambro and Firenzuola, coordinated by the respective Mayors, Massimiliano Stefanelli and Giovanni Vignoli, who we would like to thank.

3 - Foundation of the Archaeology Group and the opening of the Museum of History and Ethnography in Bruscoli

During the conference held in Firenzuola, in May 1987, we met a number of young people from Bruscoli who were enthusiastic about joining us in the search for the remains of a Roman road that also passed through their area. A substantial collaboration was soon established, which turned into a sincere friendship, based on a common interest in the study of the history of the area and archaeological research.

A few months after the Conference in September-October 1989, realising that the Superintendency for Tuscany could not maintain contacts with private individuals, even if fired by the disinterested will to explore, we founded the “Gruppo Archeologico di Bruscoli” (G.A.B.) [Bruscoli Archaeological Group], a free association of volunteers with the objective of carrying out research and explorations on the ground to safeguard, protect and catalogue every emergence of archaeological interest. The founding members were: Emanuele Stefanini, Franco Santi, Cesare Agostini, Andrea Vignoli, Marco Antonelli, Sabrina Stefanini and Alessandro Stefanini, also joined by the Parish Priest of the

town, Don Lucio Bianchini. The Group received the recognition of the Archaeological Superintendency for Tuscany on 30 November 1989 and, from that moment became its official reference for this Apennine area. The Group was then formally constituted with a public deed on 19.02.1996, becoming legally autonomous. Over the years, the founding members were joined by other volunteers from Tuscany: Mirella Romei, Domenico Galeotti, Antonio Galeotti, Franco Poli, Delia Poli and Manuel Noferini and from Bolgona: Carlo Alvisi and Franco and Vittoria Bacci. The meetings (not only formal) held by the Group members provided an impulse to those initiatives that we could not organise alone. Thus as well as material help in terms of uncovering other stretches of Roman paving, the Group provided the work force needed to excavate the remains of the building on Poggio Castelluccio (September 1992), it installed fencing to safeguard the paving on Poggio Castelluccio against the unlawful transit by cross country motorcyclists (July 1995); it built roofing to protect the entrance corridor to the firebox of the kiln on Piana degli Ossi (April 1996) and it started the excavations on the medieval castle in Bruscoli (July 1999).

The most important and demanding task was setting up the Museum of History and Ethnography in Bruscoli, possible thanks to the great



Bruscoli (Firenzuola) 13 August 1994: *The mayor of Firenzuola, Giovanni Vignoli gives the inaugural speech of the Museum of History and Ethnography in Bruscoli.*

⁵ N. Alfieri: “La Via Flaminia “Minore”; in the Minutes of the Conference “La viabilità tra Bologna e Firenze nel tempo”; published by Costa Editore, Bologna, 1992, page 99.

cultural sensibility shown by the Municipality of Firenzuola, who allowed permanent use of the local elementary school building (which had been closed). The opening of this permanent educational exhibition was mainly due to the efforts of Emanuele Stefanini, the first chairman of GAB, who with great tenacity and effort, dedicated all his free time to achieving this objective. The museum, inaugurated by the Mayor of Firenzuola, Giovanni Vignoli, on 13 August 1994, initially housed the items from ancient and medieval times found during our explorations and photographic documentation of the stretches of uncovered Roman paving. Over the years, other more recent and just as interesting items have been added, such as tools and materials. The museum is now divided into three sections:

- geo-archaeological finds.
- items from Apennine folk culture: the tools used by our grandparents, the reconstruction of agricultural environments and craft activities.
- remains from the second world war in memory of the “Gothic Line”.

4 - The photographic exhibition in Valserena (S. Benedetto Val di Sambro):

To meet the widespread curiosity aroused over the years by our discoveries, we organised a photographic exhibition illustrating the numerous images of the



Valserena (S. Benedetto Val di Sambro) 12 August 1990: visitors at the “Flaminia Militare” photographic exhibition.



Valserena (S. Benedetto Val di Sambro) 12 August 1990: group photo of the opening of the photographic exhibition. From left: Cesare Agostini, Franco Santi, Emanuele Stefanini, Sergeant of the Carabinieri, Luciano Poli, Mayor of the Municipality of S. Benedetto Val di Sambro, Oscar Clausi-Schettini and Giovanni Vignoli, Mayor of the Municipality of Firenzuola.

excavations and finds, as well as other photographs and illustrations. This was possible thanks to the generosity of Sergio Dall’Omo, who we would like to thank for allowing us to use a number of rooms owned by him in Valserena free of charge (S. Benedetto Val di Sambro). The exhibition, inaugurated by Luciano Poli, Mayor of S. Benedetto Val di Sambro and Giovanni Vignoli, Mayor of Firenzuola, attracted the interest of many visitors who flocked to see it from the very first day (12 August 1990).

5 - News of the discovery of the Flaminia Militare reaches the United States of America

During our explorations on Poggiaccio and Poggio Castelluccio, we came across the fortifications built during the second world war, fought bitterly on these mountains. As well as the remains of military supplies and bullet shards, we also identified hundreds of small trenches, big enough to hold a man and dug by American soldiers to protect themselves from enemy bombardments. One had been dug right into the Roman paving by an unaware soldier who must have worked very hard to break through the paving.

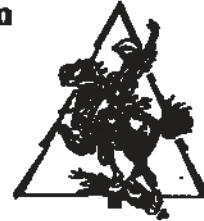
Our thoughts then turned to 187 B.C., when on the slopes of these same mountains,



91st Infantry Division Association

Lorraine - Meuse-Argonne - Ypres-Lys - Rome-Arno
North Apennines - Po Valley

April 11, 1990



Dear Signor Agostini:

I was delighted to receive your two books and especially happy to receive your letter. Thank you so much for allowing me to reprint the photographs. You and "STUDIO COSTA" will be given full credit. A short article on your work will appear in the June issue of our "Powder River Journal". A more detailed story will be featured in our December edition.

As soon as I got the copy of *LA STRADA FLAMINIA MILITARE* I rushed down to the local library and checked out all the books they had on the ancient Roman viae. The book, *THE ROADS THAT LED TO ROME*, told me just about everything I wanted to know. The book was published in 1967 and written by Victor W. Von Hagen with the photographs by Adolfo Tomeucci. So I found your book fascinating. The photographs are absolutely beautiful. They made me want to catch the next airplane back to Italy. Of course, much of this region of Italy is very familiar to me. I walked the entire distance from Florence to Bologna and probably dug some of those trenches that you mentioned. And probably walked upon *LA STRADA FLAMINIA MILITARE* though I was unaware of it at the time. I have returned to Italy several times since the war and my wife and I spent two weeks in Loiano in '88 to help dedicate the 91st Division monument that stands along Via Marconi. We have good friends in Loiano and also in Livergnano. Romana Lelli and her mother used to run the *Trattoria Ardevilla*, and they are special people to us. We also have good friends in Pianoro. Because of my war days I have learned to love Italy and its people. Let us hope that the stupidity of war will never again envelope our countries.

So your book brought back many memories: Futa Pass, Raticosa, Monzuno, Monte Adone, Monghidoro, Pietramala,the 91st Division passed through all of these places. And we walked over Mt. Altuzzo, Monticelli, M. Bastia, M. Castellari, M. della Forniche and M. Arnigo. Names that have become embedded into my heart.

I do remember *CASTEL DELL'ALPI* and just about every house and village along Highway 65.

During the winter of '44-'45 the furthest advanced point of the 91st Division was around Zula. We sent patrols out into that area about every night. When I returned to Highway 65 how surprised I was to see a fine restaurant now at Zula, and with a lovely glassed-in veranda!

Within a few days I'll be sending you two copies of my book, *THUNDER IN THE APENNINES*. I'll sign both of them. I'm still hard at work on my new book, *THE SUMMER IS ENDED*. Right now, I'm having problems with my editor who wants to shorten the book. And I'm opposed to it.

I am glad that the soldiers of the 91st left you a pair of binoculars. That's the least they could do, since we tore up your country so badly.

Unfortunately, my wife and I will be unable to travel to Italy this summer; however, we do plan on a trip in '91 or '92. Of course, I would love to visit with you about the *Flaminia Militare* and see, once again, some of the trenches my friends and I dug. We were in Italy in '84 and '88 and we want to try and return every three or four years, or at least, until we get too old to travel. I will be 65 years of age this month, and while I don't feel old and I don't believe I am old, they all tell me it is true!

My good friend, Phil Scaglia, will be going to Italy in September. Perhaps you and your friends can get together with him. Phil served in the 361st Infantry so he is familiar with all the photographs and the places I mention in my book. He also speaks fluent Italian. He read *LA STRADA FLAMINIA MILITARE* and was impressed.

So, thank you again for your kindness. Please keep in touch with me. Say "Hello" to Franco Santi and Vittorio di Cesare and tell them how much I enjoyed the book.

I am also sending you some back issues of our "Powder River Journal".

Affectionate greetings from both myself, and my wife Rita.

"Buona Pasqua a te, e tutta le tua famiglia"

Roy Livengood

The letter from Roy Livengood, an American ex-serviceman from the 1944-45 war who fought on the "Gothic Line" on the Futa pass, where he asks us for permission to publish some photographs of the Roman Road in a periodical published in the United States.

the Roman legions had to fight bloody battles to defeat the Ligurians. Although 2,130 years passed between the two wars, traces of both survive: the small trenches dug in 1944 A.D. are just a few metres from the large ditch on Poggio Castelluccio, used in the 2nd century B.C.

We also wondered what fate had held in store for those American soldiers, imagining that now that the danger of war was distant, they may appreciate this Roman road that armed, they had unknowingly trodden.

This thought was a premonition of a casual event that put us in contact with a number of American ex-servicemen who had fought on the Futa Pass. A copy of our book published in 1989 reached the hands of Roy Livengood, who had fought in those battles and who now lived in Kansas (USA). He had become a journalist and written a book about the battles along the Gothic Line⁶. Interested in our finds and as a member of the 91st Infantry Division Association, he asked permission to publish some photographs from our book in the association's military magazine, which delighted us.



Poggio Castelluccio (April 1986): at the beginning of spring, snow lingers in the still visible trench, dug in September 1944 by an American soldier to protect himself from enemy bombardment.



Poggio Castelluccio - September 1990): Philip Scaglia and Roy Livengood, ex-servicemen of the American 91st Infantry Division near a trench dug by one of their comrades-in-arms near the Roman paving in September 1944. (From "The Powder River Journal" - December 1992).



The Futa pass - September 1944: a patrol of American infantrymen carry supplies to the 91st Division, busy fighting the Germans along the "Gothic Line" near the Futa pass. Could they be climbing Poggio Castelluccio, as did the Romans in 187 B.C. to defeat the Ligurians? (From "Thunder in the Apennines" by Roy Livengood).

⁶ Roy Livengood: "Thunder in the Apennines" by Roy Livengood). Printed in the U.S.A., 1981.



Castel dell'Alpi (S. Benedetto Val di Sambro) – December 1944: *a few months after breaking through the "Gothic Line", the 5th American army had set up a repair workshop in front of the church. Note the truck and tank with a crane.*



Castel dell'Alpi (S. Benedetto Val di Sambro) – December 1944: *Cesare Agostini at 7 years old (left) with his brother, Raffaele, in the yard in front of his father's house where numerous vehicles belonging to the 5th American army were parked.*

After an exchange of letters, the idea cropped up whereby they should visit our discoveries. Thus in September 1990, Livengood came to Italy with Philip Scaglia, another Italo-American ex-serviceman resident in New York. They found the visit to the battlefields on the slopes of Poggio Castelluccio and Poggiaccio very interesting and we were struck by their emotion when once again they set their eyes on those trenches dug by their comrades-in-arms and scattered throughout the beech wood. An article and photographs of their return to the Gothic Line was later published in the December 1992 issue of their six-monthly magazine "The Powder River Journal".

6 - Guided tours along the Flaminia Militare

Following the requests of many, we organised numerous excursions, attempting to get as many people together as possible on the same day. Thus, we formed large groups ready to walk the 10 km along the ridge route between Pian di Balestra and the Futa pass. When, however, over the past years we



North Bactone (5 June 1988): members of the C.A.I. Italian Alpine Club on the edge of the "Flaminia Militare".

Poggio Castelluccio - August 1985: one of the first excursions on the "Flaminia Militare". Mr. Giorgio Brighetti reads Livy's account about the construction of the Roman Road to a large group of young people.





Piana degli Ossi – 9 August 1989: a group of friends from the “Associazione Monte Bastione” listen to L. Fedeli who is illustrating the finds from the excavation campaign.



Poggio Castelluccio – June 1990: Employees from A.T.C. in Bologna (and families) on the paving stones of the “Flaminia Militare”.



Mount Bastione – 16 September 1990: *members of the Mugello Rotary Club on the “Flaminia Militare” accompanied by Franco Santi (sitting left).*

discovered the stretches of road south of the Futa pass, on the slopes of Poggione, visits to these finds were less demanding because they could be reached after just 30 minutes' walk.

We always organised the trips during the summer months to get the full benefit of the pleasant mountain climate at altitudes almost constantly above 1,000 metres. This also allowed for time in the spring to sweep away the carpet of autumn leaves from the paving. Every year we took 5 or 6 groups belonging to private clubs (Rotary

and Lions), cultural and sports associations, company recreational clubs, sections of the C.A.I. (Bologna, Porretta Terme, Bergamo, Parma etc.) and were always very grateful for the expressions of esteem and friendship we received.

Don Bergamaschi, a well-known priest and keen mountaineer, organiser of many expeditions



Valserena - The 'Baita del Cacciatore' Restaurant - 16 September 1990: *at the end of the long trip along the “Flaminia Militare” the members of the Mugello Rotary Club restore their strength with us with a welcome lunch.*



Poggio Castelluccio – 19 July 1992: *a small but authoritative group accompanied by Cesare Agostini along the Roman road. From left: Menotti Galli, Professor of Cosmic Ray Physics at Bologna University, Gennady Andreev, Director of the Tomsk Astronomical Observatory (Siberia), Cesare Agostini, Nikolai Vasiliev, member of the Russian Science Academy, Giuseppe Longo, Professor of Physics at Bologna University.*



Mount Poggiaccio – 15 June 1991: *members of the Bologna-Est Rotary Club during a visit to the Flaminia Militare. They are grouped at the centre of the now dry, small ancient reservoir on the slopes of Poggiaccio. Lodovico Barbieri, President of the Rotary club (sitting left) is next to Franco Santi.*

to the Himalayas, came to Poggio Castelluccio and Poggiaccio in September 1993. We would also like to mention the visit on 19 July 1992, by two eminent Russian academics invited by Giuseppe Longo from the Institute of Physics of the University of Bologna.

We have already mentioned the visit by Giancarlo Susini in September 1988 (Chapter XII, paragraph 3). This illustrious professor, accepted our invitation

and returned on 3 September 1999, eleven years later, to see the paving stones unearthed in 1994-98 south of the Futa pass. He was very impressed by the straightness of the route, the solidity and perfect state of conservation of the road. On this occasion, he also measured a number of stones along the edge, noting that they either measured a Roman “foot” exactly or a multiple of one.

The Via Flaminia Militare
in the press

After the first article by Nereo Liverani in the "Nazione di Firenze" on 5 November 1985, many other daily newspapers and periodicals have published articles and reports about our discoveries, which also included clashing opinions, firing a lively debate that has accompanied us for many years.

Among the most widely read national periodicals are:

Historia:

Issue 347, January 1987, page 82.

Oggi Natura:

Issue 10, October 1988, page 124.

Airone:

Issue 104, December 1989, page 39.

Archeo:

Issue 59, January 1990, page 19.

Archeologia viva:

Issue 9, January-February 1990, page 5.

Daily newspapers:

Il Resto del Carlino:

15.07.86 - 7.08.86 -
26.09.86 - 27.12.86 - 31.01.87 - 4.02.87 -
24.05.87 - 12.07.87 - 12.03.88 - 31.07.88 -
3.08.88 - 20.01.89 - 19.05.89 - 13.09.89 -
17.11.89 - 10.08.90 - 26.09.90 - 29.09.90 -
5.09.91 - 30.01.93.

La Nazione:

9.03.86 - 26.04.86 - 25.09.86 - 5.10.86 -
22.11.86 - 12.12.86 - 17.12.86 - 7.01.87 -
5.03.87 - 26.05.87 - 28.05.87 - 23.07.88 -
27.07.88 - 8.09.89 - 24.09.89 - 28.09.89 -
10.10.89 - 26.08.90 - 21.10.90.

La Repubblica:

9.07.87 - 27.08.88 - 8.09.90.

L'Unità:

12.12.86 - 9.01.87 - 7.05.89 - 13.09.89 -
19.09.89 - 24.09.89 - 10.10.89 - 17.08.90 -
24.08.94.

Il Corriere della Sera:

13.01.87.

Paese Sera:

11.01.87 - 24.09.89.

Italia Oggi:

9.01.87.

Adige:

19.01.87.

Giornale di Napoli:

10.01.87.

Libertà:

9.01.87.

L'antica strada avrà un nome

*Verso la soluzione il mistero della Futa:
trovato il valico della dimenticata via romana*

Un'autostrada vecchia di duemila anni

**Sulle tracce di una strada romana
che attraversava l'Appennino**

QUALE FLAMINIA?

Divisi sulla strada

Varie argomentazioni sul tracciato romano

Carlino **BOLOGNA** provincia

**Lassù, in mezzo ai boschi
la via romana verso Firenze**

DA DOMENICA A VALSERENA UNA MOSTRA SULLA FLAMINIA

E il console indicò la via

Oltre duemila anni fa da Arezzo a Bologna fra i boschi. Visite guidate

Domenica 21 ottobre 1990

renze provincia

MUGELLO / SCOPERTA UN'ALTRA ANTICHISSIMA STRADA

Sulla via dei Romani

Forse è la prosecuzione della Flaminia dalla Futa sino a Fiesole

Lettere / Archeologia

Ma quante Flaminia Minor ci sono sull'Appennino?

zione è destinata a non subire modifiche
- la soluzione ideale - chiarisce Girolami -
- sarebbe quella di mantenere l'ambula-
ottimisti vorrebbero realizzarla entro 500
anni.
(Rita Bartolomei)

VIAGGIO TRA I BOSCHI SEGUENDO I SEGNI DELLA «FLAMINIA MILITARE»

La lunga ombra dei romani

Ricerche da Pian di Balestra al Passo della Futa. Nuovi tratti dell'antico selciato

«Basta a questo punto di tempo per
vecchi, alcune persone a
con era stato chiesto invano
di qualificarsi, hanno suona-
valore. Grande rispetto sul
te indaga. (G.B. + S.S.)



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