

Introduction

Many cities of the Greek and Roman world are based on an extremely regular plan derived from a rectangular grid of streets. The orthogonal scheme of street alignment was first observed, particularly by Promis,¹ in the Roman cities of northern Italy. These discoveries quickly became part of the study of Roman surveying, which shortly before the work of Promis had been well analyzed in the writings of the *gromatici* (land surveyors) and which in his time were being encountered in the remaining traces of the centuriation. These cities of northern Italy were Roman, and the doctrines of the *gromatici* were reminiscent of the Etruscan contribution to Roman culture. Nissen,² however, believed that late republican scholarship was responsible for the attribution to Etruria and that the delimitation was actually of ancient Italic origin. It was he who instigated research into like forms and repeated motifs as a means of tracing a single ethnic line.

The validity of these concepts was seemingly confirmed when, shortly afterward, studies of the *terremare* were begun. Their regularly planned layouts were considered the prototypes of Roman military camps. These ideas, which by this time had found general acceptance, were in particular endorsed by Helbig;³ they had been proposed originally by Chierici.⁴ Correcting his earlier viewpoint, Nissen⁵ later formulated a different view of the problem, affirming an identity between the Greek and the Italian towns and a common center of origin in the Orient (Babylon or Egypt). He hypothesized that the development of the Italian town depended upon Carthage as a bridge, and recognized the importance of the colonies in the development of the uniform town plan.

At the same time the research being carried on by Beloch on the cities of Campania greatly increased the store of concrete data.⁶ As early as 1878 he pointed to these Greek examples, especially Naples, to counter "Italicist" tendencies. However, he made no statement in regard to the general problem of origins and relations, whether the Greek and Italian plans were independent, or if the Italics learned their system from the Greek plans and the Greeks from the Orient. Through the largely philological research on Hippodamus of Miletus⁷ the value of the Greek

¹ C. Promis, *Le antichità di Aosta*, Turin 1862, p. 139, and *Storia dell'antica Torino*, Turin 1869.

² H. Nissen, *Templum*, Berlin 1869, p. 9, 97.

³ W. Helbig, *Die Italiker in der Poebene*, Leipzig 1879, p. 61.

⁴ G. Chierici, *Le antichità preromane della provincia di Reggio nell'Emilia*, Reggio 1871.

⁵ H. Nissen, *Pompeianische Studien*, Leipzig 1877, p. 583, also *Orientation I*, Berlin 1906, p. 79.

⁶ J. Beloch, *Bull. Inst.* 1877, p. 9.

⁷ See references in Chapter 3, note 1.

influence was being established. However, the importance of Hippodamus's work, though widely discussed, was limited mainly to that of a theoretical formulation of principles.

The problem again shifted when Brizio advanced the hypothesis that the Etruscans learned the art of city planning directly from the Orient.⁸ The problem thus became tied to that of Etruscan origins. On one side were the adherents to the theory of continuity between the *terremare*, villanovian Bologna, the Etruscan cities, the "Roma Quadrata" of the Palatine Hill, and the Roman colonies and encampments and the theory of Etruscan–Roman scholarship that this entailed. Their position is maintained in the more comprehensive studies, such as those by Haverfield, von Gerkan, Cultrera, and Lehmann–Hartleben. Täubler even went so far as to discern a *terremare* plan on the Palatine and on this evidence to affirm the derivation of the Latins from the inhabitants of the *terremare*.

In contrast to these positions are the adherents to the theory of the Eastern origins of delimitation, among whom are Lavedan, Ducati, and with particular commitment Patroni.

Separate from either of these considerations is Thulin's theory, which postulates that the Etruscans gained knowledge of the uniform grid plan from the Greeks.⁹

The question of the grid plan was approached for the first time in a general study by Haverfield.¹⁰ To him the source of Greek urbanism lay in the Orient. However, he established that the Italian cities originated independently, recognizing in them the unique characteristic of the central street crossing, a feature absent from Greek plans. He sees the *terremare*, with Marzabotto, Pompeii, Norba, and Modena, as part of a continuity, while the later colonies are thought to be a fusion of the Italic and Hellenistic plans.

These concepts were further developed by von Gerkan in his fundamental work on ancient city planning,¹¹ in which the problem of the orthogonally patterned city occupies a prominent place. He further defines the characteristics of the Italic plan as based upon the axial system of two principal streets and compares this with the main *cardine* and *decumanus* of the centuriation.

⁸ E. Brizio, *Mon. Lincei I*, 1890, p. 293.

⁹ C. O. Thulin, *Die etruskische Disciplin III*, in *Die Ritualbücher, Göteborgs Högskolas Årsskrift* 1909, p. 37.

¹⁰ F. Haverfield, *Ancient Town-Planning*, Oxford 1913.

¹¹ A. von Gerkan, *Griechische Städteanlagen*, Berlin and Leipzig 1924. See also *Röm. Mitt.* 58, 1943, p. 170.

This system then includes the *terremare*, Rome, and Pompeii. The Greeks did not employ this system of axes, nor did they attach a religious significance to the plan. As to the supposed relations between the Greek and Oriental city, von Gerkan notes that nowhere in the Orient can one find a rectangular grid; axial planning was employed in individual buildings only. Thus he sees the grid system as a natural development of the Greek colonies and Hippodamus, who lived in the fifth century B.C., as the theorizer of a much more ancient system.

Opposing these views, Cultrera saw precedents of the “Hippodamean” type throughout the Orient and in Crete.¹² He therefore proposed to attribute to Hippodamus not the orthogonal grid plan but a plan distinguished by its exploitation of scenographic qualities of the landscape. Whether the plan is rectangular or semicircular with radial divisions is not important. Cultrera further endorsed the current theory of a single Italic tradition, in which he included Fondi and Marzabotto in addition to the *terremare* and Roma Quadrata, by denying both the ties with Greece and the Etruscan introduction of Oriental prototypes. He resolved the problem of Soluntum by claiming a Phoenician origin for it and probably also for Selinus, though at a later date. He saw the cities of Campania as belonging to a region occupied by non-Greek peoples, including Etruscans.

Under the title “Städtebau” in the *Realencyclopaedie*,¹³ the uniform grid plan is discussed both in the section on Greece by E. Fabricius and in that on Italy by K. Lehmann-Hartleben. The latter sees a clear connection between *terremare* and Etruscan cities and finds a surprising similarity in the plans of *terremare* and Marzabotto (with no similarity to Greek cities). Reversing Thulin’s position on Campania, Lehmann-Hartleben maintains that in the new settlements the Greeks copied the examples of Capua and other Etruscan cities. Selinus then could be a late imitation dated 409 B.C.

The positions of Lavedan¹⁴ and Ducati¹⁵ are close, stemming from the theory of a single origin, the Orient, for both the Etruscan line (consistent with the theory of immigration) and the Greek. Concerning Greece, Ducati recalls the Milesian origin of Hippodamus and also proposes the possibility of mediation by the

¹²G. Cultrera “Architettura ippodamea. Contributo alla storia dell’edilizia nell’antichità,” *Mem. Lincei* 5, 17, 1923, p. 361.

¹³Pauly–Wissowa, *Realencyclopaedie* III A, c. 1982, column 2016.

¹⁴P. Lavedan, *Histoire de l’urbanisme*, Paris 1926, p. 103, 141.

¹⁵P. Ducati, *Storia dell’arte etrusca I*, Florence 1927, p. 374.

Phoenicians. He calls attention to the importance of Soluntum for the Phoenicians.

With this, Pace¹⁶ was drawn into the argument and pointed out that other regular plans are older yet. He concluded that such plans are inspired by the original requirements for order in new settlements.

Leaving aside the question of orthogonality, Tritsch¹⁷ makes a distinction between the Greek cities, modeled after the Mycenaean, and the terremare and Etruscan cities which came close to the centralized Oriental type.

New light was thrown on the issue when first Patroni and then Säflund proved that the reconstruction of a regular oriented plan in the case of the terremare was wrong. The ensuing discussion between Rose, sustaining the theory of continuity between terremare and Etruria, and Patroni, opposed to that view, was especially important.¹⁸ Having demolished the theory of Italic origins, Patroni called the art of planning Etruscan,¹⁹ directly introduced by them from the Orient, and he specifically considered ancient Mesopotamia as the place of origin. Of the Etruscan examples he cited Vetulonia, Marzabotto, and Pompeii. Greek planning, he thought, was also derived from the Orient but as a debased art having lost its religious significance, which the Etruscans maintained. Von Gerkan²⁰ replied to Patroni that in the western parts of Asia Minor, where the Etruscans were supposed to have originated, as well as in Mesopotamia, there are no cities truly laid out on the system of *cardine* and *decumanus*.

Martin credits the grid plan to Oriental origins, the nature of which remains to be determined, and considers the Greek colonies of the seventh and sixth centuries B.C. to be the first important phase of its development.²¹

¹⁶B. Pace, *Arte e civiltà della Sicilia antica II*, Milan 1938, p. 367. M. Zocca, in particular, stresses the universality of the rectangular layout. See his "Origini ed evoluzione degli schemi urbanistici," *Palladio*, N.S. 3, 1953, p. 21.

¹⁷F. Tritsch, "Die Stadtbildungen des Altertums und die griechische Polis," *Klio*, 22, 1928, pp. 1–83.

¹⁸H. J. Rose, "The Inauguration of Numa," *J. Roman Studies* 13, 1923, p. 82, and *Primitive Culture in Italy*, London 1926, p. 27. G. Patroni, "Voci e concetti classici arbitrariamente applicati alle terremare," *Athenaeum*, N.S. 8, 1930, p. 425; and Rose, "De templi romani origine," *ibid.* 9, 1931, p. 3.

¹⁹See especially "Vetulonia, Pompei e la storia," *Studi Etruschi* 15, 1941, p. 109.

²⁰*Röm. Mitt.* 58, 1943, p. 170.

²¹R. Martin, "Recherches sur l'agora grecque," *Bibl. Ec. Française* 174, Paris 1951, p. 350. According to S. Parnički-Pudelko, "Z problemow planowania miast w starożytnej Grecji," *Archeologia* 4, 1950–51, p. 27, Oriental influences accompany the evolution of the master plan from Tyrins to Miletus.

The discussion of city plans has also dealt with the quadripartite circular plan, of which Roma Quadrata is supposed to be an example. The origins of such a plan are either in the north, as claimed by W. Müller,²² or in the Orient, according to Dornseiff.²³

The general lines of the problem have been laid down recently by Boethius, by Brown, and by Ward Perkins. Boethius considers the time around 500 B.C. as crucial, a date to which he attributes Selinus, Paestum, and Marzabotto.²⁴ He concludes that there was definite Greek influence in Italy, or rather that in a common cultural environment Italy developed older rules of city planning. Brown points out the ties between the Etruscan cities and the older Roman colonies, between Marzabotto and Cosa, but leaves open the question of the ties to similar Greek cities in Campania.²⁵ By emphasizing the functions of Roman cities rather than their origins, Ward Perkins highlights the historical conditions that gave rise to the cities: military order and the imitation of the Etruscan city (which in turn developed with dependence on Greece).²⁶ He discounts the theories of the erudite Romans.

The paucity of knowledge of town plans creates major difficulties. Temples and tombs are unearthed, but urban complexes are not often excavated—or at least their disposition and measurements are not as fully explored as they should be. Furthermore, the existing documentation of plans is generally inaccurate, thereby giving conclusions a provisional character. In the present work some plans are derived from aerial photographs. It is scarcely necessary to caution that some of these have only a superficial value.

If we rule out the thesis of *terremare* and Italic origins, the study of grid planning today presents the following interdependent concerns:

Must we consider as a whole all the entire urban planning of the

²²W. Müller, *Kreis und Kreuz*, Berlin 1938.

²³F. Dornseiff, "Roma Quadrata," *Rhein. Mus.* 88, 1939, p. 192.

²⁴A. Boethius, "Roman and Greek Town Architecture," *Göteborgs Högskolas Årsskrift* 54, 1948:3, p. 7; "Die hellenisierte italische Stadt der römischen Republik," *Acta Instituti Athen. Regni Sueciae* 4^o, II, 1953, p. 177.

²⁵F. E. Brown, "Cosa I," *Mem. Amer. Acad.* 20, 1951, p. 107 and especially n. 101.

²⁶J. B. Ward Perkins, "The Early Development of Roman Town-Planning," mimeographed paper presented at the Second International Congress of Classical Studies in Copenhagen, August 1954; also "Early Roman Towns in Italy," *Town Planning Review* 26, 1955, p. 127.

Etruscans and Romans as a single unit? That is, is there a system that will embrace not only the Roman colony from the fourth century on, but also the Etruscan cities of Capua, Marzabotto, and Pompeii, not to mention Roma Quadrata, the doctrines of the *gromatici*, and the theory of delimitation?

What are the relations between these cities and the Greek city? Are they interdependent? Are the Etruscans emulators of the Greeks, or vice versa? The theory which maintains the Greek origins of the grid must account for the plan of Etruscan Capua, while the Etruscan-origin theory must put Selinus at a later date.

If the Hippodamean city came before Hippodamus himself, must one think of him, as is usual, as a theorist enjoying a borrowed reputation, or must one consider his work under a different light—as scenographic urbanism, for example?

Finally, must the Oriental influence be understood in a generic way? Or is it a direct source, as is thought by those who maintain the Oriental origins of the Etruscans, who emphasize the Milesian origins of Hippodamus, and who attribute Selinus and Soluntum to the Carthaginians?

