

# ENVIRONMENTAL DESIGN

## TRAILS TO THE EAST

Essays in Memory of Paolo Cuneo

Guest editors: Marisa Calia, Maria Adelaide Lala Comneno,  
Federico Cresti, Attilio Petruccioli

### SCIENTIFIC COMMITTEE

Marianne Barrucand  
Heinz Gaube  
Oleg Grabar  
Renata Holod  
Glenn Lowry  
Mohamed Naciri  
Jan Pieper  
Andre Raymond  
Eugen Wirth

### EDITORIAL ADVISORS

Vittoria Alliata	Hideobu Jinnai
Gaetano Arcuri	Mehdi Kowsar
Roberto Berardi	Said Mouline
Mauro Bertagnin	Kiyo Ilzuka
Michael Brand	Anna Pasquali
Paolo Cuneo	Jim Wescoat
Burchardt Brentjes	

### EDITORIAL COMMITTEE

Mahvash Alemi  
Dalu Jones  
Ludovico Micara  
George Michell

### GRAFIC

Paola Fermani

Subscription and orders should be sent to

LI.CO.SA.

Via Duca di Calabria 1/1

50125 Firenze

Tel. (055) 645415

Fax (055) 641257

Manuscripts should be sent to

The Editor,

ENVIRONMENTAL DESIGN

Via Torno, 68

22100 Como - Italy

Tel. (031) 303559

XVIII th year



COVER: JERUSALEM FROM THE MOUNT OF OLIVES  
(FROM DAVID ROBERTS, R.A., THE HOLY LAND)

# TRAILS TO THE EAST

## Essays in Memory of Paolo Cuneo

Paolo Cuneo 1936-1995.  
Publications and papers

	p. 8
Eugenio Galdieri and Oleg Grabar	Prefaces p. 12
Federico Cresti	Le Maghreb central au début du XVI <sup>e</sup> siècle dans la <i>Descrittione dell'Africa</i> de Jean-Léon L'Africain p. 14
Attilio Petruccioli	The Arab City: Neither Spontaneous nor Created p. 22
Dalu Jones	Postcards from Libya (December 1991) p. 34
Otello Iolita	Italian Participation in Design Competitions in Egypt p. 40
Lorenzo Nigro	Yamkhad/Aleppo: Investigating the Second Millennium B.C. Capital of Northern Syria through Islamic, Byzantine and Classical Towns p. 46
Patrizia Licini	The Ottoman Conquest of Armenia from a Portolan Italian Chart of 1581 p. 56
Tommaso Breccia Fratadocchi	Notes on Armenian Military Architecture p. 66
Sarkis Shahinian	The Tradition of Funerary Architecture in Armenia from the Origins of Christianity to the Late Middle Ages p. 72
Mourad Hasratian	L'art des khatchkars de l'école de Djouha p. 84
Matteo Compareti	La décoration des vêtements du roi Gagik Arscruni à At'mar p. 88
Simonetta Ciranna	Italian Architects: the Builders of Churches in the Capitals of the Mediterranean p. 96

**Ayse Saracgil**

**Gianroberto Scarcia**

**Maurice Cerasi**

**Ugo Marazzi**

**Angelo Michele Piemontese**

**Maria Vittoria Fontana**

**Maria Adelaide Lala Comneno**

**Michele Bernardini**

**Michael Jung**

**Paolo Costa**

**Marisa Calia**

**Eugenio Galdieri**

**Francesco Siravo**

**Anna Gilibert – Mino Turvani**

**Bianca Maria Alfieri**

**Filippo Salviati**

**Giorgio Casacchia**

**The *gecekondu* and Turkish  
Modernity**

p. 104

**Da Sivas a Montepulciano:  
l'incontro tra Biagio e Maria**

p. 108

**The Commerce of Forms and Types  
Between the West and the Ottoman  
East from the sixteenth to the  
Eighteenth Century**

p. 114

**Les villes des Khazars**

p. 134

**Anciens monuments sur l'eau selon  
Tarsusi**

p. 137

**Paintings in the Imamzada Shahzada  
Ibrahim, Kashan (Late Nineteenth  
Century)**

p. 144

**De la Samarcande pré-mongole à la  
Samarcande timouride**

p. 152

**Note sur la "Porte de fer" près de  
Termez (Darband/Qahalgha)**

p. 160

**Graffiti and Rockpaintings of  
Footprints on the Arabian Peninsula**

p. 164

**Urban Settlements in the Arabian  
Peninsula: Problems of Methodology  
and History**

p. 184

**Suakin. Memory of a City**

p. 192

**La rénovation du centre historique  
de Sana'a (Yemen): enjeux, risques,  
résultats**

p. 202

**Zanzibar: a Plan for the Historic  
Stone Town**

p. 208

**L'architecture des Comores en peril**

p. 220

**Irich: a Forfotten Place**

p. 230

**The "Fishdragon": the Makara Motif  
in Chinese Art and Architectural  
Decoration**

p. 238

**Names of the Streets in Peking under  
the Yuan Dynasty**

p. 252

# YAMKHAD/ALEPPO: INVESTIGATING THE SECOND MILLENNIUM B.C. CAPITAL OF NORTHERN SYRIA THROUGH ISLAMIC, BYZANTINE AND CLASSICAL TOWNS

A few years ago, during a long conversation with Paolo Cuneo about the masterpieces of Syrian architecture, we found that we were both in love with the medina of Aleppo, a city with a fascinating and continuous history from pre-classical times to the Islamic period. This continuity established a special link between our contiguous fields of research. After that, Paolo's enthusiasm for Aleppo became my symbol of his spiritual and scientific legacy, and assuaged somewhat the pain of the untimely death of a deeply beloved father-in-law. Thanks Paolo for your passion and for your open-minded approach to knowledge.

## *Aleppo in The Third Millennium: First Flowering*

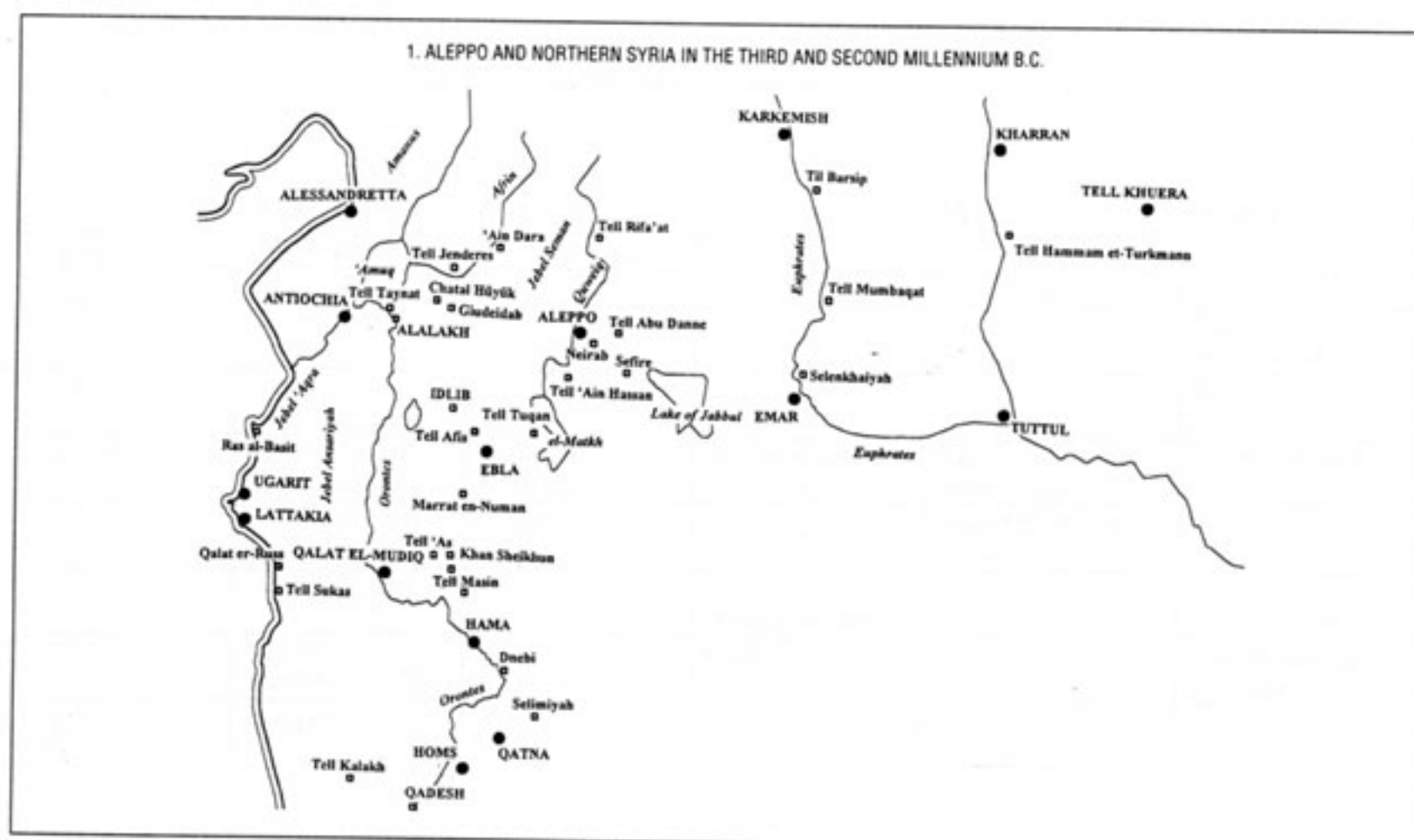
Aleppo was already a capital of northern Syria when that region underwent its first urban growth in the third millennium b.c. Under the name of Halam<sup>ki</sup>, it is attested in the tablets of Ebla as the seat of the Great Temple of Adda, one of the major West Semitic deities (Archi, Piancentini, Pomponio 1993: 257-60). One can grasp its political importance by remembering that the overall primacy given to the god Adda in early Syrian times would have been reflected in the importance of his home town Halam(b).

A few ceramic sherds retrieved from the city center and pottery from several tombs that have turned up in the

antique market (possibly from the area around Bab al-Faraj or along the old banks of the Nahar al-Quweiq) attest to the occupation of the site from around 2700 to 2200 b.c. Aleppo was then one of the expanding centers of the Caliciform culture, the ceramic horizon also epitomized by Ebla (Mardikh IIB) and Hama (J), which distinguished urban Syria in the second half of the third millennium b.c. (fig. 1).

The existence of a highly refined artistic production in Aleppo is testified by several EB III/IV cylinder seals of unknown provenance, but probably retrieved from the city center (Hammade 1987: 2021, nn. 37-38). Their favorite subject, the king's banquet, and artistic quality tell us that they are surely the work of royal carvers.

Very few topographical observations can be added to these scanty archaeological data. Early Bronze ceramic sherds found in the moat of the Islamic citadel show that the acropolis was already occupied in this period. If this datum is matched with the evidence from the Ebla tablets, one can hypothesize that the Temple of Adda was erected on the acropolis. In any case, the earliest occupation of the hill is represented by more than 10 m of stratigraphy lying on bedrock up to the elevation of second millennium b.c. layers. However, it is not possible to establish the real extent of the third-millennium town or to identify its main urban features. Also in doubt is whether some crisis in the urban





system affected northern Syria, and especially its capital Aleppo, during the last phase of the Early Bronze Age (EB IV, 2300-2000 b.c.). The most recent evidence from Ebla (Mardikh IIB2) and Hama (J51) shows a new phase of urban development during EB IV (Matthiae 1993: 52930; Matthiae 1995). Unfortunately, nothing is known of this period from the town itself, but a number of cemeteries in the neighboring sites of the Nahar Quweiq and Afrin basins suggest that Aleppo continued to be a flourishing center.

#### *Aleppo in the Second Millennium: The Amorrite Dynasty of Yamkhad*

The greatest political expansion of Aleppo occurred in the beginning of the second millennium b.c., with the ascent to power of an Amorrite dynasty, which from around 1800 b.c. pushed Yamkhad into an increasingly powerful role among the kingdoms of Syria-Palestine and Mesopotamia. This political supremacy, epitomized by the famous statement on a tablet from Mari that "the great king of Yamkhad rules over seventeen kings," is only partially reflected in the archaeological record, since no systematic excavations were carried out in the medina before the Syro-German expedition which began work in the fall of 1997 and is now digging on

the acropolis (fig. 2). Nevertheless, the high economic and political status of this kingdom can again be imagined looking at the artistic achievements of its royal workshops in the field of glyptik and sculpture. Royal cylinder seals are known from the vassal kingdom of Alalakh (Collon 1975: 314; Collon 1981), from where also comes the statue of Prince Idrimi (fig. 3). It has a cuneiform inscription telling us the history of a member of the royal family during the sixteenth century b.c. (Klengel 1981; Mayer-Opificius 1981; Mayer 1996). Thanks to the archives of Alalakh and Mari, the history of the dynasty of Yamkhad during the nineteenth-seventeenth century b.c. is known. The kings Sumuepukh (ca. 1820-1790 b.c.) and especially YarimLim (ca. 1790-1770 b.c.) succeeded in subduing northern Syria around 1800 b.c., conquering Alalakh, Ebla, and Hama, and thus extending their political hegemony from the Antioch plain to the Orontes and the Afrin valleys to the Euphrates. For the following two centuries the sovereigns of Aleppo ruled over this country as one of the major powers of the ancient Near East (Klengel 1992: 49-65) (table 1). This political situation deeply influenced art and material culture, and northern Syria therefore exhibits a strong cultural homogeneity in this period. Notwithstanding its important historical role, however, we know very little

OLD HITTITE KINGS (KHATTUSHILI, MURSHILI) SUBMIT TO NORTHERN SYRIA  
TABLE 1. MAJOR KINGDOMS OF NORTHERN SYRIA AND MESOPOTAMIA IN THE FIRST HALF OF THE SECOND MILLENNIUM B.C.

YEARS B.C.	YAMKHAD	EBLA	ALALAKH	MARI	BABYLON
2000	<i>Amorrite dyn.</i>	<i>Amorrite dyn.</i>			
1950				<i>šakkanakku</i>	
1900		Ibbit-Lim		"	Sumu-abum Sumu-la-El
1850	Sumu-epukh			Yaggid-Lim Yakhdun-Lim	Sabium Sin-mubalit
1800	Yarim-Lim I Hammurabi I	<i>under Aleppo sovereignty</i>	<i>under Aleppo sovereignty</i>	Yasmakh-addu Zimri-Lim	<b>Hammurabi</b>
1750	Abba-el Yarim-Lim II	Immeya		<i>under Babylon sovereignty</i>	Samsu-iluna Abi-esukh
1700	Niqmi-epukh		Yarim-Lim Ammi-taqum		Ammi-ditana
1650	Irkabrum Yarim-Lim III		<i>Old-Hittite conquest</i>		Ammi-saduqa Samsu-ditana
1600	Hammurabi II				



2. AERIAL VIEW OF THE ACROPOLIS OF ALEPPO SEEN FROM THE NORTHEAST.

3. THE STATUE OF IDRIMI OF ALALAKH, A VASSAL RULER OF THE KING OF ALEPPO, 16TH CENTURY B.C. BRITISH MUSEUM, WA. 130738.



4. SYRO GERMAN EXCAVATIONS ON TOP OF THE ISLAMIC CITADEL: THE DEEP TRENCH WHERE A WALL OF THE TEMPLE OF HADAD WAS DISCOVERED.





about the actual town of Aleppo in this period. The available evidence will be summed up by examining the urban plan and the architectural features of the Amorrite capital concealed beneath, but not completely obliterated by, the monuments of the superimposed Hellenistic, Roman, Byzantine and Islamic towns.

### *The Location of the Pre-Classical Town*

The reconstruction of the urban plan of ancient Aleppo started with the work of Jean Sauvaget, who proposed to identify the center of the preclassical town with the Islamic quarter of al'Aqaba, a mound 200 m wide, which stands 12 m up on the western side of the city (Sauvaget 1939: 61-62, fig. 2). This identification was based on the hypothesis that the town had been founded on the east bank of Nahar Quweiq. However, the location of the center of the ancient town on the 'Aqaba mound led Sauvaget wrongly to interpret the important discoveries of Ploix de Rotrou, who had uncovered impressive structures from the Middle Bronze and Iron Ages in a deep sounding on the Islamic citadel (Dussaud 1931), as an extramoenia sanctuary (a kind of Biblical "high place"), since it was placed on the top of what he thought was mainly a natural hill (Sauvaget 1939: 64). What he did not realize was that the ancient town spread all below the area occupied by the Islamic medina.

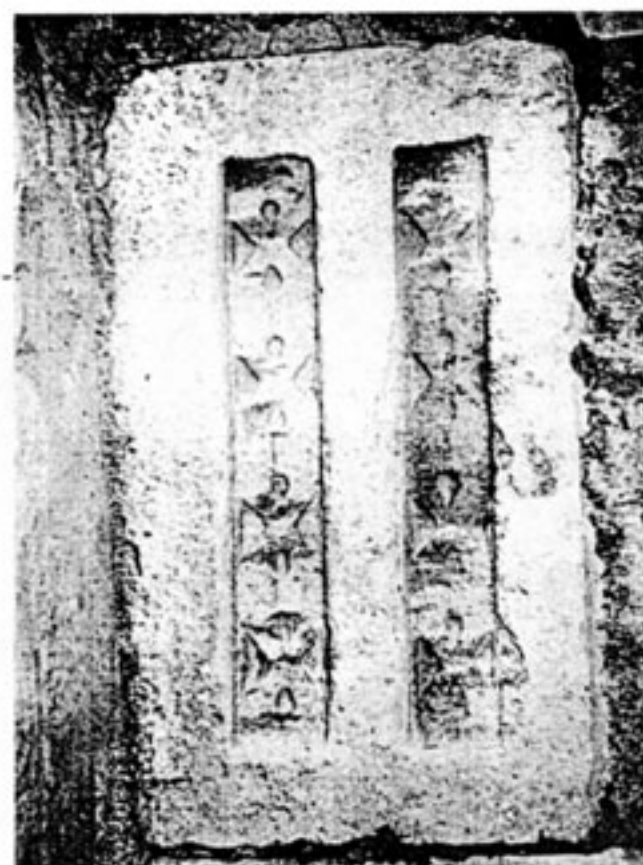
Actually, the basic urban structure of Aleppo is still readable on the ground, due to the strong conservatism of its uninterrupted development, so that the town plan of ancient Yamkhad is not too difficult to determine by comparing the topography of the Islamic city with the original elevation of the terrain. The two main hydrogeological features of the Aleppo environment are the course of Nahar Quweiq, north-south oriented, and the spur of limestone rock, which stands at a consistent elevation, ca. 1.2 km east to the river. The terrain slopes gently westwards from the spur down to the east bank of Nahar Quweiq. The earlier town was thus founded in the area between the river and the highest limestone hills. Nahar Quweiq represented both a basic water supply and a pivotal crossroad, since it was bridged by the highway linking the Mediterranean to the Euphrates Valley, and flanked by the commercial route connecting southern Anatolia and inner Syria; on the other side the limestone hill represented an easily defensible spot.

Occasional finds testify to the location of the old Syrian (2000-1600 b.c.) town beneath the Hellenistic and Islamic settlements; an archaeological and topographical survey of the center has fixed the limits of the preclassical town as a roughly rectangular precinct of almost 1200 x 900 m (108 ha.). Five main urban features have been distinguished on the ground:

(1) the acropolis (fig. 2); Hellenistic, Roman, and Byzantine superimposed fortresses below the monumental Ayyubid citadel. It was continuously inhabited at least from the third millennium b.c. onwards and sheltered one of the main sanctuaries of the town, the Temple of Hadad, the God of the Tempest, whose sanctuary was located on top of a hill or a mountain, where the thunderstorms flash; (2) the defensive ramparts, which were covered by several reconstructions of the city wall, were gradually shifted off onto the outer slope of the glacis (the Ayyubid reconstruction of the city wall is at the outer foot of the Middle Bronze Age rampart); (3) the city gates, the location of which depend on the road network and on the general topography of the town. Particularly, the western and southern gates (the Antioch Gate and the Qinnasrin Gate) still exhibit the typical bentaxis plan of the Syro-Palestinian city gates from the second millennium b.c.; the central terrace, where a public area of the second millennium b.c. was superseded by a Roman temple, a Byzantine basilica, and later by the Umayyad Mosque; (5) the mound of al'Aqaba, possibly a massive public building erected inside the rampart fortifications.

The entire central area of the town has had a continuous and homogeneous occupation from ancient times until

5. A LIMESTONE SLAB CARVED WITH A GUILLOCHE MOTIF DATING TO THE SECOND MILLENNIUM B.C REUSED IN THE UPPER MOSQUE OF THE ISLAMIC CITADEL OF ALEPPO.



today, so that one can assume that the ground level rose regularly through the centuries. That means that the variations in floor height of the medieval town can be attributed either to the original slope of the terrain or to major constructions of the preceding periods, as the line of Bronze Age fortification and the 'Aqaba mound clearly exemplify.

### *The Acropolis*

The limestone spur upon which the acropolis of Aleppo was established is the highest hill of the region between the plain of Jabbul, to the east, and the Massif Calcaire to the west, along the course of Nahar Quweiq, and was thus a quite suitable site for defensive purposes. Nevertheless, the first settlement in the area was not confined solely to the hill, since the east bank of the river, where the highway to the Mediterranean passed, was also a favorable location.

The actual contour of the citadel of Aleppo comes from the impressive works carried out in the Islamic period to strengthen the flanks of the mound by a stone revetment, which cut through pre-classical layers down to the bedrock. Stray finds of pottery in the surrounding moat show that the occupation of this site goes back to the third millennium b.c. Old Syrian layers represent the earliest period reached by archaeological

investigations on the acropolis. A wall made of carved basalt orthostates was discovered during the 1997 campaign of excavations by the Syro-German expedition, possibly belonging to the cella of the Early Iron Age Temple of Hadad. Reappraisal of the archaeological work on the citadel by enlarging the deep trench excavated by the French in the twenties has also allowed an examination of the wall made of limestone slabs (fig. 4) which should have a Middle Bronze dating, and to identify an altar with square bold-framed holes, which presents exactly the same shape as a class of cult furniture very common in the Old Syrian temples of Ebla.

In the twelfth century a.d., the excavation for creating a deep moat gave the Citadel an oval shape, but the acropolis of the second millennium b.c. seemingly had a rectangular plan, as is suggested by the topography of the surrounding area and by the road network. The road does not in fact coincide with the monumental gateway to the Citadel; at the time it was constructed (at the beginning of the Middle Bronze Age, ca. 2000-1950 b.c.), it would have been aligned with the entrances to the acropolis. Two gateways can thus be located, one to the south and one to the west; only the latter was preserved in the successive periods when the Acropolis was strongly fortified. No direct data are available for investigating the fortifications of the Acropolis during

6 RAMPART FORTIFICATIONS AT ELMISHRIFEH, ANCIENT QATNA, CENTRAL INNER SYRIA, WHICH POSSIBLY LOOK LIKE THOSE OF ANCIENT YAMKHAD/ALEPPO.





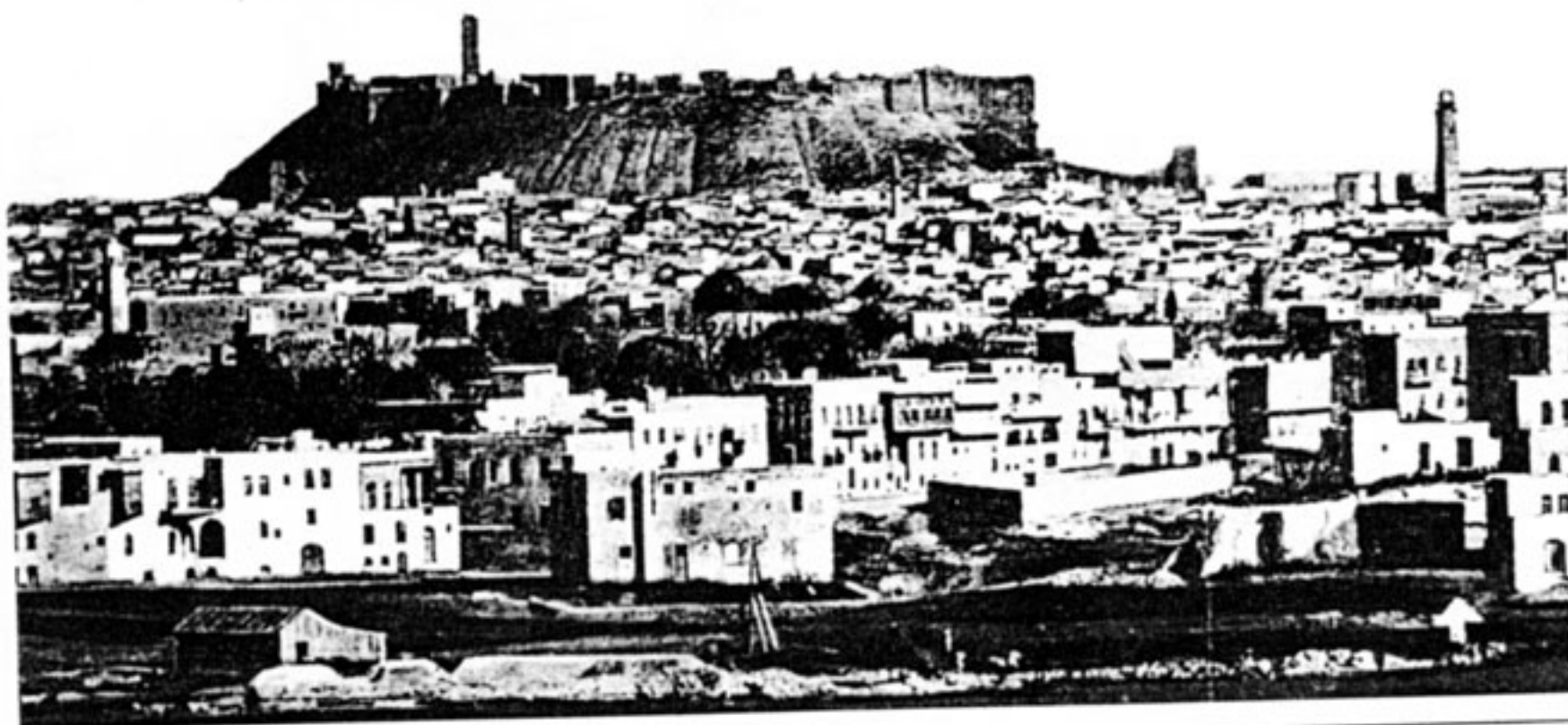
the Old Syrian period; nevertheless comparable defensive structures at Ebla and Qatna suggest that a terrace wall, or a retaining wall, separated the acropolis from the lower town. Its eccentric location in the town, its rectangular plan, and the presence of the dynastic Temple of Hadad suggests that in the second millennium b.c. the acropolis was a public area clearly distinguished from the lower town and reserved for the royal administration. It possibly housed the royal palace together with the dynastic temple of Hadad. Due to these ideological functions, the Acropolis had a monumental aspect, endorsed by the architecture of its gates, whose large basalt and limestone slabs were dismantled and reused in the Hellenistic and Islamic periods (fig. 5).

The inner gate of the Islamic citadel still preserves architectural features which can be considered ultimately to come from the Old Syrian tradition. The plan of the gateway has a bentaxis access, and the main passage is flanked by protective crouching lions, which are apparently the heirs of the Bronze and Iron Age statues of protective lions, known from many ancient Syrian sites (Mari, Ebla, Alalakh, Tell Taynat, Tell Halaf). It is not surprising to find this monumental continuity in a town where buildings have been used continuously for many centuries.

### *The Fortifications*

The distinct conservatism of the urban plan of Aleppo has to be ascribed to the system of fortification, which preserved more or less the same topographic arrangement for at least three millennia. The impressive earthen ramparts encompassing the rectangular area of the old Syrian town (fig. 6) with a glacis varying in height from 15 to 25 meters, was erected at the very beginning of the second millennium b.c. and then was gradually eroded, becoming a shallow elongated hill, on the outer slope of which the Hellenistic, Roman, and Islamic city walls were successively built, exploiting what seemed by then a "natural" defense. In the following centuries, medieval and Ottoman houses were built on the inner slopes of the ramparts (fig. 7), where continuous building activity had raised the ground level up to their summit (Raymond 1979: 128). The outer slopes were used for the Islamic necropolis (similar to the situation along the eastern side of the old city of Jerusalem), and were not occupied by Ottoman houses until the nineteenth century (Odenthal 1983: 171-72). The sharp difference in elevation (10-15 meters) between the city center and the surrounding areas can be easily appreciated on the western, southern, and eastern sides, but is unclear to the north, where modern buildings have damaged its ancient boundaries (Amer 1993: 10).

7. MEDIEVAL AND OTTOMAN PRIVATE HOUSES BUILT ON TOP OF THE SLOPE OF THE SECOND-MILLENNIUM RAMPARTS ON THE WESTERN SIDE OF THE ANCIENT TOWN AS THEY APPEARED IN THE NINETEENTH CENTURY.







Few data are available on the inner structure of the Middle Bronze glacis. It is exposed only accidentally in several spots, especially near the gates, where intrusive building works are often carried out. The outer surface of the rampart presents a revetment made alternatively of crushed limestone, fieldstone or clay, with inner layers, always leaning against the outer slope, made of debris and rubble composed of broken mud bricks or limestone blocks. It has not yet been possible to establish whether (1) the inner core of the glacis has a major wall; (2) the outer slope has a sustaining wall at its base built of stone; (3) there was a wall on top of the rampart as an upper coronation of the defensive system. A few large cyclopean limestone blocks identified beneath the foundation of the Roman city wall along the western side of the town may be interpreted as part of the supporting wall at the foot of the rampart. Though inspired by a rectangular urban plan, the ramparts do not follow regular alignments, but change their orientation about every 200 m (fig. 8). This planning device has been already singled out at Ebla, and seems to be a characteristic of defensive architecture of the major sites of northern Syria. The zigzag orientation of the defensive line is explained by the need to control the foot of the slope by projecting towers and fortresses built on top of the ramparts (Matthiae 1997: 3, 11-12, figs. 3, 22-24).

#### *The City Gates and the Road Network*

Because of their monumental dimensions, Middle Bronze Age city gates maintained their position in the following periods. Six gates of old Syrian Aleppo can be identified today (fig. 8): (1) the Antioch Gate in the middle of the western side; (2) the Northwest Gate opening onto the road through the Nahar Quweiq Valley, the fertile region that provided agricultural produce to the town; (3) the North Gate, giving access to the Jabbul Plain; (4) the Northeast Gate, opening onto the highway to the Euphrates; (5) the Southeast Gate, which leads to the Lake of Matkh, the shallow marsh depression where the Quweiq River ends; (6) the Ebla Gate, which opens in the southern side towards the main road to the south.

Some of these gates show a distinct continuity thorough time; the Antioch Gate (the main city gate on the western side) in the Ayyubid reconstruction exhibits a plan close to that of its forerunner of pre-classical times. The medieval streets approaching the gate have an oblique orientation, which recalls the double planimetric organization of second-millennium b.c. city gates, known from Ebla (fig. 9), and many other sites of Syria-Palestine. The gateway was incorporated into a double tower abutting the rampart, with an outer entrance not aligned with the inner one and an overall length of almost 50 meters. The main passage was triple-arched, with a series of facing offsets, and a

couple of big doors locked on both sides. The old Syrian origin of this plan, preserved until Islamic times, is quite certain in urban centers like Aleppo, which exhibit a continuous occupation for many centuries.

Two main streets divide old Syrian Aleppo into four parts. The first, east-west oriented, leads from the Antioch Gate to the city center, then it proceeds towards the Acropolis, turning gradually right, because of the gradient; the second crosses the city center north-south in an approximately straight line. A roughly rectangular pattern is thus adopted not only for fortifications, but also for the street network, with the exception of the eastern quarter of the town, where because of the slope of the Acropolis, streets have to ascend gradually, turning around it.

There is not enough evidence to identify the location of the gates of the eastern side of the town, though it is possible that there the fortifications had only a reduced opening to protect the Acropolis itself. Two more gates are opened on the northern and southern sides, near the eastern corners of the town.

The urban plan is thus set up on a rectangular scheme (fig. 8), with the ideological and political center, the acropolis, placed in a peripheral location. This distinguished urban plan, successively reappraised by Hellenistic, Byzantine, and Islamic architecture, in the case of Aleppo goes back to the old Syrian period (2000-1600 b.c.). The rectangular plan and the eccentric location of the acropolis are urban features typical of a distinct group of second millennium b.c. Syro-Palestinian towns, which includes Tell Atchana (Alalakh), Tell Tuqan, el Mishrifeh (Qatna), Tell el Qadi (Dan), Tell el Waqas (Hazor), al Kabri, Tell el'Ajjul (Sharuh). All these towns were defended by massive earthen ramparts, have triple-arched gateways, and show a rectangular plan associated with an eccentric location of the ideological and political city center, as well as regular subdivision by orthogonal streets. Aleppo fits this urban model well, even though two further important public areas can be identified in addition to the Acropolis – that is, the central terrace and the mound of al'Aqaba.

#### *The Central Terrace*

On the northern side of the central crossing, where the north-south and the east-west streets intersect, a 5 m-high terrace can be detected in the area now occupied by the Umayyad Mosque. Here, a Byzantine basilica erected on top of a Roman temple possibly replaced a public building of the Middle Bronze Age. The terrace is clearly distinguishable, especially on the western side; on the northern side modern buildings have been built on the same elevation as those of Roman times. Notwithstanding its continuous utilization for religious purposes, such an extended area might very likely have housed a large public building or palace or temple.



It would not have been unusual to have a temple incorporated into a major palatial building. Large basalt and limestone slabs reused in the basement of the Umayyad minaret of the mosque (not visible from outside) may have belonged to this preclassical building, judging by the way they are finished.

### *The Mound of al-'Aqaba*

An apparently unusual feature of ancient Aleppo is represented by the mound of al'Aqaba, a sort of small tell, situated inside the western rampart immediately north of the Antioch Gate. Two pieces of luviohieroglyphic-inscribed stelas accidentally found in this mound testify that its main occupation dates back at least to the end of the second millennium b.c. Nevertheless, since it is directly linked to the rampart, one might surmise that the buildings it conceals were erected together with the fortifications at the beginning of the second millennium b.c. The location inside the gateway recalls that of the fortress of Alalakh level VII (Woolley 1955: 151-53), and possibly of a similar defensive building inside the northwestern gate of Ebla (Matthiae 1997: 12). Large defensive buildings were usually joined to the city gates in Syro-Palestinian towns, for lodging soldiers and storing all the goods entering the town. One may hypothesize that, because

it was near the river, this raised terrace remained a favorite building site in subsequent periods, as is shown by the inscribed stelae, which in fact date to the twelfth century b.c.

### *Islamic Memories of Pre-Classical Building Techniques*

Apart from the general outline of the urban plan, which is the main subject of this contribution, another field of investigation — a favorite one of Paolo Cuneo — testifies to a further link existing between pre-classical and Islamic architecture. Though monumental architecture in the ancient Near East and in Syria in particular was largely renewed in Hellenistic times, the building techniques for earthen architecture remained unchanged for a long time, especially for domestic structures. The houses and buildings of the medina show this clearly: Aleppine private houses of the Islamic period used building techniques very close to those of pre-classical times. A distinguishing feature of Aleppine architecture is the skilled integration of mud bricks with wooden posts in walls and ceilings. The same technique characterized the earthen architecture of Ebla and Alalakh in the Old Syrian period.

Extensive use of wood — whether Aleppo pine or some other wood used in building (oak, cedar, ash), depending on availability is still visible in various Ayyubid monuments such the Maristan Nuri (Hospital of Nureddin) and the Abrahm Mosque on the Citadel, where wooden posts are used to support the main sustaining walls. The use of wood in association with mud brick also characterizes the residential quarters between the Antioch Gate and the Qinnasrin Gate (al-Asfaris), where Bronze Age techniques still survive, with mudbrick walls on stone foundations and the upper floors built entirely of wood.

It seems thus not too speculative to consider Aleppo one of the centers where this traditional architecture, which is based on the integration of stone (for insulating walls in the basement), mud brick (a very cheap and athermal material for the bulk of construction), and wood (used for supporting posts, ceilings, decorations) was first elaborated during preclassical times and then retained after the advent of Hellenistic monumentality, during the early Islamic, Mamluk, and Ottoman periods.

### *Conclusions*

Very scanty data are available for reconstructing the urban framework and organization of the ancient town of Aleppo. Nevertheless, the monumentality of the defenses and the impressive dimensions of the main architectural work at the time of the Kingdom of Yamkhad were preserved throughout Hellenistic, Roman, and Islamic occupations and appear in careful topographic examinations or occasional archaeological soundings. The Acropolis stands as a remarkable

10. PAINTED PITCHER BELONGING TO THE SO-CALLED NORTH-SYRIAN/CILICIAN PAINTED WARE, A DISTINCT CERAMIC PRODUCTION POSSIBLY ORIGINATING FROM THE ROYAL POTTERS' WORKSHOP OF ALEPPO, CA. 1850-1800 B.C., OXFORD, ASHMOLEAN MUSEUM.



ideological center of the town. Its eccentric location testifies that it predates the orthogonal road network and the roughly rectangular shape of the fortifications of the second-millennium town, possibly inspired by Old Babylonian urban planning. It was in fact settled for the first time in the third millennium b.c. In the Old Syrian period the town expanded over the entire area between the limestone spur and Nahar Quweiq, after Yamkhad became the capital of northern Syria. The rectangular plan adopted in Old Syrian times influenced all the successive urban transformations. Compared with Yamkhad, Berea, as it was called in Hellenistic and Roman times, was a minor center, having been replaced by Chalcis as the major center of northern Syria. After its conquest by Khalid ibn al-Walid (637) and, especially, by Salah al-Din (1183), and successively under Mongol (1260-91) and then Mamluk control, until the Ottoman conquest (1516), Aleppo regained a prominent political role, played mainly in the exploitation and administration of long-distance trade. This brought the town back to the dimensions it had in the second millennium b.c. and its original urban aspect. The exterior appearance of a town, its buildings and houses, their shapes and the building materials used depend strictly on social and economic factors, which in the case of Old Syrian and Islamic Aleppo were strikingly similar (Bahnassi 1980: 182). This may seem a highly speculative parallel, but in many respects, the Islamic town reflects the enterprise of its commercial classes (Abdel Nour 1982) which were comparable to those that made the Amorrite Kingdom of Yamkhad one of the major ruling powers of Syria and Mesopotamia in the second millennium b.c.

Lorenzo Nigro

## References

- Amer 1993. N. Amer, "Il problema della modernizzazione di una città di grandi tradizioni: piani e progetti per Aleppo dagli anni della dipendenza a quelli della crescita metropolitana," Ph.D. diss., University of Rome "La Sapienza", 1993.
- Archi, Piacentini, & Pomponio 1993. P. Archi, F. Piacentini, and I. Pomponio, *I nomi di luogo dei testi di Ebla* (= Archivi Reali di Ebla Studi II) (Rome: Missione Archeologica Italiana in Siria, 1993).
- Abdel Nour 1982. A. Abdel Nour, "Habitat et structures sociales à Alep aux XVIIe et XVIIIe siècles d'après de sources arabes inédites," in A. Boudhiba and D. Chevallier, *La ville arabe dans l'Islam. Histoire et mutations*, Atti del II Colloquio dell'ATP sul tema "Espaces socioculturels et croissance urbaine dans le monde arabe," Carthage-Amilcar, marzo 1979 (Tunis-Paris, 1982), pp. 69-102.
- Bahnassi 1980. A. Bahnassi, "Aleppo," in R. B. Serjeant, ed., *The Islamic City* (Selected Papers from a Colloquium held at Cambridge 1976) (Paris, 1980), pp. 177-82.
- Collon 1975. D. Collon, *The Seal Impressions from Tell Atchana/Alalakh*, *Alter Orient und Altes Testament* 27 (Kevelaer/Neukirchen-Vluyn, 1975).
- Collon 1981. D. Collon, "The Aleppo Workshop: A SealCutter's Workshop in Syria in the Second Half of the 18th Century b.c.," *UF* 13 (1981): 33-43.
- Cuneo 1986. P. Cuneo, *Storia dell'urbanistica. Il mondo islamico*, (Rome-Bari: Laterza, 1986).
- David 1983. J.C. David, *Le waqf Ipchir Pacha à Alep: étude d'urbanisme historique* (Damascus, 1983).
- Dietrich & Loretz 1981. M. Dietrich and O. Loretz, "Die Inschrift der Statue des Königs Idrimi von Alalah," *UF* 13 (1981): 201-69.
- Dussaud 1931. R. Dussaud, "Fouilles de M. Ploix de Rotrou dans la citadelle d'Alep," *Syria* 12 (1931): 95-96.
- Hamidé 1959. A. R. Hamidé, *La ville d'Alep: étude de géographie urbaine* (Paris, 1959).
- Hammade 1987. H. Hammade, *Cylinder Seals from the Collections of the Aleppo Museum*, Syrian Arab Republic. 1. Seals of Unknown Provenience (BARIS 335), B.A.R., (Oxford, 1987).
- Klengel 1981. H. Klengel, "Historische Kommentar zur Inschrift des Idrimi von Alalah," *UF* 13 (1981): 269-78.
- Klengel 1992. H. Klengel, *Syria 3000 to 300 b.c.: A Handbook of Political History* (Berlin: Akademie Verlag, 1992).
- Mayer-Opificius 1981. R. Mayer-Opificius, "Archäologischer Kommentar zur Statue des Idrimi von Alalah," *UF* 13 (1981): 279-90.
- Mayer 1996. W. Mayer, "Die historische Einordnung der 'Autobiographie' des Idrimi von Alalah," *UF* 27 (1996): 333-50.
- Matthiae 1990. P. Matthiae, "A New Monumental Temple of Middle Bronze II at Ebla and the Unity of the Architectural Tradition of Syria/Palestine," *AAAS* 40 (1996): 11121.
- 1993. "On This Side of the Euphrates: A Note on the Urban Origins in Inner Syria," M. Frangipane, H. Hauptmann, M. Liverani, P. Matthiae, and M. Mellink, eds., *Between the Rivers and over the Mountains. Archaeologica Anatolica et Mesopotamica Alba Palmieri Dedicata* (Rome: Università di Roma "La Sapienza", 1993), pp. 523-30.
- 1995. "Fouilles à Ebla en 1993-1994: les Palais de la Ville Basse Nord," *CRAI* 1995, pp. 65-181.
- 1997. "Tell Mardikh, 1977-1996: Vingt Ans de Fouilles et de Découvertes: La Renaissance d'Ebla Amorrhéenne," *Akkadica* 101 (1993): 129.
- Odenthal 1983. J. Odenthal, *Syrien. Hochkulturen zwischen Mittelmeer und Arabischer Wüste 5000 Jahre Geschichte im Spannungsfeld von Orient und Okzident* (Cologne: DuMont Buchverlag, 1983).
- Ploix de Rotrou 1930. G. Ploix de Rotrou, "La citadelle d'Alep et ses alentours," *CRAI* 1930, pp.
- Raymond 1979. Andre Raymond, "La conquête ottomane et le développement des grandes villes arabes. Le cas du Caire, de Damas et d'Alep," *Revue de l'Occident Musulmane et de la Méditerranée* 27 (1979): 115-34.
- Russell 1754. A. Russell, *The Natural History of Aleppo* (London, 1754).
- Sauvaget 1929. J. Sauvaget, "L'enceinte primitive de la ville d'Alep," *Mélanges de l'Institut Français de Damas* 1 (1929): 133-59.
- 1939. "Le 'tell' d'Alep," *Mélanges Syriennes offerts à M. René Dussaud*, Bibliothèque Archéologique et Historique, 30 (Paris: Geuthner, 1939), pp. 59-65.
- 1941. *Alep. Essai sur le développement d'une grande ville syrienne, des origines au milieu du XIXe siècle*, Bibliothèque Archéologique et Historique 36 (Paris: Geuthner, 1941).
- Sourdel 1952. Dominique Sourdel, "Esquisse topographique d'Alep intramuros à l'époque ayyoubide," *AAAS* 2 (1952): 109-33.
- 1953. *La description d'Alep d'Ibn Saddah* (Damascus, 1953).
- Woolley 1955. C. L. Woolley, *Alalakh. An Account of the Excavations at Tell Atchana in the Hatay, 1937-1949*, Reports of the Research Committee of the Society of Antiquaries 18 (London: Oxford University Press, 1955).