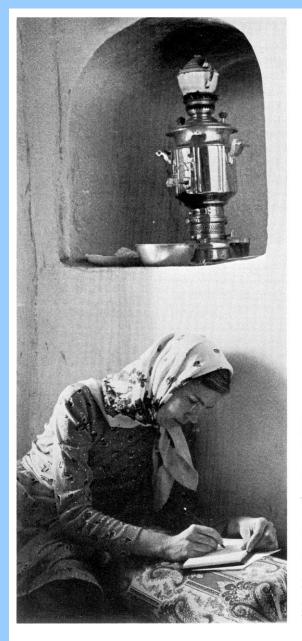
### CASE STUDY: BAGHESTAN

Ethnoarchaeological Project in Northeastern Iran

Lee Horne

1976-1978

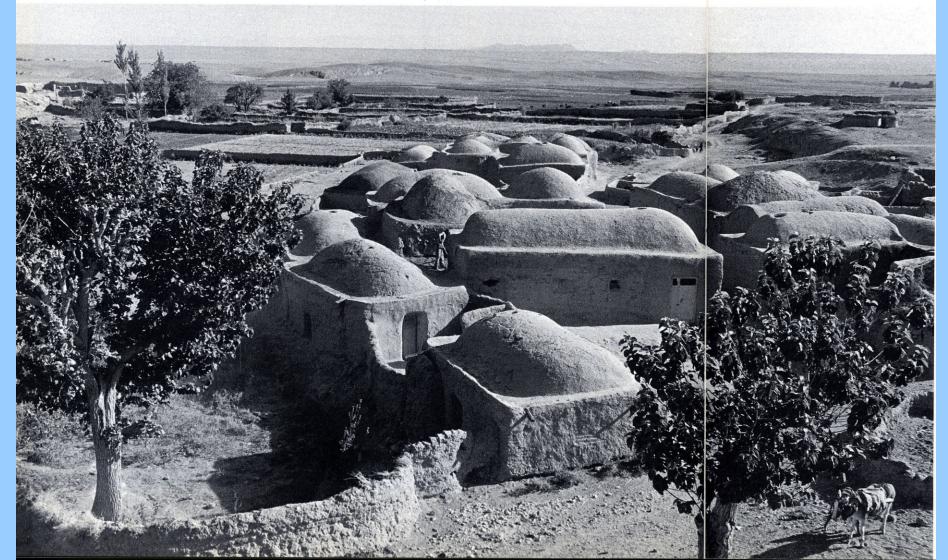


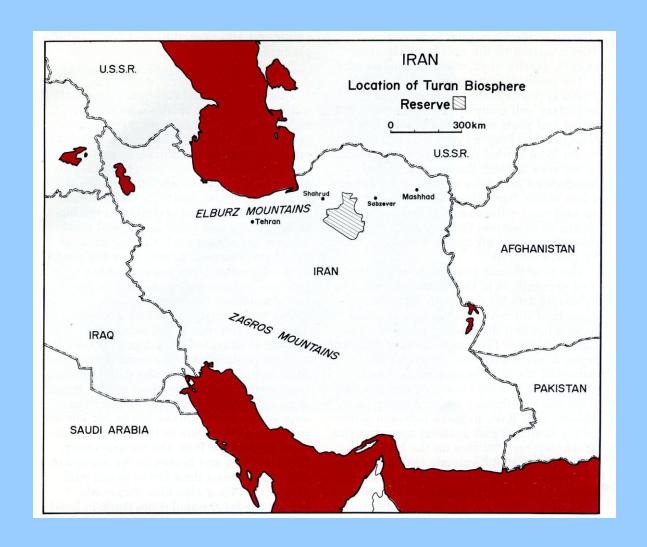
Lee Horne is a Ph.D. candidate in Anthropology at the University of Pennsylvania where she is writing her dissertation on the spatial organization of rural settlement in Turan. In addition to three seasons of ethnographic research with the Turan Programme, she has participated in archaeological survey and excavation in western Iran, in the Mahi Dasht and at Seh Gabi.

#### Architecture and Social Change in Northeastern Iran

LEE HORNE

Figure 1. Western edge of Baghestan village. Villages in this area are nucleated and irregular in plan. Fields and gardens lie outside the village. Barely visible in the distance are two isolated qal'a, abandoned fortified dwellings once the prevalent form of settlement.





Location of Horne's fieldwork

## Horne's Project

- •PhD research in area of Brian Spooner's research: Turan Program, multidisciplinary project.
- •She spent 3 summers until Revolution in 1979 precluded a final season.
- •Turan is in NE Iran and the Turan plain covers 120 km<sup>2</sup> between the sand sea to the north and a small mountain range to the south which separates it from the central desert.
- •1300 masl, with average 150 mm precipitation, with very high interannual variability.
- •Agriculture and settlements depend on qanats and very limited rain-fed agriculture. Herding of sheep and goats is very important to local economy.

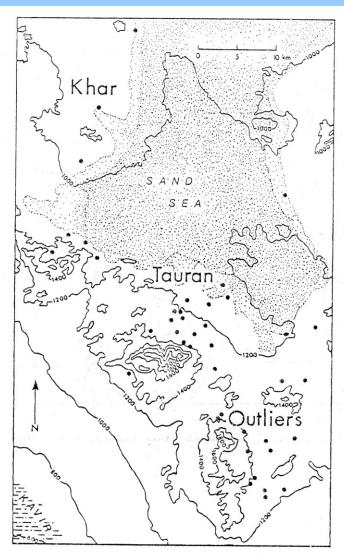
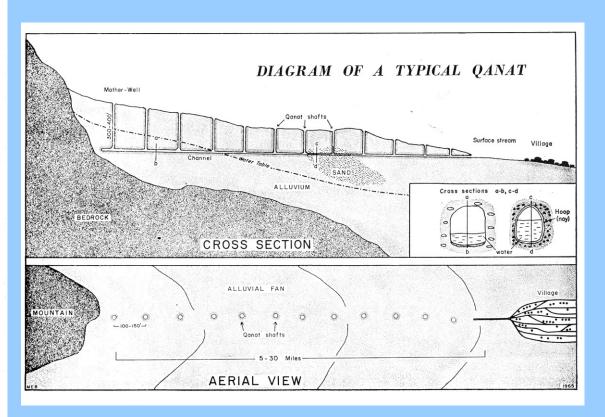


Fig. 1.2 Map of Khar o Tauran. Solid dots represent villages



### RESEARCH PROBLEM

"Explores the processes by which the shape of settlement is tied to the shape of society...and to assess some assumptions and inferences common in the archaeological literature." vii

Baghestan is one of many small villages on the Tauran plain. It has 34 households.

Baghestan is a "workplace, shelter, social setting and cosmological setting. It shows how historical, environmental, social and cultural factors shape the final compromise that is the physical entity of the village today." 17

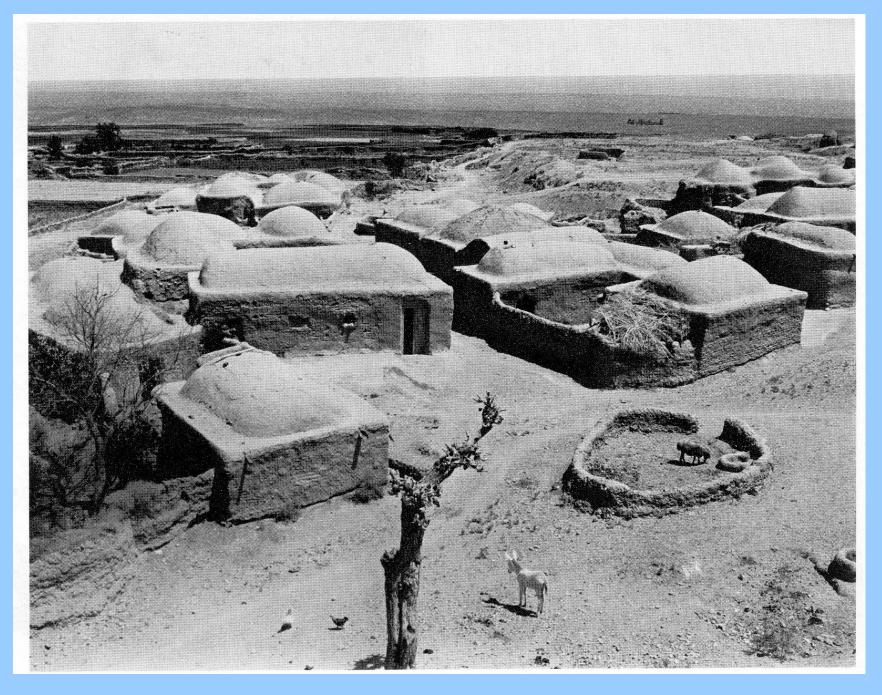
### Settlement Types

#### Villages

- Micro-variation in climate, access to water, soil/sand type etc
- Small, nucleated and irregular in plan; from ½ ha to 2 ¼ ha. Mean size is 69 persons; range is 5-95 households.
- Roughly half of structures are used for human activities; the rest for animals and storage.
- Usually there are fields, threshing floors and a cemetery with a village.
- Each village has water supply and irrigated gardens; between villages it's barren or rangeland.
- All are in locations protected from west wind storms.
- Need pasture, fuel, arable land, water.



Fig. 5.1 The three areas of Baghestan: A = Qal'a Baghestan, B = Gauju and C = Kalata



Baghestan village with domed-roof structures

# Settlement Type

#### **Summer Milking Stations**

- Typically round, not rectangular structures, with central posts and cross beams. 106
- Used for human shelter, not animals. Tend to be small and few in number.
- As close to water as possible to support flocks and milk production.
- Used May-August when pasture is fresh and milk abundant.
- Fire wood essential. "we estimated that the transhumant household at one summer station with about 250 milking animals uses 21 tons of firewood per summer season, most of it for processing the milk into storable and saleable products" 107-8.

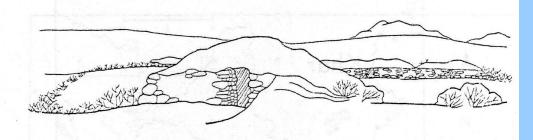


Fig. 4.3a A winter station  $(\underline{\bar{a}ghol})$  in the Turan area

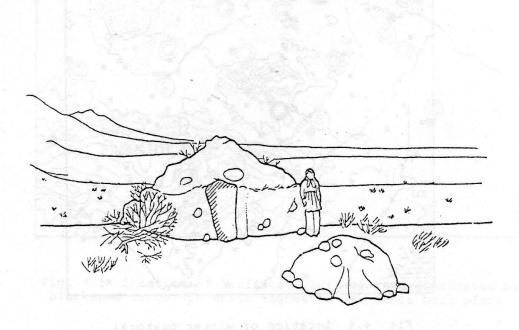
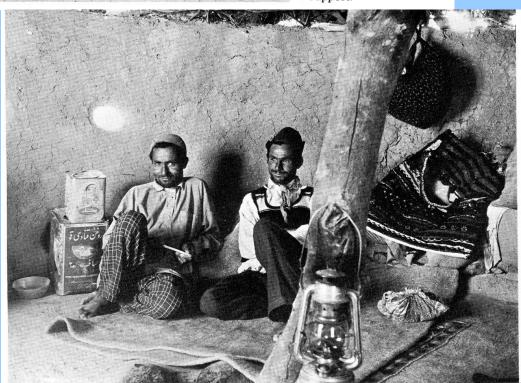


Fig. 4.3b A summer station house at Sanjari, southeast of the Tauran Plain



Dwelling at a summer milking station (Sanjari). A nearby spring waters the herds which graze on the plains below.

Interior view.
Shepherds sit on a felt mat made from sheep's wool. Food, clothes and bedding are stored against the wall. A hurricane lamp hangs from the central roof support.



6

## Settlement Type

#### Winter stations

- Typically semi-subterranean, of stone, packed dung and brush. Only men.
- In protected locations, usually dug into southerly slopes.
- Less need for water and can use dung for fuel
- Used as herding bases and shelter.
- October through April. 109
- When vermin are too bad, they are burned, so many are not in use at any time. 110



Winter camp pens

Semi-Subterranean pens and corral



#### Other Structures

- Qalas. In the past Khans built small fortified buildings. Now in ruins.
- Hoseiniya for Shi'a religious services.
- Black tent camps of Kurds who migrate down from the mountains in winter. 110
- Bandkhiras huts at dryfarmed fields
- Shrines Small structures found at graves
- Field features such as bands and irrigation canals.

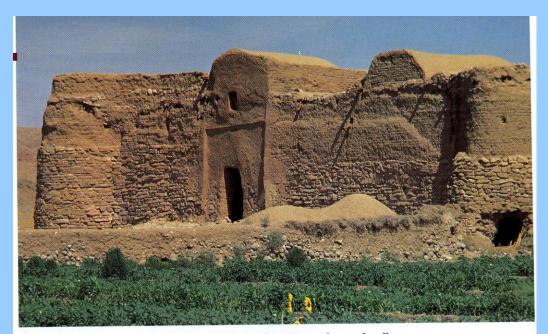
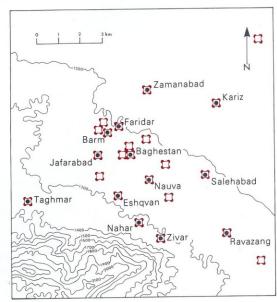


Figure 8. Asbkeshan qal'a. Towered, fortified multi-residence dwellings once dominated the landscape throughout the Iranian Plateau. This one, like the one in Baghestan village, is still occupied. In the past, it formed a self-contained settlement with its own water system, fields, and pasture nearby. Today, settlements are more dependent on the services and products of a regionally organized government.

Figure 9. Distribution of past qal'a and present-day village settlements. Each present-day village has at least one qal'a from an earlier period.



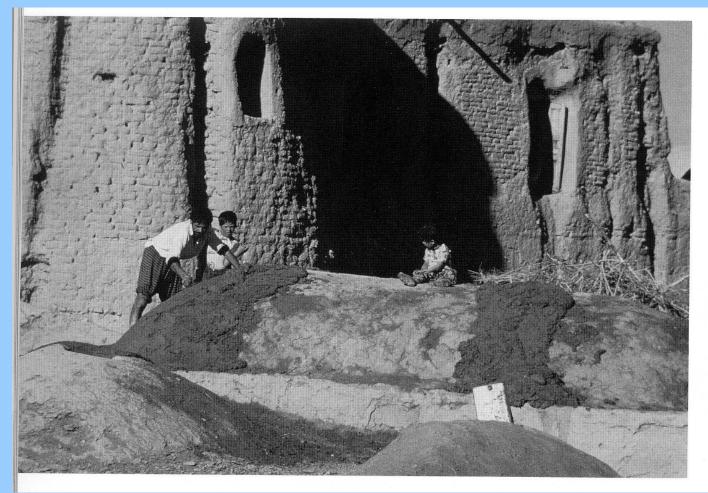
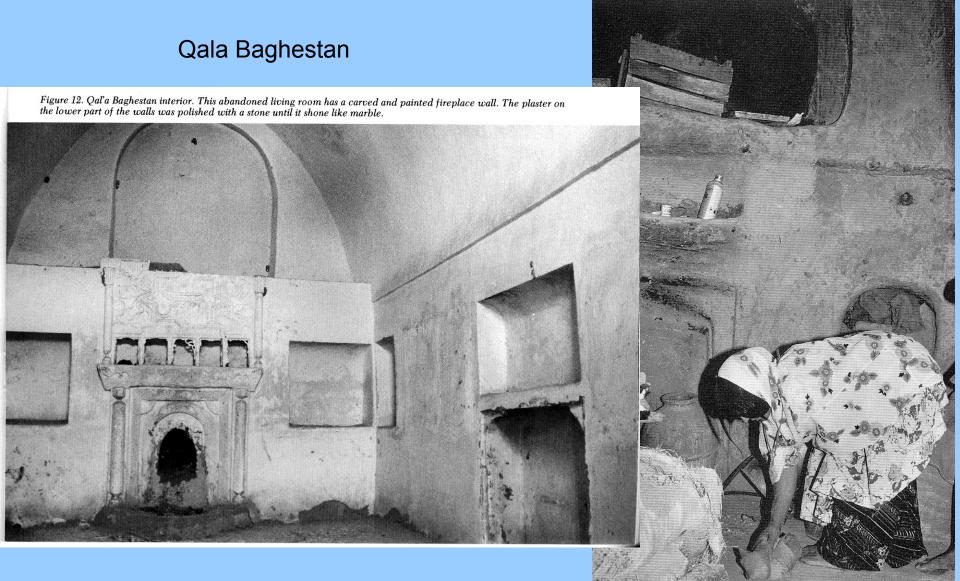


Figure 10. Baghestan's older residents were born in some of the nearby qal'a, including this one within the village itself, seen towering over simple village rooms. Mudbrick structures demand continuous upkeep; when well maintained they will last for several generations. In the foreground, villagers replaster cracking roof surfaces with mud and straw.

#### Re-used Qala



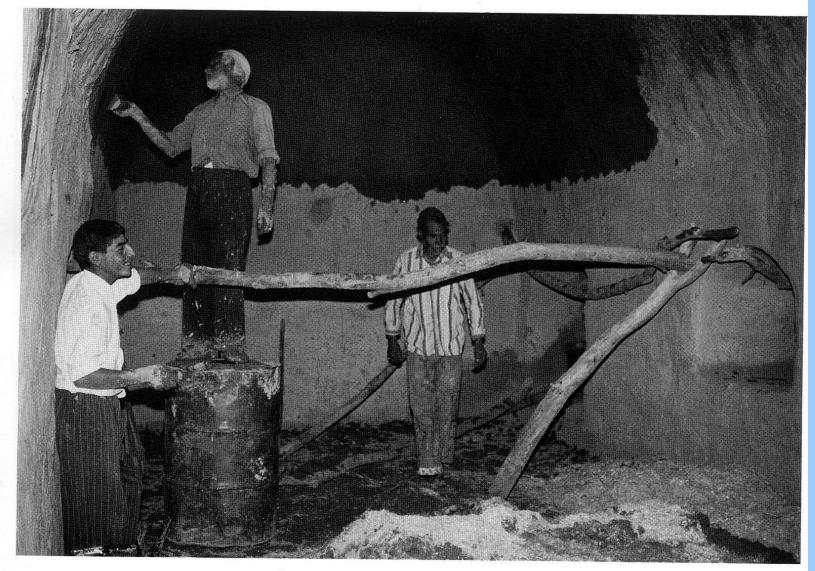


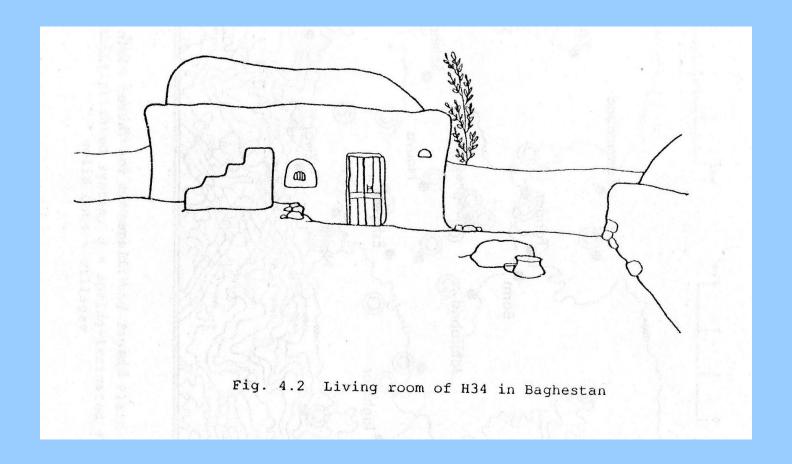
Figure 3. The village headman, assisted by a few other villagers, replasters the walls of Baghestan's hoseiniya. Used for Shi'a religious services, the hoseiniya is one of the few community spaces in the village.

## The Villages of Tauran

- All villages are tied socially and economically to others. All 13 villages are within 6 km radius and nearest neighbors distance is 1.8km. 119 That is 20 min to 1 ½ hour walk to any other village.
- Through-traffic caravan routes influence spacing and location of villages. 120
- Villages are open, not closed, to membership and fields are not held exclusively. 116

## Village Architecture

- The basic bldg unit is the room. They rarely communicate with each other, but open into courtyards or alleys. 133
- Four types of rooms: living rooms, storerooms, straw storage rooms, and animal rooms. Function, not form determines use.
- Living rooms used for sleeping, eating, entertaining, tea-making, some cooking, and crafts.
- Storerooms are for household items, cooking, food, clothes,
- Other storerooms for agricultural equipment, fertilizer, fodder, firewood, or straw.
- Animal rooms for animals.
- Also a hoseiniya "mosque", a hammam (bath), a mill, a school.
- Cemetery, threshing floor, milking stations, grape processing ovens are all outside main living area.



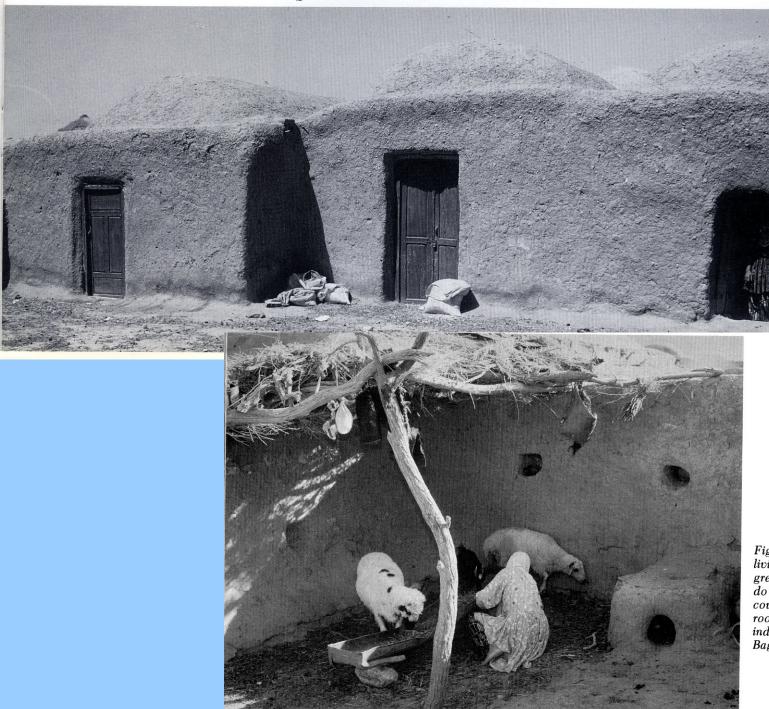
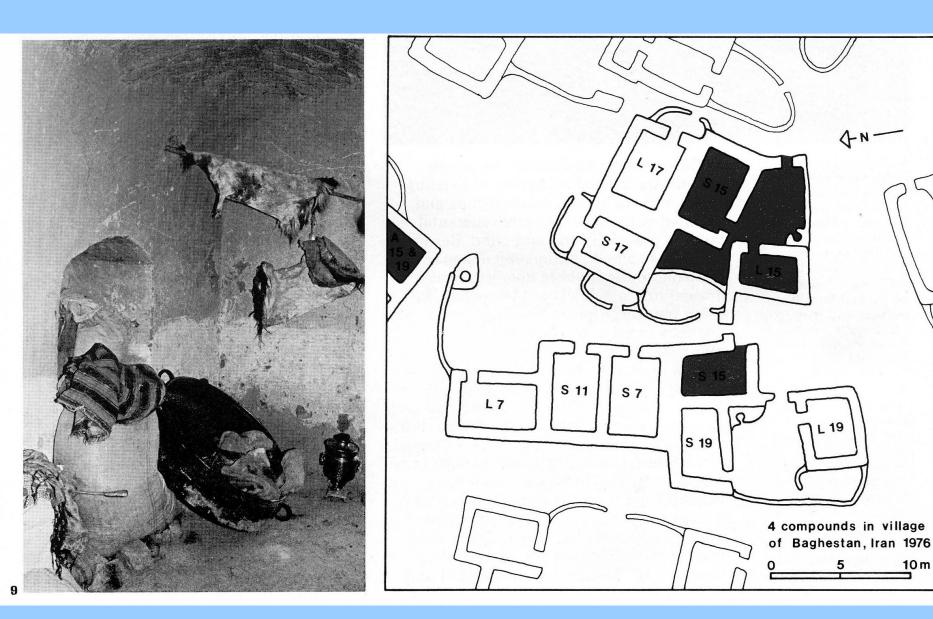


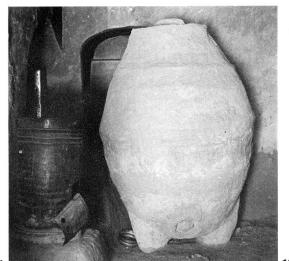
Figure 7. Courtyards are outside living and work areas and vary greatly in size. Well-to-do households do not necessarily have larger courtyards, however. Like living rooms, courtyards are not good indicators of economic status in Baghestan.

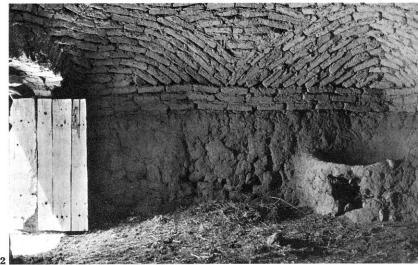




Storeroom and layout of compounds

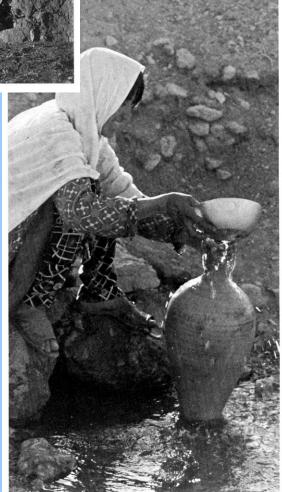
10 m





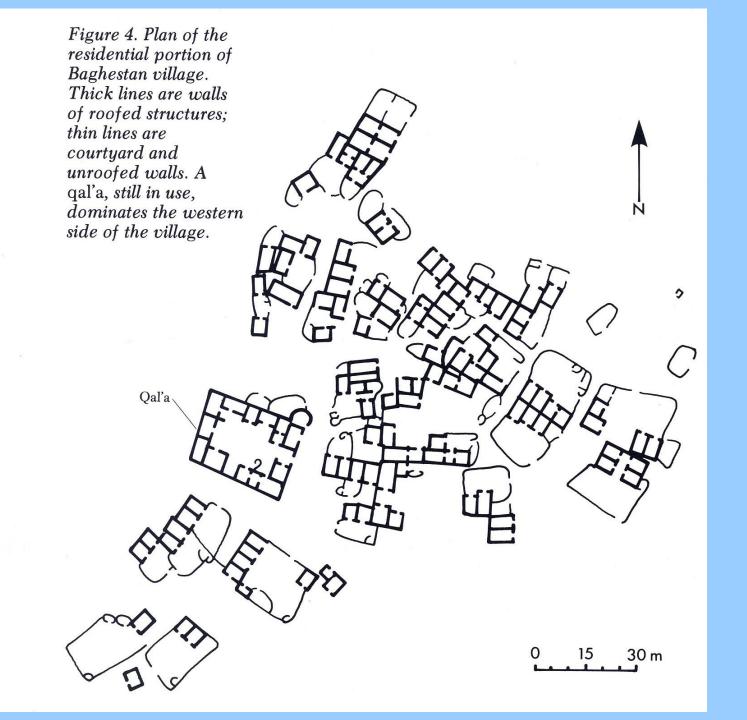
Grain storage and animal barn

Collecting water



## **Spatial Factors**

- Tight clustering means sharing of walls. Few free-standing houses.
- Courtyard walls are not "an essential element for separating household from household" 149
- Walls don't necessarily surround all of one's rooms, and may enclose another's household. Walls, not the houses are the last to be built – unlike in other areas.
- Orientations and spacing of new structures takes into account earlier ones so patterns tend to repeat.
- Standard domestic unit is two rooms and courtyard. Other rooms are scattered. 143 (see H2, H4, H5 plan Fig.6.7)
- Doors face south. Heat in winter is the main problem, with wind, dust and summer sun.141 Some folks move their living rooms from south to north with the seasons.
- No "center" for activities or symbolically. 153



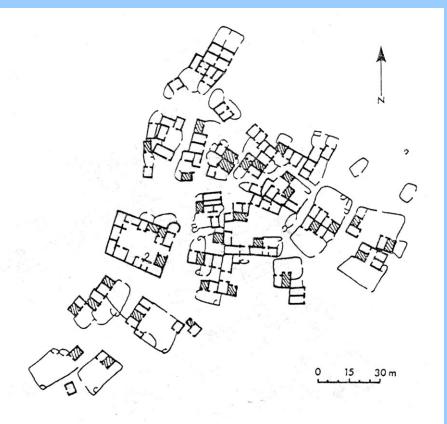


Fig. 5.2 Distribution of living rooms in Baghestan

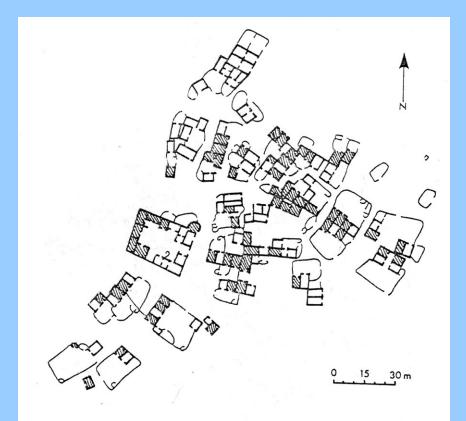


Fig. 5.3 Distribution of storerooms in Baghestan

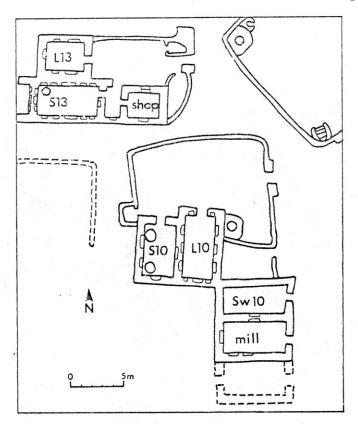


Fig. 6.8 Detailed plan of core compounds  $\rm H10$  and  $\rm H13$ . (Key on p. 260)

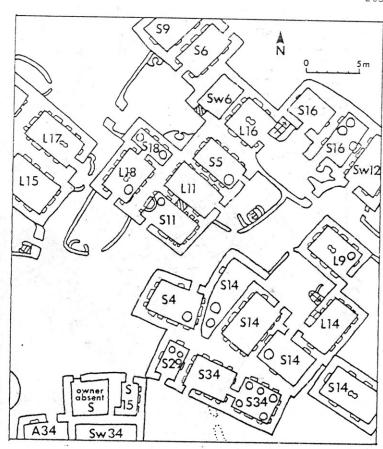


Fig. 6.9 Detailed plan of core compounds H11, H14, H16, H17, and H18. (Key on p. 260)

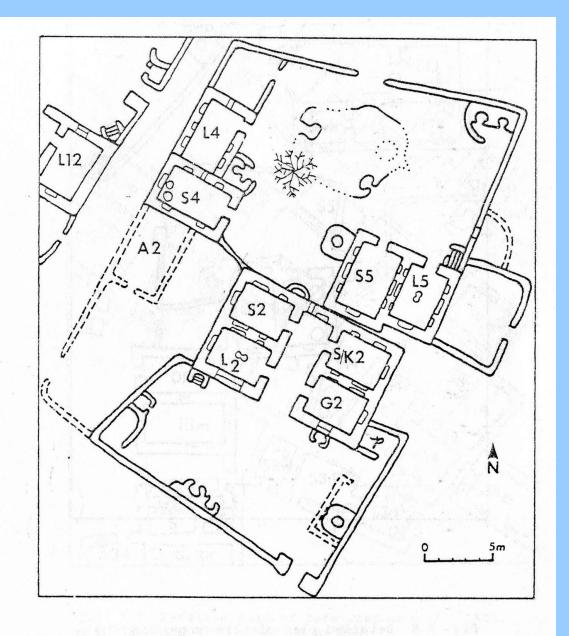


Fig. 6.7 Detailed plan of core compounds H2, H4 and H5. G = Guest room (general key on p. 260)

### Baghestan as Archaeological Site

- Khar o Tauran (region) known to have been settled at least 1000 years and more, but mounds are not typical 167
- If all the building material mud, straw, wood, in the occupied area were consolidated "the resultant cube would measure nearly 20m on each side about 8000m³ of deposit. Or, if it were distributed evenly across the occupied area it would be 0.4m deep. 168
- In Tauran, even for sites occupied for long time, there is tendency to shift location rather than build on the old. Sherd scatters from older sites illustrate this. 177
- Life span of house, if maintained, can span 100 years or more, but in Baghestan half are <20 years, most are <30 years and only a few are >50 years 180
- Ideal cycle: marriage; living room, storeroom-kitchen, compound wall, toilet, gate. Other rooms may be bought or shared. 180

## Dynamics of the Village

- Rooms and continually being changed through re-use.
- Compounds are not in themselves social units.
- Houses are minimally a living room.
- One's holdings are not necessarily contiguous.
- Dynamics are illustrated through the following figures.

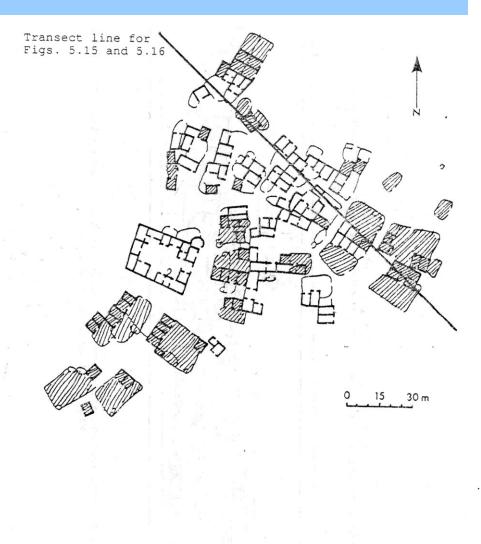


Fig. 5.14 Village growth (marked by hatched areas) in Baghestan from the late 1950s to the late 1970s. Based primarily on oral histories.

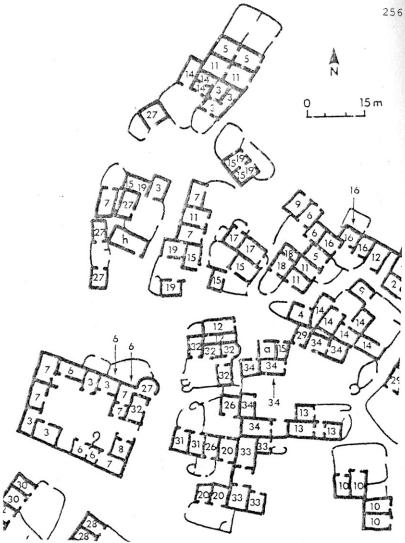


Fig. 6.3 Room ownership in northern part of Baghestan. Numbers identify households; arrows indicate upper rooms not shown in plan; a = absentee (non-resident) owner; h = absentee (non-resident)hoseiniya

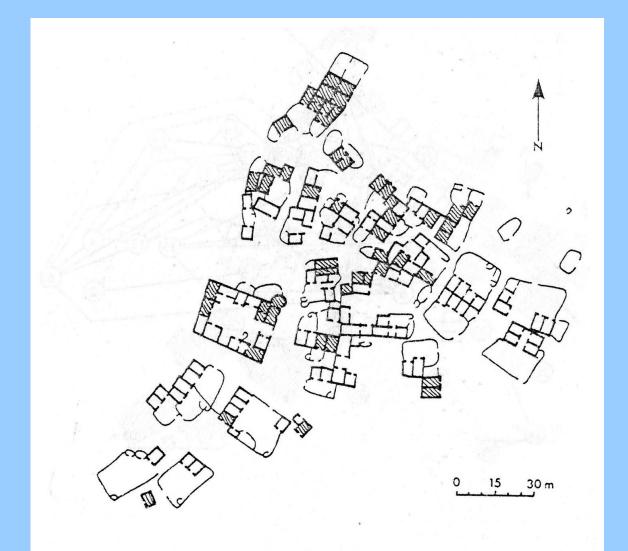
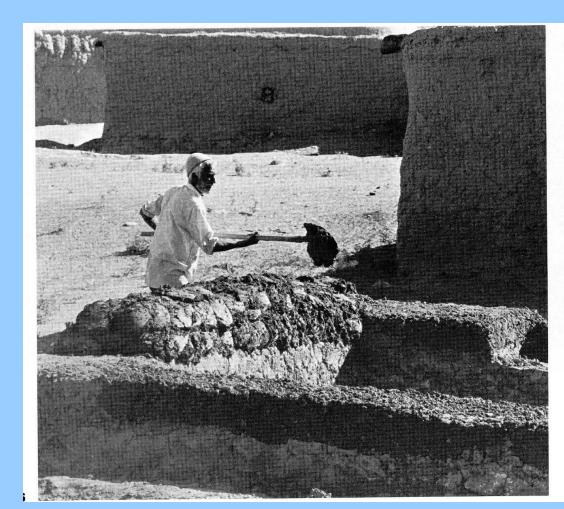
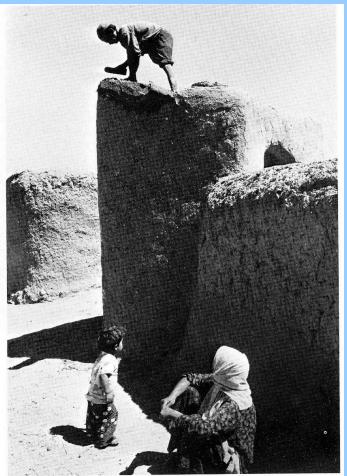


Fig. 5.12 Location of rooms non-contiguous to their core compounds

## **Degradation Factors**

- Water and wind erosion, and dust and sand deposition continually affect the site. Sparse vegetation does not inhibit erosion. 170
- Buildings that are contiguous and tightly packed will leave more mound and the rate of build-up will be faster.
- Domed houses are used until dome collapses; then a small mound about 1.5m high forms, equivalent to about 35m<sup>3</sup> of mud.
- Houses in Baghestan are nearly all chineh rather than bricks
- Life span of house, if maintained, can span 100 years or more, but in Baghestan half are <20 years, most are <30 years and only a few are >50 years 180
- Stables over the winter accumulate 50-60 cm dung, which is spread over the fields. 182



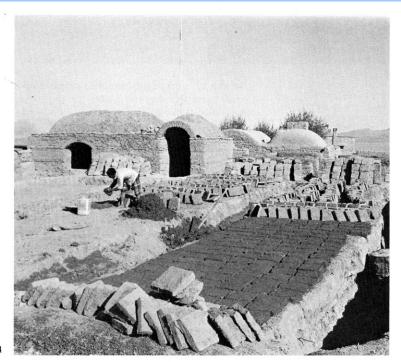


Cheneh (packed mud) construction

standing ruins, while simpler, more recent houses have long since disappeared, so it is difficult to know whether qal'a were the only type of settlement possible at any given period.

Though defense is no longer critical, the memory of those days is still very much alive, and people do not like being alone. Men are often away from their families shepherding or at other tasks, and women and children like to have neighbors and relatives close by. Beyond this apprehension, there is a strongly expressed need for the socializing and mutual aid possible among close neighbors, who are usually kin of one sort or another. Life in a Tauran village is a web of social and economic relationships.

Though settlement is nucleated rather than dispersed, villages are not unusually densely occupied relative to what is sometimes reported from elsewhere in the Middle East. Rainfall agriculture in Tauran is occasional and risky, so that dry-farmed land next to villages is not especially valuable and can be appropriated for ex-





## Assessing the "Fit"

 "By tracking down the causes of unexpected results, one is likely to learn more than one was asking in the first place." 186 An anomaly- the differences between the expected and the observed thus becomes a positive contribution.

#### Rooms and Activities

- "The traits that best characterize different kinds of room are the features, decoration, and furnishing or equipment that are added to the original basic structure, rather than the original structure itself." 189
- Remodeling to change a room's function is common.
   Half the rooms in Baghestan are being used for purposes other than their original use. 190
- Devolutionary re-use is the most significant for archaeology 192 Downward spiral of re-use, with decreasing requirements for soundness and quality of finish. Generally not reversible.
- Since re-use and change of function is so common, such things as population estimates or relative importance of animal husbandry will be in error.

## Interpretations

- The living room is the basic unit and an animal house is the least important. 193 Since original living rooms are the most numerous, they are subject to "overcounting" by archaeologists, when in fact they have been re-used for other uses.
- Seasonal settlements differ in quality, mode and material of construction and life-span. Also they are not fixed in place. 194 Seasonal users may appear to be "squatters" in abandoned villages.
- Winter houses are the strongest and most likely to be found.

#### Houses and Households

- How to infer domestic units/population, social stratification, etc?
- Life cycle of bldg/compound tied to life-cycle of building/owner.
- "How good is the fit of household size and houses? "Measured by the total number of rooms or total amount of roofed space per household, the fit is not very good" 200 Not as good as in other studies (Watson, Kramer, Kamp). Possibly because room sizes are constrained by domes.

### The Nature of Households

- In Baghestan, households do not live in self-contained compounds as one might imagine from the village plan.
   201 "The 'house' in Baghestan lacks the kind of cohesion known from elsewhere in the literature." 201
- What is a house? Houses do not share a common roof, rooms don't communicate with each other, and are open to the outdoors. In Baghestan ownership and use of rooms is widely dispersed, even within a walled compound. This is partly a result of inheritance, but rooms may be bought or rented.
- This differs from Kramer and Watson where households share compounds and joint families are usual. 206 And rooms are often interconnected.
- For Baghestan the main unit is the living room and any immediately adjacent spaces. 208

### **Fields**

- In Tauran fields are also fragmented with holdings of individuals all over the place, as in the village itself. 210 All fields are outside the village.
- Not all close fields are owned by villagers; some are farmed by people from other villages. Some fields do not have a village.
- For Baghestan, all fields are within 1.8 km and 30 minutes walking time, but that distance extends to the edges of neighboring villages.
- In Tauran, unlike some areas, "the social group, economic unit and spatial unit may not be congruent."
   214

#### Conclusions

- In a real sense, the whole Tauran region should be considered the unit of analysis for catchment studies, not the villages themselves. 216
- "What we see in any settlement is an accumulation of past and present activities" 218
- It is for the archaeologist to work out the temporal relations.
- "In Khar o Tauran, social and cultural practices disturb the expectation that activities and room types, houses and households, and fields and communities are neatly connected to each other in a one to one relationship" viii

#### References

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   Organization of Rural Settlement in Khar o
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