

ATOMIA - NEW EDUCATION FOR A NEW TOWN

Cedric Price

GENERAL

126/10pt

TEXT

216/14pt/16ems
PRICE
I.C.

126/14 1/2 or 9pt/16ems
with spacing as shown

- The concept of a finite town totally conceived at a single moment in time is ~~considered both~~ intellectually derelict and socially irresponsible.
line of white
- Such a concept in the past may well have produced a settlement capable of defence but in recent times has produced little more than medieval piles with power points—capable of only the most limited pre-ordained growth and change.
- Increased individual mobility and personal independence enables an extension of the range of self-choice activities open to all.
- Mobility of labour and the rapid spread of invisible servicing (e.g. water, *National Health* Medicare, TV, *Mars* Hershey Bars, gas, credit cards, wired power) are additional generators of an increasingly fragmented ~~(both spatially and in time)~~ humane society.
- The built environment is likely to become an increasingly restrictive and abrasive content of total life if continuing attention is paid by the administrators and their consultants (architects, planners, and romantic social scientists) to its assumed permanence rather than to its ~~shortening~~ *diminishing* socially relevant life.
- Too often, the consultants grasp desperately at some ~~generally~~ acceptable activity that can be located in "buildings" and thereby justify an urbanistic structuring and communication theory based on the imbecilic assumption that "growth" (i.e. socially healthy) activities are those most likely to provide a locationally static "fix" around or alongside which the town can grow indicating in such growth physical ~~infra~~ infra-structuring caused by such healthy activities.

- Fortunately, it is unlikely that education now entering a period of mammoth expansion in scope and content will wait around for such stultifying recognition.
- However, the value of this programme at such a time is that it has enabled me to show that the built environment together with its integral artifactual kit of parts can help to increase the rate of fruitful fragmentation of educational servicing.
- If cooperation with education is at this eleventh hour achieved by architecture and planning, then it is likely that architecture will at last realise its immense potential to demand its own technology rather than stand at the end of the "spin-off" queue with the ever-open hand.

Thesis

126/10pt

- The provision of educational facilities, in physical terms, should not be tailored to any particular requirements made by any particular authority.
- Rather, such provision should through its ambiguity enable a range of educational patterning to evolve wider than previously possible.
- In architectural and planning terms, this requires an avoidance of the providing of a single or comprehensive physical dispenser unit.
- However, the acceptance of educational servicing as continuous, essential feed to the total lifespan does demand an acceptance of the fact that education together with other essential services, must be made available in means and methods comparable with other forms of invisible servicing.
- The resultant facilities must equate therefore to a total social servicing industry rather than one related largely to a particular age group under particular circumstances.
- ~~I totally accept the principles outlined in the educational plan for this scheme.~~

ATOMIA - DISTINCTIVE FEATURES OF THE PROBLEM

New Town: Developed with federal funds in conjunction with Federal Atomic Research Facility / satellite city / 30 miles southwest of Chicago / located on a major radial freeway / highly educated population of 220,000 / population predominantly professional, semi-professional and skilled / medium density residential.

Educational Plan: Technology oriented / centers around educational nodes / nodes or educational center serving relatively limited population groups in relatively independent settings.

can draw on met. services



LOCATION MAP -- ATOMIA



LAND USE BREAKDOWN

Type	%	Acres
Institutional and open	50%	7,333
Residential	25%	3,667
Industrial	10%	1,467
Public Right of Way	10%	1,467
Commercial	5%	733
TOTAL	100%	14,667

total
7,400

COMMUNITY STRUCTURE

Unit	No. of Next Lower Units	No. of Units in City	Population/Unit (People)
A Block	0	1,680	100-150
B Neighborhood	4	420	400-600
C Village	5	84	2,000-2,500
D Town	6	14	12,000-15,000
E Center	14	1	10,000-14,000

Total population.
220,000
total

DWELLING UNIT BREAKDOWN

Type of Residential	% of Total Dwelling Units	No. of Dwelling Units	Average Dwelling Unit/ Acre
1 family detached	15%	9,450	7
2 family detached	5%	3,150	11
1 family attached	50%	31,500	18.5
2 story apts.	15%	9,450	30
8-13 story apts.	15%	9,450	90
TOTAL	100%	63,000	

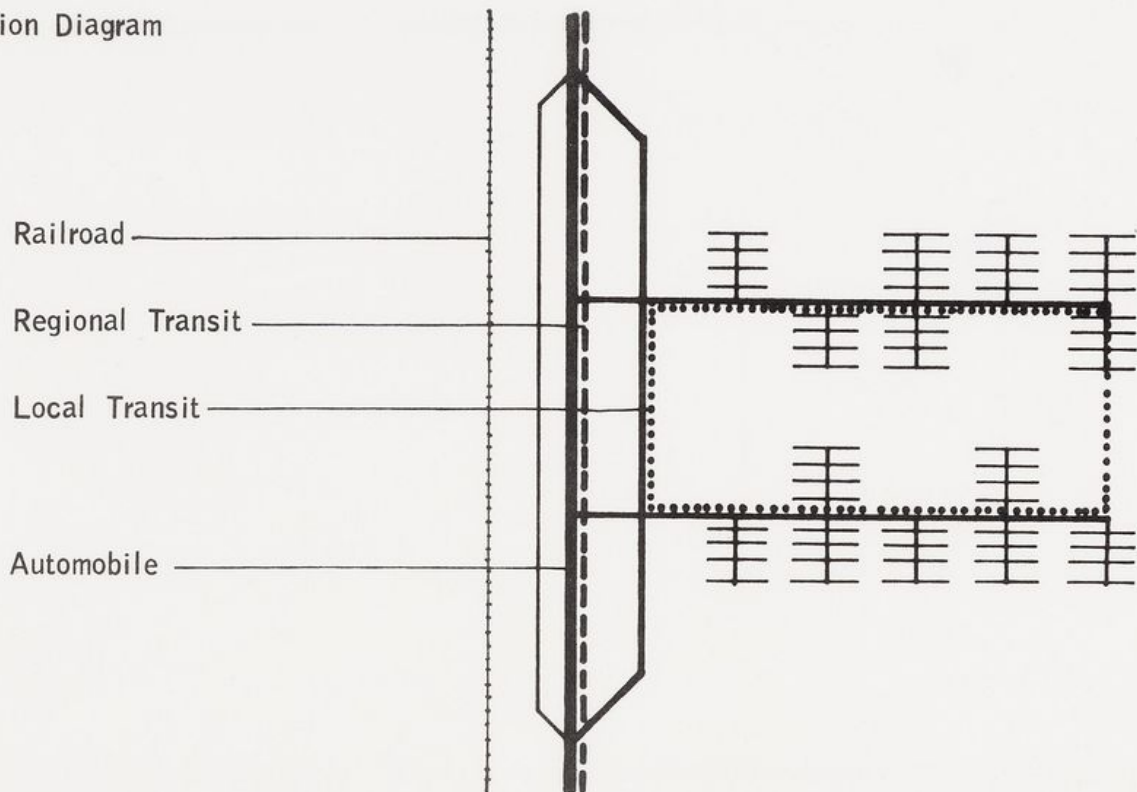
Average 60 people/ residential acre

Average 3.5 people/ dwelling unit

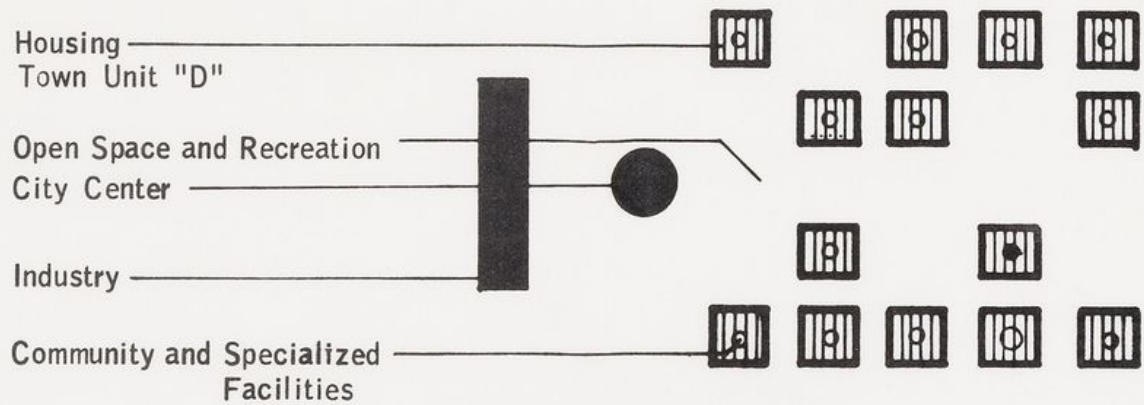
Total 63,000 dwelling units

CONCEPTUAL DIAGRAMS

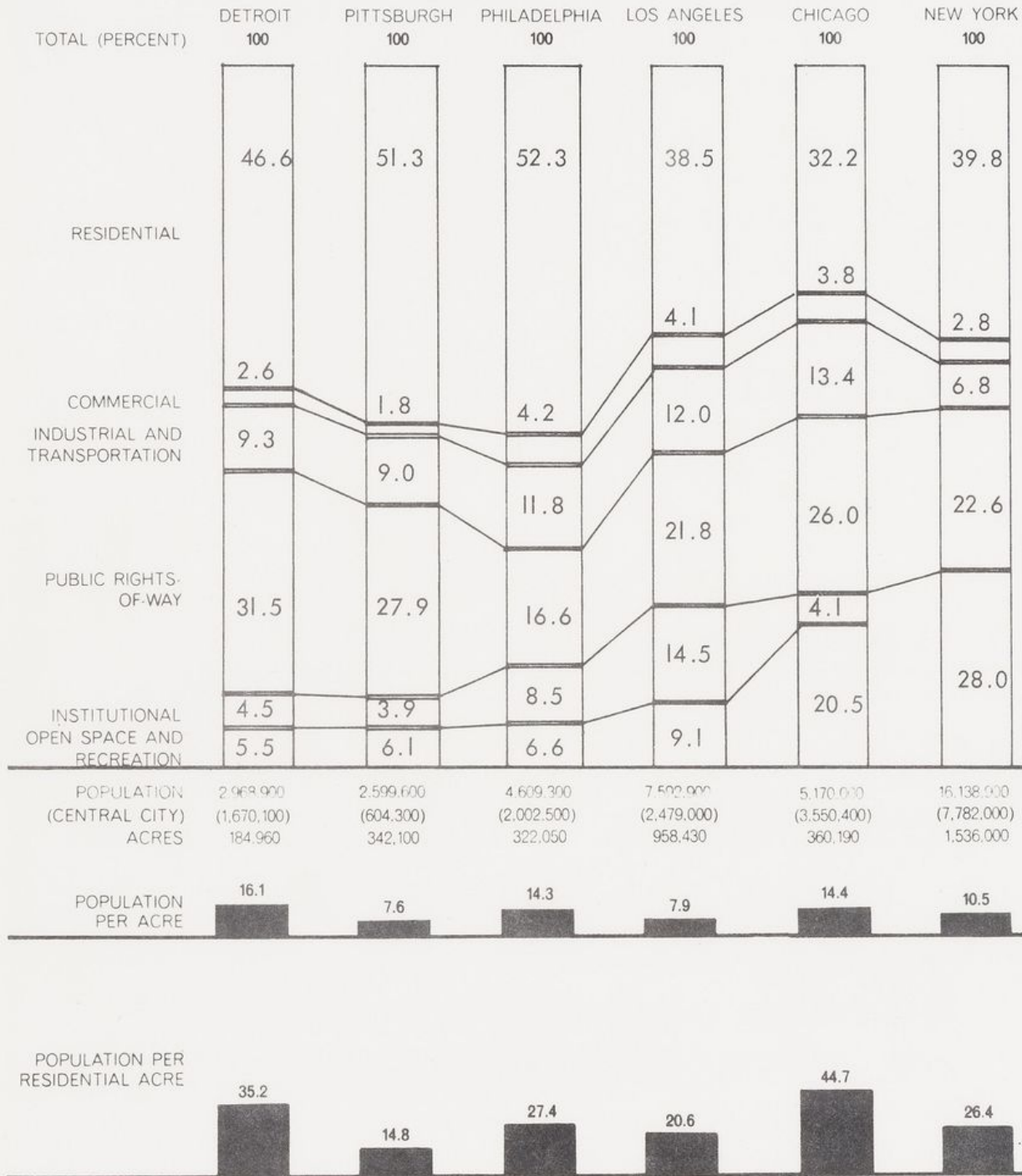
Circulation Diagram



Land Use Diagram



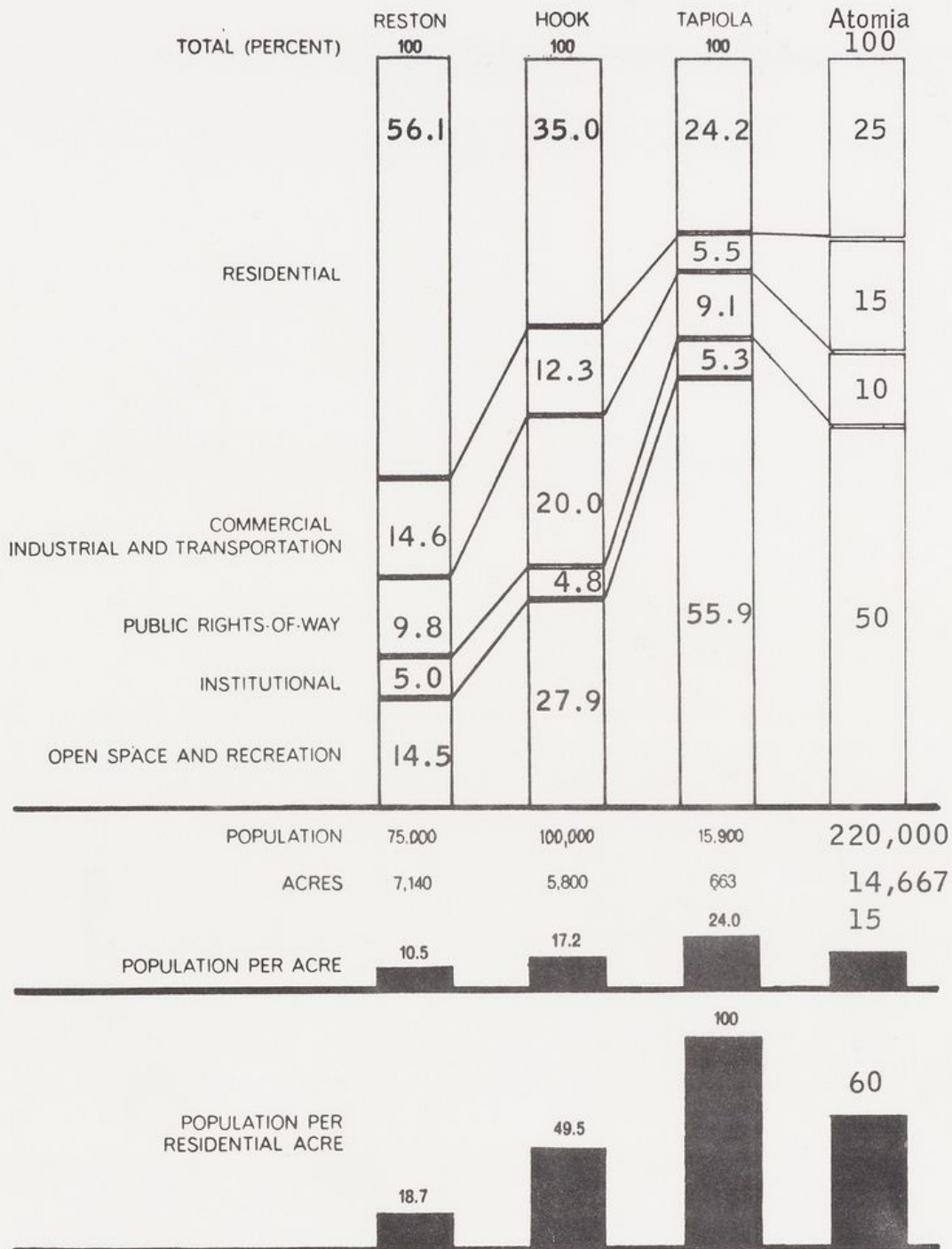
COMPARATIVE LAND USE



LAND USE IN METROPOLITAN REGIONS shows a wide range of variation. The seven regions are arranged so that percentage of open space increases from left to right. Even though the figure for New York includes land devoted to institutional use, the combined figure is higher than the combined figure that can be obtained for any other region. This suggests that New York indeed has more

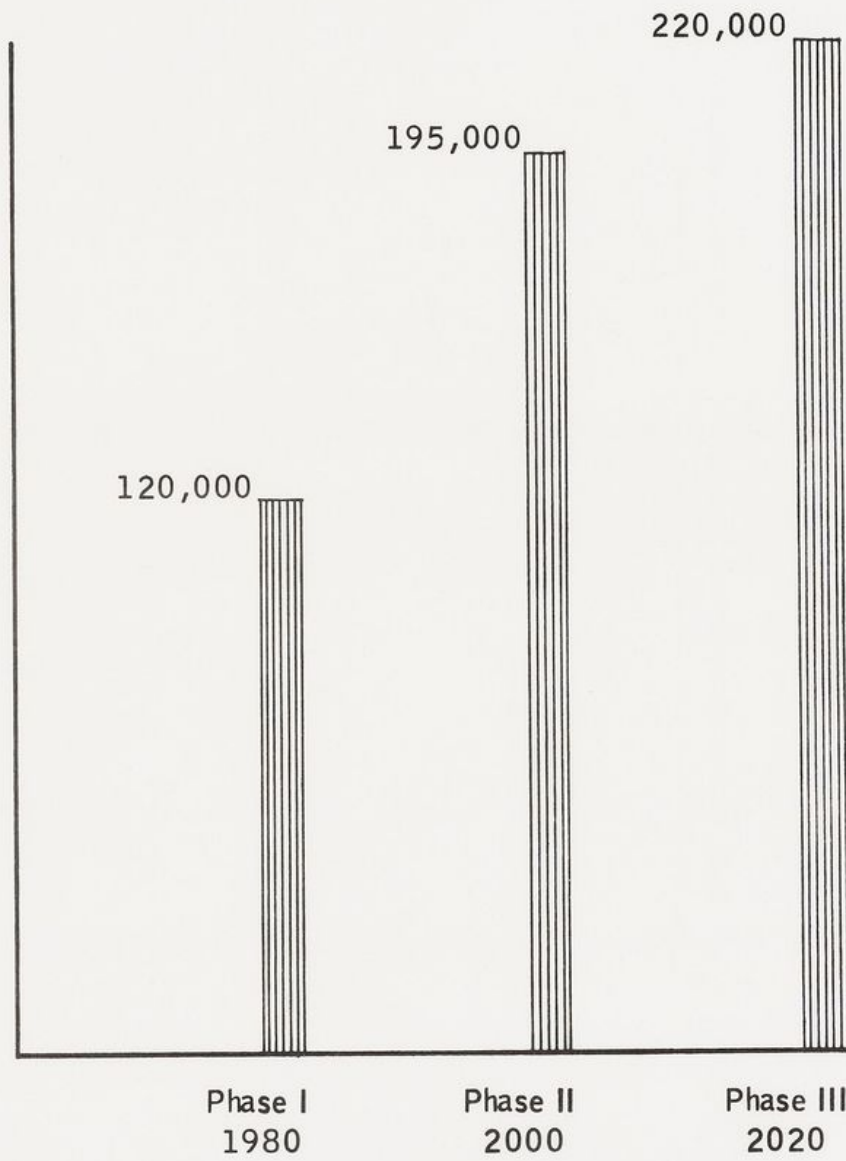
open space than other regions. The population figures shown in color include surrounding regions in addition to the central city. The population of the central city appears in parentheses. Populations shown are for 1960 except for Chicago (1956) and Detroit (1953). Note the range in population densities. The data for this illustration were assembled by the Regional Plan Association.

COMPARATIVE LAND USE

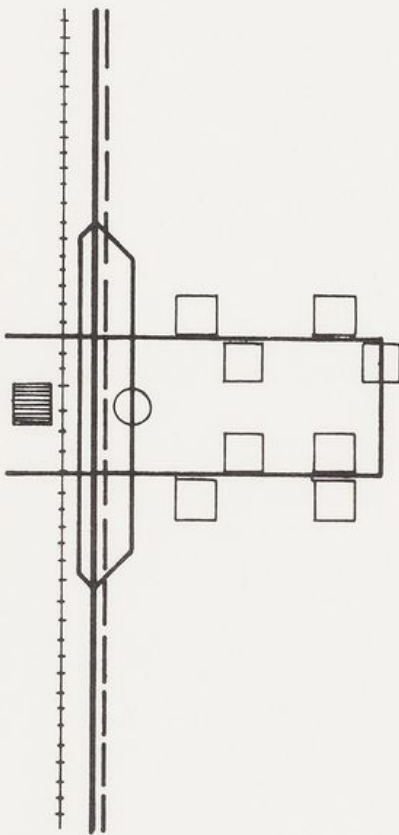


LAND USE IN NEW TOWNS shows how planners in different countries approach the problem. Reston is a new community in Virginia, 18 miles from Washington, D.C., which has attracted much comment among American planners. Tapiola, a new Finnish town, embodies the ideas of Scandinavian planners. Hook, a new town that lies between London and Southampton, will have a higher population density than any of the other new towns built in Britain since World War II. The populations of Hook and Reston are projections.

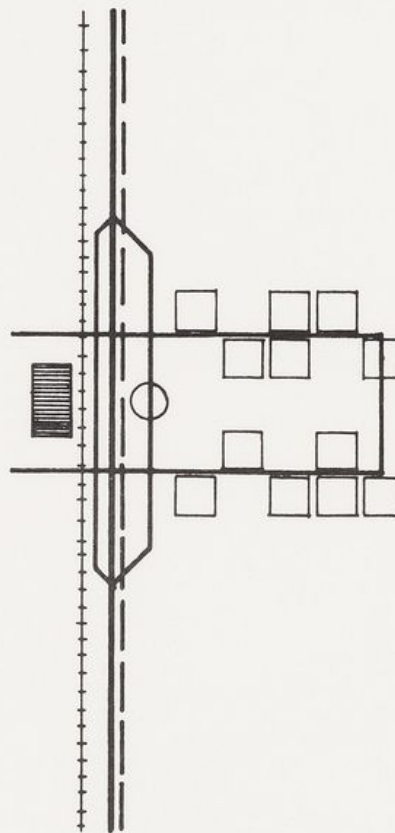
POPULATION PROJECTION



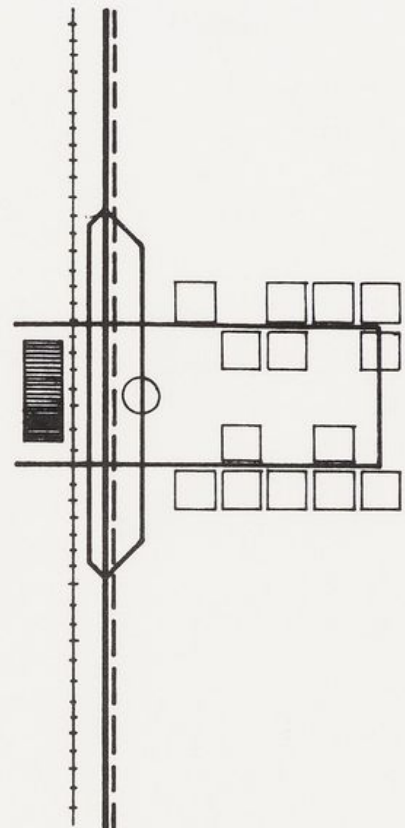
STAGING DIAGRAM



Phase I
Year 1980
8 Town "D" Units @
12,000-15,000
population each
(6,000-8,000 in
city center)
120,000 total population



Phase II
Year 2000
12 Town "D" Units @
12,000-15,000
population each
(10,000-14,000 in
city center)
195,000 total population



Phase II
Year 2020
14 Town "D" Units @
12,000-15,000
population each
(10,000-14,000 in
city center)
220,000 total population

ATOMIA

Atomia is uncomfortably hot, cold, wet, and dry on occasion. Perhaps the greatest problem is to avoid conflicting provisions for several extremes and sudden changes. Located in Central Illinois near the Great Lakes, Atomia never-the-less receives its predominant winds from the southwest and west. The terrain is generally flat with occasional hills.

Summers are usually hot and humid and winters cold and wet with frequent sudden changes due to Canadian cold fronts. Winds are generally strong from the west and southwest, but with winter cold winds from the northwest. Fastest winds occur from either direction.

TEMPERATURES:

5% year max. temp. between 85° and 105°
25% year max. temp. between 65° and 85°
25% year max. temp. between 45° and 65°
30% year max. temp. between 25° and 45°
10% year max. temp. between 0 and 25°

The majority of the year, weather is cold to warm with extremes only for short periods. The combination of low temperatures and high winter winds cause severe discomfort without proper protection. Hot periods sometimes exceed 100° and winds are likely to be light and humidity high, causing great discomfort.

SKY:

Nearly 75% of possible sunshine hours are unobstructed in the summer. In the winter, only about 42% of possible sunshine gets through, or an average of about 3 hours of feeble sunshine per day. Not uncommon in winter to have a full month without sunshine.

WIND:

Winds are strongest in the winter, coming from the northwest and southwest. In summer, winds are lower in velocity, though stronger than average for other parts of the country. Breeziest part of the day is afternoon with a large portion of evening and night hours calm.

Winds are steady enough and strong enough to cause discomfort between buildings, around building entrances on streets and in other outdoor areas if proper precautions are not taken.

RAIN:

Average rainfall is moderate and fairly evenly distributed throughout the year. The tendency is for more rain in late summer.

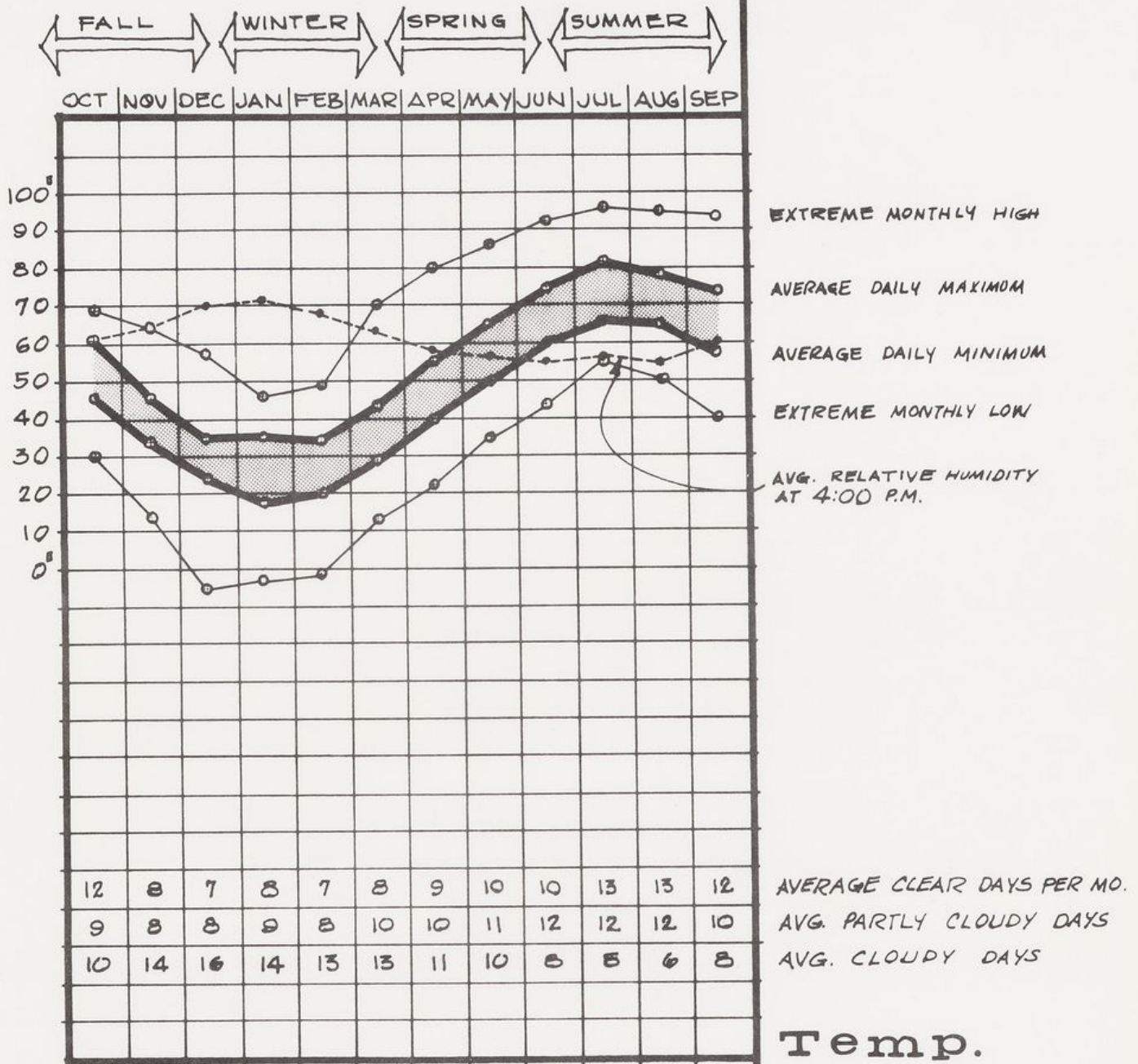
SNOW:

Snowfall is not excessive averaging, at most, 8 or 9 inches per month. However, occasional snows can be as much as 40 inches per month. Some winters are snowless. Most snows are wet and tend to melt rapidly.

RELATIVE HUMIDITY:

In the summer, the relative humidity ranges from 58% in the day to 80% at night. There is a high percentage of warm, muggy summer afternoons. In the winter, R.H. ranges from 70% in the day to 80% at night.

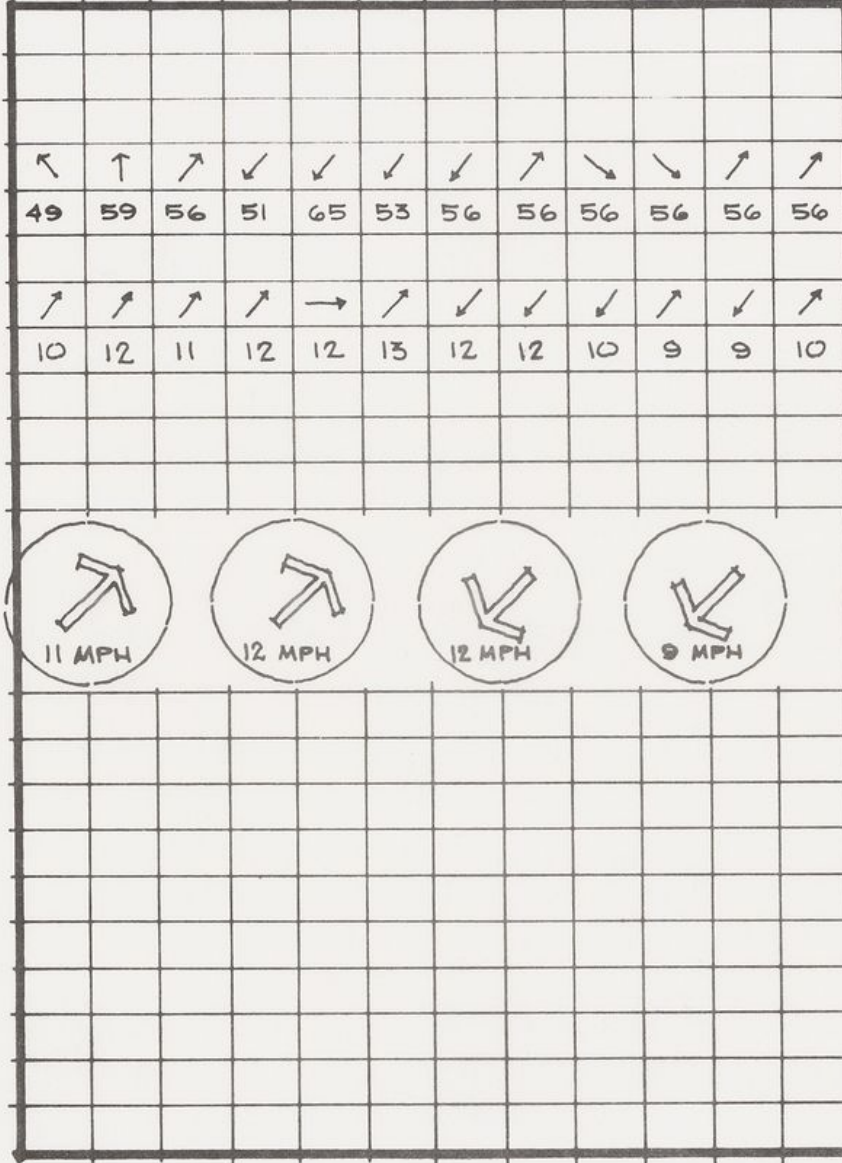
ATOMIA



ATOMIA



OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP



WIND DIRECTION (NORTH ↓)

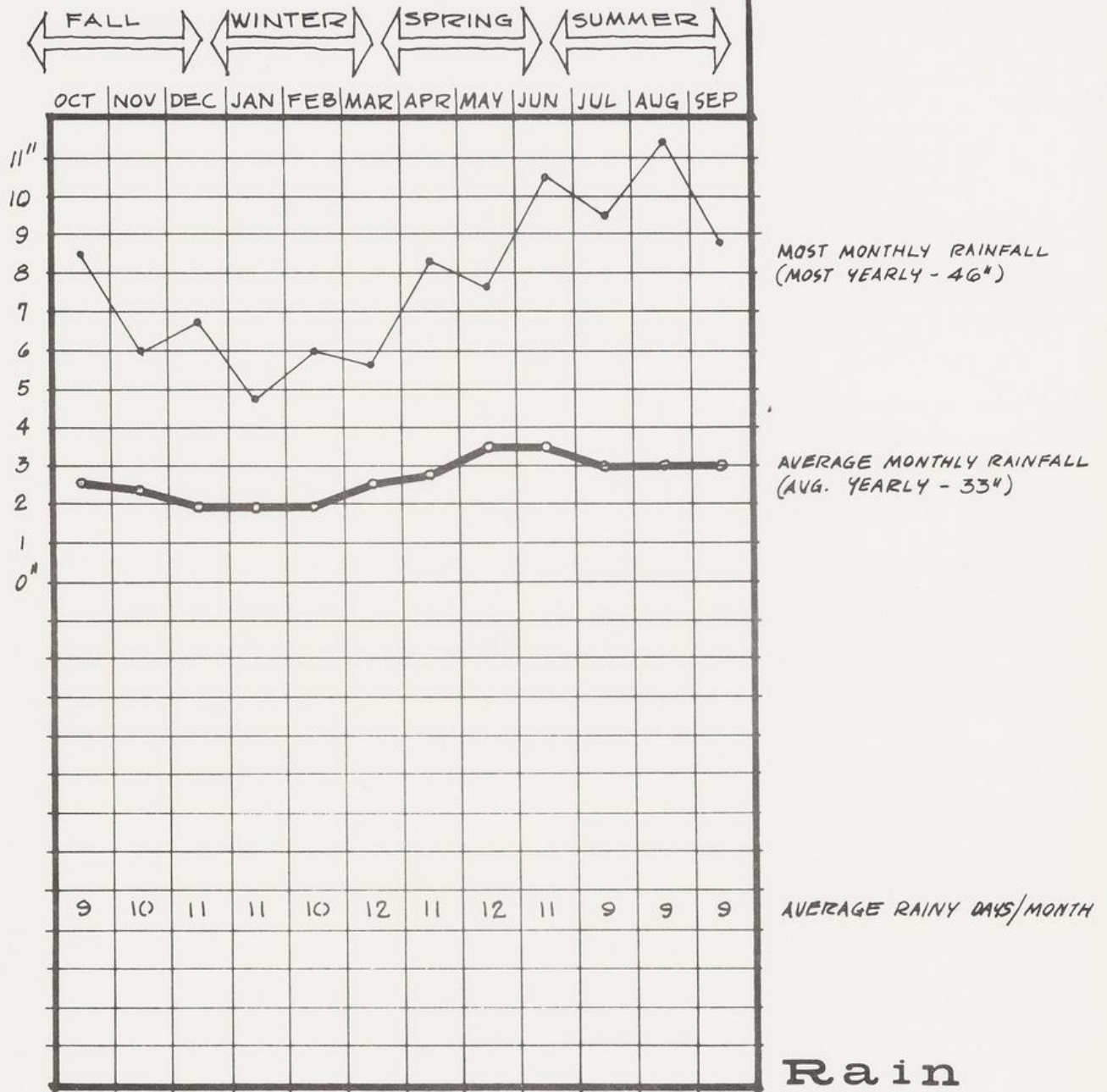
FASTEST WINDS

AVG. MONTHLY WIND (MPH)

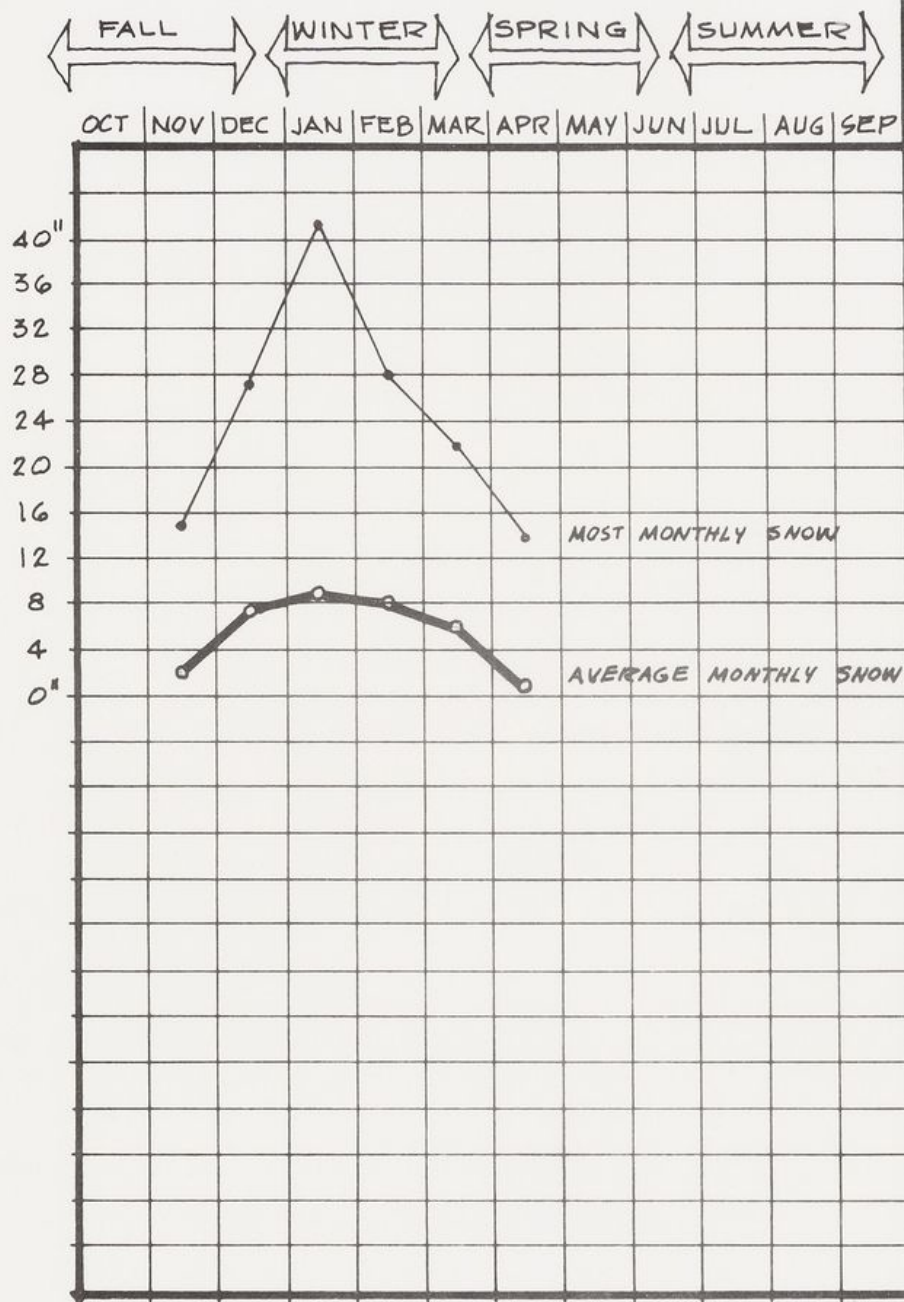
SEASONAL WINDS

Wind

ATOMIA

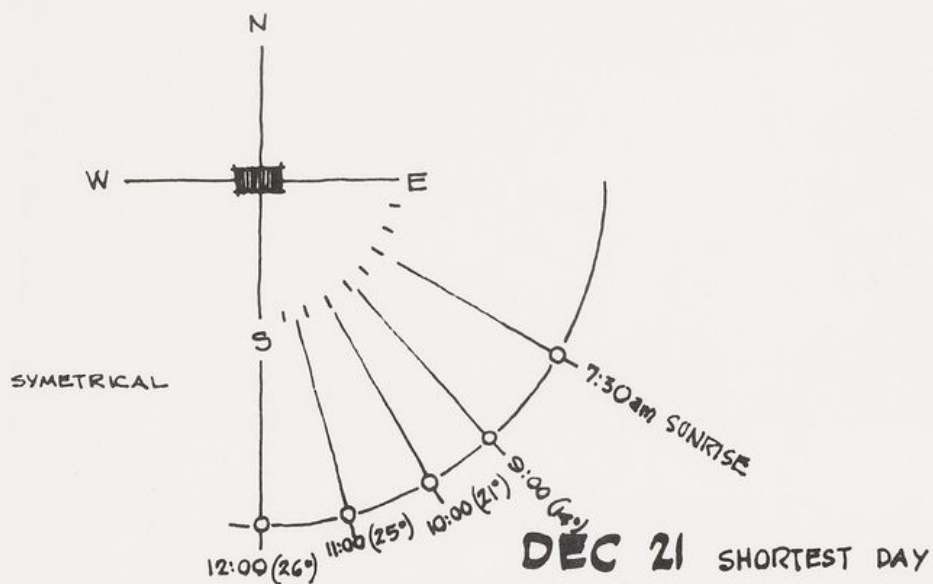
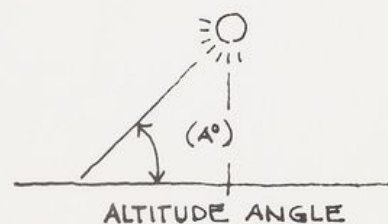
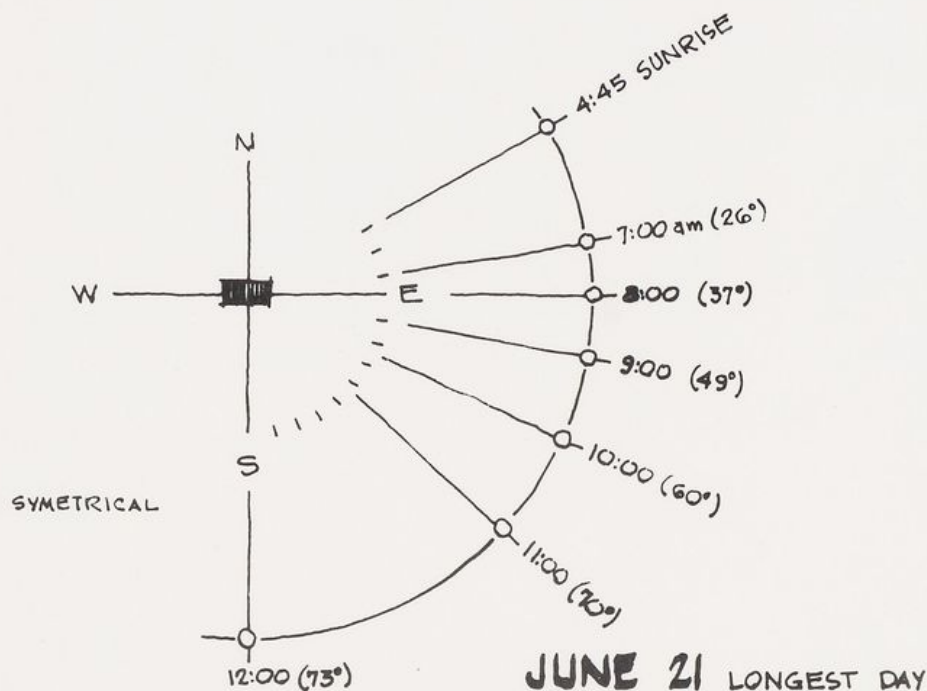


ATOMIA



Snow

ATOMIA



Sun