

אבגדהוזחטיכל



Even in Mrs. Kahler's First Grade I always would skip ahead-- in our first Dick and Jane reader *We Look and See* to discover "**something**" literally-- the first new word compound word, when Baby Sally found "something funny;" a complex new language messenger beyond "Look" and "See Spot Run." Was I even then an incorrigible goof-off or a diligent scholar, eager to learn, as things got curiouser and curiouser? Still impatient and curious, I have bypassed Synagogue Kaf for now, "skipping ahead" in my self-imposed discipline of the Aleph-Bet in sequence as guide for my theoretical synagogue studies. And so LAMED.

**LAMED** is the 12th letter in the Hebrew Aleph-Bet. It is the symbol of teaching and learning and represents aspiration, and contemplation of the heart. The Lamed Vavnik is a Lifelong Learner. The question I discovered, when consulting the commentaries on the Hebrew Letters, and their recursive reference to Lamed and learning (are not the Jews the People of the book?) was:

If learning takes place throughout a lifetime, what is the architecture of that learning? This comes before any question of the architecture of any building. And the answer came to me as follows--

What is a life? A series of events marking growth, spiritual, physical intellectual, chronological. And what is the structure of this growth and learning in Judaism? Clearly the first phase of development is completed at Bar or Bat Mltzvah, when a child can say "today I am a man" or today I am a woman." And normally this takes place at age 13. So, the module of an architecture of lifelong learning is a thirteen year span. What might this mean? A series of spaces that accomodate learning in each of the 13-year intervals of a full life. Thus, from 1 to 13 a child goes from infant through pre-K, primary school, and perhaps middle school. Spaces for such activities should include playroom

as well as classroom, and places for naps as well as active frolic. How many will use it will determine its (minimum) size. A most fundamental version of that answer could be one girl and one boy for each year, or 13 x 2 children or 26 total in the first cohort. This cohort needs its own "house" to provide at least space for energetic play, quiet resting space, study or class room, and necessary services including storage, bathrooms, even changing tables and laundry.

A sustainable congregation would be "steady-state", where newcomers would fill vacancies precisely as they arise. This translates, without being morbid, into children entering at the same rate as the old die out. So, if one boy and girl enter each year, at birth, then there would on average be one male and one female for each year of a full life represented in the congregation. If each cohort is a 13 year span, then 8 cohorts would cover all ages from 1 to 104, a full life at the current state of our medical arts. *Selah. Dayenu*.

Each cohort will provide spaces for at least 26 people with facilities appropriate to their learning needs at that stage of life-long learning.

So 8 cohorts of 26 people each form a congregation of 204 for self-sustaining lifelong learning. Buildings are made from the spaces needed in them. The architecture of the program is built on the 8 cohort houses. Each of these must have equal access to the sanctuary. The normal workings of a synagogue, including offices for staff, cantor, and rabbi, must have equal access to each and every house. The spacial configuration that most compactly accomplishes this is a wrapping of 8 cohort volumes around a central space. The Rabbi's office is closest to central sanctuary seating and bimah and has a special lookout balcony over entry. The Cantor has a piano and faces the choir, which is located behind the central bimah position.

## LIFELONG LEARNING COHORTS

**COHORT 1** (ages 1-13)

childhood learning birth-to-bar/bat mitzvah

**COHORT 2** (ages 14-26)

young adult high school and college learning

**COHORT 3** (ages 27-39)

family learning, the age of family building and home making. this "house" has kitchen and dining

**COHORT 4** (ages 40-52)

career-building workplace learning partnerships startups conferences artisan and technical learning workshops

**COHORT 5** (ages 53-65)

private carrels: accomplishment realization executive management +personal development

**COHORT 6** (ages 66-78)

new freedom world learning travel pix companionship: bar, card games, fitness

**COHORT 7** (ages 79-91)

enlightenment expression art music studio

**COHORT 8** (ages 92-104)

transcendence remembrance museum garden

Both 4th and 5th cohorts go UP. These are often the time in life for many of life's major moves and changes.

The topmost 3 cohorts have hospital beds and equipment to treat accidents and illness as they happen. These are also provided with barrier free showers.

Two cubes 18' on each side (*chai!*) linked by a half cube is the basic spatial unit that provides the flexibility and variety of spaces needed to accomodate the varying programatic requirements of each cohort in a volumetrically efficient manner. Typically, one of the cubes is a stack of two floors, while the other is a double height volume. The whole synagogue a 72' cube.

## **NOTES:**

The Bimah and Ark in this synagogue must serve at least three levels of congregants. Hence, the Bimah here is an elevator, whose sides fold up during vertical travel for safety, and fold down at each landing for extended floor space. Railings fold up at the stops.

Only 3 of the Ten Commandments DO NOT start with Lamed (*LO*, thou shalt not in Hebrew) and this is indicated in the figure above the Ark. The Ark faces east, as required and desired by liturgy.

Since the Jewish day begins at sunset, it is poetic that the oldest cohort faces west as well as south, toward garden to watch the setting sun and the start of a new day.

There are candle holders at balconies for each cohort, so that when all 8 are lit they form a Hanukah Menorah for the Eight Day and illuminate the entire sanctuary and building. Thus on the last night the miracle of the oil light represents an unending span of human generations.

The sanctuary can seat all 204 congregants at the same time. The balcony may be used for general unassigned seating or for the Orthodox need for separation of the sexes. There is plenty of room for storage underneath and behind lower level seating

Life safety is met by 2 means of egress accessible to every floor and room, with fire stairs at NE and SW. Every level, indeed every floor of every house is universally accessible from both elevators and fire stair sets. The center bay of entry at East east is ramped for for barrier-free universal access. Every bathroom is handicap accessible, with full wheel chair turning radius as well as grab bars.

THE LETTER **LAMED** is the only Hebrew letter ascending above the line. It is thus called "a tower soaring in air". The meaning of LAMED is both to learn and to teach.

## **NUMBERS and LAMED**



The LAMED is composed of three letters: a downward looking *yud* which forms the head of a *vav*, which stands, in turn, erect upon a *kaf*.

The 3 components of the form of the letter *yud*, *vav*, *kaf* have values of 10, 6, 20 repectively, making 36.

"In every generation there are a small number of hidden tzadikim (holy souls) whose devotion to G-d in learning and good deeds upholds the world. In one place the Sages refer to 30 such tzadikim, in another to 36."

The plan and elevation of Synagogue Lamed are made of 3 double cubes plus 2 tartan intervals, forming a 2 - 2 - 2 grid.

2(1)2(1)2

so every plan is 6 x 6 main units = 36 and so is every elevation and section making a total volume of  $6 \times 6 \times 6 = 216$ 

## SIMPLICITY AND ELEGANCE

**216** is also a **Friedman number**!!! (Google it!) which is a number that is the result of an expression using all its digits plus arithmetical operators:

in this case

$$6^{(2+1)} = 216$$

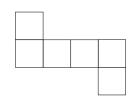
216 is the smallest cube that is also the sum of 3 cubes:

$$3^3 + 4^3 + 5^3 = 6^3 = 216$$

Plato mentions this in *The Republic*.

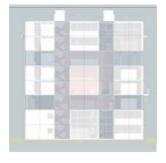
The factors of 216 are  $2^3 \cdot 3^3$ 

There are 216 fixed hexominoes. A hexomino is made of 6 squares. An unfolded cube is a hexomino. They can be found in many Cubist paintings, including those of the architect Le Corbusier, as an unfolded "die."

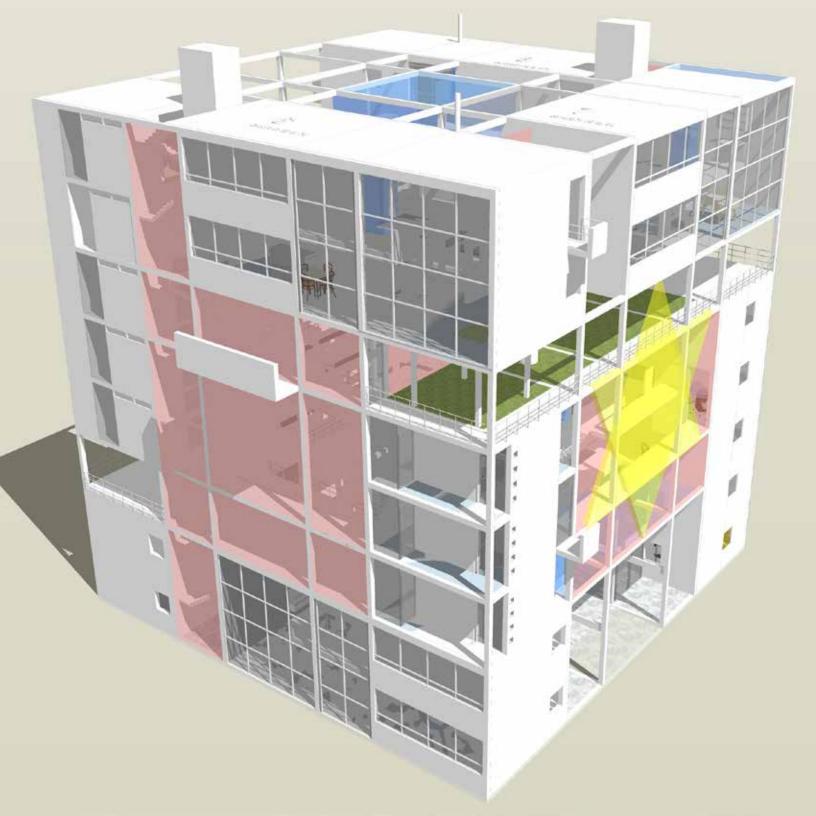


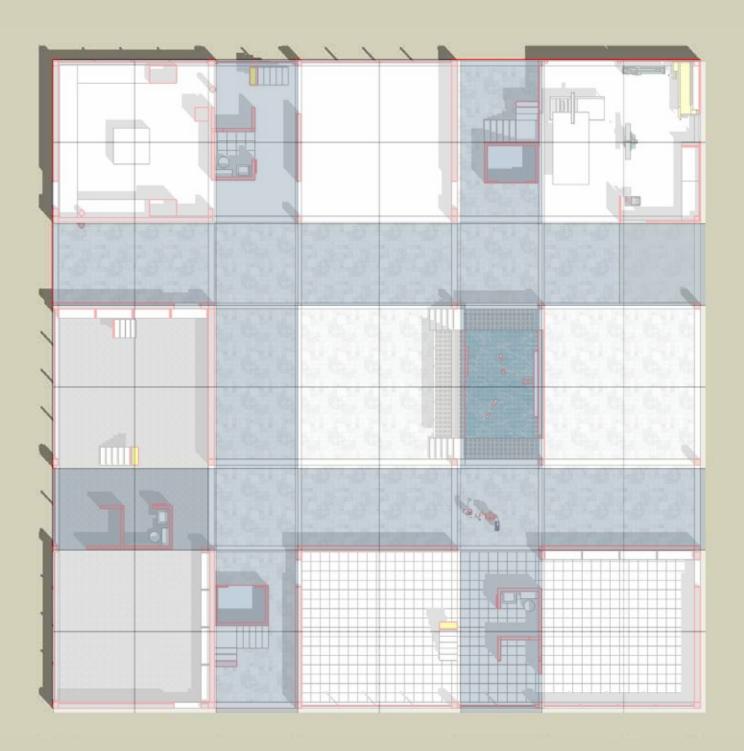


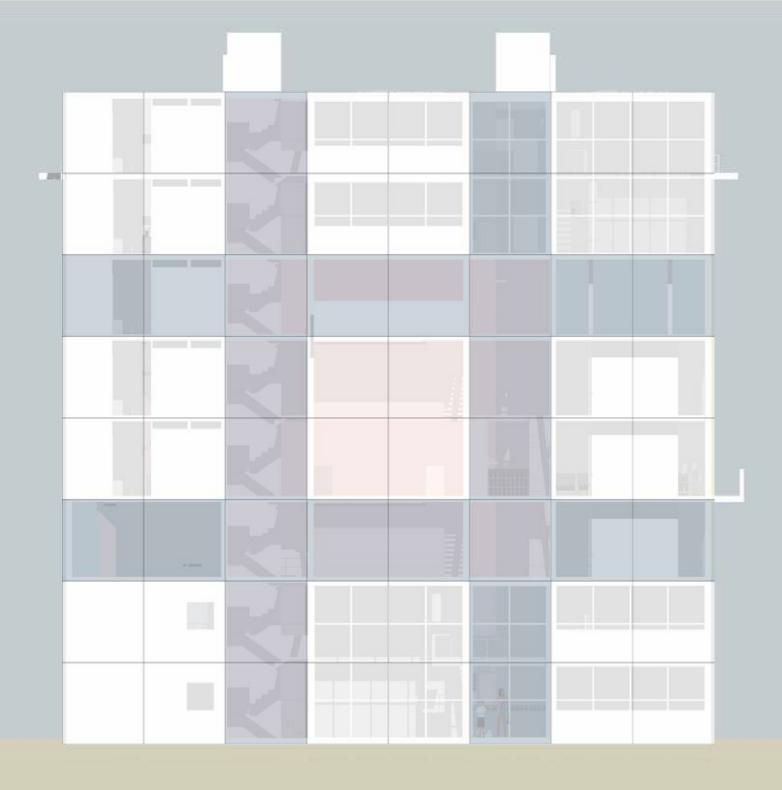
Learning is sometimes the revelation of mystery, and knowing becomes another question (or unknowing...)

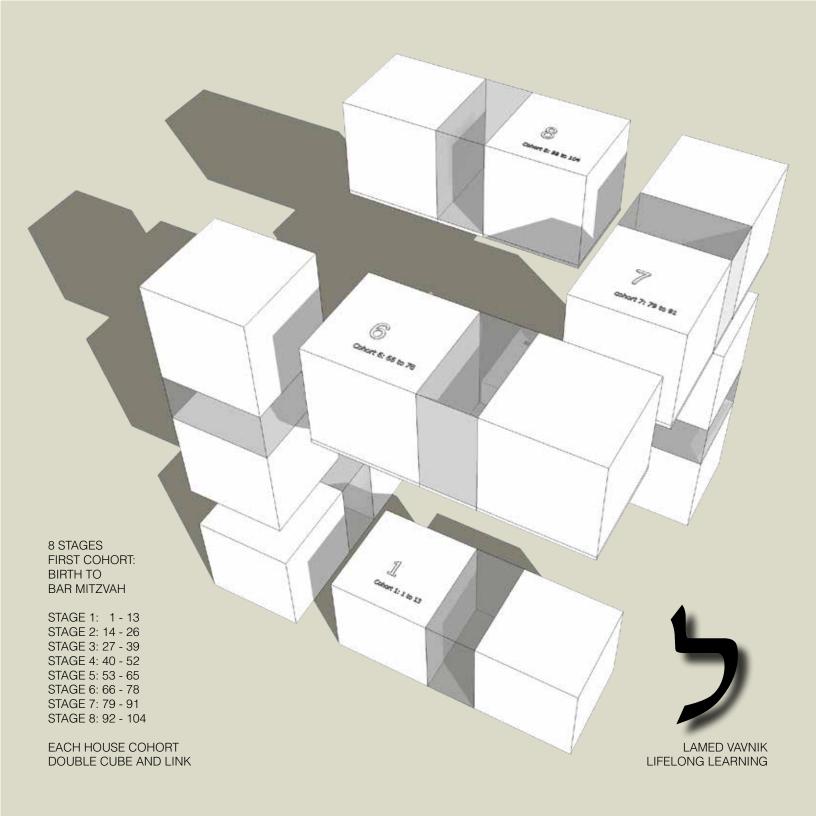


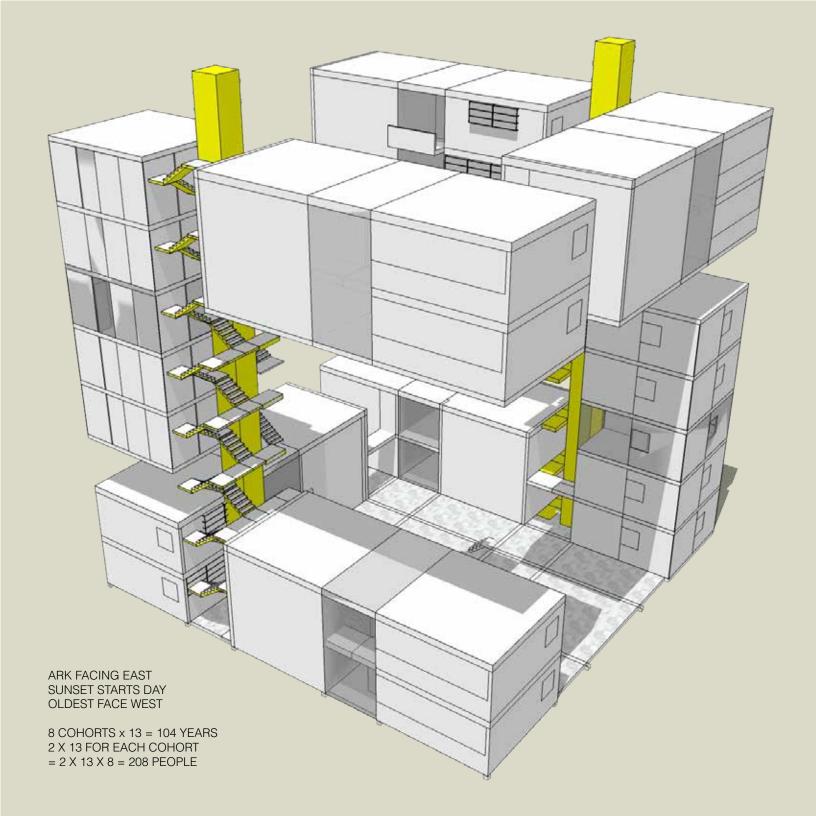














COHORT 6: TO 78 FITNESS GYM BAR TRAVEL PIX SCREEN EMERGENCY CARE

COHORT 7: TO 91
PAINT MUSIC STUDIO
COLLECTIONS
EXTENDED CARE

**VERTICAL COHORTS** 

COHORT 4: TO 52 OFFICES PARTNERS CONFERENCES WORKSHOPS

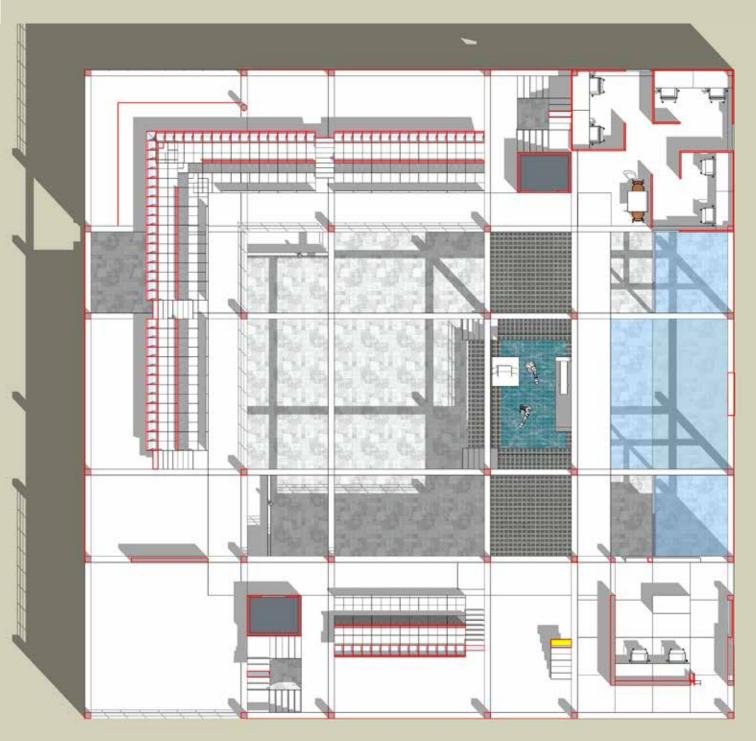
COHORT 5: TO 65 PRIVATE CARRELS



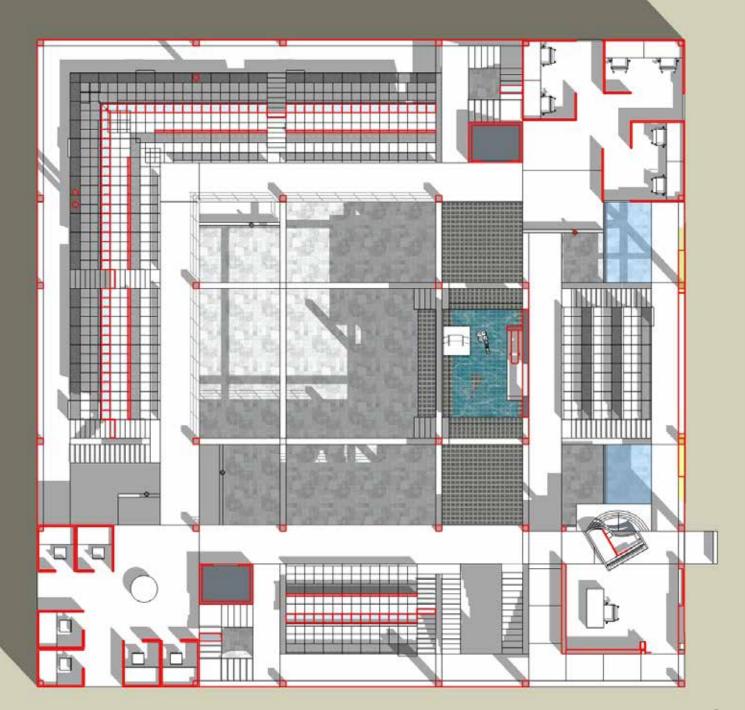


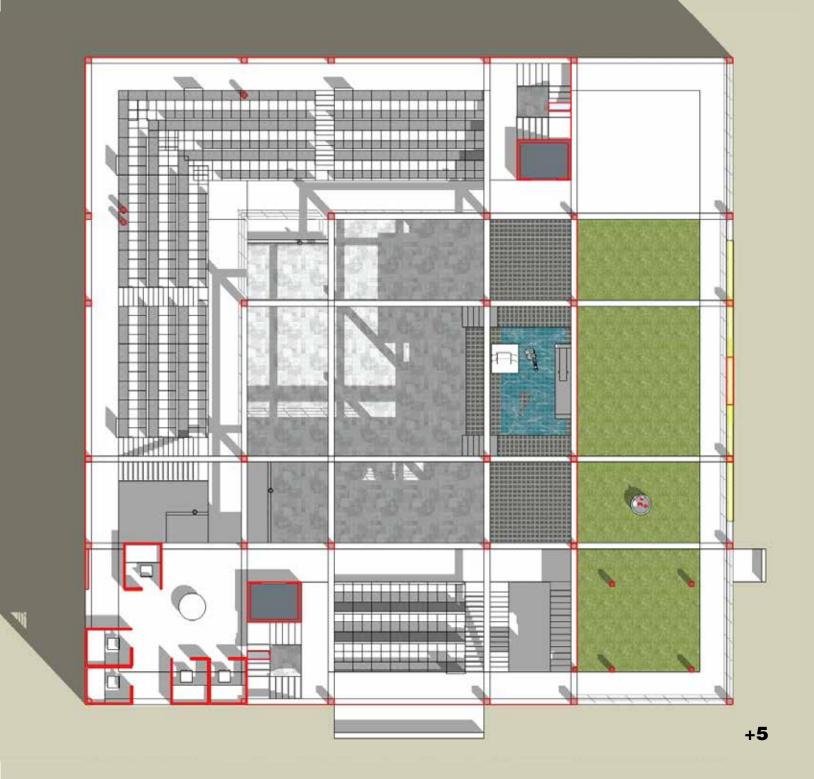








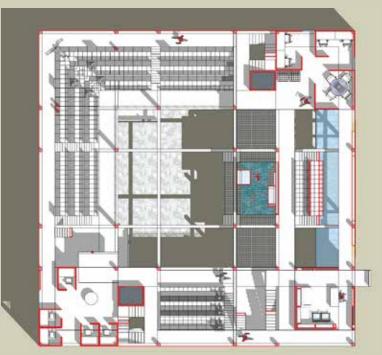






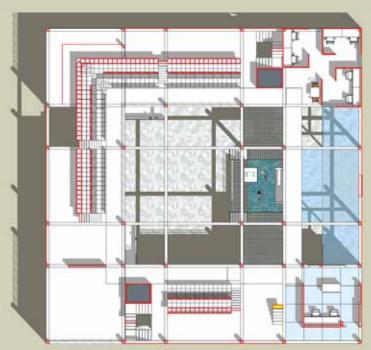








+3 +4 +2 +1



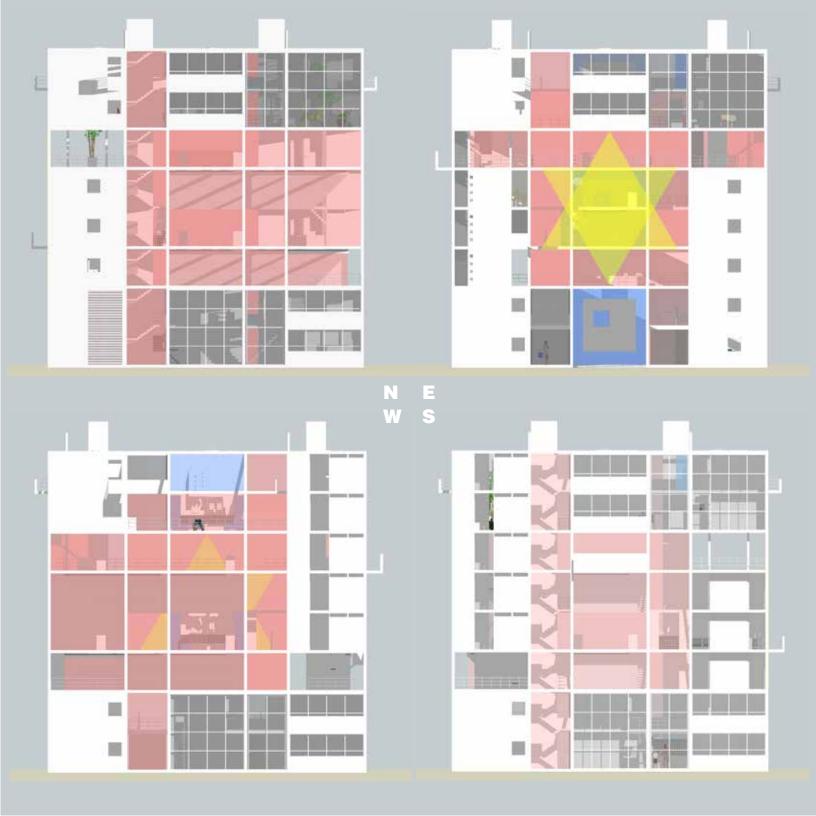




+7 +8 +6 +5









18 in Hebrew is  $^{\bullet}\Pi$  chai, life, as in L'Chaim, to life! For pepole of the book, , life is lifelong learning

לחיים

