

STARTING in the 1860s, the German-Jewish painter Moritz Oppen-heim produced a set of 20 "Pictures of Traditional Jewish Family Life" brought him fame in his lifetime. The book version of the series may have been the most popular Jewish book ever published in Germany. One of the scenes features a succa. (See reproduction of Oppenheim's painting)
A well-to-do Jewish family is seat-

ed at the holiday table in the suc erected in the leaf-strewn yard. We peer in through the curtained doors to see the family patriarch making Kiddush over what is probably a home-made raisin wine, while the halla is covered with a delicate silk damask. His wife, holding the baby, sits at the table with the other family members. As the maid brings the steaming chicken soup, the family cat watches her hoping that she will spill the porcelain tureen. Two German schoolboys peek in at the curious scene and probably wonder: Why on earth are these Jews eating outdoors in this weird booth on a chilly autumn

The scene is ostensibly a celebra-tion of nature. Or is it? What is natural about this succa and what is unnatural?

The family pictured is not really back-to-nature. From floor to ceiling the succa is festooned with the refine ments of the bourgeois family it houses. No leaf or stray bit of nature touches the lush carpet that covers the wooden floor. The drapes, no flimsy affair, are the very same heavy satin curtains that appear in the other scenes Oppenheim painted of the family's regular dining room. The oilfilled crystal chandelier would be equally in place in a ballroom. The mahogany-framed painting on the wall, the fine linen tablecloth, the hand-painted china, and the holiday finery remind us that this is no picnic in nature.

In fact, the whole idea of building a succa is unnatural. We erect a patent-ly synthetic imitation of the booths that sheltered the Israelites during their desert wanderings, as com-manded in Lev. 23:42-43. "You shall What does the succa tell us about where the 'natural' ends and man's making, the 'artificial,' begins? Cheryl-Shira Leibowitz and Roald Hoffmann ponder the contemporary philosophical relevance of an ancient Jewish observance.

## Can you build a Succa from an elephant?

live in booths seven days...so your descendants may be reminded that I provided booths for the Israelites to ve in when I brought them out of the land of Egypt..

The timing of the festival is also most unnatural - just at the start of the autumn rains in Eretz Yisrael, when most people would rather be

The only intrusion of nature is the succa's roof, which is bathed in - indeed, made of - leafy boughs. Everything else is unnatural - that is, made by human hands

In contrast to the idyllic scene Oppenheim portrays, the reality of eating in a succa is not always so attractive. A rabbi from Phoenix, Arizona, where autumn temperatures can go

up to 40 degrees centigrade, reports that the question most frequently posed to him was: "Is it kosher to aircondition the succa?"

On the other hand, olim from Anchorage, Alaska tell of building the succa walls from igloo-like ice-blocks!

The only item these two structures have in common with each other, and with Oppenheim's succa, is the leafy roof. The name of the holiday reveals that the root of "Succot" is the roof.

"One's name reflects one's es-nce" - "...khishmo kayn hoo," we read in I Sam. 25:25. Succot is the plural of "succa," which means 'booth" or "tabernacle." The root of "succa" is "s'chach," meaning "covering" or "protection." Thus, for the

sence of the succa, and of the entire holiday, we must look up to the roof.

JEWISH LAW devotes much thought to defining which materials are kasher - valid - for the roofing, the s'chach. Here we gain insight into how tradition differentiated natural from unnatural, and perhaps find an answer to our question about Oppen-heim's succa: Where does the natural leave off and the man-made begin?

The material that goes into the roof is crucial to the answer to this question, in contrast to the irrelevance of the material that forms the walls.

There must be at least three walls, and they must be of a certain height, width, and length. But there are no restrictions on material. The succa walls may be of wood; cloth, brick, plastic, or metal. "All things are valid for walls," says the Talmud (Sucēa 12a), which then challenges its own statement by asking: "Even live calinals?" animals?

This launches a debate (23a) about whether an elephant may be used as a wall, since it meets the minimal size requirements. Four objections are raised, and followed by retorts: What if the elephant wants to escape? So put it on a leash. What about the space between its legs? Fill it with palm branches. What if it sits down? So tie it with cords from above. What if it dies? Even if Jumbo shrinks a bit, the carcass still meets the minimal wall-size specifications. The bottom line is: Yes! An elephant is kasher...to serve as a succa wall.

Most certainly the Talmudic sages were not besieged by questioners wishing to build succot from ele-phants. Rather, the discussion is a search for the boundaries of a defini-tion. The Mishna declares: "All things are valid for walls" and the Gemara asks: "Even elephants?" The sages are not satisfied with generalizations, but demand logic and specificity when fleshing out a definition.

IN CONTRAST to the carte blanche for walls, there are three strict requirements that dictate which materials may be used for the roof. Underlying these dry laws we find a very complex philosophical approach to the question raised above, "What is natural and what is unnatural?

The s'chach covering the succa, to be kasher, must

- have grown from the ground;
   be cut off from its roots;
- 3) be incapable of becoming ritually

The first two requirements imply that the roofing materials must origi-nate in nature but may not be used in their natural state. These rules form the lower boundary of the spectrum of kasher materials. A growing vine trained across a succa top is too natural. It is not kasher because human beings did not make it. We are enjoined in Deut. 16:13: "You shall make the Succot festival..." A growing vine is nature-made and is not a fulfilment of this injunction ordering us, humans, to "make" the festival. Even cutting a vine that had been trained over the succa is not enough. After being severed, each vine has to be lifted and set down again so that we have done the making, not nature.

But lest we go too far in making the s'chach human-made, an upper boundary is stipulated. Rule three insures that the s'chach will not become too man-made and lose its natural properties. It is phrased in the language of the Talmudic laws relating to ritual purity and impurity, but the implications are startlingly modern.

TO UNDERSTAND the third s'chach requirement, we must take a short excursion into the laws of ritual purity, because they hint at a border-line between natural and unnatural.

Rabbi Adin Steinsaltz (The Essential Talmud) points out that the laws of purity form a complex network of interrelated elements within a special logical structure. The Tora offers no explanations and it is risky for us to do so. Since the destruction of the Temple, most of the laws are inapplicable, Steinsaltz notes.

Ritual purity (tahara) and impurity (tum'a) are not concepts of physical cleanliness or hygiene, as can be seen from the fact that ritual hand-washing must be preceded by a regular washing. In general, what is living and healthy contains no impurity, and impurity increases as an object comes closer to death. Impure sources – a corpse, carcasses of animals and reptiles, humans in certain conditions – can transmit their tum'a to objects that come into contact with them.

Many things cannot become impure - e.g. bodies of water, living animals, growing plants, and unfinished objects. To categorize any given object, one must take into account its source material, shape, and intended use.

Source material: Utensils made from unbaked earth, stone, or marble are impervious to ritual contamination. This is one reason archeologists find so much stoneware in Jerusalem excavations.

On the other hand, objects made from wood, metal, leather, bone, cloth, sackcloth and baked clay can become impure. Glass is classified with metal because both materials are recyclable.

A pattern thus seems to emerge: materials that are further from their natural state and undergo more transformations are more susceptible to impurity – e.g., metal has to be mined from ore, smelted, and then shaped, whereas stone can be hewn directly. Shape: Another factor comes into play when determining whether schach is susceptible to impurity. Wooden objects are further classified by shape: flat – pathut, or concave – having a beit kibbul that can contain liquid, etc. Branches of trees, palm fronds, and wooden slats are valid schach because they are impervious to impurity by virtue of their being non-concave wood, on the natural end of the natural/unnatural spectrum.

Intended Use: If you come across a wood or reed mat that seems to fit the bill for s'chach, there may be a problem. Mats made for reclining are sus-



Reproduction of Moritz Oppenheim's painting of a family in a succa, circa 1860.

ceptible to impurity, whereas mats for shade are impervious (and kasher for s'chach). We can't submit all mat makers to polygraph tests to gauge their intentions. So the codes provide guidelines based on general assumptions about the majority of normal people in a given city: small mats are usually for reclining and therefore not kasher, but large mats, usually for shade, may be used. Mats of the latter type, popularly sold for s'chach in Israel, are kasher and are called, paradoxically, "permanent s'chach"!

WHAT EMERGES from the laws of Succot is that the Talmudic minds 2,000 years ago were deeply engaged in dividing the world around them into categories that at first seem bizarre. But their schemes of categorization shed light on our present-day concerns about the amount of artifice and synthetic in our lives.

In recent decades there has been renewed interest in issues concerned with nature vs. technology, and a Zeitgeist including Green politics, deep ecology, New Age science, and ecofeminism has emerged. In an attempt to address these concerns, a group of young Jewish activists formualted a code in the 1960s for readers of the Whole Earth Catalogue. Called The Jewish Catalogue: A

Do-It-Yourself Kit, it resurrected Succot as an IN holiday. "Succah-building: if you can get into this mitz-vah you will probably find great joy in it... Place some 1 x 1's running in both directions on the roof and cover that with rushes or pine boughs. The entire roof must be made of organic material."

Note the buzz word, "organic," which reflects their concern about our over-reliance on the "unnatural." By condensing all the laws about s'chach into that one word, brevity has been gained. But their definition is intellectually poor in comparison to the sensitive and profound discussion of Succot in the Talmud, which reveals that these questions about natural and unnatural were addressed by the framers of Halacha millenia ago.

The difficulty in disentangling the natural from the unnatural still persists. Scientists, especially chem often feel beleaguered by society be-cause they produce 'unnatural' and often downright dangerous materials. Whereas the words 'natural,' 'organi-cally grown,' 'unadulterated' have positive connotations, synthetics seem at best conditionally good. Chemists are quick to argue that 'natural' objects cannot really be distinguished from 'unnatural' ones, e.g. vitamin C from natural rosehips is identical on a molecular level to vitamin C produced synthetically in a lab. Nevertheless, the distinction between natural and unnatural, has a hold on our psyches in daily life. Why is it that we often seek out the natural, whether we are discussants in a Talmudic debate, or readers of The Jewish Catalogue, or even chemists manufactur-

There are psychological and emotional forces at work in determining our preference for the natural. Some of these factors can explain the attraction of Succot for us moderns.

One factor is romance, an unrealistic striving for what no longer is or cannot be. This probably accounts for

the popularity of the nostalgic painting of a succa by Oppenheim. There is a certain irony in the fact that this very painting, indeed every succa, is an unreal, unnatural but entrancing attempt to replicate the natural. Such romantic paintings have a hold on us that is stronger than reality because of the image in our minds. A reaching out for nature, for real wood, the smell of hay, the feel of the wind in the sails, still determines our desires. Our penchant for romance extends to other areas. It doesn't matter that old train stations were nasty, filthy buildings. When we think of an old train station, we see Ingrid Bergman saying good-bye to Leslie Howard, and that scene forms an image in our minds of what a train station should be like.

Similarly, it doesn't matter that feeding a large family cramped in a dingy succa on a damp, windy night is no picnic; our mind's succa is just right

ANOTHER REASON we are attracted to the natural is the alienation we feel when our circuits are overloaded with the unnatural and synthetic in the environment. Sometimes the superabundance of artificial objects repels us. The typical American motel room, for instance, offers little respite from the artificial. The variety plastics and synthetic fibres in the furnishings is astonishing and even intellectually interesting, as a basis for a course in polymer chemistry. But one is hardly attracted to the setting. We are distanced from our tools, and from the effects of our actions. We see it in routine work on an assembly

line, in selling lingerie, even in scientific gesearch. We work repetitiously on a piece of something, not the whole. But there is something deep within us that makes us want to see the signature of a human hand on a product.

The Jewish Catalogue prescribes succa-building as an antidote. "One of the good things about a succa is that you should build your own. Even if you buy the prefab variety, you should erect it yourself. Most of us live in houses or apartments built by others. Most of us eat bread baked by professionals. Like hallah-baking, Succah-building gives us the chance as enjoy the fruits of our own labour.

A THIRD factor that makes us seek out the natural is spirit, an innate need for the chanced, the unique, the growing that is life. A pine struggling to grow in a Jerusalem cleft can send our thoughts forward in time to when it, or its offspring, will eventually split that rock. Or it can send our memories backward decades to its initial planting. This associative capacity of the soul is at work when we sit in the succa. The succa is supposed to trigger in our collective historical memories a recollection of God's grace in providing booths for us after we left Egypt, "so your descendants may be reminided that I provided booths for the Israelites to live in..."

The flimsiness of the succa is designed to remind us of our own vulnerability to nature, which is neutral but often inimical to anthropocentric us. This is embodied in the law that rain must be able to penetrate the s'chach. It is hard to appreciate God's protection while ensconced inside our steel-and-concrete homes.

A succa may be a jerry-built hut that looks like the work of a well-intentioned 10-year-old. Or it may look like Moritz Oppenheim's painting, something straight out of Better Homes and Gardens. But to be a valid succa, it must meet the requirements outlined in the law codes.

The philosophical underpinnings of the holiday will be found, inter alia, in the petry details of succa building. That the Talmud and later codes are not construction manuals is seen in the story of the yeshiva student who set out to build his first succa for himself and his bride. Not knowing how to begin, he asked his teacher. The rebbe said: "Learn the first

The rebbe said: "Learn the first two chapters of Tractate Succa, then go build!"

The first night of the holiday, the succa came tumbling down. Crestfallen, the groom ran to ask his rebbe why his succa had collapsed. The rabio opened his Talmud and said:
"You sek 'Why did the Sucra col-

"You ask, 'Why did the Succa collapse?' Too bad you didn't read Rashi's commentary here. He asks the same question."

No, what we have in the traditional texts is not a builder's handbook, but a sensitive, multilevel inquiry into issues such as natural and unnnatural that are still perplexing us today.

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Roald Hoffmann, 1981 Nobel laure ate, is professor of chemistry at Cornell University and received an honorary doctorate from Ben-Gurion University last May.