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Issue 16: Peoples of the Arctic

A House of Snow and Ice

by Stephen Whitt

You're a traveler, a hunter on the cold Arctic ice. You've been searching for seals for many hours, and now you must rest.

The ground around you is frozen. There are no trees anywhere. The wind is bitterly cold. Your survival depends on shelter. What will you do?

If you are an **Inuit** hunter, you might build an igloo. An **igloo** is a shelter built from snow and ice.

Not all the people of the Arctic built igloos, but the Inuit people of Northern Canada became known as skillful igloo builders. Igloos were never permanent houses for the Inuit. Instead, a large igloo might house one or more families in the cold winter months. Tent-like houses sheltered those same families in the summer.

Today the Inuit live mostly in wooden houses. But Inuit hunters, traveling far from their homes, still build igloo shelters. Igloos raise an interesting question. Why a house of ice?

There are several reasons that an ice house works surprisingly well. First of all, the ice blocks out the chilling wind. Second, ice is good at trapping heat. We say that ice is a good **insulator**. A small igloo with a candle inside, or even just the body warmth of the **inhabitants**, can stay surprisingly warm.

Have you ever wondered why a blanket can keep you warm? After all, a blanket doesn't make its own heat. By wrapping yourself in a blanket, you are capturing the heat made by your own body. That heat can keep you warm even if the air outside the blanket is very cold.

An igloo works in the same way. By trapping body heat, or the heat produced by even a small burning lamp, the inside of the igloo can stay much warmer than the outside.

This heat starts to melt the inside of the igloo. That might seem like a bad thing. In fact, as the inside walls of the igloo start to melt, they come into contact with the snow and ice closer to the outside of the igloo. This colder snow and ice cause the water to refreeze. In this way the walls of the igloo start to change from snow, which can be weak, to ice, which is much stronger.

Flesch-Kincaid RL = 4.8

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A well-built igloo is strong. A grown man can stand on top of the igloo without causing it to collapse.

So how does one build an igloo? Start with blocks of well-packed snow. The Inuit builder cuts these blocks using a sharp knife. The knife might be made of bone, stone, or metal. Next, the builder places the first ring of blocks on a firm, level patch of icy ground. When the first ring is complete, the builder starts on the second ring.

Now the real magic happens. The Inuit builder knows how to tilt the second row inward, just a little, so that fewer blocks are needed for the second row than for the first. Think about a circular race track. If you race on the inside of the track, you run a shorter distance than if you race on the outside of the track. In the same way, as the walls grow upward, and as the “circle” of the igloo gets smaller, fewer blocks are needed.

As the wall grows, the blocks begin to arch together, forming the igloo’s dome shape. By carefully fitting the blocks together, the skilled Inuit builder keeps the blocks from falling in. Finally, the builder places the final block on the very top of the igloo. He might cut a hole in this block to let out smoke from a fire.

The opening to the igloo is large enough to crawl through. Animal furs across the opening keep out the cold wind. Inside the igloo, animal furs on the icy floor serve as beds. The builder and perhaps one or two other hunters have enough space to stand up and build a fire. They might tell stories, or plan their next day on the ice. Once the hunters have rested, they will leave their igloo behind and continue their hunt.

The Inuit have hunted and built igloos for thousands of years. Today, as temperatures in the Arctic go up, some hunters discover that the ice is too thin and the snow is too rare to build igloo shelters. Not only that, but the animals that the Inuit have hunted for many **generations** are growing rare. Soon the hunters may decide that their hunting trips to the ice are too risky. They may stop making these trips; they may stop building houses from snow and ice. A way of life, and a place to live, could soon disappear forever.

Glossary

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generations: time it takes for groups of people to grow up and have children, counted as 30-35 years

igloo: a shelter built out of snow and ice

inhabitants: people living in a place

insulator: a material that traps heat

Inuit: people that have lived in the Arctic for thousands of years

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