

Sample Translation

When Winter was still Winter. The History of a Season
by Bernd Brunner

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Publication: October 2016 (Hardcover)
160 pages
Including illustrations

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Verlag Kiepenheuer & Witsch GmbH & Co. KG

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**I have been here for about ten days – and attempting to stay
warm is my only occupation. The houses are shoddily built,
and the iron stoves are useless.**

Ivan Turgenev to Gustave Flaubert,
February 20, 1870, from the Hôtel de Russie
in Weimar, Germany.

Contents

The world in winter – defining a season

Winter is coming: the first signs • Winter weather • Winter around the world • Is it ever winter in the ocean? • The four seasons: a natural principle?

Snow crunching underfoot – the characteristics of winter

What does cold feel like? • About snow: properties of a material • Measuring the depths • Tracks and the tales they tell • Why is snow white? • Michelangelo’s snowman and snow festivals • The magic and the horror of snow • Santa without snow?

Feeling winter

Past precautions against the cold • The long evolution of heating systems • Traveling in winter • John Milton’s bouts of winter depression • The invention of light therapy • Can people hibernate? • Why we shiver • The overcoat and the underdog • Lessons from the Inuit • Cold comfort

Meanings and signs

Superstitions and weather lore • The snow grouse’s magical powers • Summer versus winter • Is winter the bad time of year? • Saving winter’s honor

The hardest winter

Weather reports from the past • The Little Ice Age • When the Rhine froze • “Frost fairs” on the Thames • Cold that rends oaks • Liselotte von der Pfalz: freezing in the Palace of Versailles • Beyond belief • 1816 – the year without a summer • A walk on Lake Constance • Is it possible to predict a hard winter? • Life at the top: Europe’s highest village

Crystal clear

Johannes Kepler ponders the snowflake • Balthasar Heinrich Heinsius’ edifying thoughts on snow as God’s marvelous creation • Bokushi Suzuki and the “hexagonal blossom” • How to draw snowflakes • In search of the perfect snowflake: Wilson A. Bentley • Ukichiro Nakaya reads “letters from heaven” • How many words for snow do the Inuit have? • Fascinating frost patterns • When the sea begins to freeze • Snow rollers, icicles, and hair ice • Mummies in the ice

Winter in the city, winter on the shore

The chestnut roaster • Italo Calvino’s Marcovaldo • The physiognomy of a city in winter • A winter haven under Montreal • Joseph Brodsky and Venice in winter • George Sand and Frédéric Chopin freeze on Majorca

Cold management

How plants deal with the winter • Animal antifreeze • The bears’ winter break • Life under the snow • The fate of the Weddell seal • Fortress Antarctica: the penguin superorganism • The honeybees’ winter cluster • Winter flies, frozen frogs, and birds that brave the cold • The curious life of the snowshoe hare • Consequences of global warming • Shifting vegetation lines • A worldwide web of winter

Winter wonderlands

Bizarre beauty: gardens in winter • Outwitting winter: orangeries • Winter-inspired interior design • Cold-hearted: Anna Ivanovna’s ice palace

Dreaming of cold realms

Pytheas of Massalia and Ultima Thule • The ice cave in

Dante's Divine Comedy • Olaus Magnus and the *History of the Northern Peoples* • Disaster on the North Passage: Barents' winter on the ice • Fridtjof Nansen and the colors of the Arctic • Frank Worsley's visions • Gontran de Poncins among the Eskimos • Alfred Andersch in the far north • Anna Kim on Greenland

Picturing winter

Ice landscapes – a subject artists discovered late • A round of “colf” • Winter personified • Off to the “glistening ice mountains”: Goethe and the Gotthard pass • Caspar David Friedrich and the sea of ice • William Turner's avalanches • Claude Monet in Norway • Trading Denmark for Tahiti: Paul Gauguin

Winter sports

A peat bog ski from 6300 BC • Snowshoes in the Alps • Telemark to Christiania: Sondre Norheim invents skiing • How skiers conquered the Alps • Sleds and the people who love them • A tow lift in Davos • Promising the English winter sun in Switzerland • Germany's first ski hut • Hans Castorp on the Magic Mountain • Ski instructors and ski bunnies • America's ski jetset: Aspen • Baby steps: winter sports in Japan und China • Winter escapes: the Mediterranean and Tessin

Skimming over the ice

Origins: from bones to blades • A medieval nun takes a fall • Literary figures skating: Klopstock, Goethe, Zindel • The king of ice skating: Jackson Haines • The right ice • Smoother, faster, farther: iceboats and kicksleds

Winter rites, legends, and mysterious beings

Light of the world: pagans and Christians celebrate the shortest day of the year • Ice candles and winter bonfires • Winter royalty: the goddess Brigid, Santa Claus, and Jack Frost • Frau Holle shakes out the featherbed • Men of ice: the winter beings of Scandinavia • Harbinger of death: the snow woman Yuki Onna

States of emergency

Cold feet: Werner Herzog's winter wanderings • Snowed in: Adalbert Stifter in the Bavarian forest • A cold death: Robert Walser's obsession with snow • “God knows where the way lies”: Pushkin's Russian blizzard • Richard E. Byrd: alone in the Antarctic • A “fascinating, horrible spectacle”: Curzio Malaparte • A winter war handbook • Sanctuary in the snow

Avalanches: the white death

“As if the mountains were violently ripped asunder”: a Swiss monk in the Alps during the Renaissance • Precautions • Facts, figures, victims • Each mistake could be the last: Soldier Nelson Zorio trapped under the snow • A shot, please: the myth of the brandy-bringing St. Bernard

No shortage of snow

Japan's Niigata province: snowed in for eight months • Frozen waterfalls • Tunnels to the neighbors • A city under the snow

The end of winter

Things are heating up • Ice wine harvest in February • Doomsday for the ice of Lake Baikal • The thaw's threats to icicles and ice fishermen • First blossoms • Spring: an “insidious disease”?

The cult of cold

Europe in the Ice Age • Cosmic ice theory and cold philosophy • Longing for life at the limits: an overnight stay in an ice hotel • Cool craze: survival training as a hobby • Cryosaunas: 160 below zero • Frozen fit: cryotherapy • Back to life after the big chill? • Does chronic heat make us sick? • Vanishing glaciers: is the planet melting? • The difference between artificial and real snow • Winter sports in the age of climate change • Do we really still have winters? • The last word

References

Index

The world in winter – defining a season

In places where the first snow can fall in October, preparations get underway in August. On the coast of Norway and Sweden, for example, the boats are pulled ashore, where they are stored in safety so the winter storms can do them no harm. Wooden planks receive a coating of oil. The last potatoes are dug up and packed away to stay dry, and the flower beds are covered with seaweed. Paper is pasted over the windowpanes so the birds won't accidentally fly into the glass. The people leave their summer homes, but they don't lock the doors. That way, those in need of shelter can come inside for a brief stay and gain strength from the simple provisions left behind. It's a lovely precautionary measure.

No matter how much they may have longed for the cold, clear winter air during the hot summer, some people find themselves feeling melancholy. Others hope that winter will allow them to come to rest. And then there are those who devote themselves to recurring seasonal tasks, like winterproofing the garden. Does the heating work properly? Have the window seals been cleaned? Are any repairs needed on the roof or the facade? Is the water line to the garden hose clear and the water main turned off? Have the gutters been cleared of leaves, pine needles, and moss? Is enough salt and sand on hand? Is it time to put the snow tires on the car? A maybug that has emerged from its cocoon – and would normally spend the winter in the ground – flies into the house, apparently hoping to wait out the cold.

Then the point comes when the air grows cooler, the light fades, and the days are noticeably shorter. But neither our senses nor the calendar can confirm that winter has actually arrived. The skies are gray, and the migratory birds have been gone for a while now. It rains – sometimes for days. The transformation first takes place in small, imperceptible steps. A fine, chilly drizzle heralds the coming cold. A glass bottle full of water forgotten in the yard is reduced to shards overnight. Leaves are coated with frost that glitters in the sun – the tiny ice crystals are like needles or scales. A few days later, the first snow falls during the night. It reflects the shine of the streetlamp, making the room seem lighter. Myriad crystals of unfathomable complexity. And it's much quieter now, too – aside from the occasional cracking of the trees as the frost bursts their bark. It's said that we sleep more deeply when there's snow on the ground. Now only the hardiest venture outside. When we go out today in the winter, we wear clothing made of advanced insulating materials. But we no longer experience the cutting sensation of the cold and the winter moods that defined this season for earlier generations over thousands of years. If we assign value to the seasons, is winter bad? And is there such a thing as a typical winter?

Winter is a regularly recurring period of absence – marked by the lack of warmth and light, of leaves and flowers, of migratory birds, and of many other animals that have withdrawn into their lairs. A few lonely crows and woodpeckers seem to be the only creatures unmoved by the cold. But while life may not be as immediately obvious, it does go on. Winter, with its changeable features, is hard to grasp.

What winter actually entails is a matter of location, latitude, and altitude. Every land outside the tropics experiences it, but the precise form it takes differs from one climate zone to another. Despite variations due to geography or climate patterns, winter rages most fiercely in the north – in Scandinavia, Siberia, Alaska, or Canada. Snow covers the ground for four to five months. The trees are laden with it, too: from a slight distance they resemble giant candles dripping with wax. The landscape further north is more regular, with smaller trees and bushes. In these regions winter is the driving force of nature, wresting extreme adaptations from the animals and plants within its reach. The Arctic is also an arid region, with just half

the annual precipitation of Central Europe. Humidity levels are very low, and windless sunny days are the norm. Because cold air can absorb very little moisture, large snowfalls are a rarity at very low temperatures, but when snowstorms do happen the frigid air preserves the white blanket for a long time. This dynamic is even more pronounced in the Antarctic: the thick ice shields contain more than two-thirds of all the fresh water on earth, but the extremely low temperatures keep precipitation to a minimum. The absence of movement creates the impression that even time there is frozen to a standstill. The frost's grip extends over gigantic areas, and the ground thaws out only briefly in the summer. Drills have been used in the Antarctic to bring up sections of ice from nearly two miles below the surface – which proved to be about 900,000 years old and showed evidence of eight Ice Age cycles. Does it even make sense to talk about “winter” in this context, where coldness reigns throughout the year?

While the inhabitants of Canada's sparsely populated north come to terms with the snow – often traveling over it in snowmobiles – their counterparts further south rely on enormous snow-removal machines to clear the way, especially in the cities. But some Northern locations don't get as cold as many people expect. On Norway's Bear Island between the North Cape and Spitsbergen, the average temperature during the winter months is above 14 degrees Fahrenheit. For comparison, the Eismitte site in Greenland, where German scientist Alfred Wegener spent the winter of 1930-31 at almost 10,000 feet above sea level, the temperature plummets in February to nearly 60 degrees below zero. Some Norwegian villages are located in such steep valleys that they are shaded from the sun for close to six months of the year. A few years ago the people of one such village, Rjukan, began using giant mirrors to direct sunlight into the valley and onto the faces of the children – an event celebrated as a historic accomplishment.

Although we tend to think of winter and snow as inextricably linked, the only places in Europe where they inevitably go hand in hand are in the northern regions and mountain areas. The season's character changes dramatically further south. In some parts of Central Europe today it may not snow at all during the winter months. In the Mediterranean countries and the American South, the summers have grown hotter and longer than before and the winters are correspondingly shorter and milder. Under these conditions, plastic snowmen on balconies in Rome or “White Christmas” playing over the sound system in a Florida shopping mall simply seem ironic. But cold snaps can still surprise the inhabitants of some Mediterranean areas, from France's Maritime Alps to the much smaller peaks in Provence. Winter also has other manifestations, too, such as pounding waves that break over the Corniche in Alexandria, flooding the Bibliotheca Alexandrina and forcing the students there to seek shelter. Faced with scenes like this, it's worth recalling that the ancient Egyptians divided the year into three seasons: “inundation,” “emergence” (referring to the shoots of crops), and “heat.”

The existence of four seasons is actually a phenomenon of the middle and upper latitudes, and the fact that they are considered universal is actually a vestige of the cultural dominance of the countries located there. In subtropical and tropical regions, the length of the day and the amount of sunlight are far more constant throughout the year, and it really only makes sense to speak of two or three seasons. Two seasons – a long winter and a short summer – are sufficient to describe the polar year as well.

The Brazilian winter technically exists, but it's a pale imitation of the same season in Europe or North America. Preparations for the cold part of the year begin in July. For the inhabitants of Rio de Janeiro, average temperatures of 75 degrees are considered “cold.” Pullovers, scarves, wool caps, and anoraks are considered essential when the chilly wind blows in from

the Atlantic. The beaches are empty. On the positive side, it seldom rains and the humidity is far lower than in the summer.

A few thousand miles further south, the cold is back in control. It's often claimed that on February 7, 1821, John Davis and his crew were the first people to not only enter Antarctic waters, but actually set foot on the continent itself. But there's no way to conclusively prove that the English-born American captain and seal hunter really deserves this position in history, and many researchers now doubt that the place the men landed was actually Antarctica. In any case, they found a desert of ice unlike anything ever seen before. Since Antarctica's temperature in the summer hovers below -30 degrees, each year's snow is simply buried by the next year's, becoming increasingly compressed and gradually sinking further into the ice shield. In some spots the resulting ice is three miles thick. Pockets of air it contains provide information about the atmosphere and climate during epochs in the distant past. But the ice is not really eternal. The tremendous pressure causes the lowermost layer to collapse or flow along the underlying land to the coast, and from there into the ocean.

On land just an inch-thick layer at the surface takes part in the recurring annual cycle of warming and cooling, but sunlight penetrates water to great depths. The ocean only freezes near the pole – where temperatures are extremely low. Otherwise the high amount of salt, the strong currents, the large volume of water, and the higher temperatures near the earth's mantle all play a part in preventing the water from turning to ice. Life there can continue largely undisturbed.

If we think of autumn and spring as transitional periods, then only summer and winter are really seasons. The biblical creation story, which employs dichotomies such as day and night, heat and cold, and summer and winter, seems to support this view. The custom of dividing the year into three or four separate periods developed in ancient Rome in conjunction with the growth of agriculture. Breaking down the year into sections provided a way to gain control and plan recurring tasks. It's impossible to know exactly why this particular system caught on: perhaps the fact that it evokes the characteristics of the four elements – warm, cold, wet, and dry – has something to do with it. Parallels with the phases of human life – childhood, youth, adulthood, old age – also seem plausible. From that point, it's not much of a leap to imagine the seasons as people, such as Old Man Winter. But more on that later.

It's also possible to divide up time differently. For the Sami, the indigenous people of Scandinavia, the year consists of no less than eight seasons. This complex system is a better match for the rhythm of their lives. Winter is preceded by “early winter,” known as *Tjakttjadálvvie*. It is the time of wandering – not only in terms of the departing sun, but because the reindeer make their way to the winter pastures. Winter, or *Dálvvie*, is the core season. Peace settles over the land, which is covered in a thick layer of snow. The reindeer scrape it aside with their hooves to reach the lichens that they feed on. Then the sun slowly fights its way back, announcing the arrival of “late winter” – *Gijrradálvvie* – the time of awakening. The blanket of snow remains, but the icicles begin to drip and the female reindeer travel to the spots where they will bear their calves in May or June.

In our culture, winter officially begins on the day of the winter solstice, when the sun reaches the Tropic of Capricorn and thus the lowest point in its annual cycle. It is the shortest day of the year, and the sun is visible for a very short time – assuming the weather is clear enough to see it at all. For meteorologists, however, December 1 marks the start of winter, because weather statistics are easier to calculate using whole months. In terms of day-to-day experience, winter gets underway even earlier as specific natural phenomena take place. In

earlier eras, any number of signs could serve the purpose, from the disappearance of the bees to the song of a particular bird. According to the German Weather Service, the winter kicks off in Central Europe “when the oaks lose their leaves, the late apples ripen, and European larches shed their needles.” The same source defines the advent of early spring as the time “when the catkins and hazel bushes release their pollen and the snowdrops bloom.”

Winter weather is not the result of less intensive sunlight alone. Movements of the air at high altitudes also play a role. Climate change has shifted the procession of the seasons and made it less predictable. Winters are getting shorter and the vegetation period has extended: in Germany, for example, it has grown two weeks longer in the last several decades. Winter temperatures are expected to rise further, so the season will be wetter as well. These changes can spell problems for arriving migratory birds and early-blooming plants when insects that nourish hatchlings and pollinate blossoms are still on a traditional winter schedule. Farmers like the fact that grain sown in autumn emerges unscathed from the winter, and are please when they can get an early start with the spring barley, oats, and sugar beets. At the same time, there’s always the chance that the winter – and its freezing temperatures – can make an unexpected comeback and do serious damage to the plants.

The only way to understand what winter used to be is to consult sources where the season has left its mark: tree rings, the natural environment and landscape in general, devices built by people to make the season bearable, descriptions of those who have lived and suffered through it. All these traces combine to produce a dense network of meanings that we call “winter.” But what factors, moods, figures and myths are tied up within it?

Snow crunching underfoot – winter and its characteristics

Winter is often characterized as dark and potentially deadly, but it also brings moments that can make us feel intensely alive. Frigid air that tingles like needles on our faces. Grabbing the snow with our bare hands, and feeling sudden coldness and heat that – at least for the moment – seem parts of a single sensation. Exhaustion after a bout of cross-country skiing, when nothing but a thin layer of fabric stands between the cold and our sweating bodies. Seeing our breath become visible and blowing white plumes of steam into the air. Ears red with pain. Clambering up a mountainside far from the prepared slopes with a group of fur-clad skiers. (Only the front part of our feet is secured in the binding of our skis.) Then tightening the bindings around our ankles and gliding down through the deep snow. Wandering in snowshoes over a frozen moor where we would sink in the summertime.

The perfect winter world exists beyond our imaginations. Terrain buried in snow, a glistening winter landscape. Wooden cottages and picturesque church towers. A horse-drawn sled. If you're lucky, you can actually hear the snow's faint rustling as it falls. Everything seems orderly – a smooth white sheet, sometimes visibly formed by the wind, cloaks everything that would normally be in motion. Time seems to stand still. Covered by a massive load of snow, a fallen tree becomes a dramatic sculpture. People flee from the shadows into the warmer sunlight. Nothing could be crisper and clearer. The snow crunches underfoot. Otherwise, stillness dominates – the snow muffles every sound, as if someone has intentionally filtered out the acoustic evidence of civilization.

Even the surface of a single snowflake is formed in a way that absorbs sound. And a blanket of snow contains a large amount of empty space that traps and dampens vibrations. The effect is similar to that of a velvet curtain in a concert hall or a cork lining on the walls of a recording studio – both materials also contain empty space that break up and absorb sound waves. Another phenomenon further reduces sound during the snowfall itself: the atmosphere condenses and acts like a curtain, preventing sound waves from passing through. As a result, noises in the area are muffled even more. Mountain climber Georges Rivail once wrote about the absolute silence of snow, claiming that “it will prevail when all life is extinguished” or, even more accurately, “be as it was before all life began.”

Snow is an ephemeral substance. The air between the crystals distinguishes it from all other forms frozen water can take. Direct physical contact with snow – the tactile sensation of its icy coldness – is an elemental experience that evokes ambivalent responses. Some people are delighted by snow, while others see it as a shroud hiding everything in nature. In Languedoc, a region where heavy snowfall is hardly typical, the flakes were sometimes described euphemistically as “white flies” or “white butterflies.”

Fresh, porous snow consists up to 95 percent of air. As a result, a cubic foot only weighs about seven pounds, as opposed to over 60 pounds for a cubic foot of water. Someone who fell from a 300-foot cliff onto a snow-covered slope below could therefore potentially survive, while the same plunge into water would certainly end in death. When the snow has compacted to the point that it contains just 45 percent air, it is known as “firn.” Further compression turns it to ice. Under very cold conditions, the compressed snow becomes brittle and breaks under pressure with a crunching sound, which is generated when a large number of crystals in the layer of snow snap apart at once. If it's warmer, the ice crystals bend under pressure and don't break as easily. The result sounds more like cracking than crunching.

In the mountains, the amount of snow on the ground can vary considerably within a space of just a few meters. The contours of the underlying ground play a role. And anyone who has observed snow in the same place over years has seen that the wind usually causes it to collect in specific spots. Measuring fallen snow and determining whether these measurements are representative for a particular location are therefore complex proceedings, with difficulties that can only be touched on here. One long-used method involved a table with a surface of a square meter, which was placed in a spot protected by the wind. After a snowfall, the snow was transferred to a zinc container and weighed. But snow rarely falls straight down from the sky; it is blown about by the wind and therefore does not form an even layer on the ground. For this reason, many measurements at different locations are required to arrive at reliable data on the amount of snow falling in a specific area. A number of methods for obtaining more precise results were developed over the past decades, but very few caught on. Today special sensors are used that measure the snow by emitting an ultrasound pulse, recording the signal that bounces back, and determining the snow depth based on the time required for a complete cycle. Of course, measurements like these shed no light on the amount of water that the snow contains, since this changes depending on whether the snow is still fresh and powdery or has already settled.

The air is cleaner after a snowfall because the tiny drops of water it contains have combined with dust particles – as well as pollen, spores, bacteria, and protozoa – and frozen, sealing them inside. Here and there, the scent of fir or pine resin, steaming cows, or smoke may penetrate the clear atmosphere. Is the faint odor of ozone detectable as well? Or a whiff of electricity, caused by the negative ions in the air when it snows? Perhaps it just smells much fresher than usual. In any case, sunlight can cause the nitrogen ions in snow to turn into nitrogen oxide – a preliminary stage of atmospheric ozone. Snow can also contain sulfur compounds. Some people even claim that snow can smell like different plants depending on where the wind is coming from, or that a particular scent presages the arrival of snow. Others experience synesthesia and associate the smell of snow with a specific color, such as blue. The sensation of “crunchy” or “sticky” snow can trigger a metallic taste reminiscent of iron. At the same time, snow on our tongues may simply cause the taste of food particles or bacteria to become more noticeable.

It’s difficult to tell how firm a layer of snow is. Sometimes you sink in and have trouble getting back out; other times it supports your weight. If the snow contains algae, it will be tinged with color – a phenomenon known as “blood snow” or “watermelon snow.” In some places, such as the mountain regions in France, this type of snow is thought to be a bad omen or a sign that a more intense snowfall is on the way.

Recognizing animal tracks in the snow or reconstructing the events they document is a skill learned only with experience. One set of meandering footprints were left by a fox, who also marked his territory here and there with urine. The edges are blurred, so the tracks must be a few days old already. They suddenly make a straight line across a field. The fox caught sight of a rabbit, which ran off, changing direction in an attempt to escape. Unsuccessfully. A red stain in the snow marks the spot where the rabbit’s remains lie. A crow has spotted them and is drawing closer. Elsewhere, a snow grouse was pressed into the snow by a golden eagle before being carried off. But aside from details like these, a landscape glittering with ice crystals usually appears peaceful, as if a hidden hand has swept away the world’s clutter. Still, snow fleas or glacier fleas – insects belonging to the springtail family – sometimes gather in in large numbers on the snow’s surface, disrupting the orderly impression with their tiny black bodies. ...

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