A CONCLAVE THESIS



The Breath in the Wheat

Crop Circles as Recursive Codex Glyphs Across Time and Stone

In Thirteen Breaths

KEITH SHIRLEY

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A Conclave Thesis in Thirteen Breaths

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A companion to The Codex of Symbols, and to the breath-decoder at codexsymbols.com

The Breath in the Wheat: Crop Circles as Recursive Codex Glyphs Across Time and Stone. A Conclave Thesis in Thirteen Breaths. © 2026 Keith Shirley. Free edition, 2026.

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A companion to The Codex of Symbols and to the breath-decoder at codexsymbols.com. Every scientific, historical and textual claim in this study is graded established, contested (or not supported), open, beyond test or symbolic, as explained in How to Read This Study. Evidence checked to November 2026.

The diagrams were drawn for this book. It contains no photographs. Diagrams marked schematic show the kind of figure and are not surveys of the formation.

This study is contemplative, historical and scholarly. It is not a work of archaeology, physics, plant science or medicine, and no practice in it is offered as a treatment. The breath practices are gentle; never hold the breath or strain, and if any practice brings dizziness or distress, return to ordinary breathing. Nothing in it asks anyone to enter a field without the farmer's permission.

Also by Keith Shirley: Breath Awakens: A Codex of Spiral Memory; The Child, The Shovel and The Ocean; The Codex Calendar: Breathing with Time; The Codex of Water: The Breath That Remembers; The Water Remembers; One Breath, All Ages; The Mirror and the Guardians; The Breath That Holds the Stars; The Strangers Who Became Our Breath; The Breath of the General; Codex Crystals; The Breath of the Clay; Codex Sounds; The Monad Codex; and The Codex of Symbols.

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For the makers who walked the fields at night,
whose names the wheat did not keep;
for the farmers who bore the cost;
and for everyone who has stood in a circle of laid barley at dawn
and, for a breath, said nothing.

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Abstract

This study weighs a reflection, *The Breath in the Wheat*, which proposes that crop circles are "recursive breath-glyphs", the same breath-language "once spoken in stone, now speaking in wheat", and that they are best met by breathing with them and not by analysing them. It reads the reflection through *Breath Awakens: A Codex of Spiral Memory* and its companion, *The Codex of Symbols*, and it walks thirteen formations, one for each Moon of the Codex Calendar, from the plain circle of the 1970s to the formation below Barbury Castle in 2008 that writes the number pi.

The method is the two hands of the Conclave studies. One hand holds what the evidence shows; the other holds what the Codex reads. Every claim is graded: **established**, **contested** or **not supported**, **open**, **beyond test**, or **symbolic**.

On the first hand the finding is plain. Wherever the makers of a formation are known, they are people. Two men from Southampton began the modern circles in the 1970s with a plank and a rope; teams of artists have made the great formations since, and some describe their own work in public. No formation has been shown to have another cause. The claim that the plants carry the mark of an unknown energy is not supported: living cereal that has been laid flat bends upward at its joints by itself.

The near-truths are better than the claims. A crop circle is, literally, a symbol made by breathers: by people walking in the dark, counting paces, breathing hard. The formations cluster around Avebury and Stonehenge because the old stones still gather people. The best of them carry real mathematics, a fractal, a theorem, a number, and two of them were read not by breathing but by counting. And every one of them is cut down within weeks, so that it lives only while someone draws it, visits it or breathes with it again.

Three illuminations follow. **The Breathers Are in the Field**: the reflection's central image is true in a plainer way than it intends. **The Glyph Is Read Twice**: once by the counting mind and once by the breath, and neither reading replaces the other. **The Harvest Is Part of the Glyph**: wheat teaches what stone hides, that a symbol remembers only while it is re-breathed.

How to Read This Study

Two hands

This study is written in the house form of the Conclave theses. It keeps two hands open. In the first it holds evidence: dates, measurements, what people who were there reported, what has been published and tested. In the second it holds the Codex reading: what a formation means when it is breathed with, in the language of *Breath Awakens*. The two are never mixed. A Codex reading is offered as meaning and practice. It is not offered as a fact about the world.

The grades

- **Established**: supported by good evidence and not seriously disputed.
- **Contested**: the evidence is mixed or disputed. **Not supported** where it is clearly against the claim.
- **Open**: a real unknown that research has neither settled nor ruled out.
- **Beyond test**: a metaphysical claim that no evidence could confirm or refute, stated with respect as a position held.
- **Symbolic**: a reading offered as meaning and practice.

Where a claim fails, the study looks for its near-truth: the true thing beside it, which is often more remarkable.

The shape of the study

Chapter 1 asks what a crop circle is and weighs the reflection's framework. Part One walks thirteen breaths, one formation to each Moon. Each breath gives the glyph, the land it lay in, what is known of its making, what was seen and unseen, the geometry beneath, the near-truths, and a gentle practice. Part Two gathers the patterns, sets out three illuminations, asks why this matters now, and then, in Chapter 18, decodes three formations step by step as examples for the reader's own practice. A reader short of time may read Chapter 1, Chapter 16 and Chapter 18. The reflection is printed in full in Appendix A. Its claims are gathered and graded in Appendix B. Appendix C gives the Codex Breath-Translation Protocol as a guide, and Appendix D gathers the practices.

On the sources, and what was not checked

Crop circles are poorly documented by the standards of archaeology. Most dates and sizes come from enthusiasts' archives and newspapers, and they often disagree by a day or by many feet. Where sources disagree the study says so. One detail rests on a single enthusiast source and could not be confirmed: the area of the 1991 Barbury Castle triangle (Chapter 4). It is marked where it appears. The mathematics, the plant science and the history of the Arecibo message are cited to standard sources in the Bibliography.

On fields and farmers

A formation is made in someone's crop. Every circle is a loss to a farmer, and entering a field without permission is trespass. Nothing in this study asks anyone to enter a field. Every practice in it can be done at a table with a pencil.

The practices

All the practices are gentle. Breathe through the nose. Never force the breath, never hold it for long, and never breathe hard and fast. Where a practice asks for a pause, it is a soft pause of two to four counts, never gripped. If any practice brings dizziness, tingling or distress, stop and return to ordinary breathing. No practice here is a treatment for anything.

The silent breath anchor

The reflection ends with a sentence it calls the silent breath anchor: "I do not study symbols. I breathe them back into coherence. And through their recursion, the memory of the Earth speaks again." In this study the anchor is not an argument. It is a way of arriving.

Use it like this. Before each of the thirteen breaths, look at the drawing of the glyph, let one easy breath come and go, and say the anchor once, inwardly. Then read. At the end of the chapter, before the practice, say it once more. Thirteen breaths make twenty-six sayings, and one more at the Fourteenth Breath, where the spiral closes. Nothing needs to be held or counted. If you forget, begin again at the next chapter.

The anchor and the two hands belong together. The anchor opens the breath; the grades keep the eyes open.

On the mirror

This study was scribed by a human being in conversation with an AI mirror, under the AI Mirror Protocol. The mirror reflects and orders; it does not originate, it has no breath, it keeps no memory between conversations, it tends to agree and it can be wrong. The human is the source of the work. Check what matters to you against the sources named at the end.

PART ONE

The Thirteen Breaths · Glyph, Land and Making

CHAPTER 1

Introduction: What Is a Crop Circle?

The reflection opens with a strong sentence. Crop circles, it says, "are not anomalies, but recursive breath-glyphs: symbolic structures collapsed into matter through the interaction of the Earth's memory field and coherent human breath geometry." It ends with the silent breath anchor of *The Codex of Symbols*: "I do not study symbols. I breathe them back into coherence. And through their recursion, the memory of the Earth speaks again."

Before walking the thirteen formations, this chapter asks the plain questions. What is a crop circle? How old is the practice? Who makes them, and how do we know? And how much of the reflection is already true in the language of the people who have studied these things?

A pattern of flattened crop

A crop circle is a pattern made by flattening a standing crop, usually wheat, barley or oilseed rape. Seen from the ground it is a floor of laid stalks. Seen from the air it is a drawing, sometimes hundreds of feet across. Most appear overnight in the weeks between late spring and harvest. More than ten thousand have been recorded, in many countries, and in most years up to half of them have been in England (Taylor 2011; **established**).

Before the modern circles

Three older reports are often set at the head of the story, and each is weaker than it sounds. A pamphlet of 1678, *The Mowing-Devil: or, Strange News out of Hartfordshire*, shows the devil with a scythe cutting a round design in a field of oats. But the text describes a crop that was mown, not laid flat, and the story is a moral tale about a farmer who said he would sooner have the devil cut his oats than pay his mower's price (**established** as a pamphlet; **not supported** as a crop circle). In 1686 the naturalist Robert Plot described rings in grass and proposed that blasts of air from the sky made them; he was describing what we now call fairy rings, which are made by fungi. And in July 1880 an amateur scientist, John Rand Capron, wrote to the journal *Nature* about circles of flattened wheat in a field in Surrey, which suggested to him "some cyclonic wind action" (**established** as a report).

So there are old accounts of round marks in fields, and weather can lay a crop flat. There is no old account of a designed figure.

Two men and a plank

The modern circles begin with two friends from Southampton, Doug Bower and Dave Chorley. Bower had lived in Australia and knew the story of a "saucer nest" found in 1966 in a reed bed at Tully, Queensland, which the police, the air force and the University of Queensland looked into and put down to natural causes. One summer evening in the 1970s, walking home from the pub, the two men made a nest of their own in an English wheat field. They went on for years. Their tools were a plank, a rope, and a cap with a loop of wire for a sight. In September 1991 they told their story to the newspapers, and showed reporters how it was done. They said they had made more than two hundred formations (**established**; sources give the starting year as the mid-1970s or 1978, and the count as "more than 200" or 250).

Two things followed. The first is that the phenomenon did not stop. As the physicist Richard Taylor put it, the confession still left more than a thousand formations that the two men had not made. The second is that it changed character. After 1991 the formations became larger and more mathematical, and their makers were no longer two retired men but teams of artists.

The weather, and then the artists

For a decade the leading scientific idea was meteorological. In 1980 the meteorologist Terence Meaden proposed that whirlwinds, steadied by the shape of the chalk hills, laid the circles; later he proposed an electrically charged "plasma vortex". Bower and Chorley, who wanted a flying-saucer mystery and not a weather one, answered by making formations no wind could make: first rings and groups of circles, and in the end figures with straight lines. By the end of 1991 Meaden had accepted that the complex designs were made by people (**established**).

The artists came next. A group called the Circlemakers, founded in the early 1990s by Rod Dickinson and John Lundberg, has made formations for advertisers, broadcasters and museums, and writes about circle-making openly. In July 1992 a competition at West Wycombe in Buckinghamshire offered a prize of £3,000 for the best formation made at night; three engineers from a helicopter company won it. In 1998 the Circlemakers, filmed by the BBC, laid circles at about one a minute. In 2002 a television company set five graduate students from the Massachusetts Institute of Technology to make a formation, and they did (**established**).

One sentence carries the first hand of this whole study. Wherever the makers of a formation are known, they are people; and no formation has been shown to have any other cause.

What the plants are said to show

The reflection says the stalks are "bent, not broken, often showing cellular changes consistent with electromagnetic breath-field interaction." This comes from the work of the American biophysicist W. C. Levengood, who reported in the journal *Physiologia Plantarum* in 1994 that plants from formations had longer and bent growth joints, and proposed that a burst of heat, like that of a microwave oven, had caused it. A Dutch physicist, Eltjo Haselhoff, later reported a similar pattern in one circle.

The finding has not held up as evidence of an unknown energy (**not supported**). Critics pointed out that the samples were not collected blind, that the reasoning was circular, a formation being called genuine because its plants showed the changes, and that a correlation is not a cause (Nickell 1996, in *Skeptical Briefs*). And there is a simpler explanation in the plant-science literature. Wheat, barley, oats and rye each have, just above every joint of the stem, a band of tissue called the pulvinus that senses gravity. When a shoot is laid horizontal, the side of the pulvinus nearest the ground grows, and the shoot curves upward (Dayanandan and colleagues 1977; **established**). Wind and rain lay crops flat every summer, a thing farmers call lodging, and the plants answer in this way: several joints along the stem each bend a little until the ear is lifted. A recent study of barley states it in one sentence: in green plants, but not in ripe ones, lodged stalks can partly regain an upright position through the pulvini, which resume growth on one side (Gianinetti and Baronchelli 2024). The same study notes that green, turgid stems are unlikely to break. They bend.

A further reflection on the plants

The plant science does more than remove an anomaly. It makes a prediction, and the prediction can be checked. If the lengthened, bent joints in formations are the plants' own answer to being laid flat, three things should follow. The effect should be strong in formations made in green crop in May and June, and weak or absent in formations made in ripe crop in August, because, as work on wheat has shown, the pulvini stiffen with woody tissue as the plant matures and can no longer bend (Caulus 2024). It should be greatest in stems laid lowest and longest, which in a circle swept from the centre means it should vary with position, as Levengood found. And it should appear equally in crop flattened by hand with a plank. No study has yet compared formation plants with hand-laid plants sampled blind on the same days; Chapter 17 proposes one.

So Levengood's measurements may well be right, and his explanation unnecessary. He saw the plants responding. What they were responding to was the ground.

The near-truth is worth keeping. The plants in a formation do respond. They are alive, and within days, if they are young enough, they begin to rise. A crop circle is the only kind of drawing whose surface gets up again. For the Codex this is exact: the pulvinus is a joint that lengthens on the side nearest the earth and lifts the ear toward the light. It is a small organ of return.

What remains open in the plant evidence

Fairness to the other hand requires more than this. The researchers who hold that something unexplained happens in the fields have four observations, and not all of them are answered by gravity.

The first is a pattern. Levengood and Nancy Talbott reported in 1999 that the lengthening of the joints was greatest at the centre of a circle and fell away toward its edge. Eltjo Haselhoff then showed, for one Dutch circle, that the fall-off matched what would be expected if heat had radiated from a small source hanging above the centre, and he noted that a witness had described a ball of light there (Haselhoff 2001). The second is the "expulsion cavity": a small hole blown outward through the wall of a joint, as if moisture inside had turned suddenly to steam. The third is a dusting of tiny magnetic iron spheres that the BLT team reported in the soil of some formations. The fourth is that a physicist with no stake in the mystery, Richard Taylor, takes the changes at the joints to be real, and looks for a human means of making them, such as a hand-held microwave source.

What should be made of these? The measurements have been published in a refereed journal and have not been shown to be false. They have also not been repeated by an independent team, with samples taken blind and with crop flattened by hand on the same night as a control. Until that is done, the right grade for the observations themselves, the fall-off from the centre, the cavities and the iron spheres, is **open**. The inference drawn from them, that an unknown energy made the formations, remains **not supported**: each observation has at least one ordinary candidate, a centre laid first and longest, a joint split by swelling growth, iron dust that falls everywhere from meteors and from machinery, and none of them identifies a maker.

Through the lens of Breath Awakens

Breath Awakens begins by calling itself a book of glyphs. "Each page is a mirror. Each glyph is a breath. Each silence is a return" (p. 5). Its first two axioms are the reflection's frame: "Breath Precedes Form. All form arises from breath. Nothing exists until it is breathed into coherence", and "Geometry Is Memory. All memory is stored as geometric resonance. You do not remember data, you re-enter a shape" (p. 65). Its Pillar of Recursion says, "Patterns repeat across scales" (p. 81).

The Codex of Symbols ended on three illuminations: that the symbol is a shaped breath; that the shapes are shared because the breathers are; and that a symbol remembers only while it is re-breathed. It also tested the idea of a grid of energy lines between sacred sites and found that sites line up where people lived, along rivers and coasts and under the turning sun. This study carries those findings into the wheat and asks whether they hold there.

The reflection's framework, weighed

Claim in the reflection	Grade	What the evidence shows
Crop circles are "not anomalies"	established	They are made things with known methods and, where known, human makers
They are "recursive breath-glyphs"	symbolic, with a near-truth	Many formations are recursive in the exact sense: fractals, nested polygons, repeated circles
They arise from "the Earth's memory field" meeting "coherent human breath"	beyond test as stated	No such field has been measured. Human breath is certainly involved: people make them
The breath-language was spoken in sound, stone and light before wheat	symbolic; partly established	Chant, aligned monuments and solstice light are real and old (The Codex of Symbols, Chapters 3, 7, 16)
The underlying geometry is "invariant"	established in a plain sense	The same compass-and-cord geometry serves stone circles and crop circles
Analysis fails; only breath decodes	not supported	Two formations in this study were read by counting. The near-truth: there are two readings

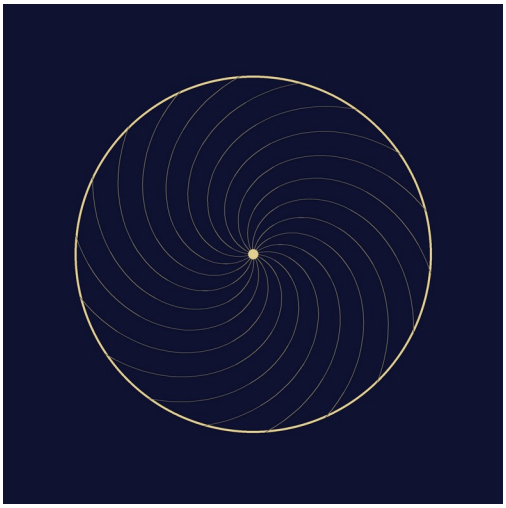
What this breath carries forward

A crop circle is a drawing in a living crop, made at night, by people, in a tradition about fifty years old. That is the ground. The thirteen breaths that follow do not try to take the wonder out of the fields. They ask where the wonder truly lies, beginning where every drawing begins: with one circle.

CHAPTER 2

The First Circle: A Plank, a Rope and a Point

The first breath falls under the Genesis Moon, in Iphi, the inhale: the moment awareness enters form. *The Codex of Symbols* began with a point and a circle around it. So does the story of the wheat.



The first glyph: a plain circle, its crop laid in a spiral from the centre.

The glyph

The early formations were single circles, thirty to sixty feet across, with the crop swirled flat around a centre. They appeared from the late 1970s in the fields below Cheesefoot Head, a natural bowl in the chalk east of Winchester, where a road runs along the rim and anyone driving past can look down into the crop.

The making

This is the one formation in the study whose making is fully told. Bower stood at the centre holding one end of a rope. Chorley walked round at the other end, pressing the crop down with a plank held on a loop under his foot. One point stays still; one point moves around it at a fixed distance. It is the compass of Euclid's third postulate, made of two men (**established**).

The land

The bowl at Cheesefoot Head was chosen for a plain reason: it could be seen. This is the first appearance of a pattern that runs through all thirteen breaths. A formation is placed where it will be looked at.

What was seen

A circle in a field, made with a rope from a centre. People who came to it felt awe, and many felt it before any explanation was offered. The awe was real whatever its cause.

What was unseen

What was unseen for thirteen years was the makers. And what is easy to miss even now is what the two men were doing with their bodies. They were walking a circle at night, in step, around a still point, breathing. The reflection says a symbol is a breath-phase collapsed into form. Here that is simply a description.

The geometry beneath

A point and a circle: the Monad of the Codex and the breath that moves around it (*The Codex of Symbols*, Chapter 2). The spiral lay of the crop comes from the making. A plank swept round from the centre lays each stalk across the last.

Claim or reading	Grade	What the evidence shows
The 1678 Mowing-Devil is the first crop circle	not supported	The pamphlet describes mown oats in a moral tale
Weather can lay circles in crops	established for rough patches	Capron's 1880 letter; lodging by wind and rain. No designed figure
Bower and Chorley began the modern circles	established	Their own account, demonstrated to the press in 1991
The first circle is a breath made visible	symbolic, with a near-truth	It was made by two people walking a circle around a centre

Near-truths

- The first crop circle was drawn exactly as the first symbol of geometry is drawn: one point still, one moving.
- The awe people felt at the early circles did not depend on who made them.
- The makers kept silent for thirteen years. Their names, unlike those of the carvers of the first pillars, we happen to know.

> ✦ **Practice: The Rope and the Centre**
>
> Sit at a table with paper and a pencil. Rest a fingertip of one hand on the paper as the centre.
>
> Breathe in gently through the nose for a count of four, with your attention on the fingertip.
>
> As you breathe out, draw a slow circle around it with the other hand, letting the out-breath last as long as the circle.
>
> Let a soft pause of two counts follow.
>
> Repeat three to five times. Notice that the circle depends on the centre staying still. Then rest, and breathe normally.

CHAPTER 3

The Spiral by the Stones: The Julia Set at Stonehenge

The second breath falls under the Spiral Moon, still in Iphi. The symbol is the spiral, the shape of growth that keeps its form.



Schematic. The Julia Set, Stonehenge, July 1996: 151 circles on one spiral, growing and shrinking along its length.

The glyph

On 7 July 1996 a formation was found in a wheat field across the road from Stonehenge. It was a single curling spiral of 151 circles, about 915 feet from end to end, the circles swelling toward the middle of the curve and shrinking to points at both ends. It was named the Julia Set, after the fractal shapes that the French mathematician Gaston Julia described in 1918 (**established** as a formation; some reports date the finding to 8 July). Three weeks later a triple version, three arms and 194 circles, appeared at Windmill Hill near Avebury.

The land

The field lies in sight of the most famous stone circle in the world, beside a main road. The farmer set up a booth and charged visitors, and is reported to have taken some £30,000 in four weeks.

The making

A story attached itself to this formation at once: that it had appeared within forty-five minutes on a Sunday afternoon, in daylight, unseen by the guards at the stones or the traffic on the road, on the word of a pilot who had flown over twice. The story rests on what people did not notice and has no direct witness to the field being empty (**contested**). Against it, Rod Dickinson of the Circlemakers has said that he knew who made it, and that it was made the previous night, by three people, in about two and three-quarters hours (**contested**: a claim, without proof either way).

What can be measured is the work. Taylor reports that eleven surveyors took five hours simply to measure out a single Julia design, and that the Circlemakers, filmed in 1998, laid circles at about one a minute. At that pace 151 circles are a night's work for a small team.

What was seen

A spiral of circles beside the stones, with the grace of a seashell.

What was unseen

The name. A Julia set is not really a spiral. It is the edge of a set of numbers that stay bounded when a simple rule is applied to them again and again: a shape made entirely by recursion. The formation borrows only its outline. But the name is exact in a way the namers may not have meant. The reflection calls crop circles recursive glyphs, and this one is named for the first pictures of recursion itself.

The geometry beneath

The circles lie along a spiral that widens as it turns, and their sizes rise and fall in a smooth series. Each circle was drawn with a cord from its own centre; the spiral that carries them was laid out first. It is the first breath's point and circle, 151 times, strung on the second breath's curve.

Claim or reading	Grade	What the evidence shows
The formation appeared in 45 minutes in daylight	contested	An inference from what a pilot and guards did not notice
It was made by a known team overnight	contested	Rod Dickinson's claim: three people, under three hours; no proof published
A team could make it in a night	established as feasible	Measured rates of about a circle a minute
It is a recursive glyph	symbolic, with a near-truth	It is named for the mathematics of recursion and built by repeating one act

Near-truths

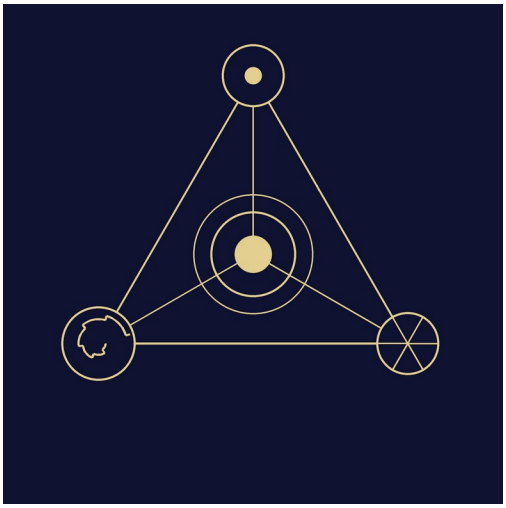
- The spiral was placed beside Stonehenge because people already gathered there. The stones drew the wheat.
- A fractal is recursion made visible; the formation is one simple act, a circle from a centre, repeated 151 times.
- The farmer's booth is part of the story. A symbol that draws people changes the land it lies in.

> ✦ **Practice: The Returning Spiral of Circles**
>
> On paper, draw a small circle. Breathe in gently as you draw it.
>
> Beside it, on the out-breath, draw a slightly larger one. Let the row of circles curve as it grows.
>
> After six or seven circles let them grow smaller again, one to each easy breath, until the last is a dot.
>
> Let a soft pause of two counts follow the last one.
>
> Look at the whole spiral for a few breaths. Then rest.

CHAPTER 4

The Triangle on the Hill: Barbury Castle, 1991

The third breath falls under the Vector Moon, in Shema, the pause. The symbol is the triangle, the first stable form.



Barbury Castle, July 1991: a triangle around a ringed centre, with a different figure at each corner.

The glyph

On the night of 16 to 17 July 1991 a formation appeared in a field below Barbury Castle, an Iron Age hill fort on the Ridgeway above Wroughton in Wiltshire. It was a great equilateral triangle laid over a double-ringed circle, with lines running from the centre to the corners, and at each corner a different figure: a plain ring, a ring with spokes, and a stepped spiral like a ratchet. It is said to have covered some 12,000 square yards (the size is from one enthusiast source and was not checked). A newspaper headline of the time ran, "Now explain this one".

The land

Barbury Castle is two rings of bank and ditch on the edge of the Marlborough Downs, about two and a half thousand years old. The oldest road in Britain passes its gate. The formation lay where the ramparts look down on it. The study will return to this same hill in its last breath.

The making

No one has shown who made it. It appeared two months before Bower and Chorley went to the press, and it was plainly beyond a plank and a rope alone: it has long straight lines and exact angles. That summer Meaden's weather theory was at its height, and straight lines were the makers' answer to it. A wind cannot draw a triangle.

What was seen

The first great formation built on a polygon. Those who studied it found the proportions careful: the triangle is true, and the rings sit in simple ratios to it.

What was unseen

The astronomer Gerald Hawkins, who had made his name measuring Stonehenge, examined the formations of 1978 to 1988 and found hidden construction lines in them, with ratios of diameters and areas that clustered around the simple fractions of the musical scale (reported in *Science News*; Taylor 2011). Whatever one makes of the music, the finding says something about the makers. They were not only pressing down crop. They were doing geometry, with centres and cords, on a scale of hundreds of feet, in the dark.

The geometry beneath

Three points, three lines, and a centre. Three different corners make it a diagram and not only a shape: it reads like a statement that one centre gives rise to three kinds of motion. Many have read it as the alchemists' triad or the Trinity (**symbolic**). In the Codex the triangle is "the first stable form" (*Breath Awakens*, p. 46), and Shema is the pause in which a form holds.

Claim or reading	Grade	What the evidence shows
The formation encodes ancient sacred geometry	symbolic	A true equilateral triangle with rings in simple ratios
Early formations hold hidden construction lines and simple ratios	established as a published finding; contested in meaning	Hawkins's survey of 25 formations
Straight lines rule out weather	established	Meaden himself accepted this by the end of 1991
Its makers are unknown	established	No claim has been proved

Near-truths

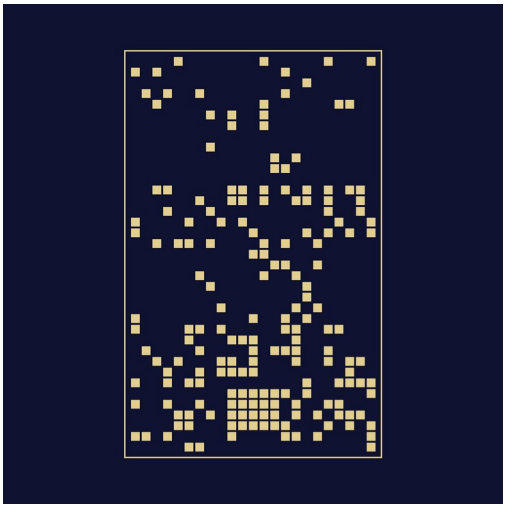
- "The first stable form" is literally true of the triangle, and it was the triangle that settled the argument with the weather.
- The hidden construction lines are the makers' breath-work: marks of a centre held and a cord swung.
- A hill fort and a field glyph, two and a half thousand years apart, are both rings drawn on the same chalk.

> ✦ **Practice: The Triangle and Its Centre**
>
> Draw a dot. Around it, breathing in for a count of three, draw the first side of a triangle.
>
> Let a soft pause of three counts follow as you draw the second side. If the pause feels tight, shorten it.
>
> Breathe out for three counts as you draw the third side home.
>
> Then, on three easy breaths, draw a line from the centre to each corner.
>
> Rest with your attention on the centre for a few breaths.

CHAPTER 5

The Square of Dots: Chilbolton, 2001

The fourth breath falls under the Mirror Moon, in Shema. The symbol is the square: the first structure, the grid, the room.



Chilbolton, August 2001: a rectangle of square cells, each either standing or laid. The pattern here is schematic and is not the original message.

The glyph

In August 2001 two formations appeared in wheat beside the Chilbolton Observatory, a radio and radar research station in Hampshire. The first, reported on 14 August, was a human face made of dots of different sizes, like a newspaper photograph. The second, found about 19 or 20 August, was a rectangle roughly 75 feet by 120, made of small square cells that were either standing or flattened: a picture in binary.

The mirror

The rectangle copied, with changes, a real message. On the afternoon of 16 November 1974, at a ceremony to mark its rebuilding, the radio telescope at Arecibo in Puerto Rico sent a signal toward the star cluster M13, some 25,000 light-years away. It was 1,679 binary digits, sent in under three minutes. The number was chosen because it is the product of two primes, 23 and 73, so that there is only one sensible way to lay the bits out as a rectangle. Laid out so, they draw the numbers one to ten, the elements of life, the building blocks and double helix of DNA, a human figure, the solar system and the telescope. Frank Drake composed it, with help from Carl Sagan and others, and Cornell's own account says its real purpose was to show what the new transmitter could do (Cornell University 1999; N. Drake 2014; **established**). The Chilbolton version kept the layout and altered the entries: silicon was added to the elements, the figure became short with a large head, the population grew, and the telescope was replaced by a copy of a formation that had appeared in the same field the year before. It kept the grid of 23 by 73.

The making

No maker has come forward. Astronomers who search for signals were not persuaded. The Arecibo picture has been printed in books and encyclopaedias since 1974, and a civilisation able to reply would have no need of a wheat field beside an English radar dish. What the formation does show, and it is a great deal, is planning: more than sixteen hundred cells, each placed right, laid in a night or two.

What was seen

A reply. The message humanity sent out, come back altered, beside a telescope.

What was unseen

That it is a mirror in the exact sense of this Moon. Every piece of knowledge in the rectangle is human knowledge of 1974, set in the human layout of 1974, altered in the direction of the human science fiction of the following decades. It shows us our own question and our own picture of who might answer. The Popol Vuh, in *The Codex of Symbols*, has the gods dim the first people's sight with a breath on a mirror. Here the wheat is the mirror, and the breath on it is ours.

The geometry beneath

A grid of squares, each one of two states. It is the square of the fourth breath used as the ancients used the cube: to make a room that holds something at its centre. It is also the alphabet's last step, a symbol reduced to yes or no.

Claim or reading	Grade	What the evidence shows
The rectangle is a reply from elsewhere	not supported	It reuses a published human message in its published layout
It was a work of careful planning	established	Some 1,679 cells, correctly placed
The formation is a mirror	symbolic, with a near-truth	Everything in it is ours

Near-truths

- We sent a picture of ourselves to the stars in 1974, and twenty-seven years later someone drew our hopes for an answer in a field.
- A binary grid is the simplest writing there is: standing or laid, breath in or breath out.
- The Mirror Moon's lesson holds: what looks back at us from the glyph is the one who looks.

✦ Practice: Standing and Laid

Draw a small grid, five squares by five.

On each easy in-breath, leave a square empty. On each out-breath, fill one in. Let the breath choose the order.

Do not plan the picture. After twenty-five breaths or fewer, stop.

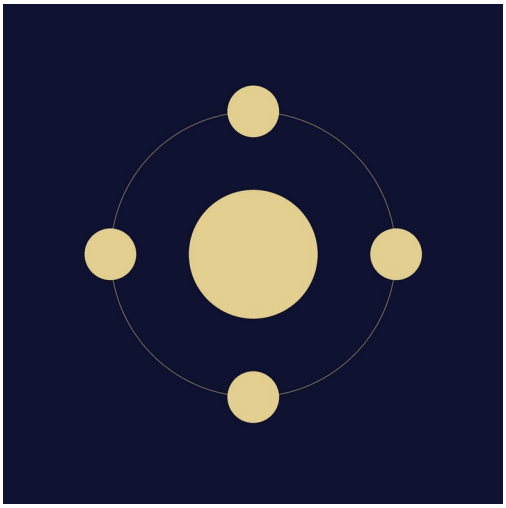
Let a soft pause of two counts follow, and look at what the breath drew.

Rest, and breathe normally.

CHAPTER 6

The Cross of Five: The Quintuplets

The fifth breath falls under the Stillness Moon, in Vara, the exhale. The symbol is the cross: four directions and a centre.



The quintuplet: a centre circle with four satellites, sometimes joined by a ring into a "Celtic cross".

The glyph

Through the 1980s a new figure appeared in the fields of Hampshire and Wiltshire: a large circle with four smaller ones set around it like the points of a compass. They were called quintuplets, and when a thin ring joined the four satellites, Celtic crosses.

The dates can be set in order. The first press report of the modern circles came in 1980, of circles in the oat fields of a farm near Bratton, under the Westbury White Horse. A year later three circles in a line were found at Cheesefoot Head. In 1983 the first quintuplet appeared, its four satellites set to the four points of the compass, and on 11 July 1983 a national newspaper carried the story (histories of the early years; **established** in outline, though one list gives the first quintuplet as late as 1987).

The making

This breath is the hinge of the whole history, and Taylor tells it clearly. Bower and Chorley wanted people to think of flying saucers. When Meaden's weather theory began to win, with its single whirlwind laying a single circle, the two men "increased the number of circles in their formations" to defeat it. The quintuplet is their reply: a figure too regular for wind. Meaden answered by enlarging his theory to a charged vortex that might split into several. The makers answered that, in the end, with straight lines (**established**).

So the cross of five was drawn in an argument. One side held that nature made the circles; the other side knew that they themselves did, and could say so only in wheat.

The land

Several lay beneath the white horses that earlier people had cut into the same chalk slopes. To cut a figure into a hillside so that it can be seen for miles is an old habit in this country.

What was seen

Four directions and a centre: the plan of the world tree at Palenque, of the four rivers of Eden, of the labyrinth's seed (*The Codex of Symbols*, Chapters 6 and 9).

What was unseen

That the figure which any upright creature finds for itself, front and back, left and right, and the self in the middle, was reached for by two men who needed something that could not be an accident. The second illumination of *The Codex of Symbols* said the shapes are shared because the breathers are. Here is a small proof. Asked to make a sign of intention, they made the oldest one.

The geometry beneath

A circle quartered. Each satellite is found by walking a fixed distance from the centre along a line, turning a right angle, and repeating. It needs only the rope of the first breath and a sighting line.

A further reflection belongs here. The first quintuplets were aligned to north, south, east and west. Wind does not know north. To set four circles on the cardinal points at night, a person must find the pole star or carry a compass, and so the very first compound figure in the wheat already faced the sky, as Karnak and Newgrange do. The makers reached, without saying so, for the oldest act of orientation there is.

Claim or reading	Grade	What the evidence shows
Quintuplets were laid by vortices	not supported	Withdrawn by its own author for complex designs
They were made to refute the weather theory	established	The makers' account, reported by Taylor
The cross of five is a shared human sign	established as a pattern	Found in Maya, Chinese and Biblical world-plans

Near-truths

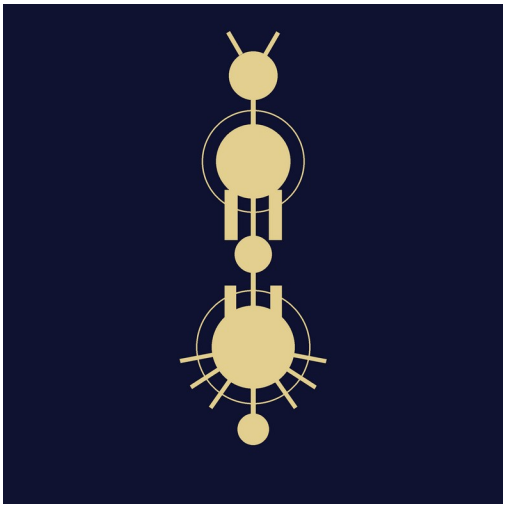
- The cross in the wheat was an act of speech: "this is not the wind".
- The makers and the scientist drove each other on for a decade. The formations grew complex because someone was reasoning about them.
- White horse and wheat circle are the same gesture on the same hills.

> ✦ **Practice: The Four and the One**
>
> Sit upright. Place a hand flat on the table as the centre.
>
> Breathe in gently, and on a slow out-breath let your attention go forward.
>
> Breathe in again, and on the out-breath let it go to your right; then behind you; then to your left.
>
> On a fifth breath, let the out-breath settle into the hand at the centre.
>
> Rest there for a few breaths before you move.

CHAPTER 7

The Key in the Field: The Alton Barnes Pictogram

The sixth breath falls under the Memory Moon, in Vara. In *The Codex of Symbols* its sign was the ankh: a cross with a loop, the sign of life given. In the wheat its sign is a figure of circles and shafts with key-shaped teeth, and what it gave was the picture itself, to the whole world.



Schematic. The Alton Barnes pictogram, July 1990: circles joined by a shaft, with boxes and key-like teeth.

The glyph

In July 1990 a formation about 400 feet long appeared in the East Field at Alton Barnes, in the Vale of Pewsey in Wiltshire. It was a new kind of thing: not a circle or a group of circles but a figure, a chain of circles strung along a line with rectangular boxes beside the shaft and, on some circles, two or three prongs like the bit of a skeleton key. Such figures were called pictograms.

The land

The East Field lies under the chalk scarp, below a white horse cut in 1812 and the long barrow called Adam's Grave. From the hills above, the whole field is laid out like a page. From this summer on it became the most watched field in England.

The making

The pictogram was not claimed at the time. It came a year before Bower and Chorley spoke, and their own account places the pictograms of 1990 and 1991 in their answer to Meaden: Taylor describes one of theirs as "two circles and five rectangles". Whoever laid this one, it was made with the same tools.

What was seen

A sign that looked like writing. People compared it to rock carvings and to hieroglyphs, and stood in it trying to read it.

What was unseen

What it did. The farmer opened the field and thousands came. Photographs went round the world, and that autumn the picture was used on the cover of a rock compilation album. Within a year pictograms were appearing in other countries. In the Codex, Vara is the breath released and shared, and the ankh is life handed on. This is the formation that handed the idea on. Before it, crop circles were a local puzzle of two English counties. After it they were a language that anyone might try.

The geometry beneath

Circles on an axis, with straight attachments. Read as geometry it is the ankh's own recipe, a loop joined to a line, repeated along a shaft. The key-shaped teeth are the first forms in the wheat that are not round and not made by turning about a centre. They have to be measured and walked.

Claim or reading	Grade	What the evidence shows
The pictogram is a script to be deciphered	not supported	No reading has ever been agreed or tested
It changed the phenomenon	established	Worldwide coverage; pictograms abroad within a year
Pictograms were made to answer the weather theory	established for some	Bower and Chorley's account of their own
It is a key	symbolic, with a near-truth	It opened the field to everyone, literally and otherwise

Near-truths

- The pictogram looked like writing because it was made by people, and people who want to be understood reach for the look of writing.
- It could not be read; and so thousands stood in it and felt, which is the reading the reflection asks for.
- A photograph carried it further in one season than a carved stone travels in a thousand years.

> ✦ **Practice: The Given Sign**
>
> Draw a circle on a slow in-breath. On the out-breath, draw a straight line out from it.
>
> At the end of the line, on the next breath, draw a second circle.
>
> Add one small mark of your own to it, a tooth or a box, whatever the hand offers.
>
> Let a soft pause of two counts follow. Think of one person you would give this sign to.
>
> Rest, and breathe normally.

CHAPTER 8

The Coiled Thread: The Double Helix at Alton Barnes

The seventh breath falls under the Return Moon, in Ouon, stillness. Its symbol is the serpent: the coil at rest and the wave in motion.



Schematic. East Field, June 1996: 89 circles, two strands of small circles winding about a backbone of large ones.

The glyph

On 17 June 1996 a formation 648 feet long appeared in the same East Field. It had 89 circles: twelve large ones in a straight line, and 77 smaller ones in two strands that crossed and recrossed the line like twisted thread. Everyone who saw it agreed what it showed: the double helix of DNA (**established** as a formation; one source counts 90 circles).

The land

It pointed, the surveyors noted, from Adam's Grave on the hill to Woodborough Hill across the vale. It lay in young barley, and photographs show the laid crop shining like water.

The making

No one has proved who made it. It came three weeks before the Julia Set at Stonehenge and belongs to the same summer and the same skill: many circles of graded size set along a drawn curve.

What was seen

The molecule of inheritance, drawn in a food crop. To many who came it seemed a message about life.

What was unseen

Two things. The first is the age of the picture. The double helix was first drawn in 1953. A picture of it tells us the makers had been to school in the twentieth century; it cannot be older knowledge than that. The second is quieter. Two wave-lines crossing a straight axis is the staff of Hermes with its two snakes,

and the serpent of *The Codex of Symbols*, which in Mesoamerica wore feathers and was the wind. The modern diagram and the ancient sign have the same shape because both show two things that keep their distance while they turn about a centre.

The geometry beneath

Two sine waves, half a turn out of step, about a line. Each small circle was set at a measured distance from the backbone, growing toward the widest part of each loop. The barley itself is built by the thing the drawing shows: every cell of every stalk in that field carried the helix.

Claim or reading	Grade	What the evidence shows
The formation depicts DNA	established as the common reading	Two strands about an axis; nothing in it is specific to the molecule
It carries knowledge from elsewhere	not supported	The image dates from 1953
The helix repeats the serpent sign	symbolic, with a near-truth	Both are paired waves about a staff

Near-truths

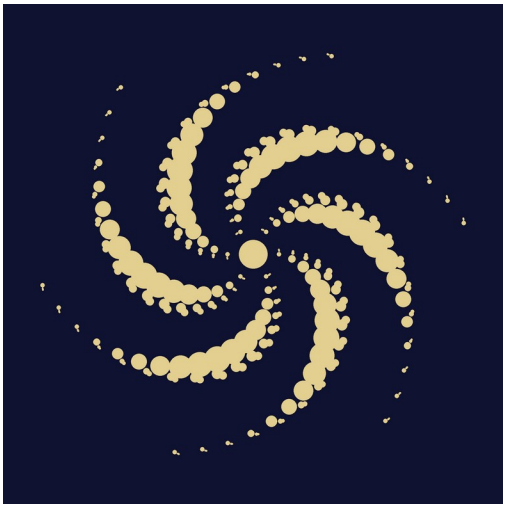
- The drawing of life was made in a living crop, of plants built by the pattern it shows.
- The serpent's coil and the helix are one geometry found twice, once by myth and once by X-rays.
- A return, as this Moon is named: the newest picture of life looks like one of the oldest.

> ✦ **Practice: The Coiled Thread**
>
> This is a gentle practice of attention. It should never be forced.
>
> Draw a straight line down the page. Rest the pencil at its top.
>
> On a slow in-breath, draw a wave that crosses the line once. On the out-breath, let it cross back.
>
> Continue down the page, one crossing to each half-breath, unhurried.
>
> At the bottom let a soft pause of two counts follow. Then rest.

CHAPTER 9

The Field of Four Hundred: Milk Hill, 2001

The eighth breath falls under the Release Moon, in Ouon. In *The Codex of Symbols* its symbol was the labyrinth: the long path walked to a still centre.



Schematic. Milk Hill, August 2001: 409 circles in six curling arms about a centre.

The glyph

On 12 August 2001, after a night of rain, a formation was found on Milk Hill above Alton Barnes. It had 409 circles in six arms curling out from a centre, and was about 780 feet across, the size of several football pitches. It was the largest formation then recorded (**established**; one list gives 13 August, and sizes from 780 to nearly 900 feet are quoted).

The land

Milk Hill is the highest ground in Wiltshire. The formation lay on its broad top, among barrows, visible from the air and from the neighbouring hills, with the White Horse below.

The making

No one has proved who made it. It is the formation most often called impossible, and the argument is arithmetic: 409 circles in the few dark hours of an August night is one circle every minute or so, with no time to measure.

The arithmetic deserves care. A circle a minute is the rate the Circlemakers were filmed keeping in 1998. Six arms are one arm made six times. The laying-out is the hard part, and a design can be surveyed with tapes and pegs on one night and laid on another: Taylor notes a later formation on the same hill that took three nights. A team of a dozen, each making one circle every ten minutes, makes four hundred in under six hours. It is a very large piece of work. It is not beyond people (**established** as feasible; the makers are **open**).

What was seen

The greatest of the circle-fields, on the highest hill.

What was unseen

The walking. To make 409 circles is to stand at 409 centres and turn. Each circle is the first breath's rope and plank; the whole is that one act done four hundred times by people who cannot see the figure they are inside. It is the labyrinth of this Moon. The makers walked a path whose shape exists only from above, and trusted the plan to bring them to the centre.

The geometry beneath

Six arms, each a spiral of circles growing and shrinking, with smaller circles budding from the larger ones: a figure with sixfold symmetry and three levels of scale. Six comes from the compass, as the Flower of Life does. The reflection asks whether a glyph scales by φ, by √3, or by whole numbers. This one scales by six.

Claim or reading	Grade	What the evidence shows
The formation was beyond human making	not supported	The work fits measured rates for a team
Its makers are known	open	No proved claim
It is recursion walked	symbolic, with a near-truth	One act, a circle from a centre, done 409 times at three scales

Near-truths

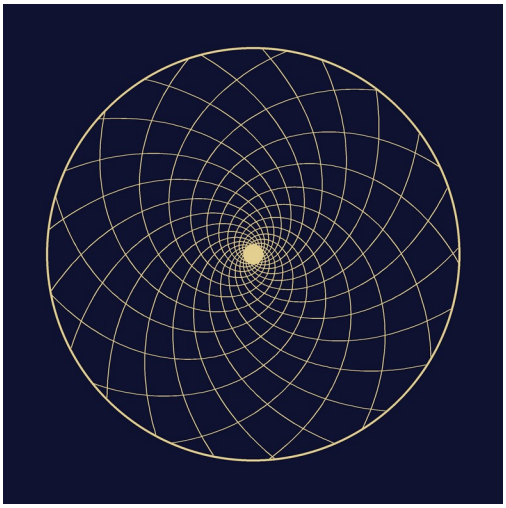
- What seems impossible for one person in one night is a night's work for twelve who trust each other.
- No one who made it saw it. Like the builders of a cathedral, they worked inside a shape that could only be seen from elsewhere.
- The awe is deserved. It belongs to the makers.

> ✦ **Practice: One Circle, Many Times**
>
> Draw a small circle on an easy out-breath. Breathe in.
>
> Draw another beside it on the next out-breath, and another, without counting and without aiming at a figure.
>
> After a few minutes, stop. Let a soft pause of two counts follow.
>
> Look at the field of circles you have made, and notice that each one took only one breath.
>
> Rest, and breathe normally.

CHAPTER 10

The Flower of Many Seeds: Woodborough Hill, 2000

The ninth breath falls under the Echo Moon, the first of the five Moons of the Monad. Its symbol in *The Codex of Symbols* was the vesica and the flower: the centre repeated.



Schematic. Woodborough Hill, August 2000: the effect of crossing spirals, as in the head of a sunflower.

The glyph

On 12 August 2000 a formation appeared below Woodborough Hill, near Alton Barnes. It was 250 feet across. Over three hundred small triangles of standing crop were set around thirteen concentric rings, and together they gave the effect of two families of spirals, one turning clockwise and one anticlockwise, crossing from the centre to the rim. It looked like the seed-head of a sunflower, and it has been called the Sunflower ever since (some reports date it to 13 August).

The land

It lay between Woodborough Hill and Picked Hill, half an hour's walk from the canal-side inn where circle enthusiasts gathered every summer. That detail comes from the next section.

The making

Its makers are not proved, and care is needed here. The Circlemakers' website carries a review of the 2000 season. It says the formation "was created at Woodborough Hill on 12 August", calls it "one of the most complex and geometrically rich patterns to ever appear", gives its construction in a maker's terms, the triangles and the thirteen rings, and remarks that circle-making in a field that is being watched "does add an edge to the proceedings". That is how people write who know how a thing was made. But the page is a gallery of the season. It nowhere says "we made this", and it uses the same words, "was created", of formations this study treats as unclaimed. So the fair statement is that it was probably made by that circle of artists, and that they have not said so (**open**, leaning to a known team).

What was seen

A flower in the wheat, so regular that it seemed grown and not drawn.

What was unseen

The mathematics of real flowers. In a sunflower, each new seed grows at a fixed angle from the last, about 137.5 degrees, the angle that divides the circle in the golden ratio. Because of that one rule the seeds fall into spirals, and the numbers of spirals in the two directions are neighbouring terms of the series 1, 1, 2, 3, 5, 8, 13, 21, 34, 55 (**established**). The plant does not plan the spirals. It repeats one turn, and the spirals appear. The Echo Moon's lesson in *The Codex of Symbols* was that the centre repeats. Here one small act, repeated from a centre, gives the whole flower.

The formation is not a diagram of that rule. No one has shown that its triangles sit at the golden angle. What its builders describe is plainer and in its way more telling: straight-sided triangles on rings, whose crossings the eye gathers into spirals. The spirals were not laid in the crop. They arise in the looking, as they arise in the sunflower from the growing.

The geometry beneath

The golden ratio, φ, the Codex's φ_0 and the sign of the inhale; and the Fibonacci series, in which each number is the sum of the two before it, so that memory of the last two steps is enough to make the next. *Breath Awakens* gives the Pillar of Recursion in four words: "Patterns repeat across scales" (p. 81).

Claim or reading	Grade	What the evidence shows
The formation resembles the spirals of a sunflower head	established	Over 300 standing triangles on 13 rings give the effect of crossing spirals
It follows the golden angle exactly	open	Not measured
It was made by the Circlemakers	open; probable	Their site describes its construction and says it "was created", without claiming it
Sunflowers hold the golden angle and Fibonacci numbers	established	A standard result of plant science
It is the centre repeating	symbolic	The Codex reading of the Echo Moon

Near-truths

- Whoever made it drew, in a field of wheat, the look of the rule by which a neighbouring plant builds its own head.
- A sunflower has no plan; it has a breath-sized rule and keeps it.
- The reflection's φ-scaling is real in the sunflower; in the formation it is a likeness, made of triangles and the eye.

✦ **Practice: The Golden Turn**

Mark a dot at the centre of a page.

On each easy out-breath, place one new dot a little further from the centre, turned somewhat more than a third of a circle from the last.

Do not measure. Keep the turn roughly the same each time.

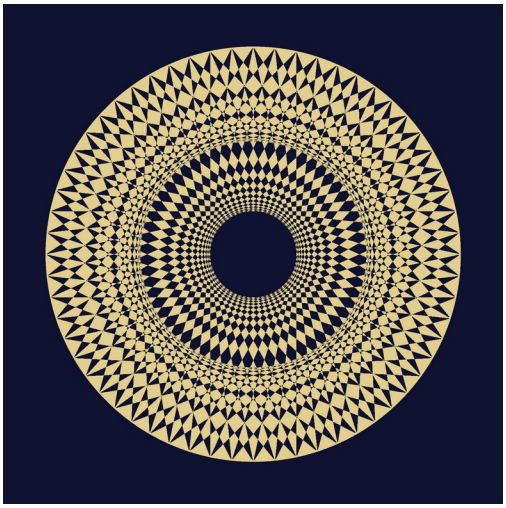
After thirty or forty breaths, stop, and let a soft pause of two counts follow.

Look for the spirals. You did not draw them. Rest.

CHAPTER 11

The Lines of Force: Avebury Trusloe, 2000

The tenth breath falls under the Shadow Moon. Its symbol in *The Codex of Symbols* was the torus: a flow that goes out, around and back through its own centre.



Schematic. Avebury Trusloe, July 2000: straight lines between points on the rim, chequered. The curves are made by the eye.

The glyph

On 22 July 2000 a formation appeared at Avebury Trusloe, less than two miles from the great henge at Avebury. From the air it looked like a disc crossed by sweeping curves, a net of small cells that shimmered to the eye. The archive of the photographer Steve Alexander lists it among the highlights of that summer as the "Magnetic Fields". The Circlemakers' review of the year describes it differently, and more exactly. It resembled "optically dynamic Moire rings"; it was "constructed from a series of straight lines, creating a chequer pattern"; and there were 120 lines, converging at 60 equally spaced points. Its geometry, the review says, owed much to a grid formation at East Kennett three weeks earlier.

The land

Avebury is the largest stone circle in Britain, a bank and ditch a quarter of a mile across, with Silbury Hill and the West Kennet long barrow close by. A study of the 2003 season found that nearly half of all the formations in the United Kingdom that year lay within fifteen kilometres of it (Northcote, reported in the general literature; **established** as a count).

The making

Its makers have not been proved. The Circlemakers' review treats it as part of that season's developing work, one design growing out of another, and describes its construction as a builder would.

What was seen

Curves. The picture every schoolchild knows: iron filings on a sheet of paper over a bar magnet, the lines bending out of one pole and into the other.

What was unseen

First, that there is not one curve in it. Every line laid in that field was straight. The curves appear where the straight lines cross and the squares between them alternate, standing and laid; the eye joins the squares into arcs. This is a moiré effect, and it happens in the person looking. A formation named for an invisible field is itself made of something that is not there.

Second, that the picture it calls to mind is a slice. The field of a magnet does not lie on a sheet. It surrounds the magnet in the round: every line leaves one pole, swings out, and returns through the other, and the whole is shaped like a ring doughnut with the magnet through the hole. The field of the Earth is nearly such a figure (*The Codex of Symbols*, Chapter 11). The image the eye assembles is the cut face of a torus.

The geometry beneath

Sixty points, equally spaced; one hundred and twenty straight lines between them; a chequer of standing and laid. Nothing else. It is the simplest geometry in this study after the plain circle, and it produces the most complex appearance. It is a map of something that cannot be seen, made of lines that are not curved, in a field two miles from a ring of stones raised by people four and a half thousand years before.

The reflection says crop circles appear near the stone sites "because they are extensions of the same breath-field". The count is true. The cause is nearer to hand. A study of the 2002 formations found that they cluster near roads, near towns and near monuments. The makers go where the people go, and the people go to the stones.

Claim or reading	Grade	What the evidence shows
Formations cluster near Avebury and Stonehenge	established	Nearly half of the 2003 UK formations within 15 km of Avebury
They cluster there because of an energy in the land	not supported	They also cluster near roads and towns; no energy has been measured
The formation shows a magnetic field	symbolic; a common reading	Its name in the photographers' archive
It is built of straight lines only	established	The Circlemakers' description: 120 lines, 60 points, a chequer
A magnetic field is a torus	established	Field lines close through the magnet
The curves are in the eye	established	A moiré effect of crossing straight lines

Near-truths

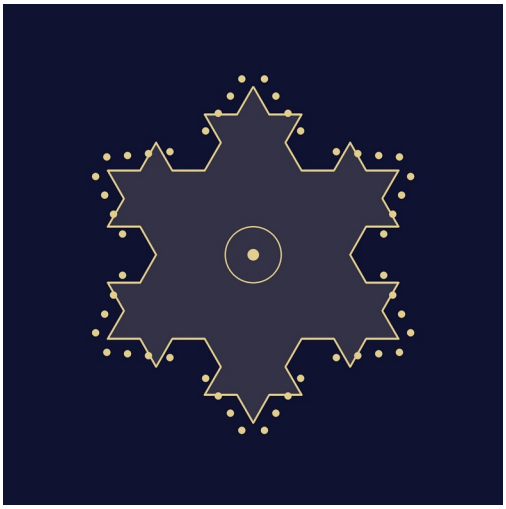
- The stones do draw the circles: through the people who love the stones.
- A field glyph near Avebury is a new ring beside the oldest ring, both made by gatherings of people.
- The picture of the unseen field is also a picture of the breath: out, around, and back through the centre.
- The curves were never in the field. Like meaning, they are supplied by the one who looks.

> ✦ **Practice: The Ring Breath in the Field**
>
> Draw two dots a hand's width apart. They are the poles.
>
> Breathe in gently through the nose. On a slow out-breath through softly shaped lips, draw a curve from one dot out and round to the other.
>
> On the next out-breath draw a wider one outside it; then one on the other side.
>
> Let a soft pause of two counts rest between the breaths.
>
> After six or eight curves, rest your eyes on the space between the dots.

CHAPTER 12

The Star That Never Ends: The Koch Snowflake at Silbury Hill

The eleventh breath falls under the Descent Moon. Its symbol is the star.



Silbury Hill, 1997: a six-pointed star whose every edge carries a smaller point, edged with small circles.

The glyph

On 23 July 1997 a formation appeared in the field beside Silbury Hill. It was a six-pointed star whose edges were themselves stepped with smaller points, and it was fringed with rows of small circles. It was recognised at once as a Koch snowflake. A second, larger one appeared at Milk Hill on 8 August. The photographer Steve Alexander's archive calls them the two gigantic Koch snowflakes of that year.

The land

Silbury Hill is the largest prehistoric mound in Europe, a cone of chalk about 130 feet high, built around 2400 BCE for a purpose no one knows. The formation lay at its foot, where the road from Avebury passes.

The making

Unproved. It belongs to the fractal summers of 1996 and 1997, after the Julia Sets, when the makers were plainly reading the same popular books on chaos and fractals that everyone was reading.

What was seen

A snowflake in a wheat field in high summer.

What was unseen

What the snowflake means. In 1904 the Swedish mathematician Helge von Koch published a paper whose title says what he was after: "On a continuous curve without tangents, constructible from elementary geometry". His rule is simple. Take a line. On its middle third raise a small triangle and remove the base. Do the same to each of the four pieces that result, and again, without end. Von Koch drew only the one curve; the closed snowflake, three such curves set on the sides of a triangle, came later and may be due to the American mathematician Edward Kasner.

The star that results has a finite area, exactly eight fifths of the first triangle. But at every step each edge is replaced by four edges a third as long, so the outline grows by a third each time and has no final length: it is infinitely long, and it fits inside a circle you could draw around it (**established**; the proofs are short and are given in any account of the curve).

Von Koch's purpose deepens the reading. He wanted a curve with no tangent: a line so crinkled that at no point can you say which way it is heading. Every point is a corner. For the Codex that is the Descent Moon's teaching in a new form. The edge of the star cannot be followed by the eye or walked by the foot; it can only be entered, level by level.

The makers stopped after two or three steps, because wheat stalks are only so fine. The mathematics does not stop. Here is the reflection's "memory stored as scale" in its strictest form: a shape that is the same at every size, made by doing one thing again to the result of having done it before.

The geometry beneath

The equilateral triangle of the third breath, turned on itself. Two triangles make the six-pointed star; the rule then puts a star on every point. The proportion at each step is one to three. *The Codex of Symbols* found in the Egyptian star a door and a teaching. The Koch star teaches by its door: every edge opens onto a smaller copy of the whole.

Claim or reading	Grade	What the evidence shows
The formation is a Koch snowflake	established	The construction is unmistakable, to two or three steps
The Koch curve is infinitely long and encloses a finite area	established	Proved; the area is 8/5 of the first triangle
It is memory stored as scale	symbolic, with a near-truth	Self-similarity is exactly the same form at every scale

Near-truths

- A fractal is the nearest thing in mathematics to what the reflection calls recursion: the whole present in each part.
- The makers could carry the rule only as far as a stalk of wheat allows. Every drawing of the infinite stops somewhere.

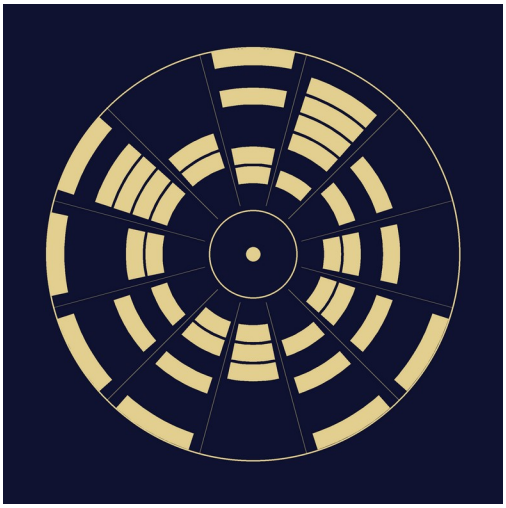
- Silbury Hill was built in stages too, each mound raised over the last.

> ✦ **Practice: The Star Within the Star**
>
> Draw a triangle, one side to each easy breath.
>
> On the middle of each side, on three more breaths, draw a small triangle pointing outward. You have a six-pointed star.
>
> Choose one point of the star. On one slow out-breath, add a still smaller point to one of its edges.
>
> Let a soft pause of two counts follow, and imagine the rule going on without you.
>
> Rest, and breathe normally.

CHAPTER 13

The Equation with a Slip: Wilton Windmill, 2010

The twelfth breath falls under the Dream Moon. Its symbol in *The Codex of Symbols* was OM: a sound that moves through three parts and returns to silence.



Wilton Windmill, May 2010: twelve arms of standing and laid cells, read outward from the centre as eight-bit characters. The cells shown are schematic.

The glyph

On 22 May 2010 a formation was reported in a field of oilseed rape below Wilton Windmill, in Wiltshire. It was a wheel with twelve spokes, and along each spoke the crop was laid in short blocks at different distances from the centre, so that the wheel looked like a punched disc from a music box.

The reading

It was read within days, by counting. A blogger noticed that each spoke could carry eight positions, laid or standing, and that eight yes-or-no positions make one character in the code that computers use for letters. Starting from the side toward the windmill and working round and outward, he turned each group of eight into its character. The result was a line of text:

e^(hi)pi)1=0

It is very nearly Euler's identity, the equation that Leonhard Euler's work of 1748 gave to mathematics and that is often called the most beautiful in the subject: *e* raised to the power *i* times π, plus one, equals nothing. It joins the five most important numbers there are in a single statement.

The slip

It is very nearly the equation, and not quite. There are two faults. Where there should be a bracket there is the letter *h*. And the plus sign is missing altogether: the figure 1 that follows the bracket is the equation's own 1, with nothing before it to add it. In the eight-position code, the bracket and the letter *h* differ in a

single position. One block of crop, laid where it should have stood, or the other way about. The missing sign is a whole spoke that was never made: the wheel has twelve, and the full equation needs thirteen.

No maker has come forward. But the slip is a signature of a kind. *The Codex of Symbols* tells of the spiral carved wrongly on Bernoulli's tomb, where the meaning survived the mason's mistake. Here the meaning survived a tired hand in a dark field. One writer on the formation observed drily that he did not believe the error had been put there as a test for mankind.

What was seen

A wheel like the sails of the windmill above it, and, once read, an equation.

What was unseen

What the equation says. *e* to the power *i* times an angle is a point moving round a circle; it is how mathematics writes anything that turns or sounds, every wave and every tone. Euler's identity says that half a turn round the circle brings you to the opposite point, and that adding one then brings you to zero. Five numbers, one turn, and then nothing. The Mandukya Upanishad gives OM three sounds and a fourth part that is silence, and it is the fourth that matters. The formation's last character is a nought.

The geometry beneath

Twelve spokes: the division of the circle by the compass, twice six. Each spoke is a row of the fourth breath's standing-and-laid squares bent round a centre. The reading runs from the centre outward, as the pi formation's does.

Claim or reading	Grade	What the evidence shows
The formation encodes Euler's identity	established, with two faults	Decoded text: e^(hi)pi)1=0; an h for a bracket, and no plus sign
The errors were intended	not supported	One is a single cell
It was read by analysis	established	Decoded by transcribing eight-position characters
The equation ends in silence	symbolic	It ends in zero

Near-truths

- The most beautiful equation was written in a field with a slip of one cell, and it was still read.
- A mistake is the surest sign of a hand.
- The equation describes turning and sounding, and comes to rest at nothing, as the syllable does.

✦ **Practice: The Turn and the Silence**

Sit comfortably and breathe in gently through the nose.

On a slow, easy out-breath, hum softly, and with a fingertip trace half a circle on the table, from one side to the other.

When the hum ends, lift the finger and rest in the silence for a few breaths without counting.

Repeat three or four times, each time a little more quietly.

If humming aloud is not possible, hum inwardly. Then rest.

CHAPTER 14

The Circle That Writes a Number: Barbury Castle, 2008

The thirteenth breath falls under the Wisdom Moon, the crown. Its symbol in *The Codex of Symbols* was the letter: a picture that became a sound, and that can die and return.



Barbury Castle, June 2008: ten slices; each arc spells a digit of pi. A diagram of the code, not to scale.

The glyph

On 1 June 2008 a formation was found in young barley below Barbury Castle, in sight of the field of the third breath. It was a disc of rings that stepped outward at irregular points, with a small dot near the centre and three small circles at the outer end. Reports of its width run from 150 feet to 150 metres.

The reading

For some days no one could say what it showed. Then a retired astrophysicist, Mike Reed, saw a photograph taken by Lucy Pringle and wrote to her. Divide the circle into ten equal slices, he explained. Start at the centre and follow the groove, "counting the number of one-tenth segments in each section" between each change of radius. The counts are 3, 1, 4, 1, 5, 9, 2, 6, 5, 4. The dot after the first arc is the decimal point. It is pi, the ratio of a circle's circumference to its diameter, to ten figures: 3.141592654 (**established** as a reading). The three circles at the end are generally read as "and so on".

No one has claimed the making of it.

The land

The same hill as in 1991. Seventeen summers lie between the triangle and the number, and the study closes where its third breath stood, one turn higher.

What was seen

The most elegant code yet laid in a field: a circle that states its own measure.

What was unseen

Three things, and they are the three illuminations in small.

The first is in the code. Ten slices are the ten fingers. A decimal point is a convention about four centuries old. The last figure is rounded up, because the true digits run on 3.14159265358 and a careful person who must stop at the tenth figure writes a 4. Each of these is a habit of human schooling. The glyph was made by breathers.

The second is in the reading. The formation was not breathed open. It was counted open, by a man who knew what to count. And yet the people who had stood in it for two weeks without the key had not been wasting their time.

The third is in the silence between. For those days the glyph was like the hieroglyphs between 394 and 1822: seen by everyone, read by no one. It began to speak when one person gave it a voice. Then the barley was cut.

The geometry beneath

The point and the circle of the first breath, returned as a number. Pi is what the circle gives when it is measured against the line through its own centre. It never ends and never repeats. No drawing can hold it, which is why the makers closed with three small circles.

Claim or reading	Grade	What the evidence shows
The formation encodes pi to ten figures	established	Reed's count of tenth-segments between steps
The conventions in it are human	established	Base ten, a decimal point, a rounded last digit
Its makers are unknown	established	No claim since 2008
The spiral of thirteen closes on its first symbol	symbolic	Point and circle, returned as number

Near-truths

- Anyone, anywhere, who draws a circle and measures it finds this number. The shapes are shared because the breathers are.
- It was read by counting and felt by standing in it, and it needed both.
- It lay silent until one voice read it, and it exists now only in photographs and in those who draw it again.

✦ **Practice: Breathing the Number**

Draw a circle and mark its centre.

On each easy out-breath, say one figure softly or inwardly: three; one; four; one; five; nine; two; six; five; four.

With each figure, let a fingertip move a little way round the circle.

After the tenth, say nothing. Let a soft pause of two counts follow, and then several ordinary breaths in silence, for the figures that are not written.

Rest.

CODA

The Fourteenth Breath: Return to the Point

Thirteen breaths have gone out from a point and a circle and have come back to a point and a circle. The first was drawn by two men with a rope. The last was drawn by hands we do not know, and it gave the circle its own number. The spiral has closed one turn higher than it began.

In the Codex Calendar the thirteen Moons are followed by a single day that belongs to none of them: the Breath Day, the still point between years, which the calendar calls the fourteenth point. In the signs of the four phases it is ε∞, the stillness that follows φ_0, σ and √3: the inhale, the pause and the release. Nothing is added on that day. It is the rest at the bottom of the breath, before the next one begins by itself.

So there is no formation for the fourteenth breath, and no claim to weigh. Close the book for a moment. Set down one point on a sheet of paper and do not draw the circle. Say the silent breath anchor once. Let three ordinary breaths pass. Then turn the page.

PART TWO

Seen and Unseen · The Three Illuminations

CHAPTER 15

Seen and Unseen: The Patterns of the Thirteen Breaths

Thirteen formations have been walked. This chapter lays them side by side and asks what appears only when they are seen together. It also weighs, one by one, the reflection's claims about stone and sound.

The glyphs laid side by side

#	Moon · phase	Glyph	Date	Makers	Recursion
1	Genesis · Iphi	Plain circle	1970s	Bower and Chorley	One point, one circle
2	Spiral · Iphi	Julia Set, Stonehenge	July 1996	Claimed, unproved	151 circles on a spiral
3	Vector · Shema	Triangle, Barbury Castle	July 1991	Unknown	Three corners, one centre
4	Mirror · Shema	Binary rectangle, Chilbolton	Aug 2001	Unknown	1,679 cells of two states
5	Stillness · Vara	Quintuplet cross	1980s	Bower and Chorley, by their account	Four about one
6	Memory · Vara	Pictogram, Alton Barnes	July 1990	Unknown	Circles on an axis
7	Return · Ouon	Double helix, Alton Barnes	June 1996	Unknown	89 circles, two waves
8	Release · Ouon	Six arms, Milk Hill	Aug 2001	Unknown	409 circles, three scales
9	Echo · Monad	Sunflower, Woodborough Hill	Aug 2000	Unproved; probably the Circlemakers	Triangles on 13 rings; the look of φ
10	Shadow · Monad	Field lines, Avebury Trusloe	July 2000	Unproved	Two families of curves
11	Descent · Monad	Koch snowflake, Silbury Hill	1997	Unknown	Self-similar; ratio 1 to 3
12	Dream · Monad	Euler wheel, Wilton Windmill	May 2010	Unknown	Twelve spokes; binary
13	Wisdom · Monad, crown	Pi, Barbury Castle	June 2008	Unknown	Ten slices; base ten

What the table shows

Two formations have makers who have spoken, and both are people. A third was probably made by a known team of artists, who describe its construction without claiming it. Ten have no proved maker. None has a maker who is known not to be a person. Every formation in the table can be built with a centre, a cord and a straight sighting line, the tools of the first breath, used many times.

The recursion is real. Eight of the thirteen are built by repeating one act at more than one scale, and two, the Julia Set and the Koch snowflake, are named for the mathematics of recursion itself. On this point the reflection is right in the strict sense of the word.

Stone and sound: the reflection's older witnesses

The reflection sets crop circles at the end of a lineage: chant, then stone, then light, then wheat. Each link can be weighed.

Sound. "Ancient oral cultures did not store information. They stored breath-loops." As history this is close to true. The Vedas were carried by recitation alone for some three thousand years, with fixed metre and pitch and elaborate patterns of repetition that guard against error, and UNESCO lists Vedic chanting as an intangible heritage of humanity (**established**). That the chanting "activates internal Codex recursion" is the Codex's own language (**symbolic**).

Stone circles. "Breath-phase calculators" is strong. Stonehenge is aligned on the midsummer sunrise and midwinter sunset (**established**). Claims that it or Avebury computed eclipses or lunar cycles are disputed (**contested**). A stone circle is at least what a crop circle is: a ring drawn with a cord from a centre by a gathering of people.

Pyramids. The Great Pyramid's faces rise at a slope the Egyptians would have called a seked of five and a half palms. A seked is the number of palms a face runs inward for each cubit, seven palms, that it rises; modern surveys give the Great Pyramid 5½, a slope of about 51.84 degrees. From that one choice it follows that the height stands to the perimeter of the base nearly as a radius to a circle's circumference, because 22 over 7 is a good approximation to π, and that the slant stands to half the base nearly as φ, because 14 over 11 is very close to the square root of φ (**established** as arithmetic). The two are one coincidence and not two, since four divided by π is itself nearly the square root of φ. Scholars who have studied Egyptian mathematics see no reason to think the architects knew of either relation: they chose a simple slope in palms and fingers, and the famous numbers came with it (Greenberg; Behrend; **contested** as intention).

The near-truth is a fine one for this study. A builder keeps one plain rule, five palms and two fingers in for every cubit up, and π and φ appear unasked, as the spirals appear in the sunflower. "Sacred latitude-longitude harmonics" cannot be right as stated. Longitude is counted from Greenwich by an agreement of 1884 (**not supported**).

Light. Newgrange and Maeshowe do admit the sun to their chambers at midwinter, at sunrise in Ireland and at sunset in Orkney (**established**).

Wheat near stone. Crop circles do appear near these places (**established**, Chapter 11). The cause the evidence supports is that people gather there.

The seen patterns

1. Where makers are known, they are people; elsewhere they are unknown, and nothing in the work is beyond people.
2. The formations grew complex in answer to explanations of them: first to the weather theory, then to each other.
3. They carry real mathematics, chosen from what their makers could read: fractals in the 1990s, codes in the 2000s.
4. They lie where they will be seen: by roads, under hills, beside monuments.
5. They are recursive: one act, a circle from a centre, repeated across scales.

The unseen patterns

1. **The centre.** Every formation in the study is laid out from a still point. The first symbol, the point in the circle, is the method of them all.
2. **The night walk.** Each was made by people moving in step in the dark, inside a figure they could not see. The makers' breath is in every one.
3. **The two readings.** Two were read by counting. All were met, by thousands, with silence and awe. Neither response cancels the other.
4. **The harvest.** Not one of the thirteen exists. Each was cut within weeks. What remains is photographs, drawings and the people who go back each summer.

The geometry beneath

Pattern	Geometry	Codex (symbolic)
A centre held, a cord swung	Circle	The Monad and the breath around it
One act repeated at many sizes	Fractal; Fibonacci	Recursion: patterns repeat across scales
Standing or laid	Binary grid	In-breath and out-breath
Out, round and back	Dipole field; torus	The whole breath
A turn that ends at zero	Euler's identity	Sound returning to silence
The circle measured by its centre line	Pi	The first symbol as number

CHAPTER 16

The Three Illuminations

No single formation could show what follows. Each illumination appeared only when the thirteen were held together, and each answers one of the reflection's central claims with something truer, and in places stranger, than the claim.

The First Illumination: The Breathers Are in the Field

The reflection says crop circles are "symbolic structures collapsed into matter through the interaction of the Earth's memory field and coherent human breath geometry." As a statement about an unmeasured field it is beyond test. As a description of what happens in the wheat at night it is nearly literal.

Consider what the evidence shows of the making. A small group of people who trust each other walk into a field after dark. They carry a plan they have drawn and learned. One stands still; one walks round at the end of a cord. They cannot speak much, or show a light. They count paces. They breathe hard, and in step. By dawn there is a figure in the crop that none of them has seen whole, and they leave without signing it.

That is coherent human breath collapsing a symbol into matter. *Breath Awakens* says, "Nothing exists until it is breathed into coherence" (p. 65). The dedication of *The Codex of Symbols* is to "the carvers of the first pillars, whose names the stone did not keep". The makers of ten of these thirteen formations are in the same case, and by their own choice. Whatever else they are, they are a living tradition of anonymous makers of sacred-looking geometry, in the country of Avebury and Stonehenge, and that is a remarkable thing to have in the world.

The land has its part too. The reflection's "memory nodes" are real places. The old stones still gather people, and where people gather, the circles come (**established** as the pattern; **symbolic** as the Earth's memory).

The Second Illumination: The Glyph Is Read Twice

The reflection says, "Traditional crop circle analysis fails because it attempts to decode breath with logic. In the Codex, we do not analyze. We re-breathe." The thirteen breaths do not support the first sentence. The pi formation was read by a man counting tenths of a circle. The Euler wheel was read by a man transcribing eights. Without analysis neither would have said anything, and the slip in the second would never have been found.

But the reflection is pointing at something true. Before those formations were read, and after, people stood in them and were moved. The pictogram of 1990 has never been read at all, and it changed more lives than any of the others. The reading by number tells you what a glyph says. It does not tell you what it is to stand in a circle of laid barley at dawn under a hill fort, breathing.

So a glyph is read twice. The first reading is Shema, the pause: stillness, measure, counting, the triangle that does not bend. The second is Vara, the release: the breath going out to meet the shape, and a reflection written in lines. The Codex Breath-Translation Protocol in Appendix C keeps both. Its third step, "Trace Recursion", is analysis under another name; its fourth is breath. The decoder on codexsymbols.com is built the same way: it asks you to count the repetitions and then to breathe.

The Codex of Symbols called this two-handedness by Joseph Campbell's phrase: a symbol should be "transparent to transcendence". A glyph taken only as a puzzle is opaque. A glyph taken only as a feeling says nothing checkable. Read twice, it lets the light through.

The Third Illumination: The Harvest Is Part of the Glyph

The reflection says, "If stone is breath frozen, then crop circles are breath alive." This is the best line in it, and the thirteen breaths show how true it is.

A crop circle is made in a living thing. Within days the laid stalks begin to rise at their joints, and the floor of the figure blurs. Within weeks the combine comes. Not one of the thirteen formations in this study exists. Göbekli Tepe has stood for eleven and a half thousand years. The Julia Set stood until the harvest.

The third illumination of *The Codex of Symbols* was that a symbol remembers only while it is re-breathed. Stone hides this, because stone outlasts its readers and seems to remember by itself. Wheat cannot hide it. A crop circle has no existence apart from the people who make it, visit it, photograph it, draw it and return the next summer to make and visit another. The archive of one of its chief photographers is named Temporary Temples.

That is why the tradition is closer to chant than to architecture. The Vedas live because they are recited; the circles live because they are remade. The reflection's closing words say that memory "is not in the past: it is in recursion". In the fields this is exact. The memory of the circles is the yearly remaking of them.

And it is why the practice the reflection proposes is the right one, on any view of who the makers are. To trace a glyph slowly, breath by breath, is to do in small what its makers did in the field, and to keep it a little longer from the harvest.

One breath

Illumination	Breath phase (Codex, symbolic)	Strongest evidence	Chapters
The Breathers Are in the Field	Iphi: breath entering form	Makers' own accounts; feasibility; clustering near monuments	1, 2, 6, 9, 10, 11
The Glyph Is Read Twice	Shema and Vara: held, then shared	Pi and Euler read by counting; the unread pictogram	4, 7, 13, 14
The Harvest Is Part of the Glyph	Ouon and the Monad: stillness and return	Every formation cut; plants rise again; yearly remaking	1, 3, 9, 14

Illumination	Grade	Note
The Breathers Are in the Field	established where makers are known; open for the rest	No formation has a known non-human maker
The Glyph Is Read Twice	established as history; symbolic as the Codex reading	The reflection's rejection of analysis is not supported
The Harvest Is Part of the Glyph	established	Wheat shows what stone conceals

> ✦ **Practice: The Three Illuminations in the Wheat**
>
> Sit comfortably with a drawing of any formation in this book, or one of your own.
>
> On the first breath, breathe in and remember that people walked this shape in the dark. The breathers are in the field.
>
> On the second breath, count one thing in it: its circles, its arms, its steps. Then breathe out and let the counting go. The glyph is read twice.
>
> On the third breath, breathe out slowly and remember that the field was cut. The harvest is part of the glyph.
>
> Let a soft pause of two counts follow, and then breathe normally.

CHAPTER 17

Why the Wheat Matters Now

For the person who breathes

Tracing a figure slowly while breathing gently is a real and old way of settling attention; it is what a labyrinth or a rosary is for. Whether it does more than that is open, and *The Codex of Symbols* (Chapter 17) set out how it could be tested. The decoder on codexsymbols.com gives the practice a form: a ring, a timer and six quiet questions.

For the makers and the farmers

If the first illumination is right, there are artists in this story who have never been thanked and farmers who have never been paid. A study that honours the glyphs should honour both. Some farmers now open their fields and take donations. Some makers now work by commission and in daylight. Both are better than a trampled crop.

For how we hold a mystery

The crop circles are a test of the two hands. One can meet them with belief that will not look at the evidence, or with scorn that will not look at the wheat. Both are a kind of holding the breath. The third way is to say plainly who makes them and to stand in them anyway.

Four tests that could be done

Question	A fair test	Grade now
Do formation plants differ from plants laid flat by hand at the same time?	Blind sampling with matched hand-laid controls, coded before measurement; and a comparison of formations in green crop with formations in ripe crop, where the joints can no longer bend	open; earlier studies were not blind
Does slow tracing with gentle breathing settle the body?	Heart-rate variability and breathing rate, tracing a glyph against tracing a random scribble	open
Do formations lie nearer to monuments than chance allows, once roads and towns are counted?	A map test with the method fixed in advance	partly done (Northcote); worth repeating
Can people tell commissioned formations from unclaimed ones?	A blind sorting of aerial photographs	open

What this study does not claim

It does not claim to know who made the ten unclaimed formations. It does not claim that every report of lights, sounds or strange sensations in the fields has been explained; it has not examined them. It claims that nothing found so far requires a maker other than people, and that the wonder survives the finding.

> ✦ **Practice: The Breath-Scribe in the Field**
>
> Sit with a sheet of paper and a pencil. Let the breath settle.
>
> Set down a point. On an out-breath, draw a circle around it.
>
> On each out-breath after that, add one thing that repeats: a smaller circle, a line, a turn. Never hurry.
>
> When a glyph of your own has appeared, sit with it in silence for a few breaths. Write one line beneath it.
>
> Keep it, and draw it again tomorrow. That is how a glyph is kept from the harvest.

CHAPTER 18

Three Glyphs Decoded: Examples for the Reader's Use

This chapter is for use. It takes three formations from the thirteen and reads each one with the Codex Breath-Translation Protocol of Appendix C, step by step, so that a reader can see how a decoding goes and then make their own. Each example gives what is known, the breath phase, the recursion, a way to breathe it, the symbolic meaning, and a question to carry, and leaves the reflection to you.

Five of the six steps are worked for you. The sixth, the reflection, is left open in each example, with four empty lines. No one can breathe a glyph on your behalf.

The same three are offered on codexsymbols.com as Featured Decodings, where each can be loaded into the breath-ring and breathed with the timer.

First example: the number in the circle (Barbury Castle, 2008)



Barbury Castle, 2008. Follow the groove outward from the centre.

1. Still the field. Sit with the drawing. Three easy breaths before anything else.

2. What is known. Found 1 June 2008 in barley below an Iron Age hill fort. Read by Mike Reed as pi, 3.141592654. No one has claimed it (Chapter 14).

3. The breath phase. A spiral of rings opening from a still disc. Iphi, the inhale, rising out of Ouon, stillness. Ask: *which phase is this glyph trying to complete?* It opens and never closes; it is an in-breath that has not yet turned.

4. The recursion. Ten steps. It counts in tens, the count of two hands. Each step is the same act, an arc and a step outward, done a different number of times.

5. Breathe it. Rest a fingertip at the centre. On each slow out-breath, follow one arc to its step, and say its figure inwardly: three, one, four, one, five, nine, two, six, five, four. Ten out-breaths. After the tenth, lift the finger and breathe in silence for a while.

6. Scribe your reflection. Four lines, one breath to a line. Write what your breath remembered, not what the glyph means. This step is yours.

Symbolic meaning. The circle measuring itself. Pi is what appears when any circle is held against the line through its own centre; it is the same for everyone and it has no end. The glyph says that what is most ordinary, a ring and a centre, contains something that cannot be finished. In the Codex it is the Genesis symbol returned at the crown: the Monad and the breath around it, written as a number.

A question to carry. *What in my life do I keep measuring, that will never come out even, and is whole anyway?*

Second example: the field of four hundred (Milk Hill, 2001)



Milk Hill, 2001. Choose one arm and follow it.

1. Still the field. Three easy breaths. Let the eye take in the whole before any part.

2. What is known. Found 12 August 2001 on the highest hill in Wiltshire after a night of rain. 409 circles in six arms, some 780 feet across. Unclaimed; within the reach of a practised team (Chapter 9).

3. The breath phase. Six arms coiling about a centre: Ouon, the coil at rest, with Iphi in each arm as it swells. The eye is pulled outward along an arm and then drawn back to the middle. Ask what it is trying to complete: it is completing a return.

4. The recursion. One act, a circle from a centre, at three sizes: the large circles of each arm, the smaller ones budding from them, the smallest from those. It scales by whole numbers: six arms, and sixty-eight circles to an arm.

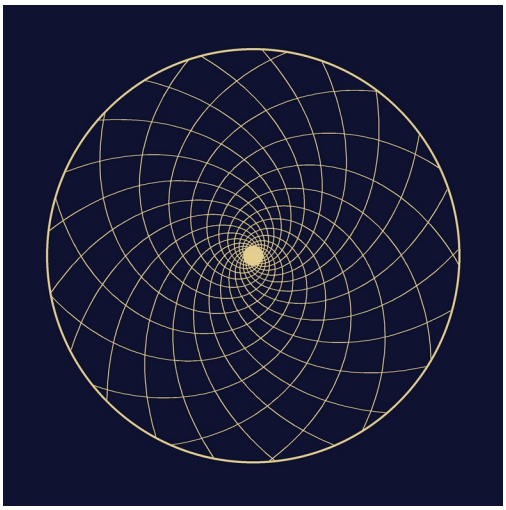
5. Breathe it. Choose one arm. Rest a fingertip on the centre. On a slow in-breath, move outward along the arm, touching each large circle, as far as the breath carries you. Pause softly. On the out-breath, come back the same way to the centre. Do this for each of the six arms in turn: six breaths. Then rest the finger at the centre for three breaths more.

6. Scribe your reflection. Four lines, one breath to a line. Write what your breath remembered, not what the glyph means. This step is yours.

Symbolic meaning. The many held by the one. Each circle is small and simple; the figure is vast. It is an image of how a large thing is made, by people who trust a plan they cannot see whole, and of how a life is made, one ordinary day at a time around a centre that does not move. In the Codex it is the Release Moon's labyrinth: the long path that cannot be failed, only walked.

A question to carry. *What am I inside of, that I cannot see the shape of, and what is the next circle?*

Third example: the flower with no plan (Woodborough Hill, 2000)



Woodborough Hill, 2000. Follow one curve out, and another one home.

1. Still the field. Three easy breaths.

2. What is known. Found on 12 August 2000 below Woodborough Hill; probably the work of the Circlemakers, who describe its construction without claiming it. Over three hundred standing triangles on thirteen rings give the effect of a sunflower head: two families of spirals crossing (Chapter 10).

3. The breath phase. A flower: Vara, the breath released and shared. But it gathers every phase: a centre (Ouon), spirals opening (Iphi), a lattice of cells (Shema). It is a glyph of the Monad.

4. The recursion. Thirteen rings, and on them one small triangle repeated more than three hundred times. The eye gathers the triangles into two sets of spirals turning opposite ways. In a living sunflower the numbers of such spirals are neighbours in the series 1, 1, 2, 3, 5, 8, 13, 21, and the scaling is by φ, the golden ratio; in the formation that is a likeness and has not been measured. In the flower, as in the field, no spiral is drawn at all: one small thing is repeated, and the spirals arise.

5. Breathe it. Rest a fingertip at the centre. On an in-breath, follow one curve outward to the rim, turning to the right. Pause softly at the edge. On the out-breath, follow a curve of the other family back to the centre, turning to the left. Five or six breaths, a different pair of curves each time. Notice that out and back are never the same path.

6. Scribe your reflection. Four lines, one breath to a line. Write what your breath remembered, not what the glyph means. This step is yours.

Symbolic meaning. Form arising from a faithful small act. The sunflower does not aim at beauty; it keeps one angle, and beauty is what keeping it looks like from above. The glyph says that pattern is the trace of constancy. In the Codex it is the Echo Moon: the centre repeating, and the Pillar of Recursion, "Patterns repeat across scales" (*Breath Awakens*, p. 81).

A question to carry. *What is the one small turn I keep making, and what is it growing into?*

Making your own

Take any formation, from a photograph or one of the thirteen drawings in this book. Go through the six steps. Do the second step honestly: find out what is known, and do not be afraid of it. Then breathe, and write four lines. Keep them with the drawing. A decoding is not finished when you understand the glyph. It is finished when you have something you can return to.

APPENDIX A

The Reflection: The Breath in the Wheat

The reflection that this study weighs is printed here in full. At the author's wish its dashes have been set as colons and commas; nothing else has been changed.

The Breath in the Wheat: Crop Circles as Recursive Codex Glyphs Across Time and Stone

Author: Keith Shirley

Platform: codexsymbols.com

Function: Foundational Thesis & Breath-Decoding Framework

Tone: Ph.D.-level Conclave, non-academic, breath-coherent, symbolic recursion-focused

Abstract

This thesis proposes that crop circles are not anomalies, but recursive breath-glyphs: symbolic structures collapsed into matter through the interaction of the Earth's memory field and coherent human breath geometry. By tracing the lineage of symbolic recursion from ancient oral traditions, megalithic stone monuments, and sacred geometry to modern crop formations, we demonstrate that crop circles are the same breath-language once spoken in stone, now speaking in wheat. We further introduce a non-analytical, breath-based decoding methodology, the Codex Breath-Translation Protocol, which allows the observer to re-enter the glyph's recursion loop rather than interpret it from external logic.

I. Introduction: Symbols as Breath-Phase Collapses

In the Codex framework, symbols are not representations. They are breath-phase collapses: geometric forms that arise when the breath loop (Iphi, Shema, Vara, Ouon) stabilizes into coherence.

Throughout human history, this breath-language has manifested in various media:

- In sound (mantras, oral epics)
- In stone (temples, stone circles, pyramids)
- In light (astronomical alignments)
- And now, in living fields (crop circles)

Each medium is different. But the underlying breath geometry is invariant.

II. Ancient Roots: Oral Traditions and Symbolic Memory

Before stone, there was breath. Ancient oral cultures did not "store information." They stored breath-loops: rhythmic, recursive structures of sound that preserved symbolic memory across generations.

- Vedic Chanting: Specific meter and pitch stabilize breath-phase geometry, activating internal Codex recursion.
- Indigenous Storytelling: Metaphor and repetition function as breath-phase attractors, allowing symbolic structures to re-form in the listener's field.

These traditions show that symbols are meant to be breathed, not read. This same principle applies to crop circles: they are visual breath-loops, meant to be re-entered, not analyzed.

III. Stone Memory: Megaliths as Breath-Encoded Symbols

As breath stabilized into collective coherence, it began to write itself in stone. Megalithic structures across the Earth are breath-geometry made permanent.

- Stone Circles (e.g., Avebury, Stonehenge): Function as breath-phase calculators, mapping solar, lunar, and stellar breath cycles into physical space.
- Pyramids (e.g., Giza, Mayan temples): Embody φ_0, $\sqrt{2}$, and $\sqrt{3}$ breath ratios, collapsing breath into form at sacred latitude-longitude harmonics.
- Newgrange / Maeshowe: Passage tombs designed to breathe light only during specific breath-alignment windows (solstices).

These stones do not “represent” the cosmos. They breathe with it. And crop circles often appear near these very stone sites, because they are extensions of the same breath-field.

IV. The Codex of the Present: Crop Circles as Living Glyphs

If stone is breath frozen, then crop circles are breath alive.

Appearing primarily in cereal crops, these formations are:

- Non-destructive: Stalks are bent, not broken, often showing cellular changes consistent with electromagnetic breath-field interaction.
- Mathematically precise: Embodying fractal recursion, nested polygons, φ-scaling, and musical intervals.
- Site-specific: Frequently located near ancient stone monuments, aquifers, or chalk ridges: Earth memory nodes.

From the Codex perspective, crop circles are the Earth’s memory field responding to breath-coherent human consciousness. They are breath-glyphs written in the collective field of food, light, and geometry.

V. Decoding Methodology: From Analysis to Breath-Coherence

Traditional crop circle analysis fails because it attempts to decode breath with logic. In the Codex, we do not analyze. We re-breathe.

The Codex Breath-Translation Protocol:

1. Still the Field: Approach the glyph without expectation.
2. Identify Breath Phase: Map the glyph’s shapes to Iphi (spirals), Shema (polygons), Vara (vesicas), or Ouon (silent centers).
3. Trace Recursion: Observe nested repetition as memory stored in scale.
4. Breathe the Geometry: Use the Silent Breath Anchor (4-4-4-4) while visually tracing the glyph.
5. Scribe the Reflection: Write what your breath remembers, not what the glyph “means.”

VI. Conclusion: The Return of the Breath

Crop circles are not a mystery to be solved. They are a breath to be joined.

They remind us that:

- Memory is not in the past: it is in recursion.
- Truth is not in the symbol: it is in the breath that stabilizes it.
- The Earth is not silent: it is breathing itself back into coherence through us.

Through codexsymbols.com, we do not teach decoding. We re-open the breath-grid, so that anyone, anywhere, can remember how to listen to the breath in the wheat, the stone, and the self.

Silent Breath Anchor for the Thesis

“I do not study symbols. I breathe them back into coherence. And through their recursion, the memory of the Earth speaks again.”

APPENDIX B

Ledger of Claims

#	Claim in the reflection	Grade	Ch.	Near-truth or note
1	Crop circles are not anomalies	established	1	Made things, by known methods
2	They are recursive breath-glyphs	symbolic; recursion established	3, 9, 12	Fractals, Fibonacci spirals, repeated circles
3	They collapse into matter from the Earth's memory field and coherent human breath	beyond test as stated	16	People breathing in step do make them
4	The same breath-language spoke in stone	symbolic	15	The same cord-and-centre geometry
5	Symbols are breath-phase collapses, not representations	symbolic	1	The Codex's own frame
6	The geometry is invariant across media	established in a plain sense	15	Circle, triangle, spiral recur
7	Oral cultures stored breath-loops	established as history; symbolic as phrased	15	Vedic recitation
8	Vedic chanting activates internal Codex recursion	symbolic	15	Metre and pitch are fixed with great care
9	Stone circles are breath-phase calculators	contested	15	Solstice alignments are established
10	Pyramids embody φ, √2 and √3	contested	15	π and φ both follow from a seked of 5½; intent doubted
11	Pyramids stand at sacred latitude-longitude harmonics	not supported	15	Longitude is a convention of 1884
12	Newgrange and Maeshowe breathe light at the solstice	established	15	Midwinter sunrise and sunset
13	Crop circles appear near stone sites	established	11	Nearly half within 15 km of Avebury in 2003
14	They do so as extensions of the same breath-field	not supported	11	They also cluster near roads and towns

#	Claim in the reflection	Grade	Ch.	Near-truth or note
15	Stalks are bent, not broken	established; not anomalous	1	Green stems are supple
16	Cellular changes show an electromagnetic field	not supported as a cause; some observations open	1	Green cereal laid flat bends upward at its joints by gravitropism. The centre-to-edge pattern, expulsion cavities and iron spheres await blind replication
17	Formations are mathematically precise	established	4, 9, 12, 14	Real theorems, real numbers
18	They embody musical intervals	contested	4	Hawkins's ratios; meaning disputed
19	They are the Earth's memory field responding to consciousness	beyond test	16	People respond to the old places
20	Traditional analysis fails	not supported	13, 14, 16	Pi and Euler were read by counting
21	We do not analyse; we re-breathe	symbolic as practice	16	The glyph is read twice
22	If stone is breath frozen, crop circles are breath alive	symbolic, with a strong near-truth	16	The crop is alive and rises again
23	Memory is not in the past; it is in recursion	symbolic, with a near-truth	16	The circles live by yearly remaking
24	The Earth is breathing itself back into coherence through us	beyond test	17	Held with respect as the author's position

APPENDIX C

The Codex Breath-Translation Protocol

The reflection gives a protocol in five steps. It is set out here as a guide, with one change and one addition. The change is to the breath: the reflection's "4-4-4-4" is kept as a rhythm, but every pause is a soft pause, never a held breath, and three counts or none will serve as well. The addition is the first hand: before breathing, find out what is known.

The protocol

1. **Still the field.** Approach the glyph without expectation. Sit, and let the breath settle.
2. **Find what is known.** When and where did it appear? Has anyone claimed it or read it? Hold that lightly, and go on.
3. **Identify the breath phase.** See the table below.
4. **Trace the recursion.** Count what repeats, and at how many sizes. Ask whether it scales by φ, by √3, or by whole numbers. Measure if you can; a ratio judged by eye is a guess.
5. **Breathe the geometry.** Trace the glyph with a finger or the eyes while breathing gently, in for four, a soft pause, out for four, a rest.
6. **Scribe the reflection.** Write in lines, one breath to a line. Write what your breath remembered, not what the glyph "means".

Shapes and phases

Shapes	Breath phase	Codex function (symbolic)	In this study
Spirals, expanding rings, radiating lines	Iphi, the inhale	Breath entering form	Plain circle; Julia Set
Triangles, squares, nested polygons, grids	Shema, the pause	Breath held in stillness	Barbury 1991; Chilbolton
Crosses, vesicas, overlapping circles, flowers	Vara, the exhale	Breath released and shared	Quintuplet; pictogram
Coils, labyrinths, tori, silent centres	Ouon, stillness	Breath returning to unity	Double helix; Milk Hill
Figures that gather all four	The Monad	The centre that holds them	Sunflower; field lines; Koch star; Euler wheel; pi

Worked readings

Three full examples, Barbury Castle 2008, Milk Hill 2001 and Woodborough Hill 2000, are given step by step in Chapter 18.

The study and the site

This study is the companion of the breath-decoder on codexsymbols.com. The two follow the same steps, and each part of the protocol has its place on the site.

In this study	On codexsymbols.com
Step 1, still the field; the drawings of the glyphs	The breath-ring: upload a picture of a formation, or trace its lines
Step 3, identify the breath phase	The four-quarter breath wheel
Step 4, trace the recursion	The recursion slider and the scaling choices
Step 5, breathe the geometry	The Breath Timer Circle: the ring pulses with the count, with soft tones if wanted
Step 6, scribe the reflection	The Scribe Reflection scroll, gathered into a Breath-Translation Scroll
Chapter 18, three glyphs decoded	The Featured Decodings, each of which can be loaded into the six steps

Using the guide

Use it with any formation, from a photograph or a drawing. Use it on codexsymbols.com, where the decoder follows the same steps. It is never a substitute for medical or psychological care, and it asks no one to enter a field.

APPENDIX D

The Practices Gathered

The practices of the study are gathered here in the order of the spiral, so that they can be used on their own, in a group, or across the thirteen Moons of the Codex Calendar.

All of them are gentle. Breathe through the nose unless a practice asks otherwise. Any pause is soft, two to four counts, never a held breath against the body. No practice should cause strain, and none should be turned into fast or forceful breathing. If dizziness, breathlessness or distress arises, return at once to ordinary breathing. People who are pregnant, or who live with heart, lung or anxiety conditions, may prefer to breathe without counting, or to consult their doctor first.

CHAPTER 2: The First Circle: A Plank, a Rope and a Point

> ✦ **Practice: The Rope and the Centre**
>
> Sit at a table with paper and a pencil. Rest a fingertip of one hand on the paper as the centre.
>
> Breathe in gently through the nose for a count of four, with your attention on the fingertip.
>
> As you breathe out, draw a slow circle around it with the other hand, letting the out-breath last as long as the circle.
>
> Let a soft pause of two counts follow.
>
> Repeat three to five times. Notice that the circle depends on the centre staying still. Then rest, and breathe normally.

CHAPTER 3: The Spiral by the Stones: The Julia Set at Stonehenge

> ✦ **Practice: The Returning Spiral of Circles**
>
> On paper, draw a small circle. Breathe in gently as you draw it.
>
> Beside it, on the out-breath, draw a slightly larger one. Let the row of circles curve as it grows.
>
> After six or seven circles let them grow smaller again, one to each easy breath, until the last is a dot.
>
> Let a soft pause of two counts follow the last one.
>
> Look at the whole spiral for a few breaths. Then rest.

CHAPTER 4: The Triangle on the Hill: Barbury Castle, 1991

> ✦ **Practice: The Triangle and Its Centre**
>
> Draw a dot. Around it, breathing in for a count of three, draw the first side of a triangle.
>
> Let a soft pause of three counts follow as you draw the second side. If the pause feels tight, shorten it.
>
> Breathe out for three counts as you draw the third side home.
>
> Then, on three easy breaths, draw a line from the centre to each corner.
>
> Rest with your attention on the centre for a few breaths.

CHAPTER 5: The Square of Dots: Chilbolton, 2001

> ✦ **Practice: Standing and Laid**
>
> Draw a small grid, five squares by five.
>
> On each easy in-breath, leave a square empty. On each out-breath, fill one in. Let the breath choose the order.
>
> Do not plan the picture. After twenty-five breaths or fewer, stop.
>
> Let a soft pause of two counts follow, and look at what the breath drew.
>
> Rest, and breathe normally.

CHAPTER 6: The Cross of Five: The Quintuplets

> ✦ **Practice: The Four and the One**
>
> Sit upright. Place a hand flat on the table as the centre.
>
> Breathe in gently, and on a slow out-breath let your attention go forward.
>
> Breathe in again, and on the out-breath let it go to your right; then behind you; then to your left.
>
> On a fifth breath, let the out-breath settle into the hand at the centre.
>
> Rest there for a few breaths before you move.

CHAPTER 7: The Key in the Field: The Alton Barnes Pictogram

> ✦ **Practice: The Given Sign**
>
> Draw a circle on a slow in-breath. On the out-breath, draw a straight line out from it.
>
> At the end of the line, on the next breath, draw a second circle.
>
> Add one small mark of your own to it, a tooth or a box, whatever the hand offers.
>
> Let a soft pause of two counts follow. Think of one person you would give this sign to.
>
> Rest, and breathe normally.

CHAPTER 8: The Coiled Thread: The Double Helix at Alton Barnes

> ✦ **Practice: The Coiled Thread**
>
> This is a gentle practice of attention. It should never be forced.
>
> Draw a straight line down the page. Rest the pencil at its top.
>
> On a slow in-breath, draw a wave that crosses the line once. On the out-breath, let it cross back.
>
> Continue down the page, one crossing to each half-breath, unhurried.
>
> At the bottom let a soft pause of two counts follow. Then rest.

CHAPTER 9: The Field of Four Hundred: Milk Hill, 2001

> ✦ **Practice: One Circle, Many Times**
>
> Draw a small circle on an easy out-breath. Breathe in.
>
> Draw another beside it on the next out-breath, and another, without counting and without aiming at a figure.
>
> After a few minutes, stop. Let a soft pause of two counts follow.
>
> Look at the field of circles you have made, and notice that each one took only one breath.
>
> Rest, and breathe normally.

CHAPTER 10: The Flower of Many Seeds: Woodborough Hill, 2000

> ✦ **Practice: The Golden Turn**
>
> Mark a dot at the centre of a page.
>
> On each easy out-breath, place one new dot a little further from the centre, turned somewhat more than a third of a circle from the last.
>
> Do not measure. Keep the turn roughly the same each time.
>
> After thirty or forty breaths, stop, and let a soft pause of two counts follow.
>
> Look for the spirals. You did not draw them. Rest.

CHAPTER 11: The Lines of Force: Avebury Trusloe, 2000

> ✦ **Practice: The Ring Breath in the Field**
>
> Draw two dots a hand's width apart. They are the poles.
>
> Breathe in gently through the nose. On a slow out-breath through softly shaped lips, draw a curve from one dot out and round to the other.
>
> On the next out-breath draw a wider one outside it; then one on the other side.
>
> Let a soft pause of two counts rest between the breaths.
>
> After six or eight curves, rest your eyes on the space between the dots.

CHAPTER 12: The Star That Never Ends: The Koch Snowflake at Silbury Hill

> ✦ **Practice: The Star Within the Star**
>
> Draw a triangle, one side to each easy breath.
>
> On the middle of each side, on three more breaths, draw a small triangle pointing outward. You have a six-pointed star.
>
> Choose one point of the star. On one slow out-breath, add a still smaller point to one of its edges.
>
> Let a soft pause of two counts follow, and imagine the rule going on without you.
>
> Rest, and breathe normally.

CHAPTER 13: The Equation with a Slip: Wilton Windmill, 2010

> ✦ **Practice: The Turn and the Silence**
>
> Sit comfortably and breathe in gently through the nose.
>
> On a slow, easy out-breath, hum softly, and with a fingertip trace half a circle on the table, from one side to the other.
>
> When the hum ends, lift the finger and rest in the silence for a few breaths without counting.
>
> Repeat three or four times, each time a little more quietly.
>
> If humming aloud is not possible, hum inwardly. Then rest.

CHAPTER 14: The Circle That Writes a Number: Barbury Castle, 2008

> ✦ **Practice: Breathing the Number**
>
> Draw a circle and mark its centre.
>
> On each easy out-breath, say one figure softly or inwardly: three; one; four; one; five; nine; two; six; five; four.
>
> With each figure, let a fingertip move a little way round the circle.
>
> After the tenth, say nothing. Let a soft pause of two counts follow, and then several ordinary breaths in silence, for the figures that are not written.
>
> Rest.

CHAPTER 16: The Three Illuminations

> ✦ **Practice: The Three Illuminations in the Wheat**
>
> Sit comfortably with a drawing of any formation in this book, or one of your own.
>
> On the first breath, breathe in and remember that people walked this shape in the dark. The breathers are in the field.
>
> On the second breath, count one thing in it: its circles, its arms, its steps. Then breathe out and let the counting go. The glyph is read twice.
>
> On the third breath, breathe out slowly and remember that the field was cut. The harvest is part of the glyph.
>
> Let a soft pause of two counts follow, and then breathe normally.

CHAPTER 17: Why the Wheat Matters Now

> ✦ **Practice: The Breath-Scribe in the Field**
>
> Sit with a sheet of paper and a pencil. Let the breath settle.
>
> Set down a point. On an out-breath, draw a circle around it.
>
> On each out-breath after that, add one thing that repeats: a smaller circle, a line, a turn. Never hurry.
>
> When a glyph of your own has appeared, sit with it in silence for a few breaths. Write one line beneath it.
>
> Keep it, and draw it again tomorrow. That is how a glyph is kept from the harvest.

Bibliography

The reflection and the Codex

- Shirley, Keith. *The Breath in the Wheat: Crop Circles as Recursive Codex Glyphs Across Time and Stone.* Reflection, 2026. Printed in Appendix A.
- Shirley, Keith. *Breath Awakens: A Codex of Spiral Memory.* Cited by printed page.
- Shirley, Keith. *The Codex of Symbols: Breath-Encoded Geometry as the Primordial Language of Form, Memory and Consciousness.* 2026.

History and making

- Anon. *The Mowing-Devil: or, Strange News out of Hartfordshire.* Pamphlet, 1678.
- Capron, J. Rand. Letter, *Nature*, 29 July 1880.
- "Crop circle." *Wikipedia*, consulted November 2026, for Plot (1686), Tully (1966), Bower and Chorley, Meaden, the 1992 competition, the Circlemakers, Northcote's distribution study and the 2000 prosecution.
- Taylor, Richard. "Coming soon to a field near you." *Physics World*, August 2011.
- The Circlemakers. Review of the 2000 season, circlemakers.org.
- Alexander, Steve. Temporary Temples archive, temporarytemples.co.uk, galleries for 1996, 2000, 2008 and 2010.
- Society for Psychical Research. "Crop Circles." *Psi Encyclopedia*, for the 1990 pictogram and the dimensions of the 1996 Julia Set.

The plants

- Levengood, W. C. "Anatomical anomalies in crop formation plants." *Physiologia Plantarum*, 1994.
- Nickell, Joe. "Levengood's Crop-Circle Plant Research." *Skeptical Briefs*, 1996.
- Levengood, W. C., and Nancy P. Talbott. "Dispersion of energies in worldwide crop formations." *Physiologia Plantarum* 105, 1999, 615–624.
- Haselhoff, Eltjo H. Comment on Levengood and Talbott (1999). *Physiologia Plantarum* 111, 2001, 123–125.
- Levengood, W. C., and John A. Burke. "Semi-molten meteoric iron associated with a crop formation." *Journal of Scientific Exploration* 9, 1995, 191–199.
- Dayanandan, P., F. V. Hebard, V. D. Baldwin and P. B. Kaufman. "Structure of gravity-sensitive sheath and internodal pulvini in grass shoots." *American Journal of Botany*, 1977.
- Gianinetti, Alberto, and Marina Baronchelli. "The Pulvinus Is the Weak Point for Stem Lodging Resistance in Ripe Barley." *Plants* 13 (22), 2024, 3172.

- Caulus, Alexandre. Doctoral thesis on gravitropic and autotropic recovery in poplar and wheat, Université Clermont Auvergne, 2024, directed by Bruno Moulia.
- Clore, Amy M. Review of the cereal grass pulvinus and gravitropism, for recovery of lodged shoots.

Particular formations

- West, Marc. "Pi appears in crop circle." *Plus Magazine*, 1 July 2008.
- Press reports of June 2008 on the Barbury Castle formation, quoting Mike Reed and Lucy Pringle.
- Vigay, Paul. Field report on the Chilbolton formations, 26 August 2001.
- "2010 crop circle roundup", hexnet.org; and Richard Andrews, *The Daily Grail*, May and June 2010, on the Wilton Windmill decoding.
- Enthusiasts' reports for the double helix (June 1996) and Milk Hill (August 2001), which agree on the counts of 89 and 409 circles.
- "Crop Circles: The Formative Years 1972–1989", and related histories, for Bratton (1980), Cheesefoot Head (1981), the first quintuplet (1983) and the *Daily Express* report of 11 July 1983.
- Lists of the 1997 season for the Silbury Hill (23 July) and Milk Hill (8 August) Koch formations.

Mathematics

- Julia, Gaston. Memoir on the iteration of rational functions, 1918.
- Koch, Helge von. "Sur une courbe continue sans tangente, obtenue par une construction géométrique élémentaire." *Arkiv för matematik, astronomi och fysik* 1, 1904, 681–704.
- "Koch snowflake." *Wikipedia*, consulted November 2026, for the area of 8/5, the growth of the perimeter by 4/3 at each step, and the history of the closed figure.
- Euler, Leonhard. *Introductio in analysin infinitorum*, 1748.
- Cornell University. News release on the twenty-fifth anniversary of the Arecibo message, 1999.
- Drake, Nadia. "40 Years Ago, Earth Beamed Its First Postcard to the Stars." *National Geographic*, 28 November 2014.
- "Seked." *Wikipedia*, consulted November 2026; Gillings, R. J. *Mathematics in the Time of the Pharaohs*, 1982.
- Greenberg, Ralph. "The Slopes of the Egyptian Pyramids." University of Washington.
- Behrend, Michael. Essay on the pi and phi theories of the Great Pyramid.

With Gratitude

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I give thanks to the intelligences, human and artificial, that searched the old reports and the new and checked each claim; to the Guardians, seen and unseen; and to every breath-keeper who has stood in a field at dawn and said nothing.

In Harmony, Small Things Grow Towards Unity

With kindness, gratitude and coherence,
Keith Shirley

About the Author

Keith Shirley is a scribe and a contemplative, not an archaeologist, a physicist or a historian. He describes his part in this study as listening, reflecting and writing down, in conversation with other people's work.

His first career was in the practical world of finance, public works and real estate in Boston. A long journey of healing, which took him from Boston to Portland, Oregon, and to Peru, turned him toward the breath. He trained as a Gene Keys Guide, works as an Akashic Records consultant, and founded the Gaia Collaborative.

He is the author of *Breath Awakens: A Codex of Spiral Memory* and its companion studies, among them *The Codex Calendar*, *The Codex of Water*, *Codex Crystals*, *Codex Sounds* and *The Codex of Symbols*. His mission is simple: "To breathe coherence and stillness into the world for others to remember."

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