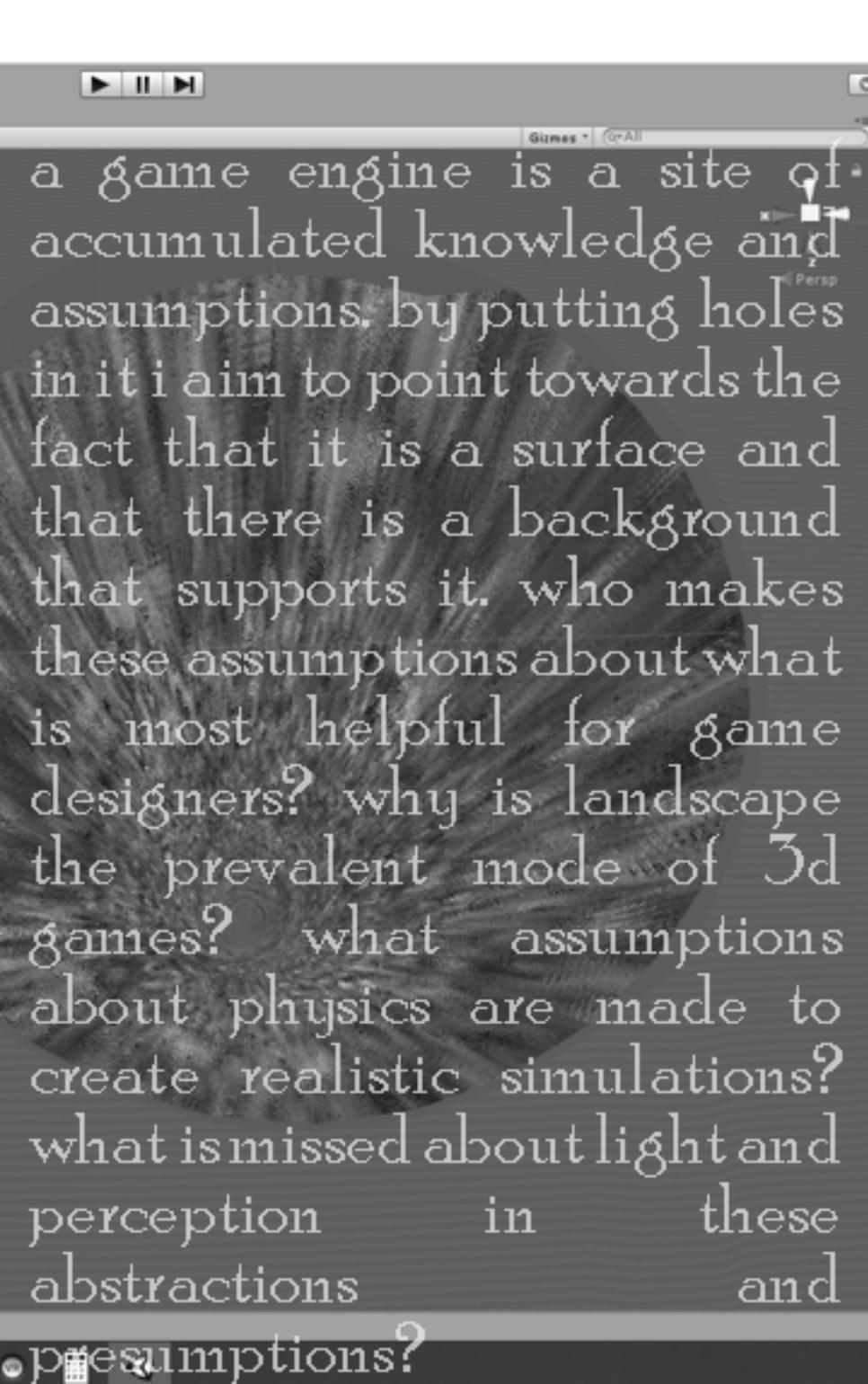






what is a site?  
how is it different than sight?

a site is a place where an event happens. it is the space where matter comes together to continuously unfold in its never ending becoming. it is fertile soil where life sprouts. a sight is a perceived event.



a game engine is a site of accumulated knowledge and assumptions. by putting holes in it i aim to point towards the fact that it is a surface and that there is a background that supports it. who makes these assumptions about what is most helpful for game designers? why is landscape the prevalent mode of 3d games? what assumptions about physics are made to create realistic simulations? what is missed about light and perception in these abstractions and presumptions?



**A spot in the wall.** Let us start with some facts from daily life. Suppose you wake up one morning and look at the white wall in front of you. It is the usual wall you see every morning, of course. But this time, right there in the top left corner, something new catches your eye: you see that a little hole is now there that was not there yesterday.

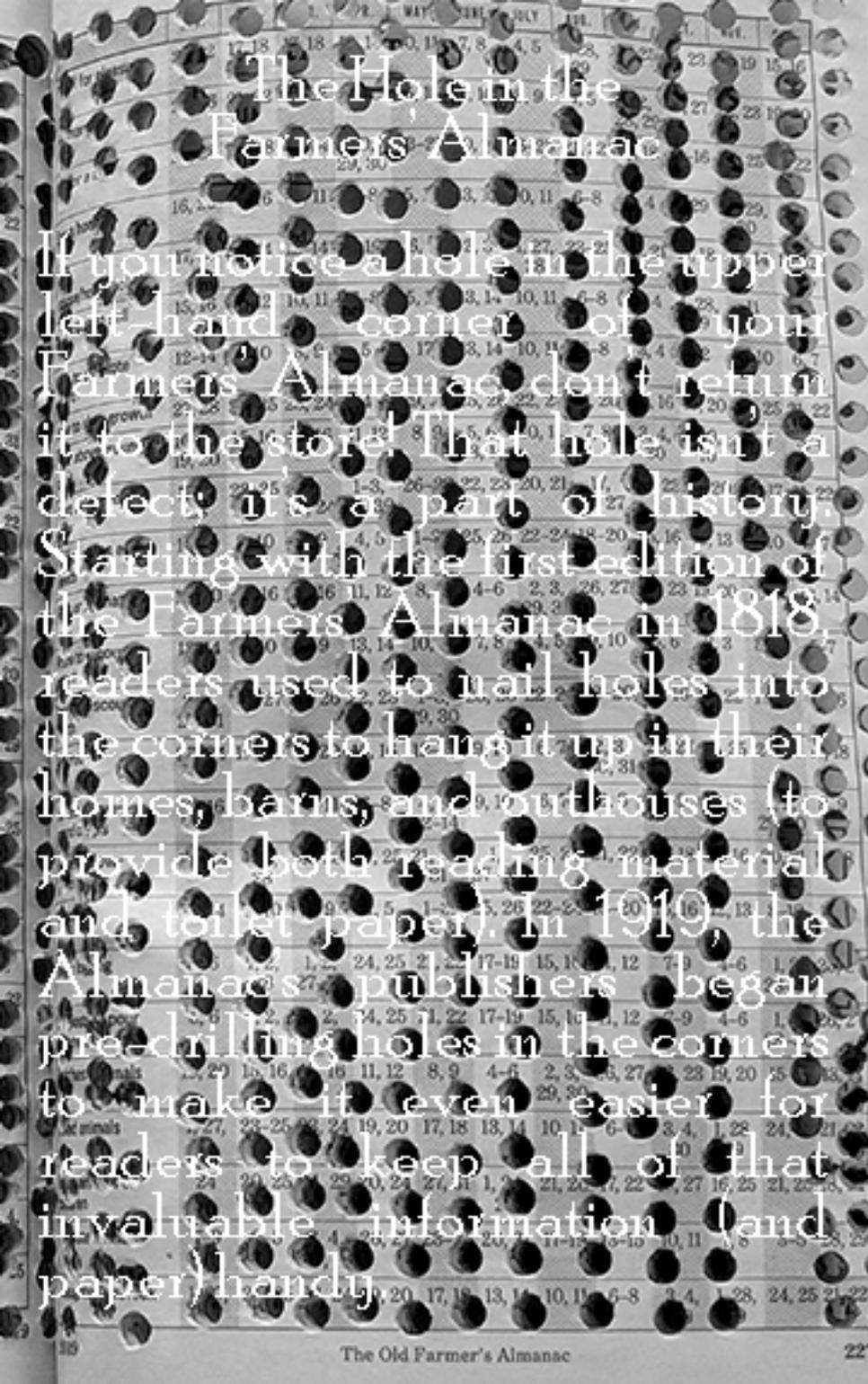
How do you describe what you see? A spot in the wall, darker than the rest, filled with shadow, that goes deep inside (though you cannot really tell how deep). It looks unitary and complete, compact, though less dense than the wall. A thing, perhaps, but a bit mysterious. It is not made of the shadow you see. It is not even made of the sorts of stuff ordinary things are ordinarily made of: not of the air that is inside it, nor of the plaster and bits of paint that have fallen on the floor over night. In fact, if it is something, it does not seem to be made of anything.

You compare it with the bookshelf on the wall. It is also unitary, complete, compact, and different in density from the wall. These properties are exemplified at the region of space where the shelf is localized (and which the shelf occupies). But in the case of the hole, no properties seem to do that job. It is uncertain whether the hole really *occupies* the place where it is localized. In fact, it seems that there is a hole there just *insofar* as nothing occupies that place (or insofar as something else could occupy that place; as a matter of fact, you are now planning to fill that hole with new synthetic filling). If there is a hole there, it is because *the wall* has a certain shape there (and surely if the wall were not there the hole would not be there either). Unlike the shelf, the hole depends for its existence on the existence of a wall, and of *that* particular wall. The borders of the hole mark an interruption in the surface of the wall. A discontinuity breaks in, and you can imagine how to restore the natural continuity of the surface so as to make the hole disappear. Thus, it is by perceiving a *discontinuity* in the *surface* of the wall that you seem to perceive the hole. Surfaces are the major character here.



corn is a major crop grown in the us that would not exist without indigenous cultivation, and now, for the most part, is not grown for direct human consumption and does not produce its own seeds. cornhole is a game, popularized in the midwest, where players take turns trying to land beanbags into small holes cut out of boards. the name has no specific origin, but refers to the fact that, prior to the widespread adoption of toilet paper, corn husks were used to wipe assholes after going to the bathroom, and since corn is a phallic shape it becomes a joke about anal sex. nobody thinks about this when they talk about cornhole (unless jokingly), its the popular name used commonly by a large group of people.

## The Hole in the Farmer's Almanac



If you notice a hole in the upper left-hand corner of your Farmer's Almanac, don't return it to the store! That hole isn't a defect; it's a part of history. Starting with the first edition of the Farmer's Almanac in 1818, readers used to nail holes into the corners to hang it up in their homes, barns, and outhouses (to provide both reading material and toilet paper). In 1919, the Almanac's publishers began pre-drilling holes in the corners to make it even easier for readers to keep all of that invaluable information (and paper) handy.



**Figure 24**  
Cutting out an infinite succession of tridimensional holes in a cube. The volume vanishes and the hole takes over.

cubic block vanishes, while the surface of the hole lining is infinite. In this case, it is perhaps not so improper to speak of the block as of a completely holed object: the hole has—so to speak—taken over.

Moreover, the question whether there can be completely holed objects must be kept separate from the question whether there is a *maximum* hole that can be hosted by a given object. One could be tempted to answer in the positive, though the exact answer would likely depend on the type of hole. For instance, one could suggest that an object could host one and only one maximum internal cavity, leaving only the object's surface. (In the case of a perforating tunnel there would be an infinite number of maximum candidates, one for each way of enlarging an initial discontinuity.) Such a suggestion, however, is not compatible with our notion of a surface. For us, surfaces are parts of objects, but they are not bulky. Hence, one cannot be left with just a surface. A surface exists only if some arbitrary thickness of internal matter exists.

**The ontological dependence of holes.** The fact that holes are always in something—and can be created only by action upon something—makes them ontologically dependent entities: a hole cannot be removed from its host. As we already mentioned, this is not to deny that holes have lives of their own. They do; they have birthdays and careers (they have a curriculum vitae), and they can change shape, size, depth, and width. But a hole cannot do such things—and such things cannot happen to it—without the support of some object “hosting” it. The foundation of a hole's being lies in its host—or, better, in the surface of its host: a hole needs some object at the surface of which to “grow” and find a place to be.

a typical 3d model, however, has a surface that seems to be infinitely thin. are all of these models objects with a maximum hole, infinitely close to bursting and becoming nothing? if you pop them will they disappear? what would be left over?



The two central images adorning the labels of opera records have been the dog and the angel. Bestial. Celestial. When you listen to opera, are your desires doggy or divine?

The dog was the logo of the Victor Company and of the British firm His Master's Voice. The link between the dog and the operatic disc was indissoluble; the Victor dog graced an illuminated sign at 37th and Broadway, near the Met, to show New York how close the dog lived to opera's center. Because a "master" is another word for the original from which records are made, the dog looking into the horn to find his missing master's voice is an image of a mass-produced replication (a record) seeking its original. The dog is also an image of obedience and loyalty: man's best friend. (This servitude is a little sexy: imagine the dog burrowing its warm way into the master's horn.) We, listening to opera records, occupy the dog's seat. We are trying to enter a hole backwards, trying to go back in time, through the looking glass, to find a phantom. Thomas Mann, in *The Magic Mountain*, describes listening to a record as equivalent to looking "at a painting through the wrong end of an opera-glass, seeing it remote and diminutive. . . ." My hunger for opera records is backwards, inverted. Listening, I try to reverse chronology, and the dog-label tells me my desire is devolutionary.

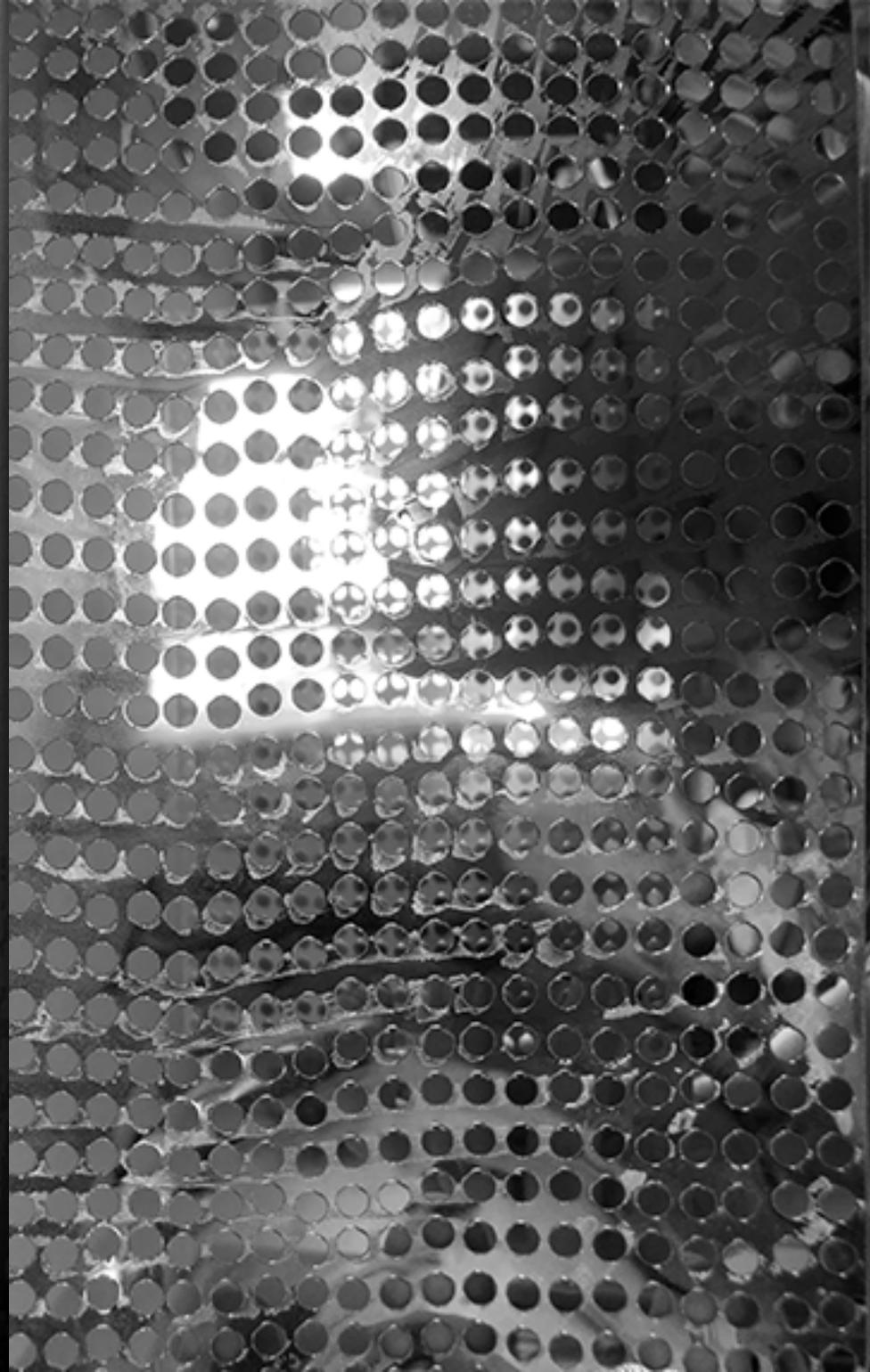
The other image, a nude and androgynous cherub, was the logo of the Gramophone Company in the early 1900s, and Angel Records assumed it in the 1950s. The cherub, writing with a quill on the record, represents the singer's voice, magically inscribing itself on the grooves; the cherub embodies the mystery of phonographic technol-

I've always been fascinated by the spindle hole. Everything on the record's face conspires to highlight it: the price circles at the top of the label and the round window in the protective paper envelope cut out its shape. Remove a vintage Melba record from its sleeve and you see, printed on the inside of the envelope, a photograph of the diva, as if the round center of the envelope were a window onto a retreating, hermetic world.

The hole makes no single anatomical allusion. It makes many. It isn't reductively equal, even in the listener's unconscious, to any part of the human body. But it has always spoken to me of the emptiness at the center of a recorded voice and the emptiness at the center of a listener's life and the ambiguities in any sexual body, including a homosexual body, concerning the proper and improper function of orifices.

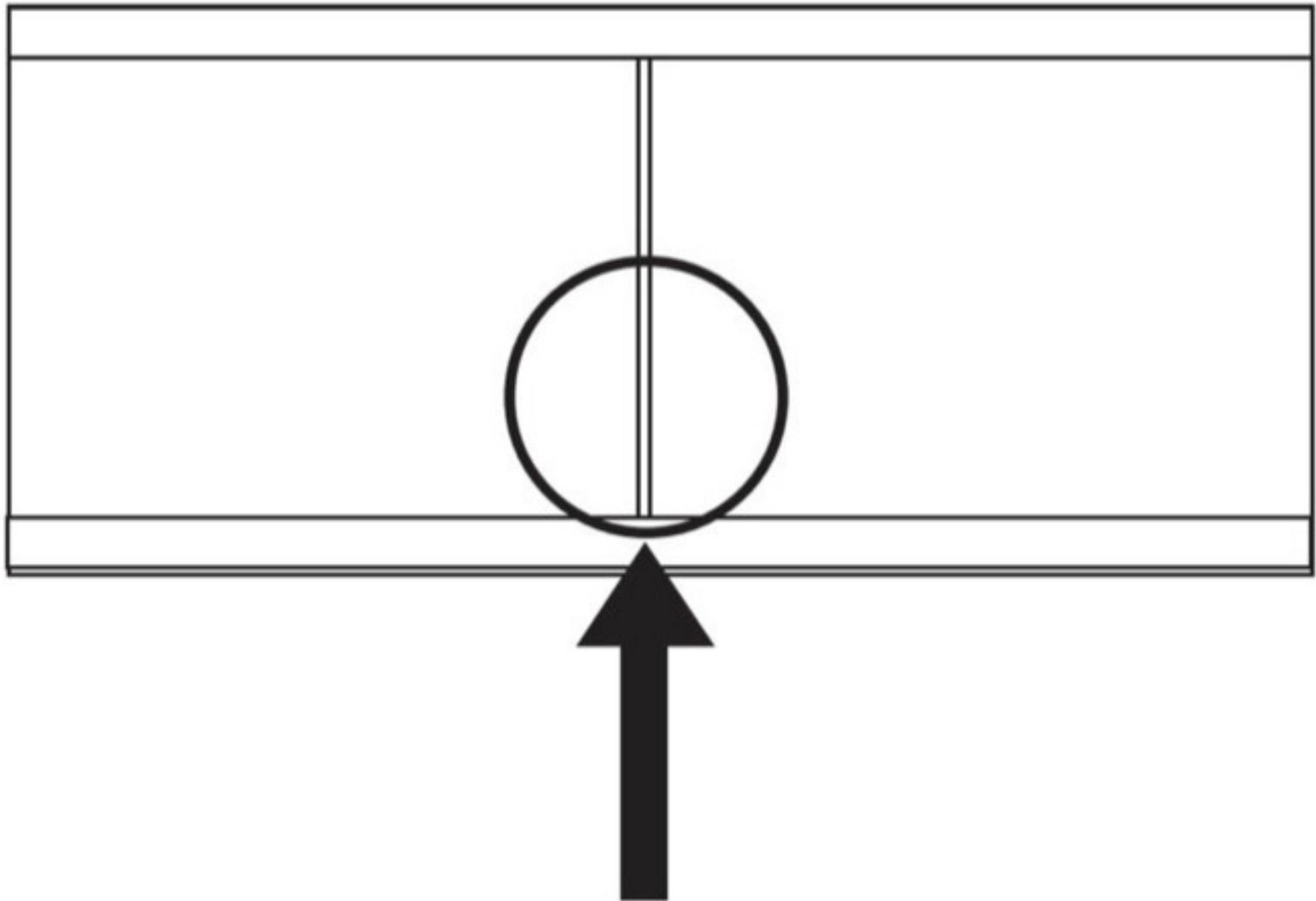
Early 78 aria records sometimes had explanatory labels affixed to their blank backsides. The label translated the aria's words and briefly described the plot. Because the label lay in the record's center, the spindle hole interrupted the text and functioned like a line-break in poetry, disturbing and magnifying the sense, and reminding me of fissures in the listening experience:

The Shadow Song, a favorite concert number, is sung in Act II, in the scene where *Dinorah*, thinking her lover, *Hoel*, has proved faithless, becomes insane and dances being accompanied by a waltz, vocal effects. In the last part is voice and flute, as in Lucia. 





We must build upon the interstice as a discursive and physical space for queer dynamic difference.

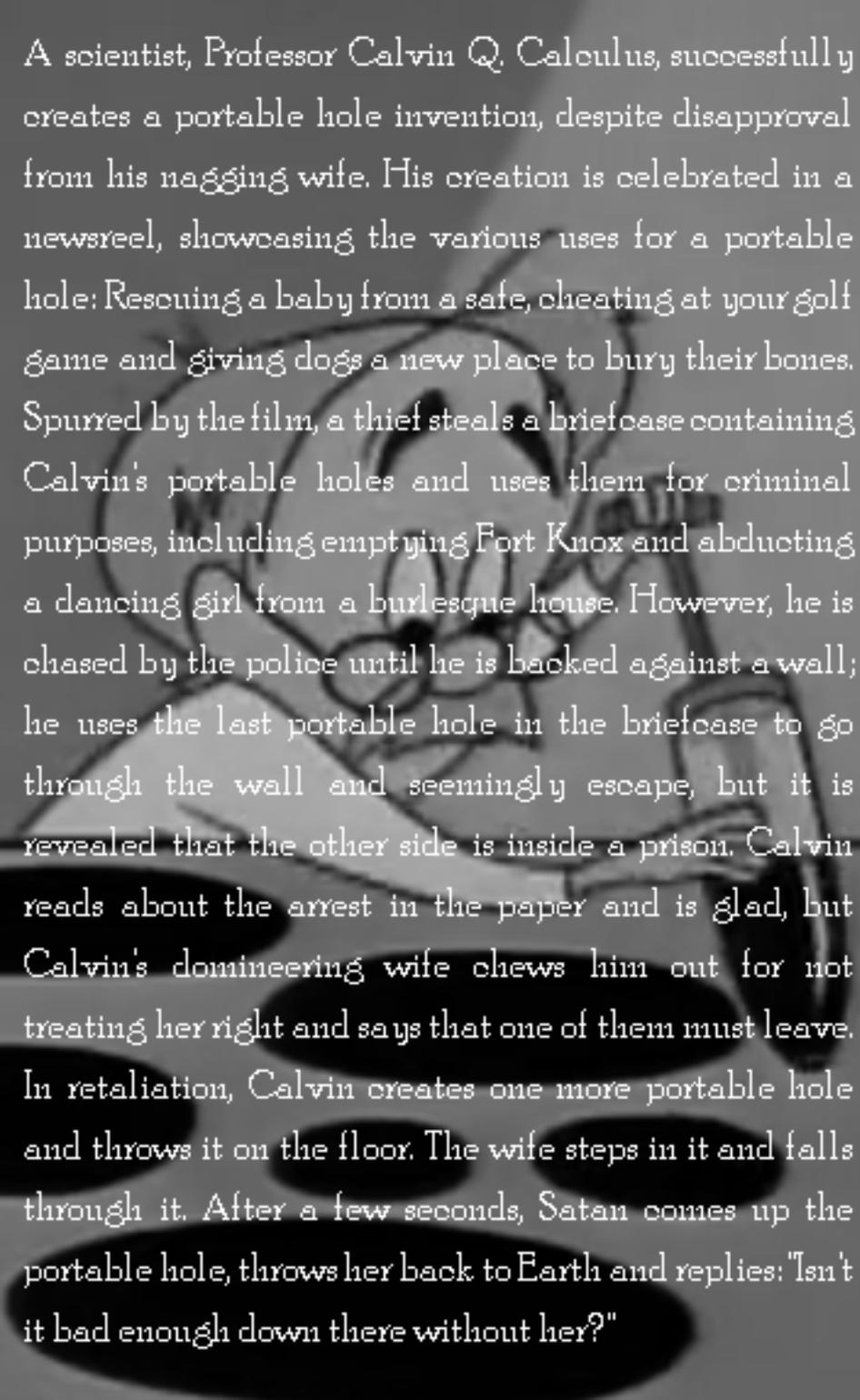




The legend holds that a team of Russian engineers purportedly led by an individual named "Mr. Azakov" in an unnamed place in Siberia had drilled a hole that was 14.4 kilometres (8.9 mi) deep before breaking through to a cavity. Intrigued by this unexpected discovery, they lowered an extremely heat-tolerant microphone, along with other sensory equipment, into the well. The temperature deep within was 1,000 °C (1,832 °F)—heat from a chamber of fire from which (purportedly) the tormented screams of the damned could be heard. However, the recording was later found to be looped together from various sound effects, sometimes identified as the soundtrack of the 1972 movie *Baron Blood*.<sup>[1]</sup>

The Kola Superdeep Borehole was just 9 inches in diameter, but at 40,230 feet (12,262 meters) reigns as the deepest hole. It took almost 20 years to reach that 7.5-mile depth—only half the distance or less to the mantle.

a circle with a  
diameter of  
9 inches



A scientist, Professor Calvin Q. Calculus, successfully creates a portable hole invention, despite disapproval from his nagging wife. His creation is celebrated in a newsreel, showcasing the various uses for a portable hole: Rescuing a baby from a safe, cheating at your golf game and giving dogs a new place to bury their bones. Spurred by the film, a thief steals a briefcase containing Calvin's portable holes and uses them for criminal purposes, including emptying Fort Knox and abducting a dancing girl from a burlesque house. However, he is chased by the police until he is backed against a wall; he uses the last portable hole in the briefcase to go through the wall and seemingly escape, but it is revealed that the other side is inside a prison. Calvin reads about the arrest in the paper and is glad, but Calvin's domineering wife chews him out for not treating her right and says that one of them must leave. In retaliation, Calvin creates one more portable hole and throws it on the floor. The wife steps in it and falls through it. After a few seconds, Satan comes up the portable hole, throws her back to Earth and replies: "Isn't it bad enough down there without her?"



“You are to dig one hole each day, including Saturdays and Sundays. Each hole must be five feet deep, and five feet across in every direction. Your shovel is your measuring stick. Breakfast is served at 4:30.”



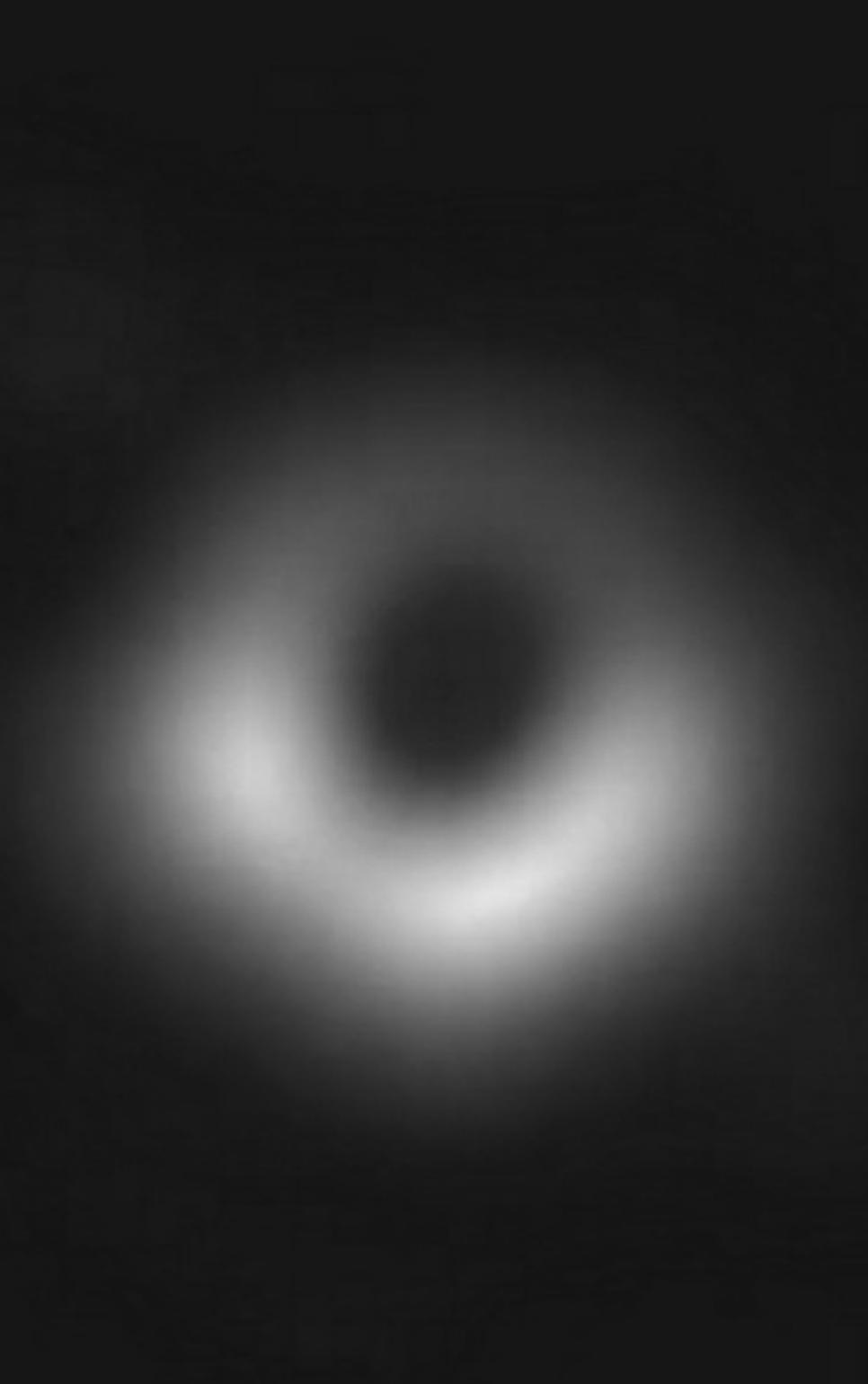
Figure 2.4. The Aperture Science logo from *Portal*. Creative Commons image via Wikimedia Commons.

jumping, and carrying objects, is to create these holes. Entering them is a basic requirement for proceeding through levels; without them, the game's environments become unnavigable. What is more, players cannot hesitate or enter these holes timidly. Many of the game's puzzles involve running into portals at full speed in order to maintain enough momentum to reach a platform on the other side. The game's tagline, "Now you're thinking with portals," encourages the player to internalize the logic of the hole. Like Hitchcock's cut into the "celluloid body," the hard surfaces that surround the player in *Portal* are repeatedly cut open, closed, and cut again. In an aesthetic move seemingly made to fit Miller's critique, these holes ripple with flames around their edges. The Aperture Science logo itself, a grooved and dilated circle, recalls a puckered anus (figure 2.4).

Yet there are also telling differences between the holes that Miller describes in "Anal Rope" and those seen in *Portal*. Whereas Miller emphasizes how Hitchcock's cut attempts to hide itself, the holes in *Portal* are anything but hidden. If the portal, like the cut, is also the anus and by extension one possible site of queer erotics, then that anus is presented front and center. It appears in the game's very name and the name of the science facility ("aperture"). These holes, unlike those found in the darkness of the backside, are bright and inviting. If each portal is an anus hidden in plain sight, however, what does it mean to get "too close" to these portals when closeness is not necessary to see them? In this case, the value of too-close reading is not necessarily to find the tiny detail that unlocks the bigger picture, but to gain new perspective on the bigger picture itself—to think with portals differently.

Another element of *Portal* with a clear parallel in Miller's reading of *Rope* is the continuous shot. Like the structure of Hitchcock's film, which





black holes are difficult to see because we can only see an object when it is distinct from its background (keeping in mind that 'seeing' is always accompanied by the other senses). how can we photograph something that absorbs light and exists in the dark matter of space? its surface only becomes apparant by how it affects its surroundings, light and gas that are swirled around it or sucked into it.

the lead researcher of the recent black hole photograph was Katie Bouman, who is from West Lafayette, Indiana, home of Purdue University, who's most famous and celebrated alum is Neil Armstrong. Bouman developed a method for algorithmically imaging a black hole as a conventional photograph, which records light going through a hole and hitting a surface, would be impossible. instead, the algorithm replaces the role of the focusing lens to organize the available light data, 5 petabytes (equivalent to 5,000 years of MP3 audio) which exist on harddrives which weigh 1000 lbs total.

How could we ever literally see a unitary form or figure when the light striking our eye is splintered into countless separate points by the rods and cones populating the retina? Gloss over the gaps. How could we literally see a continuous surface-surround of space when our very own nose sunders our field of vision in two—not to mention the holes poked in both halves by the blindspot of each eye? Bridge it over. How could we see depth when our retinas are two-dimensional to begin with, even before what they register is poked, sundered, and splintered? Superadd it. We see unity of form in excess of our eyes.

What literally strikes our eye is edging. Not only color, but space, time, figure/ground, and formal stability, in their reciprocal difference and on

"A paradox, the doughnut hole. Empty space, once, but now they've learned to market even that. A minus quantity; nothing, rendered edible. I wondered if they might be used—metaphorically, of course—to demonstrate the existence of God. Does naming a sphere of nothingness transmute it into being?"

BB

like I wanted to do a page a day but that's just not feasible to do that and stay alive."

At some point, Loftus made the decision to butcher *Infinite Jest*. From what I gather there used to be a video of the event, but like most of the project, it has disappeared. (In February 2018, Twitter suspended Loftus's account for making parody figure-skating videos in which skaters at the PyeongChang Winter Games appeared to perform to ironic subbed-in audio instead of music.) The *Vice* interview, thankfully, does include a picture of the act of anal ingestion. "I blended together five pages of *Infinite Jest* and a bunch of apples and made this thick sauce," Loftus reports. "Then I put it into a turkey baster that I bought and then I put a turkey baster into my asshole and did a handstand and had someone squeeze the turkey baster until it was empty." In the photo, Loftus is upside down, hands on the ground, feet in the air. She is wearing plain gray underwear and maybe a sports bra. Her friend is holding one of her ankles in one hand; with the other hand, she is holding the turkey baster. Loftus's right thigh is obscuring whether or not the baster is inserted. Her body looks like a doll's, or a mannequin's. Her face is completely out of the frame.

"Absorbing 'culture' is a desperate, frantic attempt to groove in an ungroovy world, to escape the horror

By becoming an exclusive  
hole sponsorship your  
package includes:

18 holes of golf for up to 2  
golfers

Lunch and dinner for up to  
2 golfers

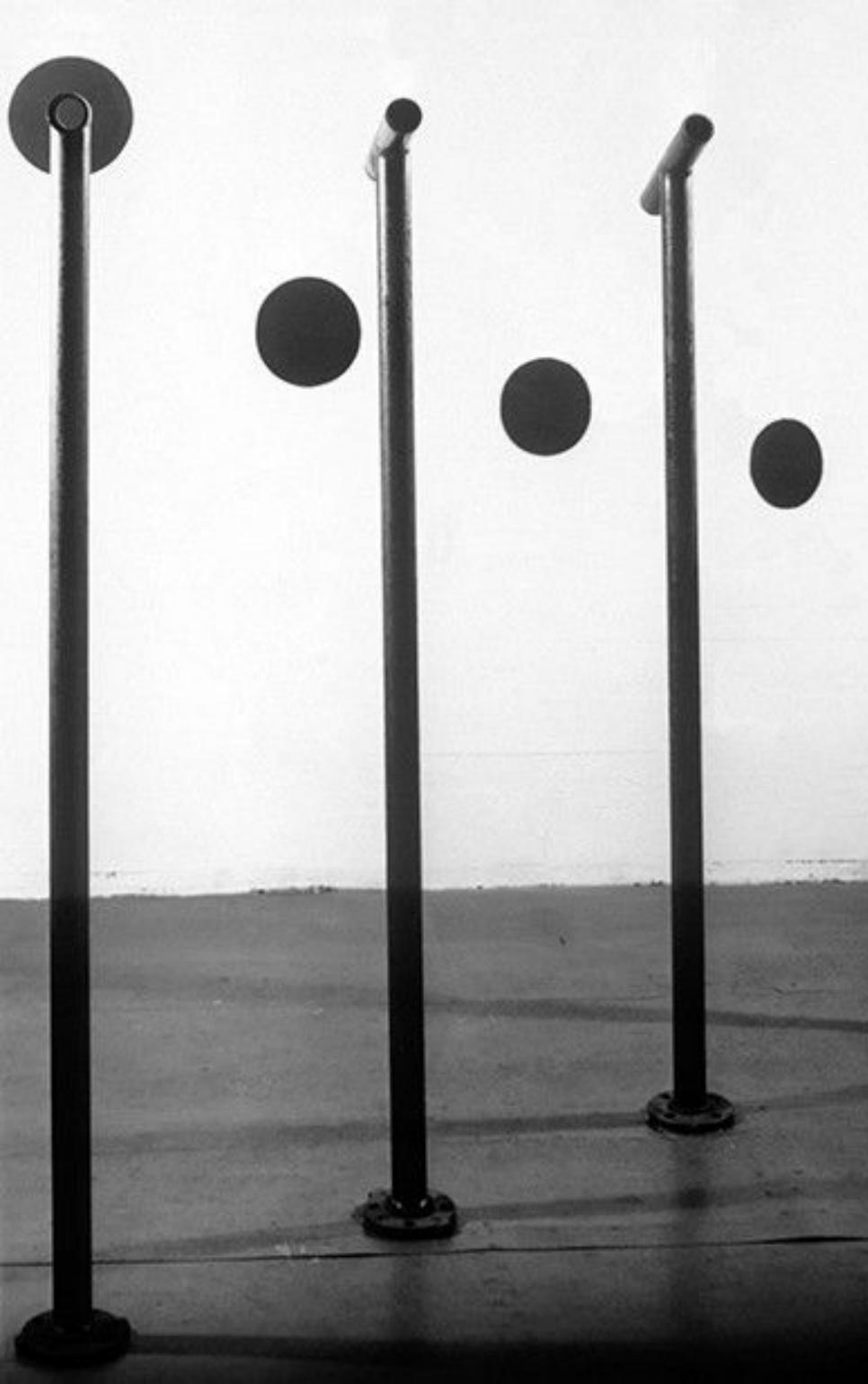
1-item insert in goodie  
bag (sponsor provides  
item)

Banner in dinner tent

Recognition during the  
dinner reception

Recognition in program

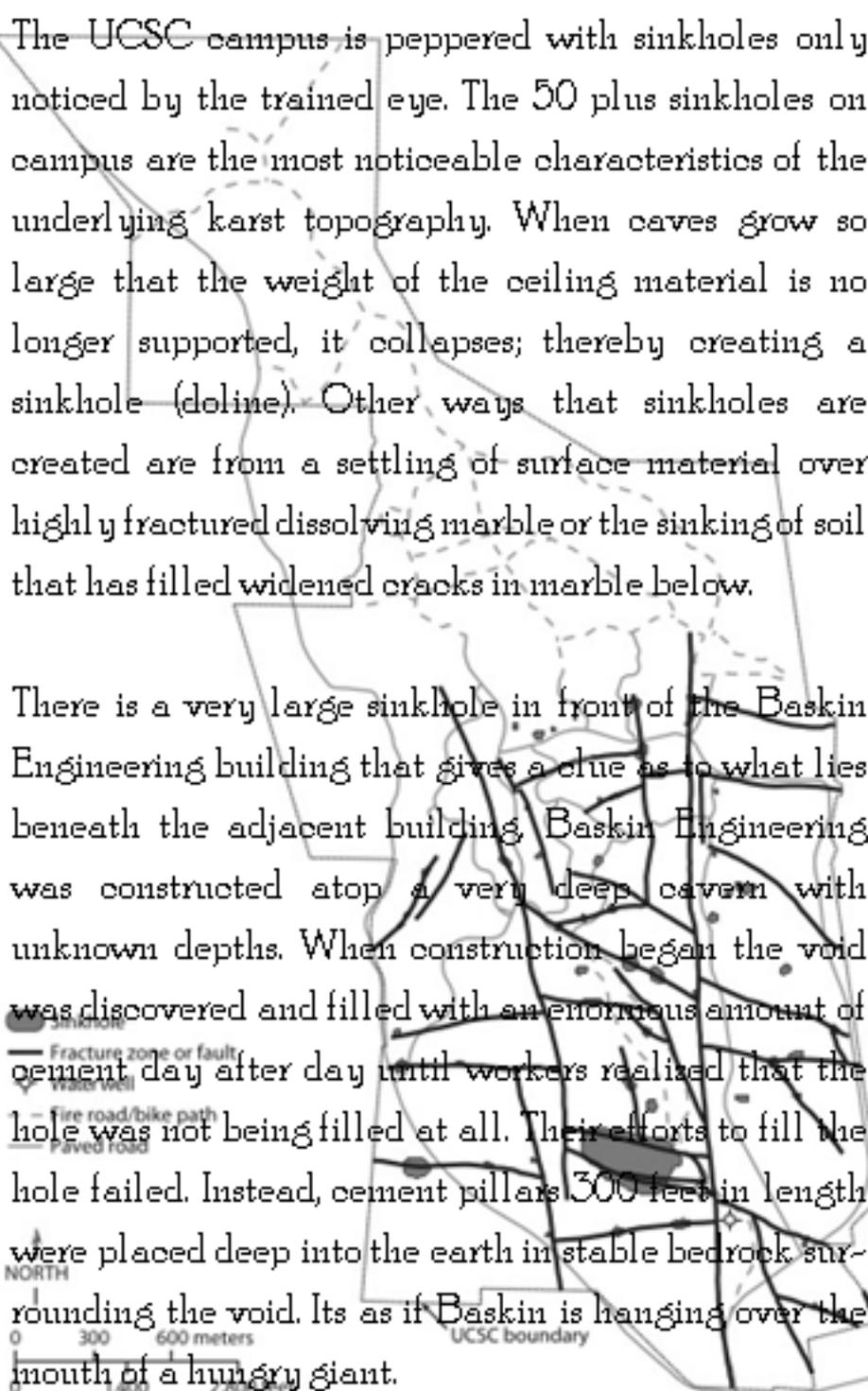
Company name/logo with  
link on the Golf Outing  
website "thank you" page



land art uses a site as a canvas, or sometimes, as a block of marble to sculpt into. land is a material that can be used abstractly, as if it had the anonymity of clay (which must have directly come from the earth somewhere). a place in the desert could be any place in any desert, the wide open american west is devoid of the obvious signs of american life, and yet is pregnant with the american colonial dream. a pioneer is someone who paves the way for an invasion. what is this art paving the way for? the gallery is a frame, earth art says we can shift the frame to be 'the earth' instead. their action or intervention or art narrows down the focus, points to a specific system or set of events. framing a sunset or a comet or an eclipse. we consume this art as images, i do not know what it's like to see them in person. seeing a photo of a hole cut into the ground raises the question for me of what cutting a similar hole into a similar looking ground can be, if done digitally. the labor is different, it can be displayed differently (vr becomes an actual manifestation or visitation of the action rather than being an incomplete copy), it will erode differently, it has different effects on the 'actual environment' (interrupting plant and animal life/possibly water, using electricity and devices which require rare minerals and precarious labor).

The UCSC campus is peppered with sinkholes only noticed by the trained eye. The 50 plus sinkholes on campus are the most noticeable characteristics of the underlying karst topography. When caves grow so large that the weight of the ceiling material is no longer supported, it collapses; thereby creating a sinkhole (doline). Other ways that sinkholes are created are from a settling of surface material over highly fractured dissolving marble or the sinking of soil that has filled widened cracks in marble below.

There is a very large sinkhole in front of the Baskin Engineering building that gives a clue as to what lies beneath the adjacent building. Baskin Engineering was constructed atop a very deep cavern with unknown depths. When construction began the void was discovered and filled with an enormous amount of cement day after day until workers realized that the hole was not being filled at all. Their efforts to fill the hole failed. Instead, cement pillars 300 feet in length were placed deep into the earth in stable bedrock surrounding the void. Its as if Baskin is hanging over the mouth of a hungry giant.



this was starting to become. Just as one longs for a solitary  
hole to call one's own,  
so one is horrified at the prospect of being immured in it: that,  
at any rate,  
was my take on the setup this winter. Once past March, the  
addition  
seems not to be complete, to be rambling on to the horizon.  
So one can lose a good idea  
by not writing it down, yet by losing it one can have it: it  
nourishes other asides

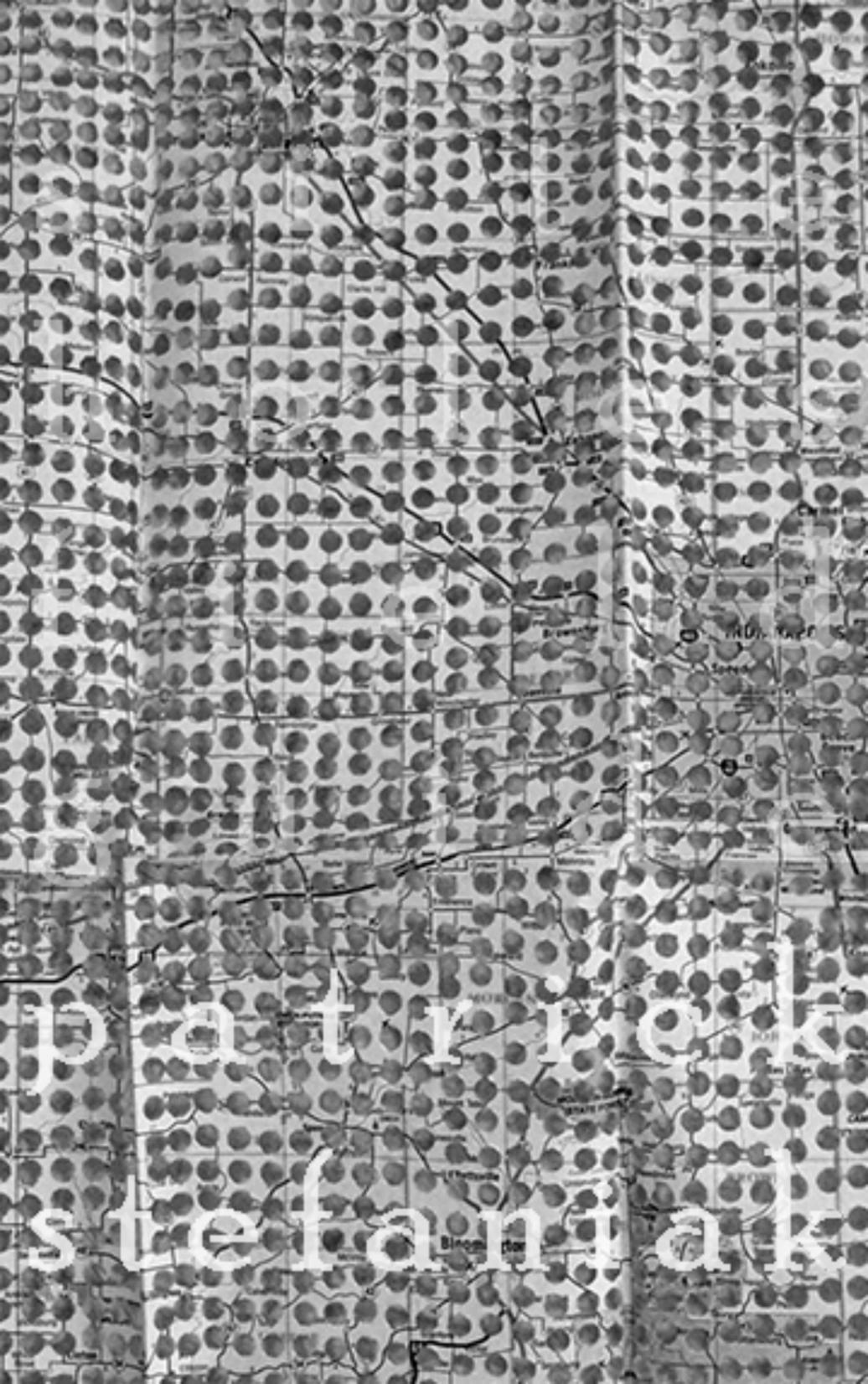
122

FLOW CHART

it knows nothing of, would not recognize itself in, yet who  
the negotiations  
are terminated, speaks in the acts of that progenitor, and does  
recognize itself, is grateful for not having done so earlier.  
When all is

*In order of appearance:*

- Drawing Threads from Sight to Site  
~ Victoria Mitchell
- Holes And Other Superficialities ~  
Roberto Casati and Achille C. Varzi
- The Old Farmer's Almanac website
- The Queen's Throat ~ Wayne  
Kostenbaum
- Footnote to Howl ~ Allen Ginsberg
- Courtship ~ Bjork
- Gay Bombs ~ Zach Blas
- Wikipedia
- Ask Smithsonian: What's the Deepest Hole  
Ever Dug?
- Holes ~ Louis Sachar
- Video Games Have Always Been Queer ~  
Bo Ruberg
- Les Duffield
- semblance and event ~ Brian Massumi
- Margaret Atwood
- Females ~ Andrea Long Chu
- Locators ~ Nancy Holt
- Kiva ~ Peter Campus
- Below the Buildings: Karst and  
Construction at UCSC ~ Lauren McEvoy
- Flow Chart ~ John Ashbery



patrik  
stefan jak