

Tombic communication

Martin Howse

20 November 2013

Tombic communication walk-shop overview



The system of megaliths now provided a complete substitute for those functions of his mind which gave to it its sense of the sustained rational order of time and space [...] Without the blocks his sense of reality shrank to little more than a few square inches of sand beneath his feet.

[J.G. Ballard. Terminal Beach]

If patterns of ones and zeroes were “like” patterns of human lives and deaths, if everything about an individual could be represented in a computer record by a

long strings of ones and zeroes, then what kind of creature could be represented by a long string of lives and deaths?

[*Thomas Pynchon. Vineland*]

Technology buries us alive in order to re-place the site of execution on the skin, under the earth.

Robert Smithson talks of a ‘tombic communication’, and that ‘the medium is the mummy.’ This workshop will attempt to identify, document and construct technologic tombs and mummies in Copenhagen.

Activities might include:

- the construction and burial of computer memories
- mapping entropy in Copenhagen
- recording worm poetry
- a concert for buried devices
- sketching pornographic logic

Workshop with Martin Howse (FREE!)

Please email here to register your interest.

Meet up at Science Friction at 13:00 on Thursday, 21st of November.

The workshop will last roughly 4 hours, please dress warmly and bring recording equipment and any materials you might think of as interesting for the potential activities :)

More information: <http://1010.co.uk/tombic.pdf>

Robert Smithson

The system of megaliths now provided a complete substitute for those functions of his mind which gave to it its sense of the sustained rational order of time and space [...] Without the blocks his sense of reality shrank to little more than a few square inches of sand beneath his feet.

[*J.G. Ballard. Terminal Beach*]

Once we are free from utilitarian presuppositions we become aware of what J.G Ballard calls *The Synthetic Landscape*, or what Roland Barthes refers to as “the *simulacrum* of objects,” or what Tony Smith calls the “artificial landscape,” or what Jorge Luis Borges calls “visible unrealities.” What do these four persons have in common? [...] For them the environment is coded into exact units of order, as well as being prior to all rational theory; hence it is prior to all explanatory naturalism, to physical science, psychology, and also to metaphysics. An example of this environmental coding is Stonehenge.

[...]

Is language at the root of these megaliths, the way mathematics is at the root of geometry? Is the verbal prior to the material? The “noise of history”

is contained by Ballard's megaliths. The abyss of language erases the supposed meaning of general history and leaves an awesome "Babel."

[...]

There seems to be parallels between cybernation and the world of the Pyramid. The logic behind "thinking machines" with their "artificial nervous systems" has a rigid complexity, that on an aesthetic level resembles the tomibic burial structures of ancient Egypt. [...] Perhaps one could call a computing machine - an "electric mummy" - *the medium is the mummy*.

[Robert Smithson. *The Artist as Site-Seer: or, A Dintorphic Essay*]

PART ONE

The system of megaliths now provided a complete substitute for those functions of his mind which gave to it its sense of the sustained rational order of time and space, his awareness kindled from levels above those of his present nervous system (if the autonomic system is dominated by the past, the cerebro-spinal reaches towards the future). Without the blocks his sense of reality shrank to little more than the few square inches of sand beneath his feet.

J. G. Ballard, *Terminal Beach*

Once we are free from utilitarian presuppositions we become aware of what J. G. Ballard calls "*The Synthetic Landscape*," or what Roland Barthes refers to as "the *simulacrum* of objects," or what Tony Smith calls the "artificial landscape," or what Jorge Luis Borges calls "visible unrealities."¹ What do these four persons have in common?² Not assumptions or beliefs of any kind, but the same degree of esthetic awareness.³ For them the environment is coded into exact units of order, as well as being prior to all rational theory; hence it is prior to all explanatory naturalism, to physical science, psychology, and also to metaphysics.⁴ An example of this environmental coding is Stonehenge.⁵

Far from being a primitive Druid Temple, it turns out that the 3500-year-old Stonehenge was actually a complex astronomical observatory—in fact, a Neolithic computer, built to predict eclipses, and to follow solstices and equinoxes.⁶ By following the intervals of "extreme azimuths" suggested by Diodorus, a historian from about 50 B.C., Gerald S. Hawkins has decoded the cycles of Stonehenge.⁷

Robert Morris has said that what interested him most when he visited Stonehenge was not the trilithons at the center of the monument, but rather its mound-like fringes.⁸ This penumbral region that interested Morris caused me to think of George Kubler's theory of "Prime Objects and Replication."⁹ Says Kubler, "Prime objects resemble the prime numbers of mathematics because no conclusive rule is known to govern the appearance of either, although such a rule may some day be found."¹⁰ What Kubler suggests in his theory is an "equality" between the "prime" and the "replication" that maintains itself throughout the monotony of "Historical Drift."¹¹ Prime objects do not decompose, because like prime numbers they resist decomposition because of their enigmatic origin, which is what Morris calls "unitary."¹² In short the prime object is immobile and often indestructible.¹³ Kubler maintains that "buildings" constitute most of our primes.¹⁴ Very few primes survive, so it

seems only logical for Morris to want to build the edge-ring of one of the world's most completely manifest prime objects—Stonehenge.¹⁵ One manifestation of Morris's art is a tendency to confined *amorphousness*.¹⁶

J. G. Ballard in his *The Waiting Grounds* discloses evidence of the prime enigma.¹⁷ The idea of the "megalith" appears in several of Ballard's science-fiction stories, but in *The Waiting Grounds*, we find many references to codes that are "chiselled" onto the "five stone rectangles."¹⁸ They are "strings of meaningless ciphers . . . intricate cuneiform glyphics . . . minute carved symbols . . . odd crosshatched symbols that seemed to be numerals."¹⁹ Could these be the "millions of utterances," that Kubler speaks of in reference to the "replica-mass"?²⁰ Is language at the root of these megaliths, the way mathematics is at the root of geometry?²¹ Is the verbal prior to the material?²² The "noise of history" is contained by Ballard's megaliths.²³ The abyss of language erases the supposed meanings of general history and leaves an awesome "babel."²⁴ These megalithic rectangles are Ballard's memory traces of that elusive prime object—the Tower of Babel.²⁵ Writes Ballard, "I went over to the megalith on my left and began to examine the inscriptions carefully. Here the entries read:

MINYS-259	DELT*	ARGUS	AD 1874
TYLNYS-413	DELTA	ARGUS	*D 1874
.....

There were fewer blanks . . ."²⁶

Ed Kienholz it seems would like to add in the wake of this babel—"THE WORLD"—"a simple rectangle of concrete" . . . where upon people may inscribe something "stupid or obscene."²⁷

The Great Pyramid would qualify as a prime object, but would not as a Juddian "specific object."²⁸ Nevertheless, it is an agglomeration of codes, puzzles, clocks, tombic theories, secret passages, and lacunary mathematics.²⁹ The Great Pyramid does not exist in terms of character or individual, but as a "semblance."³⁰ Like Stonehenge, it is an awesome computer, based on orbital chronologies and shifting calendars.³¹ The purpose of The Great Pyramid was defined by the Hebrews centuries ago—the name they gave it "Urim-middin"="Light-Measures," and the Phoenicians called it "Baal-Middon"="The Lord of the Measures."³² Greek "Pyra"="beacon fires."³³ "Urin"="Purim"="Lights."³⁴ In Greek it becomes "Pyra-midos," "Pyra-mid."³⁵ A "beacon of reflexions," and a "monument of measures."³⁶

The prime object becomes the prime number, if seen as "the monument of measures."³⁷ The prime number only refers to itself or 1 and is in a way like the Kantian "thing in itself."³⁸ The only even prime is 2.³⁹ The distribution of primes in a number system is irregular.⁴⁰ For example, there are five primes between 100 and 114, but none between 114 and 127.⁴¹ Ever since Euclid's proof that primes are infinite, mathematicians like some artists have been looking for that "conclusive rule," that would determine whether or not a number like an

object is prime.⁴² But the infinite, as Borges warns, is a "numerous Hydra" and a "swamp monster."⁴³

Alexander Graham Bell (1847–1922) generally known as "the inventor of the telephone" may be viewed esthetically as the first "structuralist" to deal with language in a concrete way.⁴⁴ In 1873 he traced space sounds upon smoked glass with the aid of a device called the "phonograph" (Scott and Koenig) (1859) which was a kind of early oscillograph.⁴⁵ The speech patterns were fixed on the glass and called a "visual form" by Bell.⁴⁶ Such visible speech patterns are measured by spectrographs.⁴⁷ The "stacking" of successive instants of speech makes it possible to "read" the stacked spectra, and identify the syllables, words, or sentences visually.⁴⁸ This phonetic logic seems to have something to do with Bell's lattice structures, which anticipate R. Buckminster Fuller and Sol LeWitt.⁴⁹

The fundamental unit of measure of prime and object number is the module.⁵⁰ Bell's tetrahedral lattice systems were used as "kites" to make flight tests.⁵¹ He also built an extraordinary tower that was made of prefabricated, standardized mass-produced tetrahedral units.⁵² A perfect prime object may be seen in his pyramid-type observation post.⁵³ From this simple wooden shelter he would supervise his aerodynamic experiments.⁵⁴

There seems to be parallels between cybernation and the world of the Pyramid.⁵⁵ The logic behind "thinking machines" with their "artificial nervous systems" has a rigid complexity, that on an esthetic level resembles the tombic burial structures of ancient Egypt.⁵⁶ The hieroglyphics of the *Book of the Dead* are similar to the circuit symbols of computer memory banks or "coded channels."⁵⁷ Perhaps, one could call a computing machine—an "electric mummy"—*the medium is the mummy*.⁵⁸ All the content is removed from the "memory" of an automaton, and transformed into a "shape" or "object."⁵⁹ The mummy like the automaton has vacant memories, that remember voids of meaning.⁶⁰

Both cybernetics and Egyptian ritual seem to be contributing to what Erwin Panofsky calls, "... the collective memory of mankind, in Greek *threnoi*, and the Roman *conclamations*." (See *Tomb Sculpture: Its Changing Aspects from Ancient Egypt to Bernini*.)⁶¹ Binary numbers are in computers transferred into magnetic memory cells, and then packed into ordered layers; they form a silent dirge.⁶² Hundreds of thousands of cells will fit in less than a cubic foot of space.⁶³ The memories run through standard computer code groups the same way the *threnoi* of hieroglyphics run through Egyptian funerary sculpture.⁶⁴ Simulated intelligence fabricates "memories" that are neither dead nor alive; such coded information feigns the possibility of immortality.⁶⁵

It seems that the tendency toward "tombic communication" is still with us, even if its process is apparently invisible.⁶⁶ Art not only communicates through space, but also through time.⁶⁷ The "formal" categories of "modernism" have lost this fact.⁶⁸ Rational concerns with cubism or the return to impressionism by way of "color field painting" force art into "histories of taste."⁶⁹ The mind as well as the eye belongs to art.⁷⁰ To talk constantly "about seeing" is a linguistic

problem not a visual problem.⁷¹ All abstract concepts are *blind*, because they do not refer back to anything that has already been seen.⁷² The "visual" has its origin in the enigma of blind order—which is in a word, *language*.⁷³ Art that depends only on the retina of the eye, is cut off from this reservoir or paradigm of memory.⁷⁴ When art and memory combine, we become aware of the *syntax* of communication.⁷⁵

NOTES

1. Other stories by J. G. Ballard: *The Wind From Nowhere*, *The Drowned World*, *Billionium*, and *The Voices of Time*. "If there is such a thing as critical proof," says Roland Barthes, "it lies not in the ability to *discover* the work under consideration but, on the contrary, to cover it as completely as possible with one's own language." Tony Smith makes "voids in space" that are "probably malignant." Jorge Luis Borges is, according to Anthony Kerrigan, "daring dryly to go beyond such a Mannerist master as James Joyce."
2. "these four persons"—drawn from the Great Number 4 in *abstracto* with special attention to the Doctrine of the Four Humours (Barthes = Sanguine . . . Ballard = phlegmatic . . . Smith = choleric . . . Borges = melancholic).
3. "the same degree"—near zero.
4. Phenomenology. Reality is enigmatic-inexplicable-baffling . . .
5. In 1740 Dr. William Stukeley discovered the "druid cubit," a distance of 20.8.
6. Druidism was the religious and philosophic system of the Druids.
7. Diodorus, also spelled Diodotus, died in Cicero's house, 59 B.C.
8. Robert Morris is the author of:

Dissatisfactions

7/17/62 5:30 P.M.

"That everything relevant will not be recorded."

9. "The penumbral region"—known as "barrows"—three types "bowl," "bell," and "disc."
10. George Kubler draws upon new insights in fields such as anthropology and linguistics and replaces the notion of style with the idea of a linked succession of works distributed in time as recognizable early and late versions of the same action. (Book cover blurb.)
11. "maintains itself throughout the monotony" 5 Kinds of Monotony: 1. television torpor. 2. muddy thinking. 3. discussions about "flying saucers." 4. false paths and stifling repetitions. 5. hypertrophy of detail.
12. "decomposition—according to Lahee's *Field Geology*—"slump/rapid flowage/soft muds/turbidity current/residual deposits/slush/fine sediment/brackish water fossils/ glaciofluvial creepage/volcanic outbursts/swamp beds/lava flow/discordant plutons."
13. "immobile"—see Victor Brombert's study of Flaubert's *Salammbô: An Epic of Immobility*—*The Hudson Review*, Spring 1966.
14. Ad Reinhardt's thousands of color slides (architecture, sculpture, painting) go between "primes" and "replicas" within the context of his own categories (noses, eyes, feet, navels, and headlessness).
15. "the edge ring"—*A Project for Earth and Sod*.
16. "tendency to confined *amorphousness*"—Morris's "edge ring" presses into the ground. His other work also discloses this sinking kinaesthesia. A sensation of massiveness pulls one's view downward. The bulging masses in his forms avoid any reference to "frames" or "structural supports." Morris's bevelled corners break down the hard angle. His morphology submits to a mind-crushing pressure.

17. "enigma"—an ataraxic landscape.
18. "science-fiction" also called "science-fact."
19. Exhausted numbers: one . . . yawn . . . two . . . yawn . . . three . . . yawn . . . four . . . yawn . . . five . . . yawn.
20. Eva Hesse's notion of "metronomic irregularity" and her works of the same name evoke the lost tempo of "millions of utterances."
21. NO and YES.
22. YES and NO.
23. "noise"—gives no satisfaction to the listener, unless regularized.
24. "supposed meanings"—the usurpation of "tradition" and the degradation of "myth." T. S. Eliot is coupled with Jackson Pollock in William Rubin's "Jackson Pollock and the Modern Tradition." *Artforum*, February 1967. "Myths are easier to grasp than new and original abstract art. . . ." T. S. Eliot is used as a weapon against "myths" by Mr. Rubin, yet Eliot based *The Waste Land* on the Grail legend and myths of vegetation.
25. "The Tower of Babel"—"These pilgrims disputed in the narrow corridors, proffered dark curses, strangled each other on the divine stairways, flung the deceptive books into the air shafts . . ." Borges.
26. On the walls of Ballard's Babel.
27. ". . . to be built at Hope, Idaho."
28. "Juddian"—"The warhead will be mated to the firing position"—refers to a "loricate" object by Lee Bontecou. *Arts*, April 1965.
29. "Lacunary"—See *Lacunary Films*, Monique Wittig in the *New Statesman*, July 15, 1966.
30. "The Great Pyramid"—said to be "shrouded in the mists of remote antiquity."
31. "shifting calendars"—temporal fatigue.
32. Linguistic drift.
33. Ditto.
34. Ditto.
35. Ditto.
36. Ditto.
37. *Table of Prime Numbers from 1 to 1000*.
38. "the Kantian 'thing in itself'" —In Max Born's essay "Symbol and Reality" he tells us that "Kant's 'thing in itself' or Lenin's dogma are unsatisfactory because they violate the principle of decidability."
39. "2"—The Ambidextrous Fatality. The Dreadful Double. The Deadly Duality. The Enantiomorphic Abyss. "For the Snark *was* a Boojum, you see." Lewis Carroll.
40. "The irregularity persists and becomes even more disconcerting when we penetrate deeper into the natural sequence of numbers," says Tobias Dantzig in *Number: The Language of Science*.
41. Prime objects also lead one to bottomless pits and bizarre arrays.
42. Pierre de Fermat (1601–1665) claimed he could prove this "most recondite mystery of number," but didn't have enough room "on the margin of this page" to do so.
43. As long as one remains within the range of "kinaesthesia," "empathy," and "gestalt"—no warning is necessary. In order to remain safe from "infinity," one must "see through his bowels."
44. Define Bell by Roland Barthes' "structuralist activity"—". . . by the controlled manifestation of certain units and certain associations of these units." *Partisan Review*, Winter 1967.
45. "See Section 3, "Speech Representation of the Frequency-Time Plane" in Colin Cherry's *On Human Communication*.
46. "When we speak to one another we do not transmit our thoughts. We transmit physical signals. . ." Colin Cherry. *The Thought-Word-Thing-Triangle* of Ogden and I. A. Richards (*Meaning of Meaning*) could be associated with Bell's tetrahedral modules.

- One can "read" Carl Andre's "sculpture" and "look" at his "poems."
47. Bell's invention of the telephone is not related to "literature" or "sculpture," but is a
48. device that makes one conscious of the origin of prime form (number + object).
"phonetic logic"—Conditioned by "the ear," perhaps more than "the eye." Music is
49. important to LeWitt. Claude Lévi-Strauss says the act of listening to musical work
immobilizes the passage of time. Overture to *le cru et le cuit*. (Yale French Studies,
Structuralism.)
50. *Types of Modules* according to Konrad Wachsmann: "material, performance, geometry,
handling, structural, element, joint, component, tolerance, installation fixture, planning."
Definitions of each module may be found in his book *The Turning Point of Building*.
Bell's "Kites" are flying "Thought-Word-Thing Triangles."
51. He built the tower for "his guests' enjoyment."
52. Robert Morris has said he would not want to "live" in his work.
53. Inside his "simple wooden shelter," Alexander Graham Bell relives the life of a
54. Pharaoh.
55. "Cybernation" resembles the statues of Daedalus or of the tripods made by Hephaes-
tus."—Michael Harrington, *The Accidental Century*.
56. "The Egyptians say that their houses are only hostelryes and their graves their houses"
(Diodorus).
57. "Hieroglyphics. Language of the ancient Egyptians, invented by the priests to conceal
their shameful secrets. 'Just think! There are people who understand hieroglyphics! But
after all, the whole thing may be a hoax.'" Flaubert's Dictionary of Accepted Ideas.
58. Substance is excluded.
59. A system of geometrical modules enclose the mummy and the automaton. "Lifelike"
details remain but all in no way naturalistic. In both these forms willful conflict and
differentiation become passive and inert. There is no suggestion of vitalistic "action,"
no sign of exerted energy. The body becomes a regular "shape" or verges on it.
60. Both the mummy and the automaton exclude all self-centered time and movement.
61. Tomb Art is always between the abstract which is clear and simple, and the decadent
which is intricate and recondite.
62. Look up "dirge" in the dictionary, it will give you lots of ideas.
63. "The isomorph never forgets" (Ancient Hawaiian Proverb).
64. A language of lattices: points, lines, and planes.
65. "... the future will repeat it to a vertiginous degree" (Borges).
66. American art and "media" as revealed by the urban environment, like Egyptian
monumental art, excludes any suggestion of death. Yet, they are both "fossilized
pseudo-events" and entirely funerary. The remnants of Christian culture as expressed
in our pastoral "graveyards" have nothing to do with our "invisible" tombs. Death is
treated by the American in a "Baroque" or "Gothic" way. Always in the past. Death is
never in his future.
67. The need for certain "sculptors" to see their work as a "whole" takes them out of
"time" and doesn't dissolve their consciousness. Any art that suggests movement is
"plastic" and subject to decay.
68. The old rational categories should be replaced by irrational categories.
69. Both cubism and impressionism are the last products of rational art.
70. A precise mind void of reason.
71. [The remaining notes have either been lost or never completed. There are two drafts
of this essay. What appears here is the revised version, which includes the text and
notes up to number 25. Notes 60-70 are from the first draft.—ed.]

William Blake

I am your Rational Power O Albion & that Human Form
You call Divine, is but a Worm seventy inches long
That creeps forth in a night & is dried in the morning sun
In fortuitous concourse of memorys accumulated & lost
It plows the Earth in its own conceit, it overwhelms the Hills
Beneath its winding labyrinths, till a stone of the brook
Stops it in midst of its pride among its hills & rivers
[William Blake. Jerusalem The Emanation of The Giant Albion]

Plotinus earth memory section

[...] But if they so apply themselves, they must have memory; it is impossible that they should have no remembrance if they are to be benefactors; their service could not exist without memory.

[on the stars and earth as having soul and perception. Plotinus IV.26]

Activities

The workshop will attempt to identify, document and construct these tombs and mummies in Copenhagen.

entropy mapping

- try older entropy mapper, and new uBLOX GPS logger using code in: `~/xxxxx_svn/new_skry` and with `sd-reader-backup.hex` as previous logger for signals and so on!
- how to plot again? use variations of `gpsrng.py` and `gpsrngcum.py` (adjust for which column we use)

see:

file: `~/collect2011/psych/studies/symptoms_newcastle/software`

`gpsrng2.py` gives us location [latitude longitude] which can be put into google maps

towards identification and documentation

construction (see core memory below) - also buried devices
concert

core memory

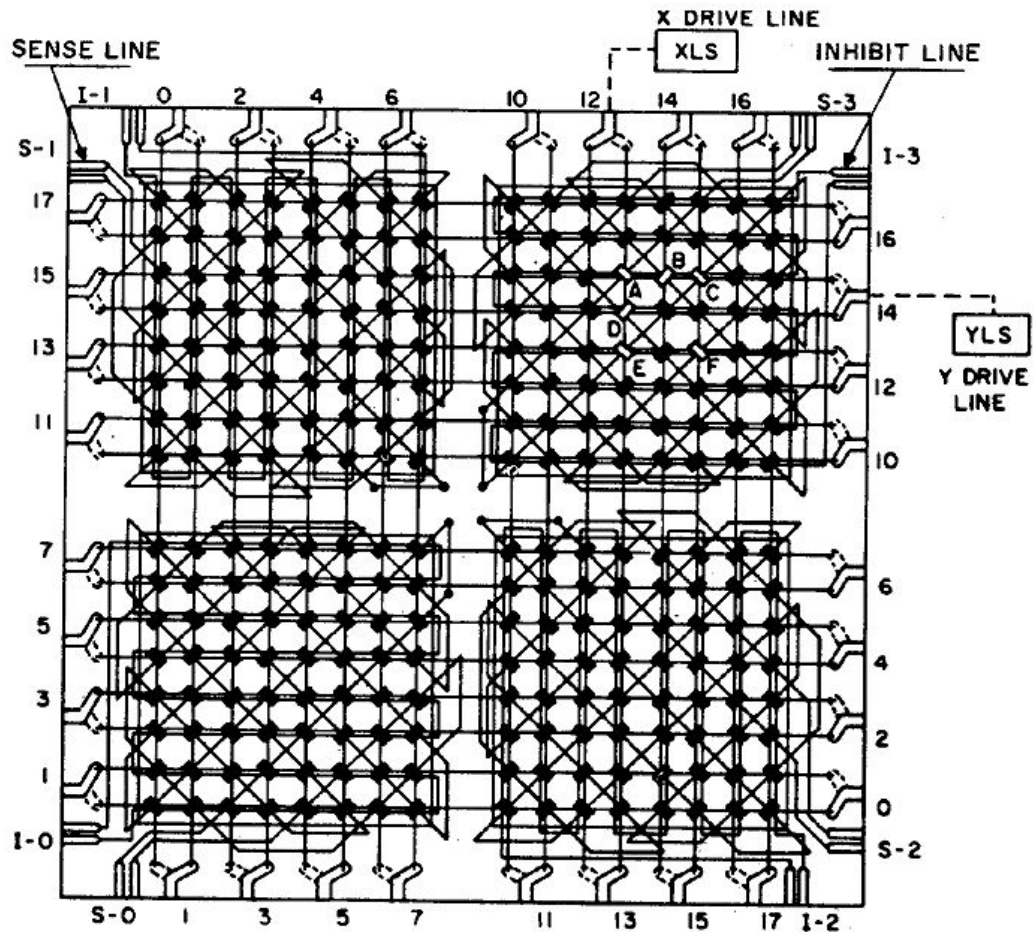


Figure 6-10.—A simplified magnetic core board, 16 by 16 array.

for cores:

<https://sites.google.com/site/wayneholder/one-bit-ferrite-core-memory>

<https://docs.google.com/a/sciencefriction.dk/document/d/1bAGTGiQUO2RttmnkLVIBhwMIZDK39tp2u>

<http://www.ed-thelen.org/comp-hist/navy-core-memory-desc.html>

notes

A film in three parts:

- 1 The Time Machine. Morlocks and Eloi.
- 2 Robert Smithson, earth computing and pornographic logic.
- 3 Edgar Allen Poe. Buried alive.

Looking at Ballard's megaliths through the earth-smeared lens of Robert Smithson

Ideas for constructing buried core/ferrite core memories - running computer process through these - and for a concert for buried devices

To bring

basic tools, stuff for cores(wire, connectors, clips, parts, arduino and cable), logging devices, **microSD HOLDER**, batteries, programmer+usb cable, earth-bootX

digital camera, laptop etc... network card+cable, audio recorder

Credits

Tombic Communication is organised as part of Pitch Drop * science friction.
With thanks to Jamie Allen and all involved!

<http://sciencefriction.dk/>