

Lacan's Alethosphere: A Psychoanalytical Model for AI and Big Data (and, Coincidentally, a Revised Account of the Foundation of Cities)

Don Kunze

Penn State University

Text for Presentation at AMPS conference "(in)Tangible Heritage(s)," June 2022

1. I am grateful to the organizers of the Architecture Media, Politics, and Society conference on (in)Tangible Heritage(s) to talk about the tangibility of intangibility and *vice versa*, using our very modern idea of gadgetry and Big Data to connect to a theory of ancient culture and urban origins that is hardly recognized by architecture historians. I specialize in two thinkers, an un-famous Italian philosopher of the eighteenth century and a famous psychoanalyst of the twentieth. This has to be an original talk if only because the followers of both thinkers have yet to recognize the significance of the one to the other, and if nothing else I am bringing both of them together as original theorists of artificial intelligence because they both thought that intelligence was, from the very start, artificial.

2. This is a thesis about the relation of the unnoticed surplus we produce when we go about our daily business. Because more and more of this business has been automated by the gadgets we find indispensable for everything from communicating with others, to reading to the news, to finding our way, we accept the way we are tracked and surveilled by mostly anonymous enterprises who themselves are not conscious of the algorithms and transactions they set in motion. Our fate is automated by this Big Data Machine, which we take for granted.

3. The surplus is a kind of unconscious that grows up in the space we create then deny, with our willing acceptance of utility and denial of the demands this utility places on us. We say that we "desire to know" what these gadgets have to offer us, but in fact it is the gadgets that desire us to use them, and that desire, we find out to our amazement and horror when, after talking to a friend about going kayaking, we get advertisements later the same day for bargains on new kayaks.

4. This thesis about the unnoticed surplus is not new. In fact it was guessed over 25 years before the Internet became a reality, by a psychoanalyst, Jacques Lacan, who on May 13, the day scheduled for his bi-weekly lecture at the Law Faculty of the Sorbonne in Paris, found himself doing a Q&A session for his audience on the steps of the Pantheon.

5. Lacan noticed someone in the crowd recording his remarks with a portable tape recorder, and on the spur of the moment guessed at the future of the Internet, where some useful gadget would transform what we call knowledge into a kind of unconscious resembling a giant machine in the form of a kind of atmosphere covering the whole earth.

6. He called the useful gadgets by a difficult word, “lathouses,” and the sphere he called an “aletho-sphere,” using the Greek word for truth, “alethea.” The important thing was that the lathouse was something you could hold in your hand, as a kind of helpful tool, but that the alethosphere’s truth, its aletheia, was a truth we wouldn’t understand. Rather, it would be in the business of understanding us.

7. It seems that the idea of cloud computing must have copied Lacan’s idea of an alethosphere, a truth sphere, an atmospheric machine that had a desire we would install in our innermost lives even though its desire would be alien and unknown, an anonymous desiring Other. A zombie at the heart of our most intimate transactions.

8. It’s worth remembering Lacan’s unusual words and their associations. In a way, they carry Freud’s original idea of the Unconscious as a kind of automaton into the 21st century terminology of cloud computing and data mining. We are reminded by these terms that Freud’s idea of the unconscious was radically different from the Humanist conception of the sub-conscious. Freud’s idea grew from an even more daring speculative connection, between what we think are intimate thoughts and wishes to the machinery of what we think are our own neural networks, but which seem to have a life of their own.

9. Freud started, as you may know, with the basic idea of the pleasure principle, put in terms of a defensive action needed to counter an incoming stimulation. The idea was homeostasis — to keep the system at a low-energy circulation. It didn't matter much whether the incoming stimulus was pleasure or pain, it had to be balanced out by an equal and opposite force.

10. [blank]

11. If we can imagine the see-saw function of the neural network as a spiral always returning the system to a near-zero state, we would see that it moves around a void, and does its best to maintain it as a contained space. However if this spiral is itself to be contained, it must itself circle around a second void, but this one, in contrast to the first, is incontinent. Freud realized that the neural network idea had to be expanded to include two kinds of voids, one that could be contained by balancing out pleasure with pain and vice versa, but another that could not be contained, because it was about the whole circuit's desire to return to its primal near-zero state.

12. Freud made a kind of marketing mistake by naming this second circuit the "death drive." It wasn't anything like a suicidal impulse, but rather a kind of Nirvana state. In religions where Nirvana is an important component, the connection is positive and desirable, or maybe we should say that a certain kind of inaction is essential to escape the turmoil of responding to every disturbance. We could say that the second circuit seeks the same kind of peace that some religions seek through meditation and fasting. It's a way of being both inside the system and at the same time standing outside the system. Lacan found the torus to be the best topological analog for this second circuit, so we should note a few important things about this 2-d surface.

13. A torus is like a sphere, but a sphere with a hole in it. This hole allows the torus to be what's called a projective form, which we can see in the diagrams known as "fundamental polygons." In the polygon of the sphere, moving from the upper right to the lower left involves an expansion followed by a contraction. For the torus, the vectors look similar but the red and blue vectors expand together, like a left and right-hand version of space, making it impossible for the completion of the circuit

to be oriented in the same way a traveler around a sphere would be facing in the same direction as where he or she left. In the torus, the returning traveler would not be able to do this, because he or she would always be moving in two spaces at the same time.

14. The first void is about the flow of information in experience and the moment-by-moment responses the organism needs to make. The second void, however, sees that this void must mean something. A signifier here is not like a word, but more like a rebus, a communication from something ordinarily lacking the power of speech, like the stars or patterns in clouds. A blank signifier eclipses or sublimates conventional meaning, producing an enigma condition. In what follows this moment, there seems to be an unknown, an “x” that explains the relations between new signifiers, which seem to hover in a kind of cloud, haunted by the suppressed signifier.

These two fraction-like expressions use the idea of multiplication to demonstrate the presence of two voids, the first related to the self-intersection of the sudden event of meaningfulness and as something mysterious but eventually knowable, and a second void that produces the flip-flop effect of a suppressed signifier that both disappears on the left and re-appears as a ghost on the right.

15. This experiment takes us to a stage of history that is not recognized officially by architecture, but is known by archaeologists and classicists as the cyclopians, named after the famous giant. Early on, the cyclops was said to have one eye, but this actually referred to the single clearings or “eyes” humans at this first stage made in the forests to gain a better view of the sky.

18. Thunder was the meaningful act that caused the suppression of the sky as a natural object and transformed it into a matrix of metonymical relations of subsequent experiences, which the first humans tried to predict by setting up ceremonial alters in the clearings, which were also burial grounds.

19. These openings were “sidereal” in the sense that their position on earth was determined by the structure of the sky. Therefore, any one clearing was, thanks to

this 1:1 relationship, unmovable. This is the basis for the story of Prometheus, who was chained to a rock, made to suffer an eagle removing his liver, which would regenerate and be removed again, in an endless cycle. This was a metaphor for the ritual sacrifices that took place in these ceremonial centers, where sacrifice was essential to keep the living from being haunted by the dead, who were buried in the same space.

20. This made each clearing, serving a single human group, incommunicative with the others. The cyclopes had no social structure, just independent hearth-based religions built around unmovable ritual centers.

21. But, because this principle of non-association was not sustainable, it was necessary to develop work-arounds that allowed the groups to trade their surplus goods through a practice called “silent trade.” A remote crossroads would be selected by kicking stones into a group and, in effect, measuring the traffic potential. Then a first party would leave some surplus good, the next passer-by would take this and leave his own surplus; the next traveler would do the same. None of the traders ever met face-to-face. To account for the exchanges they would say that the god Hermes, whose name in fact derived from the word for a “pile of stones,” had controlled the transactions and forbidden anyone to abuse it. The traders believed that their goods came from Hades, whose name originally meant “the invisible,” and was thus sacred. It’s easy to see how Hermes Latin name, Mercury, came to be the name for market. The geography Paul Wheatley discovered that the first cities in all of the seven regions of urban development were originally cemeteries. The key here is that the separate cyclopean tribes had allowed an outside group, which they regarded as untouchable because of their contamination by death, to handle the business of burying and tending to rituals. These undertakers became the first humans to learn multiple languages and serve as middle-men. As such, they could facilitate other kinds of exchanges, and a new urban idea grew up as the undertakers created layered civic functions and specialized jobs. Exchange and regulation operated under the protection of the spirits of the buried dead.

22. To get an idea of how this second circuit worked both inside and outside the first homeostatic pleasure-principle circuit, stare at the cross at the center of the pink dots until you see a green dot that seems to move around. Of course in reality nothing is moving, there is only a sequence of gaps created by “turning off” pink dots in succession. This material experience of the green dot is a durable illusion, and durable illusions of figure ground reversal are so effective that they can sustain the exchange of goods and services and regulate ideas and emotions as well.

Think of the way these first undertakers made this first alethosphere, thanks to their language skills and status as “untouchables.” The “gadgets” that they circulated among their client populations included religious objects, fortune-telling services, assistance with love matters, and of course funeral arrangements to prevent families from being haunted by their deceased ancestors. The presence of these lathouses was virtual — you couldn’t pin it down, but it was nonetheless material and undeniable, just as the green dot is undeniably something you see if you stare at the cross in the middle. This secondary virtuality is the stuff of urban history, but its effectiveness is nowhere to be found in our literature.

23. Lacan’s prescient idea of the small appliance and complementary alethosphere has been anticipated by this very ancient system of creating an administrative center out of a conceptual void. In other words, the first cultures of the city were toruses, with a principle of continence to keep the dead from haunting the living and the living from fighting and killing each other. Continence happened at the same time a principle of incontinence, the “alethosphere” idea, allowed the opposite to happen. Thanks to the fiction of Hades in silent trade, the first undertakers were able to occupy a conceptual position opened up by sacrifice and the homeostasis of Prometheus.

24. The problem was that the city needed to secularize these religious functions to become truly cosmopolitan. How was it possible to neutralize and invert the funerary function? In a way, the story of the evolving city is the same as the evolving subject, whose pleasure principle must be accompanied by a second circuit seeming at first to operate in an opposite direction, death against life.

25. Fortunately, our experiment to connect neural networks to the development of cities has a well-documented, if often misunderstood case. In Rome, there is a second foundation story, following or perhaps qualifying the one involving Romulus and Remus. This is the story of the sacrifice of a knight named Mettius Curtius, who rode his horse into a mire that had made the Forum suddenly uninhabitable. The story of course reverses the actual sequence of events of urban development. The Forum was uninhabitable because it was originally a burial ground, over which nothing could be built and no one could trespass.

26. The story of Curtius converted the historical succession, from cemetery to city center, into a temporary problem that can be solved only by a hero acting on impulse. This story reveals more than the Romulus Remus story, which sketched out the walls of Rome with a plow that the impious brother failed to take seriously and was thus murdered. Of course, this is a thinly veiled story about sacrifice, but instead of the hero Curtius we have the villain brother. The Curtius story has the advantage of giving away the secret of urban exchange, of a city of the dead for a city of the living.

27. When the Roman Senate consulted a soothsayer, the advice was that Rome needed to sacrifice what it most valued, but no one could guess just what this was. The knight Curtius, however, volunteered that this unknown 'X' object was a citizen willing to die for his or her city. Here, the Curtius story follows exactly the formula Lacan gives for metaphor, where an event, a significance, suppresses a signifier, which in this case was the collective burial site.

28. When the knight mounted his horse and rode into the mire, he effectively re-enacted the burial function of the site, but he did so as a collective. The x? in Lacan's formula for metaphor directly indicated Curtius's voluntary trip, beneath the surface indicated by the bar.

29. Above this emerged a secondary formation, a virtual circuit that was the government of Rome, with its powers of life and death, held together by a logic we could say was, like all governments, metonymic. That is, it was based on tangible procedures and rules, but in the background was the ghost of the original signifier,

which was the collective memory of the ancestral dead, evoked to give authority and resonance to the actions of the living.

30. Lacan liked to compare his formula to the mathematical form of multiplication, so that the denominator of the first “fraction” would cancel out, along with the numerator of the second. This cancellation has historical only if we remember Lacan’s lucky prediction of the Internet in 1970, where the “signifier” is the lathouse or gadget and the “new events” transacted in the cloud of metonymical, machinic networks is the alethosphere, where the canceled gadget is itself haunted by Data Mining. If nothing else, Lacan’s lucky guess opens up a new history of the origin of cities, and confirms that the first human thought was logically structured by metaphor, the suppression of a signifier by an act or event of sudden significance.

31. What is unknown both to Lacanians and to those who read and follow the work of the 18c. philosopher of culture, Giambattista Vico, is that the idea of the alethosphere and lathouse is simultaneously ancient and modern, thanks to its status as a metaphoric replacement structure. Suppression is echoed by a virtuality of relationships shadowed by the missing signifier, which in ancient times was the sacrificial spirit. This automates systems of knowledge with the “alethosphere” of the unconscious, materialized in the customs, institutions, and tools of culture, whose daily use creates a surplus ideological content that is virtual and homeostatic. I offer this difficult coda for this short essay on the alethosphere as the metaphoric structure of city origins, if only to say that a good idea can be found in unexpected places if one knows how to relax ideas of temporality and spatiality. If architecture theory were able to abandon the strict chronology of precedent and radical historicism of modernity, it might possibly be able to think this way. The advantage is that once thought possesses the means of time travel, nothing is impossible.