

STRIKE notes

The Superior Vividness of Lightning in America

1. In this marble sculpture of Benjamin Franklin by Hiram Powers (1862), the figure is supported by a tree trunk that has been visibly struck by lightning.
2. *Franklin seized the lightning from heaven and the scepter from tyrants.* Anne-Robert-Jacques Turgot, 1778
The lightning rod was invented by Founding Father, Benjamin Franklin. He regularly advocated for its use in his *Poor Richard's Almanac*.
3. America became a leader in early electrical innovation, some attributed this to the unique quality of the air; American atmosphere was thought to be more electric. Highlighted pages from *A View of the Soil and Climate of the United States of America*, C.F. Volney, 1804.

Marked by Lightning

4. The branching pattern caused by high voltage discharge is called a Lichtenberg figure. This example of captured lightning was created in a lab by Stoneridge Engineering. The photographs above depict the Z Machine at Sandia National Laboratory and a home laboratory.**
5. Photos from top to bottom:
 - Lichtenberg figure created by a highly charged contact with touch screen*
 - Lichtenberg figure on sidewalk, created by fallen power line*
 - Lichtenberg Figures created by lightning strike on golf courses**
6. Lightning rods tips, sculpted by lightning.
7. *A single flight of planes no bigger than a wedge of geese can quickly end this island fantasy, burn the towers, crumble the bridges, turn the underground passages into lethal chambers ... All dwellers in cities must live with the stubborn fact of annihilation; in New York the fact is somewhat more concentrated because of the concentration of the city itself, and because, of all targets, New York has a certain clear priority. In the mind of whatever perverted dreamer might loose the lightning, New York must hold a steady, irresistible charm.*
This passage from E.B. White's essay "Here Is New York" (1948) has taken on new significance since the terrorist attacks of September 11, 2001. It has been quoted numerous times since, but I was reminded of it recently in Kenneth Baker's book on Walter de Maria's 1977 installation, *The Lightning Field*.

This is not a photograph of lightning striking the Empire State Building. On July 7, 1931, bolts of lightning from an imaginary cloud were hurled at a miniature model of the New York City skyline. Engineers experimented with 5,000,000 volt artificial lightning, concluding that the Empire State Building would act as a lightning rod for the surrounding area. This is a photograph of the laboratory tests being conducted. No damage was done to the model. (AP Photo)

I Sing the Body Electric

8. *The thin red jellies within you or within me, the bones and the marrow in the bones.*
"I Sing the Body Electric" was first published as one of twelve untitled poems in *Leaves of Grass*, 1855. Walt Whitman didn't add the title "I Sing the Body Electric" until 1867. In this poem, the body becomes a conduit for spirituality, sexuality, and poetry.
9. *Lichtenberg skin patterns are transient in both surviving and postmortem cases.*
Skin marked by Lightning: top left images and captions from the case report "Lightning and Lichtenberg Figures" by Cherington, Olson, and Yarnell, Lightning Data Center, *Injury Journal*, September 2002.
Middle row: Lichtenberg skin patterns**
Top right: Winston Kemp, struck by lightning**
Bottom row: Photographs of henna stain on skin*
10. *The lightning was inspiration -- the power to use the works of others as sparks for one's own creativity.*
from *The Origins of Elvis and Captain Marvel Jr.*
Objects from front to back:
 - Elvis Presley's personal insignia, the letters T C B over a lightning bolt, carved in soap stone.
 - Segment of the famous Graceland Gates at Elvis's Memphis home. It is likely that this piece of metal was once charged by Elvis's touch.
 - Yellow and black lightning graphic adapted from the walls of the Graceland basement.
11. Spherical Lichtenberg figure with mug from a lover, marked by the electricity we once shared.
*If dreams were thunder,
Lightning was desire
This old house it would've burned down
a long time ago.*
Angel from Montgomery, John Prine, 1971

National Lightning Protection

12. Collected lightning rod sales materials and ephemera. Photos:
 - *Men examining aluminum cap of Washington Monument, and Aluminum cap of Washington Monument with lightning rods IV*, Theodor Horydczak, ca. 1920-1950 (Library of Congress Prints and Photographs Division)
 - *Photograph of First M.E. Church*: Scene shortly after a severe hail and snow storm on May 5, 1906. The steeple, 176 ft. high, was struck by lightning and a little later much of the burning portion fell into the street. (Postcard collection, Bentley Historical Library, Ann Arbor, MI)
13. As evident in this text (reprinted from *Lightning Wireless*, Lily Cox-Richard, 2008) the Pointed vs. Blunt controversy was a political one. When something is called a political lightning rod, it usually refers to a controversial person or issue that actively attracts attention. However, the purpose of a lightning rod is not to attract lightning, but to carrying the wild force safely to the ground. If one understands a political lightning rod as something that diverts attention, rather than attracting it, one may look more critically at the reasons for such a diversion.

What causes a strike?

14. Fulgurite from the collection of the Grand Rapids Public Museum. When lightning strikes the ground, it can fuse rock, sand, or soil into a tube-form around the bolt.
15. Lightning occurs when electric charges in a cloud reach a critical point of imbalance. The tension can no longer be contained, triggering a dramatic discharge. After the surge, the atmosphere's equilibrium is reestablished. Strikes can be an effective method for regaining equilibrium in other sites of unbalanced power. Pages scanned from *Politics of Nonviolent Action, Part Two: The Methods*, Gene Sharp, 1973.
16. Poster from California State Employees' Association, Service Employees International Union, Local 1000 (The Center for the Study of Political Graphics). The threat of a strike from a brewing storm gives lightning agency and power that should be taken very seriously. As told poetically in Bob Dylan's *Chimes of Freedom*, lightning often flashes on behalf of society's less powerful members.

STRIKE notes

Why Trees are so Often Struck by Lightning

17. Collected lightning protection sales materials and equipment for safeguarding trees.
Note the installation of grounding cable on the tree in far right side of the diorama.
18. Fulgurite found by Bob Rogers, approximately 10 miles north east of Hesperia, MI, c. 2009.

Diorama, from left to right

- ▶ Tempered by countless storms, these lightning rods retain the material wisdom of knowing lightning.
- ▶ *Lightning is a destructive force running wild.*
It is a freakish force.
Creating the schematic does not relieve anxiety, but instead draws it out of hiding and brings it into focus. Lightning rods do not diffuse the surge, but can channel its charge along grounding cables, away from the protected structure and safely into the earth. Typical Lightning Protection Plan for Residence, adapted from Copperweld Company trade literature.
- ▶ The mural depicting Native Americans and the constructed wigwam are both original to the *People of the Grand* exhibit at the Grand Rapids Public Museum and could not be permanently altered or moved. Lightning rods have been temporarily installed on the wigwam for exhibition, and a copper grounding cable has been installed in the tree on the far right side of the diorama.
- ▶ From the Report on the Destruction by Lightning of a Gunpowder Store:
The gunpowder was ignited by a flash passing between the two imperfect conductors. "The only structural damage effected was produced by the impingement of bricks, which striking with great force, had in a few instances, partially penetrated or displaced brick work in the dwelling-houses and buildings, and a portion of the iron of an iron church was broken by a piece of projected debris. A brick was driven through a window in one of the houses at three hundred years, and broke a bedstand."
Report of the Lightning Rod Conference, 1882

The Gleam without the Bolt

The Exploding Thunder House was a portable model used by lightning-rod salesmen. This illustration demonstrates the consequences of precautions not taken. (Department of the History of Science collection, Harvard University)

In the Cabin

- ▶ *...the Lightning-rod man still dwells in the land; still travels in storm-time, and drives a brave trade with the fears of man.*
The Lightning-Rod Man, Herman Melville, 1854
Read by Stacy Carson
Produced by Sharad Patel and Lily Cox-Richard
- ▶ Calendars indexing the chronology of changes to the Homeland Security Advisory System, from its introduction on March 12, 2002 until April 20, 2011, when it was replaced by the implementation of a new threat system by the U.S. Department of Homeland Security.

* photo: Lily Cox-Richard
** image found in online research

