



Weston Historical Society

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THE DAY THE SKY FELL ON CONNECTICUT

Marshall S. Berdan

So you think that Weston is just a bedroom community where nothing much ever happens? Perhaps so. But two hundred years ago this month, something truly earth-shattering happened in this out-of-the-way farming community of some 2,600, propelling Weston (which at the time included what is now Easton) onto both the national and international stages.

Just before dawn on December 14th, 1807, a luminous ball of fire was seen streaking southward across the partly cloudy sky. About a minute after its appearance, a trio of explosions could be heard from as far away as 40-50 miles, followed seconds later by a loud whizzing or roaring noise as fragments of the fireball slammed into the still unfrozen earth.

What made the Weston Meteorite – as it came to be known – so significant was that it was the first “witnessed” meteorite fall in the United States. Europe, however, had seen several such falls, the earliest – and most dramatic -- of which had occurred in November of 1492 when a 260-pound

specimen had plummeted to earth near Ensisheim, Germany. In 1795, a much smaller single meteorite had splattered mud on a farmhand in Yorkshire, while just three and half years earlier -- on April 24, 1803 -- a shower containing an estimated 2,000-3,000 meteorites had been witnessed by hundreds of individuals, including the mayor and other town officials in L’Aigle, Normandy.



The witnesses of the Weston Meteorite were not nearly as numerous, but they were equally well situated to recount what they had seen and heard and to recover specimens. And thanks to a regularly scheduled town meeting that afternoon, word got out quickly – not just to the outside world, but to those other Westonites who had concluded that

their eyes must have deceived them.

The first public account of the event appeared in New Haven’s “Connecticut Herald” on December 22nd, under the headline “Remarkable Phenomenon.” It ended with an appeal for “gentlemen who may

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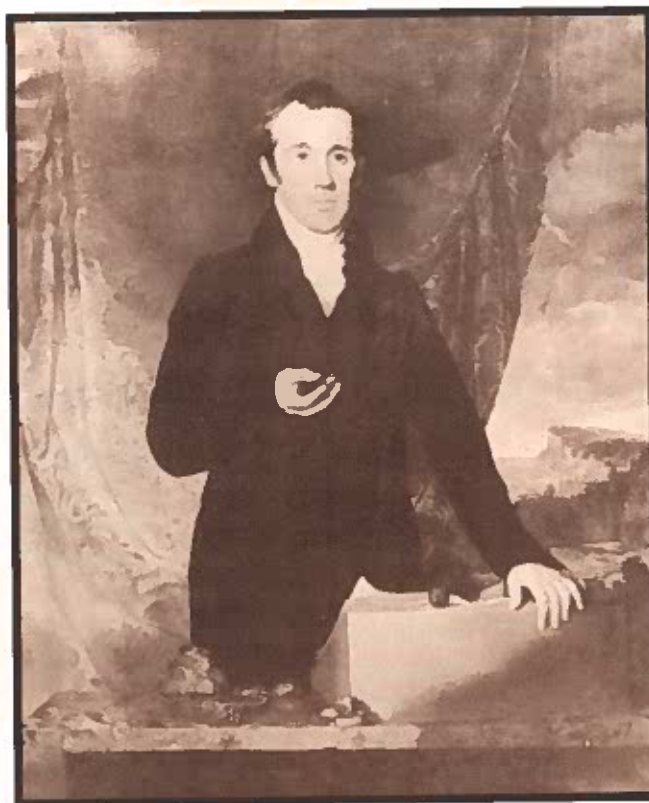
have observed it, in distant parts of the state, to favor the public with their observations.”

By then, however, the most important gentleman had already come forward. He was not an eyewitness, but 28-year-old Benjamin Silliman, Professor of Chemistry and Natural History at Yale College, and the son of Revolutionary War general Gold Selleck Silliman. Like his father, Silliman had studied law at Yale, only to conclude that there were already too many lawyers in the young nation. In 1802, Yale President Timothy Dwight persuaded Silliman to become the college's first professor of Chemistry and Natural History. To prepare himself for his new duties, he went to Philadelphia to study under James Woodhouse, Professor of Chemistry at the University of Pennsylvania, and then to Edinburgh, where his course of instruction included meteorites.

Nineteen months after his return came the event that would determine the trajectory of the rest of his life. Within hours of hearing the news, Silliman was on his way to Weston, accompanied by a colleague, James L. Kingsley, Professor of Religious Studies. Despite the relatively short distance, the pair didn't arrive until Monday the 21st as Silliman's religious upbringing compelled him to observe the Sabbath, which they did in Fairfield.

The two professors spent the next two days conducting interviews and collecting fragments of the meteorite. Their report, which would be revised and republished several times over the next few years, is still the most complete description of what happened that December morning.

Silliman and Kingsley's falling star witness was Nathan Wheeler, “a gentleman of great respectability and undoubted veracity” who at the time served as Weston's town clerk, treasurer, and justice of the peace. More importantly, Wheeler, who just happened to be standing outside his house at the time and was thus able to observe the astronomical phenomenon which began with “a sudden flash of light.”



Benjamin Silliman (1779-1864). Portrait by Samuel F. B. Morse, 1825

Wheeler estimated the size of the fireball, which he described as appearing like “a burning fire brand, carried against the wind” and trailed by “a conical train of paler light” as being “about one-half to two-thirds the apparent diameter of the moon.” No sooner had it reached the zenith, however, then he heard “three loud and distinct reports” like those of a four-pounder [cannon] close at hand . . . followed by a rapid succession of reports less loud, and running into each other so as to produce a continual rumbling like that of a cannon ball rolling over a floor.”

Though Wheeler had had a spectacular view, he had not been near where any of the stones fell to earth. These would be found in three separate locations (two in what is now Easton, the other in Trumbull) over a linear range of 9 to 10 miles, corresponding -- as Silliman and Kingsley soon concluded -- to where they had been ejected during the three explosions.

The first stones to hit did so near Merwin Burr's

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homestead. Burr had also been an early riser that morning, and had distinctly seen something land in the darkness. But it wouldn't be until the sun rose that he would find it: a lead-colored stone the size of a goose egg and still warm to the touch.

Five miles south, William Prince, one of early Weston's wealthiest residents, testified to having been roused from his bed by a flash of light and having observed a patch of smoking ground, the results, he naturally assumed, of a lightning strike. Upon inspection later, he found a 35-pound fragment, buried two feet in the ground. Hoping that it contained precious metals, Prince set to work breaking it with a hammer and melting the fragments at a blacksmith's forge. When it was clear that they contained nothing that he considered valuable, he sold the remaining 12-pound piece to Isaac Bronson, a friend and former roommate of Silliman's from Greenfield Village.

The single largest fragment appears to have fallen some 500 feet from Elijah Seeley's farmhouse in Trumbull, an additional four miles farther south. Like the others, Seeley, who had been inside at the time, attributed it to lightning, only to discover later that several of his cows had jumped into the adjacent enclosure and that "all exhibited strong indications of terror." (Subsequent embellishments would have Seeley actually milking his cows when the meteorite landed only fifty feet away).

Unfortunately, the meteorite had struck an imbedded fieldstone, shattering both to smithereens, most of which had been carried away by curious neighbors. Judging by the size of the crater (five feet in length by four and a half feet in width and three feet deep) Silliman estimated that this particular fragment weighed nearly 200 pounds.

But the two Yale professors were not fated to return without at least one sizeable treasure. Less than half a mile from the Prince household, a 13-pound fragment had imbedded itself into the soft ground of an unidentified farmer's field, splitting only

into two roughly even pieces. By the time it was discovered, however, word of the scientific value of the stones had gotten out. Silliman was allowed to purchase the smaller, six-pound piece for a price he prudently never disclosed.

Back in New Haven, Silliman retreated into his basement laboratory to begin analyzing his specimens, which he soon concluded to be comprised of "51.5% silix, 38% brown oxid of iron, 13% magnesia, 1.5% oxid of nickel, and 1% sulphur, with the excess . . . proceeding manifestly from the oxidizement of the iron, in a considerable, but unknown proportion." Time was of the essence: the meteorite had attracted the attention of numerous professional and amateur men of science, including Silliman's former instructor, James Woodhouse. Silliman was clearly in the best position to capitalize, but until he conclusively did so, scientific "ownership" of the Weston Meteorite was still up for grabs.

Silliman and Kingsley's first report, a several thousand-word summarization of the numerous eyewitness accounts accompanied by the preliminary results of Silliman's chemical analysis, appeared in the Dec. 29th issue of the "Connecticut Herald." The report was reprinted in the January issue of "Churchman's Magazine" or "Treasury of Divine and Useful Knowledge," this time with a preamble designed to pre-empt alternative accounts.

"As imperfect and erroneous accounts of late phenomenon at Weston, are finding their way into the public prints, we take the liberty of enclosing for your paper, the result of an investigation into the circumstances and evidence of the events referred to, which we have made on the ground where it happened."

But Silliman, the scientist, took a back seat to editor Rev. Tillotson Bronson, the divine, who pontificated on the meteorite's "ultimate" significance: "As Christians we believe that all events in the natural

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world are subject to the control of Almighty Power.” “But what is this compared with the events of the last great day when planets and suns shall be hurled from their spheres and the earth not only shaken, but from her centre torn to be involved in flames and dissolved into smoke and vapors.” “Think of this, O Christian! And consider what manner of person thou oughtest to be, *in all holy conversation and godliness.*”

In the meantime, Silliman received some welcome news from his friend Isaac Bronson: a 36½-pound fragment had been found atop Tashua Hill in Trumbull by the son of a Mr. Jennings of Fairfield. Unfortunately, continued Bronson’s letter, “it will require some address to get it from [the father] as he seems to entertain extravagant ideas of the value of his prize.” (Having refused the \$5 Bronson offered, Jennings eventually took his treasure to New York City where he exhibited it for money).

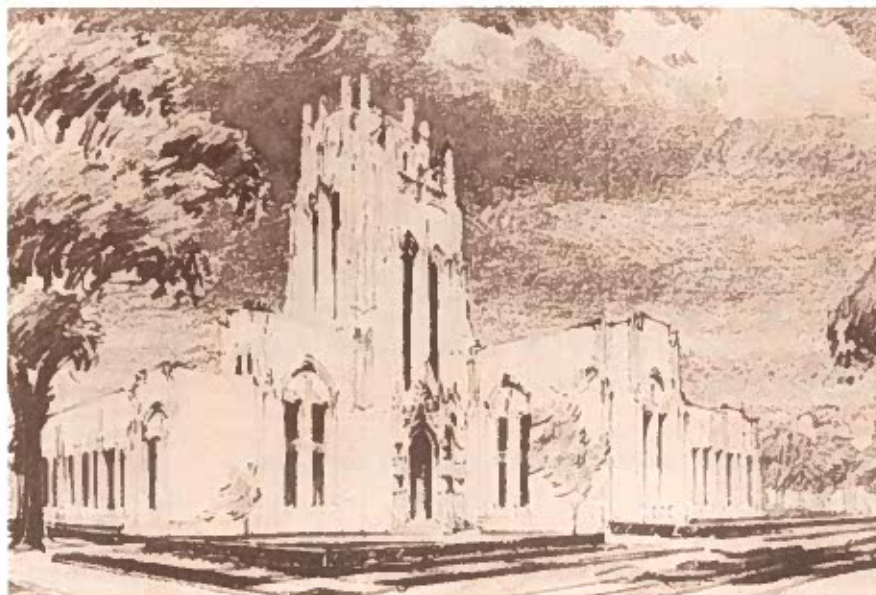
Silliman’s attentions, however, were directed to the more pressing objective of producing a comprehensive report of the Weston Meteorite for the world scientific community. To that end he repeated his regimen of chemical analyses, incorporating both the results – which he now deemed to be conclusive – and detailed descriptions of the procedures.

The authors concluded by asserting that the meteorite couldn’t have come from any of the popularly believed sources: stones fused by lightning, terrestrial volcanoes, a coalescence of atmospheric gases, and projectiles from lunar volcanoes. Assuring their readers that the stones were most assuredly extraterrestrial in nature, they went on to tentatively accept the late Thomas Clap’s (President of Yale, 1739-1766) “terrestrial comet” theory according to which the such bodies “revolv[ed] around the earth in the same manner as the solar comets revolve around the sun.” But they signed off noncommittally: “until we have more facts and better observations, the phenomenon must be considered as a great measure inexplicable.”

Upon its completion in late January / early February, the

report was sent off to the pre-eminent scientific academies in France and Britain as they were held in higher esteem, even by American practitioners. For the domestic market, Bronson had suggested a decidedly more popular tract, one that would be priced at \$1 a copy, and would “bring [them] a sum equal to a year’s salary.” Silliman quickly warmed to the idea, suggesting to Kingsley that they “could write [themselves] into reputation and bread.”

But the plan came to nothing and the two decided to submit their comprehensive rewrite to this country’s leading scientific body, the American Philosophical Society in Philadelphia. At the conclusion of the academic term, Silliman hand-delivered the document where it was formally read at the Society’s March 4th meeting. While there, he discussed his conclusions



Drawing of the proposed new building of the Peabody Museum by Charles Z. Klauder, architect



METEOR ANNIVERSARY – 200 YEARS

Friday evening, December 14, there will be an event to celebrate the anniversary of the “Weston Meteorite”. There will be a distinguished panel on hand to discuss this important and amazing event in the history of our towns. The panelists include, Dr. Richard P. Binzel, Professor of Planetary Science at MIT, Dr. Karl K. Turekian, Curator of Peabody Museum’s Div. of Meteorites and Planetary Science (Dr. Turekian will be bringing the 28 lb. piece of the Weston meteorite house at the Peabody Museum), Mr. Monty C. Robson, Dir. Of the John J. McCarthy Observatory, New Milford, Ct., and Mr. Daniel Cruson, retired teacher of Anthropology and local history at Joel Barlow H.S. in Redding, Ct., and author of several publications of local history, including the “Images of America” series.

This should be a fun and informative evening for everyone. Ticket information may be found by calling the Weston Historical Society at 226-1804, or by contacting one the Society’s trustees. Tickets will be \$15.00. Please join us. Refreshments will be served and there will be display tables set up with some student works and some meteor pieces for sale, memorabilia, and the Morehouse/Albin “stone.”

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with Woodhouse, but without letting his erstwhile instructor actually see the report lest he appropriate portions of it for his own benefit. Realizing that he was beaten, Woodhouse backed off and the Weston Meteorite now “belonged” to Silliman.

An oft-repeated legend has President Thomas Jefferson saying “I would more easily believe that two Yankee professors had lied than that stones fell from heaven.” Another version has him opining to a senator with whom he was dining that it was “all a lie.” Neither seems to be true, though Jefferson was known to be adverse to the theory of extraterrestrial origin based upon a remark he had made in an 1805 letter.

Whatever he did or didn’t say, Jefferson commissioned Nathaniel Bowditch of Salem, Massachusetts, “the father of American navigation,” to investigate. Bowditch’s report wouldn’t be published until 1815, and though it would effectively refute the terrestrial comet theory, it did corroborate the two Yankee professors on the essential point of the meteorite’s extraterrestrial origin.

Back in New Haven, Silliman continued to pursue the Jennings fragment, as much to keep it out of the hands of potential rivals as for his own benefit. Jennings had hoped to get as much as \$500 for it, but eventually settled for \$130 from Colonel George Gibbs of Newport, the country’s foremost collector of minerals.

Fortuitously for Silliman, Gibbs was an acquaintance whose friendship would be made even more secure by the awarding of an honorary degree from Yale later that year. In 1811, Gibbs would loan Yale his extensive collection (some 12,000 specimens), and Silliman would finally have access to the single largest fragment of the Weston Meteorite. Fourteen years later, an impoverished Gibbs would sell his entire collection to Yale for \$20,000.

In the meantime, Kingsley had been replaced as co-author by Jeremiah Day, Professor of Mathematics and Natural Philosophy, who contributed a projection of the dimensions (a diameter of at least 491 feet and a weight of six million tons)

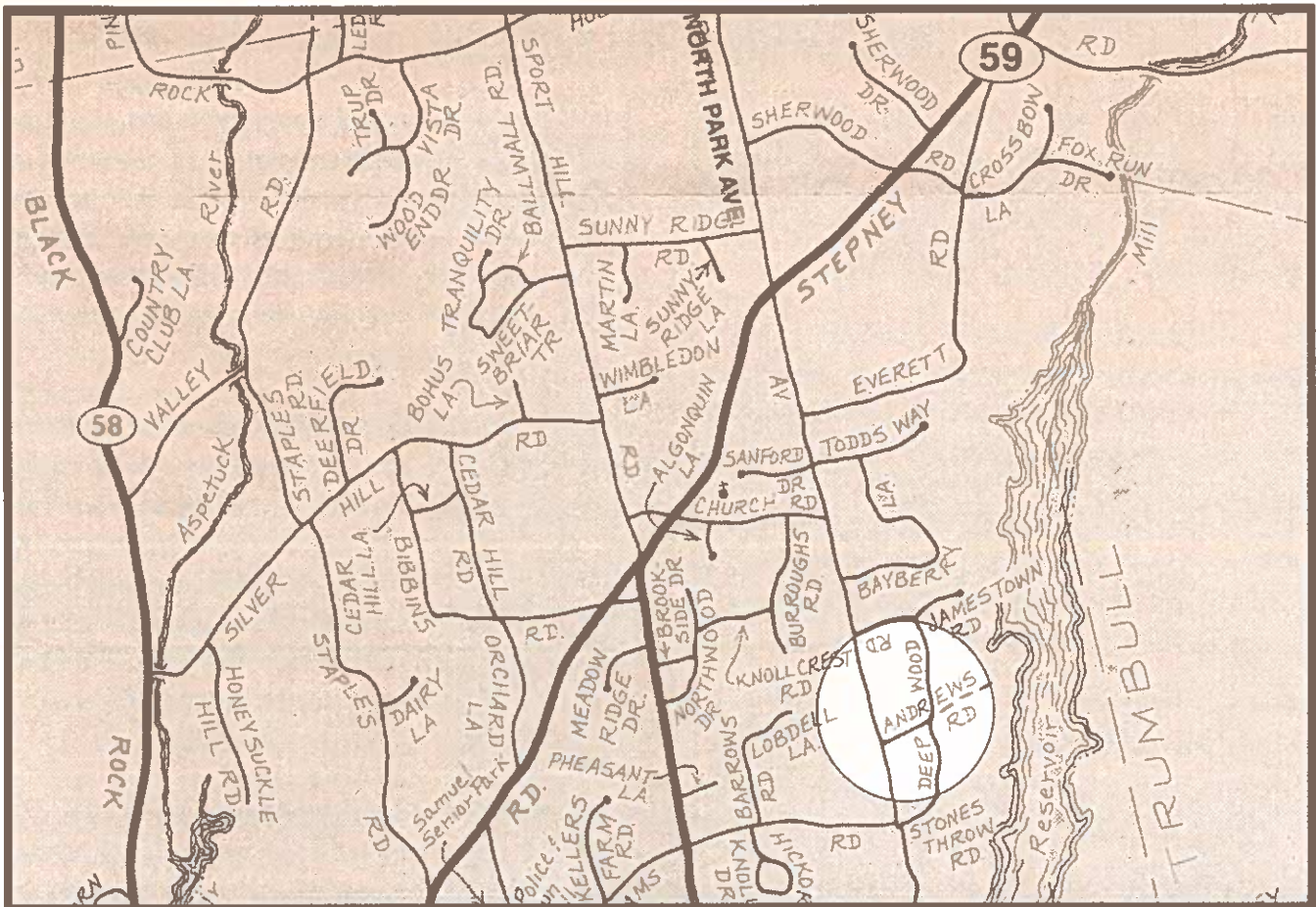
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and velocity (3 miles per second) based largely upon the observations of an eyewitness that Day's brother had located in Hartford. The revised Silliman and Day account appeared in "Memoirs of the American Academy of Arts and Sciences" of Cambridge, Massachusetts, in 1809, and "Memoirs of the Connecticut Academy of Arts and Science" in 1810.

By 1812, Silliman was busy riding his assiduously cultivated expertise - and the Jennings/Gibbs fragment - to fame if not profit. And he was riding it literally as well, as during his lecture tours of the Northeast, it - along with assorted other meteorites that had come into his possession - were transported in a specially-designed compartment underneath his carriage. In 1818, Silliman founded the

"American Journal of Science," which - 189 years later, continues to be the country's leading journal of geology and its longest continuously published scientific periodical.

"As a result, Yale became one of the pre-eminent scientific institutions of the mid 19th-century," explains Barbara Narenda, who, since 1972, has served as Collection Manager of the Peabody Museum's Meteorite Collection. Silliman's prestige eventually attracted 17-year-old James Dwight Dana, who would go on to become the most prominent American geologist of the 19th century and whose system of mineralogy is still in use today. Upon Silliman's retirement in 1854, his duties were divided between Dana, who had also become his son-in-law, and his son, Benjamin Silliman, Jr.



Drawing of the proposed new building of the Peabody Museum by Charles Z. Klauder, architect

PIECE OF THE ROCK?

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Two hundred years later, the Jennings/Gibb meteorite – now classified as a H4 stone chondrite and down to 28 pounds as a result of donations to other institutions, including the Smithsonian in Washington -- is still at Yale where it serves as the cornerstone of the Peabody's extensive meteorite collection. Are there pieces of the Weston Meteorite out there still waiting to be discovered? "Probably," says Narendra, who notes that of the 350 pounds it is now believed to have weighed, only 50 pounds can be accounted for. "But by now the fragments are so weathered as to be indistinguishable from the millions of other stones lying all around." Even so, she still gets the occasional call from someone believing that he or she has unearthed a long-lots fragment. So far, however, none has proven to be an authentic part of American scientific history and Weston's abiding claim to international fame.

History is defined as "a chronological record of significant events." We not only have a record of events, but we usually include dates, times, persons, etc. related to the event. As time passes we sometimes change the story, just a bit, to emphasize a particular detail, or embellish a fact to make the story more palatable. It is similar to the children's game of telephone. The more the story is told, the more it changes. Our facts and figures might be the same, but the details might not.

Such is the case of the "Weston Meteorite" possessed by Ernie and Judy Albin of Newtown Tpke. They have a "piece of the rock?" Here is their story:

It is a story...a family story that has been passed down through the Morehouse/Albin generations. When we moved to Weston and into the farm house that had been owned by the Morehouse family from the time it was built around 1859, we learned about the "stone." It was the husband of our neighbor, Minerva Morehouse Heady, who brought it to our attention. We had moved the farmhouse across the street and put it on a new foundation. The property where it had been for one hundred years was sold to developers and "Tex" was afraid it would be buried. He carted it to us in his tractor, saying "You might want to keep this." The family story is that this very strange looking stone was part of the meteor that fell a long time ago. We were told that Aunt Carrie Morehouse, who grew up in the house, was very protective of the stone. She showed it to Ernie when he was a young boy and told him that it was a meteor. It rested along side of a wagon road in the back of the house. This area is now Blue Spruce Circle. A picture of the stone was taken in the late 30's or early 40's with a notation stating "This is the meteor behind the house." It remained outside, enduring all the elements until late 2006.

Then, due to the upcoming 200th anniversary of the first U.S. recorded meteor fall, this stone started to arouse some significant interest among those who were very involved in the goings on in space – past and present. Our stone was examined closely and pieces taken to the Smithsonian Institute for testing and the determination was made that it did not belong to the Weston fall. What is it? Where did it come from? Perhaps another meteor fall? It's a mystery!

Editor's Note

Although we have written about the Weston Meteor in previous issues of the Chronicle, we are very excited about the 200th anniversary of this historic event for not only Weston, but the entire country. We are so fortunate that one of our members Marshall S. Berdan (fondly called Mike) spent many hours researching this event and talking with the experts. He then accumulated all his information and wrote about the Meteor for the "Hog River Journal" which is a magazine devoted to Connecticut historical events. Mike then gave the Historical Society the rights to the story. We are extremely grateful for this wonderful history of the Weston Meteorite.

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