

# Jack Horkheimer, "Star Hustler"

*The SKEPTICAL INQUIRER talks with  
Public Television's exuberant  
"Star Hustler"*

Interview by GABRIEL SEABROOK

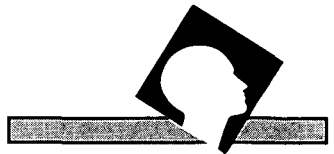
*Avid astronomy interpreter, freethinking teacher, and popular television personality, 54-year-old Jack Horkheimer has become something of an institution to astronomy buffs around the world. Indeed, his enthusiasm for science is infectious, as I found out when I visited him in his spacious, sunny office at the Miami Space Transit Planetarium.—G.S.*

**SI:** Most astronomers are content to work quietly behind the scenes in offices, labs, and observatories. Yet you write and host your own television program. What inspires you to bring astronomy before millions of viewers each week?

**Jack Horkheimer:** Ever since I was a kid, I've been a science nut; in fact, I'm addicted to all the sciences. As I grew older, I would often find myself talking about the latest discovery to someone, or explaining the wonders of some particular aspect of science. And so early on I realized two things: first, that I wanted to share this enthusiasm with others, and second, that I had a talent for communicating. But more important, I wanted to make science accessible to people. When I finally had the opportunity to create "Star Hustler," it was for one reason: to turn on as many people as possible to the wonders of modern science and astronomy.

**SI:** How does a "Star Hustler" episode get put on the air?

**J.H.:** With a great amount of difficulty and angst! The basis of each show starts with something I think will interest people; something that people can see in the night sky, from



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anyplace, at that time of year. We view each episode as a short story that requires both drama and humor. We start with a 20-minute script, hold production meetings, art meetings, and finally the computer specialists get together for the animation layouts. We do four episodes a month, one for each week. It takes about two weeks and 35 people to complete four shows. There's so much I'd like to say on the air about the stars; I only wish I had fifty minutes instead of four!

**SI:** What questions are most often asked by your viewers?

**J.H.:** The number one question is, believe it or not, "What's the name of that music you use in the beginning

of your show?" [Debussy's *Arabesque* No. 1; Tomita, "Snowflakes Are Dancing," RCA.] The second most asked question, "Are you really that excited about the stars?" Yes, I am! The third: "Is that space beam real, and have you ever fallen off?" The answer: Yes, it's real, and yes, I've fallen off!

**SI:** Besides working with public television station WPBT on "Star Hustler," you're also involved with the Miami Space Transit Planetarium. How did you come to be executive director there?

**J.H.:** Well, I started off running the planetarium as a volunteer; it was kind

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of a hobby for me. I worked seven days a week, sometimes fourteen hours a day. After the first year, they asked me if I'd like to take over permanently. I said, "What does that entail?" They said, "We'll pay you." I said, "Great!" That was 24 and a half years ago!

**SI:** Tell us about the Miami Space Transit Planetarium itself.

**J.H.:** It opened in 1966 as one of the largest planetariums of its kind. It's unique in that the starfield is one of the few ever designed by Roy K. Marshall, the great astronomer of the forties and the fifties. It's probably one of the most natural looking starfields in the world. We can duplicate all kinds of motions, not only on the planet but off the planet. We've won international awards, our shows are seen all over the world, and we were the first planetarium ever to get a grant from NASA to produce an international show [*Starbound*]. We were the first planetarium in the country that we know of to produce science dramas: full multimedia shows, full soundtracks, professional narration. Sally Jessy Raphael narrated my shows *Child of the Universe* and *Buck Rogers, Right On*. Leonary Nimoy, Arthur Godfrey, and several other media celebrities have done shows for us here too.

**SI:** While astronomers today use radio telescopes instead of stone circles, isn't humanity's primal fascination with the stars still at the root of contemporary astronomy?

**J.H.:** Yes. We are animals; we are biological, chemical organisms; we are products of evolution. Our fascination with the stars goes way back to prehistoric times. Indeed, it seems that

there is something that naturally excites us, that fills us with awe and wonder, when we look up at the stars. All great religions placed their gods in the skies, and for good reason: the stars inspire us with their inaccessibility and with their permanence. Though the seasons change, the stars always remain the same. I think this engendered incredible wonder in prehistoric men and women, who saw the stars as unchanging, immortal beings.

**SI:** How did you yourself become interested in astronomy?

**J.H.:** I think all astronomers worth their salt will admit that it begins in childhood; something back then got them hooked on the awe, the immensity, the wonder of it all. For me, it was a lunar eclipse. Wow!"

**SI:** What prompted you to then go on and take up the study of stars professionally?

**J.H.:** Harlow Shapley, one of the great astronomers of our century, said, when asked that same question, "Because they're so pretty."

**SI:** Your approach to astronomy on "Star Hustler" has on occasion been called "too flamboyant." The word *hustler* itself suggests a carnival-like atmosphere. What do you say to those who assert that science is a serious topic that should be presented in a restrained, scholarly manner?

**J.H.:** One word? Bullshit. They're wrong. This attitude turns science into a religion, makes it inaccessible, the very opposite of what it should be.

**SI:** Science then becomes dogmatic?

**J.H.:** Of course! It becomes the very thing that good scientists are screaming against. How far are we away from astrology when we get misguided scientists going around saying that astronomy must be treated with great reverence? Science is for everyone!

**SI:** How do you see your role as a popularizer of astronomy?

**J.H.:** I want to reach people no one else has been able to reach. I could tell you lots of stories about people who have been turned on to the stars for the first time through my television shows and planetarium lectures; young and old, educated and uneducated, from every walk of life. I get letters from people in nursing homes telling me that they watch my show because they can no longer see the stars themselves. Then there are the kids who get their first telescope after coming to the planetarium or watching the television show. This is my reward. I don't do "Star Hustler" for the money. I do it because I want to share my love of science with others.

**SI:** Many people continue to believe that the full moon brings out violent, romantic, or lunatic behavior in otherwise "normal individuals. How do you defend the moon against such charges?

**J.H.:** Well, it's true: celestial bodies *can* affect the human mind. Suppose you get hit in the head by a meteorite? That would definitely have a direct effect! Seriously though, the moon does affect human behavior, but not in the way most people think it does. Historically speaking, there once *were* more crimes committed during the full moon. Not because of some mysterious lunar force, but for two very simple reasons: one, before the advent of gas and electric light, many people found it more convenient to travel, plant crops, or hold festivals, parties and meetings on nights of the full moon because of the bright light. The more people out, the more easily crimes were committed against them. Second, with so many people out and about, more homes were empty. The result? More break-ins. Today, however, with modern lighting, all of that has changed. Statistics now show that

there isn't any rise in crime at all during a full moon. Yet stories about the moon and crime from our grandparents' day are still circulating, leading many to believe that the moon directly affects human behavior. This nonsense is then reinforced by the wild claims of astrologers.

**SI:** In 1984, the Committee for the Scientific Investigation of Claims of the Paranormal called on all of the newspapers in the United States to carry a disclaimer in their astrology columns. As an astronomer, what are your views on astrology?

**J.H.:** People search for guidance. If they don't get it from formalized

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religion, they turn to an informal religion, and that's what astrology is; it's an informal religion. The books don't say this, but it's the biggest, most popular religion in the world. [Anthropologists refer to astrology as one of the "celestial religions."] The planets and stars were originally thought to be deities that affect human behavior, human destiny. It's said, really, that so many people today continue to use astrology as a guide on how to live. I've talked to teachers who treat their students according to their individual astrological signs. This is child abuse. It's beyond imagination. It's superstition, high-tech witchery.

**SI:** What do you see as the primary difference between astronomy and astrology?

**J.H.:** Simply put: astrology is subjective, astronomy is objective. Astrology is a religion, astronomy is a science.

**SI:** Astronomy has been called the "oldest of the physical sciences," while systematic astrology began in Meso-

potamia a mere 4,400 years ago. Yet the myth that astrology arose prior to astronomy persists.

**J.H.:** Astronomy comes first because you have to know the motions of the stars before you write a horoscope! And of course, we have carvings of the moon on bones, and cave drawings of the moon dating back to the Paleolithic period, long before civilization emerged. These prehistoric people were studying the workings and paths of the planets and stars, not casting astrological charts!

**SI:** Despite the best efforts of skeptics, science teachers, and scientists themselves, the popularity of astrology and other pseudosciences seems to increase with each passing year. What are your feelings about this?

**J.H.:** Part of this had to do with simple statistics: the total world population increases each year. Thus the amount of people who embrace the pseudosciences increases proportionally. More important, however, has been the development of electronic communications: radio, television satellites, computers, tape recorders, telephones, videos, and fax machines. While these technologies have greatly accelerated the proliferation of authentic science on a global scale, they have helped spread the pseudosciences as well. Demand creates supply, and soon we have organizations like Time-Life, who feed this hunger by publishing books on the paranormal.

**SI:** What is your opinion of Time-Life's promotion of the pseudosciences?

**J.H.:** They've lost all credibility, period. They're not interested in truth, they're interested in making money. The individual head executives of the companies like these pull down millions a year. They don't care that they're fleecing the public.

They're laughing all the way to the bank!

**SI:** A majority of Americans say they have seen or believe in the existence of UFOs. What, in your opinion, is behind this phenomenon?

**J.H.:** Objects that are not easily identifiable to the majority of people! Look, there are lots of UFOs; lots of flying objects are unidentifiable. What's really behind all of this is that people want to believe in something that's bigger than themselves. Let's put it this way, most human institutions are full of hypocrisy. We have evangelists on the take, and so on. These institutions don't provide adequate answers to questions about the universe, and so people have to turn to something for comfort, for answers. As a skeptic and scientist, I naturally don't believe in things like astrology or UFOs. But at the same time, I don't think the spiritual rug should be pulled out from under people who are not ready, or who have nothing to replace their belief systems with. Many are simply not intellectually equipped to go beyond astrology and other spiritual belief systems. This is why I say that scientists must combine reason with compassion. If we lose our humanity we might as well join the ranks of magicians posing as psychics and other fakes.

**SI:** You spend a lot of time gazing skyward. Have you yourself ever seen what some would call a "UFO"?

**J.H.:** Sure. Then I go out, make some phone calls, do some research, and find out what it was! Inevitably, it turns out to be a combination of an atmospheric phenomenon and a celestial phenomenon. It can look quite spooky and quite convincing to the untrained or uncritical eye. Obviously there is a psychological factor involved in believing that these things are "flying saucers." *That's* what fascinates me, not so much the "UFOs"

themselves.

SI: There are those who would maintain that the universe is only 6,000 to 10,000 years old. Yet light is traveling to us from stars that are thousands, even millions of light-years from Earth. Why, in the face of such naked evidence to the contrary, is the religious creation model so appealing to so many?

J.H.: People believe what they want to believe, and if they have a belief system that tells them to believe such and such, no matter what the evidence says, they will. Most are not willing to risk jeopardizing their own value systems. If logic cannot dislodge personal prejudice, no matter how obvious the logic is, then you're dealing with a form of brainwashing, of indoctrination. Millions of people all over the world are inflicted with this "illness." A good example is the religious fundamentalists: some of these sects would literally kill each other in order to prove that "God is love"! Observation tells us that logic is not enough for some. If you take a brain and sufficiently condition it from birth, put a fear system into it, that person will fight to preserve that programmed belief. Subconscious fears will prevent that person from submitting to logic. To those who say the universe is only 6,000 years old, I say, the image they have of their god must be very small indeed.

SI: Christian mythology teems with astronomical, even astrological symbolism. What, for example, is behind the "Star of Bethlehem" theme?

J.H.: Funny you should ask that. I once did a five-hour talk show on this topic! Heraldic stars are political, pure and simple. In ancient times, shooting stars and comets were considered portents, omens of power. A ruler would hire astrologers to find signs of a great event in the heavens

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that was supposed to have occurred at the leader's moment of birth, or during another important time in his life. If such an event didn't actually occur, the astrologers invented one. Often the appearance of a new comet could literally bring down an entire empire. Caesar and all of the other great emperors had a star heralding their births. Heraldic stars proclaimed great events like births, deaths, and marriages. As Shakespeare said: "When beggars die, there are no comets seen; The heavens themselves blaze forth the death of princes." It's a symbolic theme found in every ancient culture throughout the world. Even though I come from a Jesuit background myself, I don't take the Star of Bethlehem literally. For if this was indeed a historical event, then the church must accept the fact that it is promoting astrology.

SI: How is it that from Earth it looks to us as if the stars are moving away from us, yet Einstein showed that there is no center to the universe?

J.H.: Well, we start with the big bang. Then if we picture the universe as a big balloon with dots painted on it, the dots represent galaxies. Then, pretending that you're standing on one of those dots, you slowly blow up the balloon. You'll find that no matter which dot you "stand" on, all of the other dots appear to be moving away from you.

**SI:** The ancient Babylonians, Chinese, and Egyptians were all fairly sophisticated astronomers in their day. What are the most significant changes that have taken place in astronomy since the Bronze Age?

**J.H.:** Most important, the use of the telescopes. In 1610, Galileo saw the moons of Jupiter through a telescope and proved that we are not a geocentric system. Second, the development of spacecraft and computer technology. These things have fundamentally and forever altered the world in which we live, as well as our perception of it.

**SI:** Many ancient and medieval scientists paid a heavy price for viewing "God's creation" skeptically.

**J.H.:** I feel a great sadness for all those who were persecuted in the name of science, people like Giordano Bruno, who was burned at the stake because of his astronomical findings. I'm sure there were thousands just like him who perished silently, alone, in agony. Think of all the great minds throughout history who had put up with intolerant belief systems.

**SI:** On "Star Hustler" you are careful to separate physics from metaphysics, no doubt, in part, because the general public is often unaware of the line that separates science from pseudoscience.

**J.H.:** I was on a talk show in Philadelphia once, and the host asked me, "What do you think about Shirley MacLaine's new book?" I said, "I don't care to discuss it." He asked "Why not?" I said, "Because I *was* Shirley MacLaine in a past life and I've had enough of her!" Seriously though, this is a real problem. I'm horrified by these "crystal people," the "New Agers," the channelers. When I see some self-righteous televangelist telling people that cancer and other illnesses are the result of evil spirits and that they can only be cured by getting "closer to

Jesus," I just boil over. I agonize over children or invalids who are trapped in homes with people like this. If someone is sick and suffering from an illness, it is an insult to have such ideas forced on them. I think that religious beliefs like these are a crime against the human mind, against human dignity. Unfortunately, we will always have unethical people preying on the gullible and desperate.

**SI:** What relevancy does astronomy and space exploration have for the average person?

**J.H.:** Most modern technologies are spinoffs of the American space program. Nearly all jobs today are related, in some way, to data gleaned from astronomical pursuits. And so I see the space program as the most cost productive enterprise that humanity has ever undertaken. If we took the money set aside for NASA and gave it back to Congress, where do you think it would go, to the poor? Hell no, it would go to another bureaucracy. For one thing NASA is the least corrupt of all the agencies. To me, it's like the Holy of Holies. The bottom line is that astronomy creates jobs, improves the quality of life, and teaches us about the universe, and ultimately about ourselves.

**SI:** How likely is it that Earth is the only planet in the cosmos that contains sentient beings?

**J.H.:** I suggest you call Carl Sagan. I agree with him! Seriously, though, I believe that the universe is populated with sentient beings. We like to think our species is the only intelligent life-form in the cosmos. I don't agree. I think that dolphins, gorillas, and chimps are pretty hip. Listen, there are planets everywhere in space. Logic says that "we are not alone."

**SI:** Some take the development of current astrophysical concepts like "wormholes," a "tenth planet," "baby universes," "imaginary time," and

“white holes” as a sign that empirical astronomy and metaphysics are moving ever closer together. Will science and religion ever become one?

**J.H.:** I don't think we'll ever reach the point where we talk about how many angels sit on the head of a singularity. Otherwise I defer to Stephen Hawking. I have a little altar to him in my room and I light a candle for him once a month . . . on the night of a full moon!

**SI:** Speaking of Hawking, do you have any heroes, or people who you personally admire?

**J.H.:** Well, aside from Sagan and Hawking, all of the people at the Jet Propulsion Laboratory and at NASA. These people are epic; they are mythologic to me. They are the great “spiritual” leaders of our time, and they're producing the great mythologies of modern-day society. My “religion” is the religion of JPL and NASA, it really is.

**SI:** Aristarchus, Ptolemy, Copernicus, Herschel, and many others saw incredible advances in astronomy during the time periods in which they lived. What, in your view, is the most exciting development in astronomy today?

**J.H.:** Multi-mirror, computerized telescopes. Computers help us control telescopes and refine data in ways that we never could before.

**SI:** One last question. As a skeptic and a scientist, you maintain a highly critical view of established religion. Yet you have a Christmas tree here in your office.

**J.H.:** Actually, I don't celebrate Christmas in the traditional sense, and I don't see the tree as being exclusively Christian. The evergreen itself is a symbol of the winter solstice, of spiritual renewal, of hope for the future. I celebrate equinoxes too. You see, I'm an optimist, and so for me these are periods of rejuvenation, of rebirth, of the revitalization of life, just as they were to ancient peoples. I'll always be drawn to things like Stonehenge, the Maya, medicine wheels. I still love to watch the sun rise in the morning and the moon rise at night. I see my own yard as a small Stonehenge: it marks the passing of the seasons. I guess you could say that, though I'm nonreligious in the orthodox sense, I'm *spiritual* in what I think of as the original meaning of the word. That is, I'm very much into feeling a part of nature and the natural processes of the universe. I'm filled with the wonder of it all. In the end, isn't that the essence of both good science and true spirituality?

*Gabriel Seabrook is a writer on scientific and religious topics, founder of the Collegium for Cognitive Religiology, a member of the American Anthropological Association, and a board member of the Institute for Free New Thought. He is currently writing several books on the origins and development of religious thought. Jack Horkheimer may be contacted at the Miami Space Transit Planetarium, 3280 S. Miami, FL 33129; (305) 854-4244.*