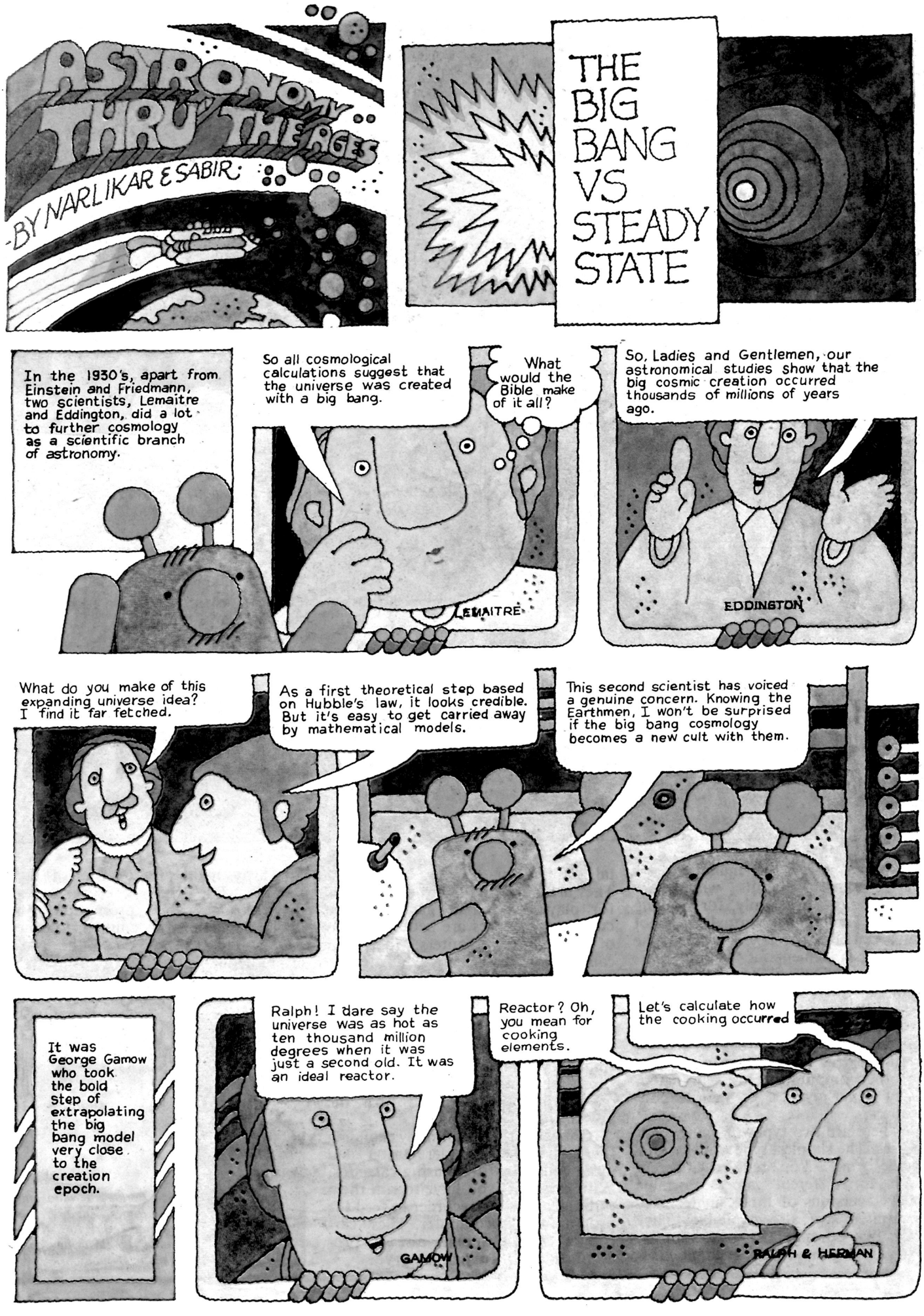
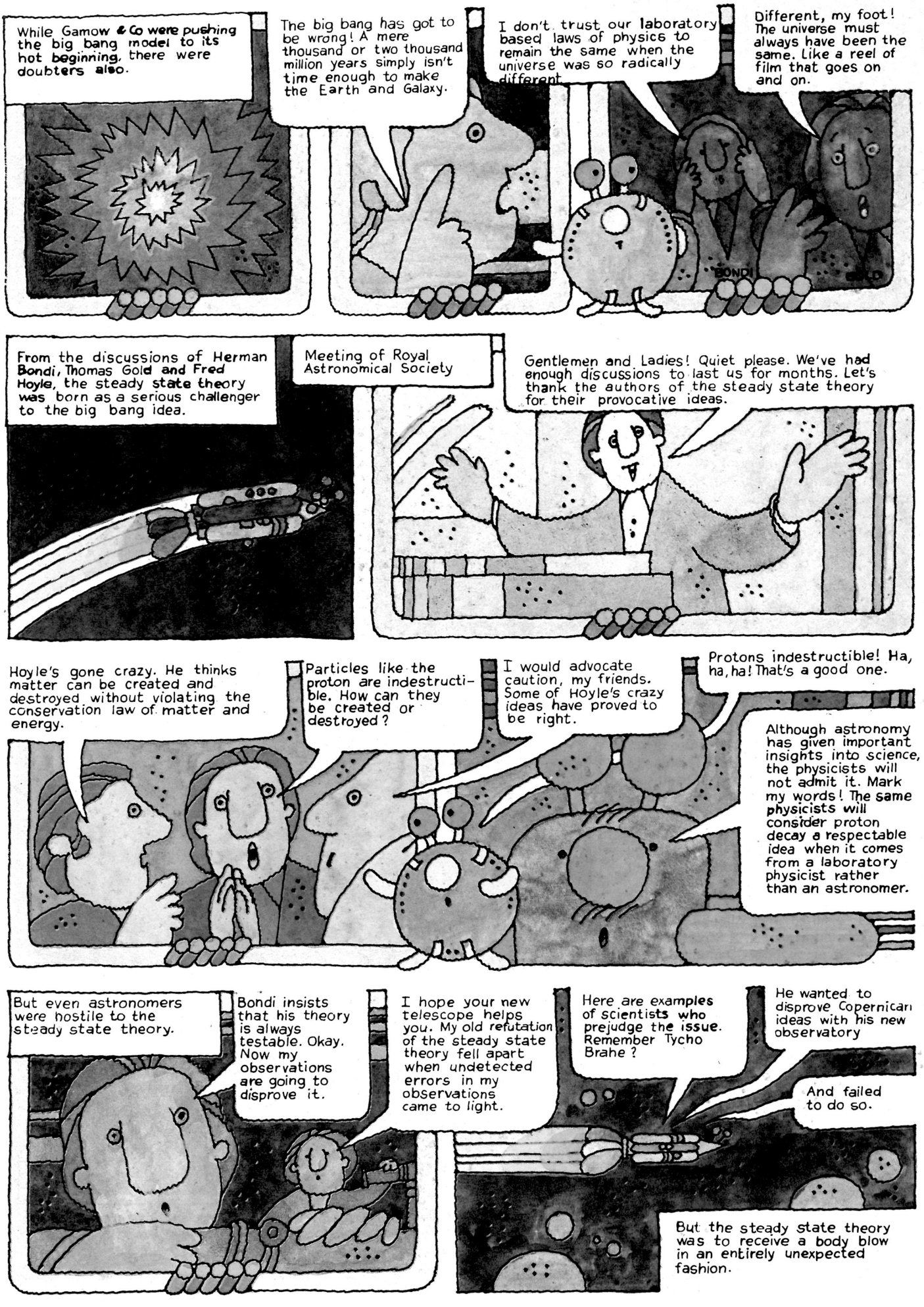

ASTRONOMY THRU THE AGES
BY NARLIKAR & SABIR
THE BIG BANG VS STEADY STATE
In the 1930's, apart from Einstein and Friedmann, two scientists, Lemaitre and Eddington, did a lot to further cosmology as a scientific branch of astronomy.
So all cosmological calculations suggest that the universe was created with a big bang.
What would the Bible make of it all?
LEMAITRE
So, Ladies and Gentlemen, our astronomical studies show that the big cosmic creation occurred thousands of millions of years ago.
EDDINGTON
What do you make of this expanding universe idea? I find it far fetched.
As a first theoretical step based on Hubble's law, it looks credible. But it's easy to get carried away by mathematical models.
This second scientist has voiced a genuine concern. Knowing the Earthmen, I won't be surprised if the big bang cosmology becomes a new cult with them.
It was George Gamow who took the bold step of extrapolating the big bang model very close to the creation epoch.
Ralph! I dare say the universe was as hot as ten thousand million degrees when it was just a second old. It was an ideal reactor.
GAMOW
Reactor? Oh, you mean for cooking elements.
Let's calculate how the cooking occurred
RALPH & HERMAN


While Gamow & Co were pushing the big bang model to its hot beginning, there were doubters also.
The big bang has got to be wrong! A mere thousand or two thousand million years simply isn't time enough to make the Earth and Galaxy.
I don't trust our laboratory based laws of physics to remain the same when the universe was so radically different.
Different, my foot! The universe must always have been the same. Like a reel of film that goes on and on.
BONDI
GOLD
From the discussions of Herman Bondi, Thomas Gold and Fred Hoyle, the steady state theory was born as a serious challenger to the big bang idea.
Meeting of Royal Astronomical Society
Gentlemen and Ladies! Quiet please. We've had enough discussions to last us for months. Let's thank the authors of the steady state theory for their provocative ideas.
Hoyle's gone crazy. He thinks matter can be created and destroyed without violating the conservation law of matter and energy.
Particles like the proton are indestructible. How can they be created or destroyed?
I would advocate caution, my friends. Some of Hoyle's crazy ideas have proved to be right.
Protons indestructible! Ha, ha, ha! That's a good one.
Although astronomy has given important insights into science, the physicists will not admit it. Mark my words! The same physicists will consider proton decay a respectable idea when it comes from a laboratory physicist rather than an astronomer.
But even astronomers were hostile to the steady state theory.
Bondi insists that his theory is always testable. Okay. Now my observations are going to disprove it.
I hope your new telescope helps you. My old refutation of the steady state theory fell apart when undetected errors in my observations came to light.
Here are examples of scientists who prejudge the issue. Remember Tycho Brahe?
He wanted to disprove Copernican ideas with his new observatory
And failed to do so.
But the steady state theory was to receive a body blow in an entirely unexpected fashion.