Last issue I talked about what science fiction critics scornfully call “translations,” lazy-minded stories that have no real speculative content of their own but are simply carried over from standard Western stories or adventure stories or whatever by the simple procedure of calling Comanches “Sloogls,” horses “greeznaks,” and rabbits “smeerps.” Plenty of examples are available out of the pulp-magazine past of science fiction, and now and then one sneaks through today. Another kind of translation is a one-to-one conversion of some episode of human history to science fiction. Isaac Asimov did that in his Foundation series, which was based on the division of the Roman Empire into eastern and western halves. Randall Garrett, in his 1959 story “Despoilers of the Golden Empire,” offered a tongue-in-cheek specimen that begins with the resonant Asimovian lines, “In the seven centuries since the Second Empire had been founded on the shattered remnants of the First . . .” and tells a tale of the conquest of a powerful alien empire by a handful of Earthmen, only to reveal in the final sentence that he has simply been retelling Pizarro’s conquest of Peru. But also I cited a few stories, like Poul Anderson and Gordon Dickson’s Hoka series and my own “The Secret Sharer,” that seem to be translations but in fact actually play by the rules of science fiction.

Has anyone ever invented a truly original science fiction concept, though, one that—underneath all the flamboyant special effects—isn’t just some sort of translation from our mundane reality? I wonder about that. To invent something that springs into being without predecessor and bears no relationship whatever to anything rooted in the actualities of the known universe, and to describe it and make it comprehensible to us in the form of a story, may indeed be not just very difficult to achieve but, in fact, logically impossible.

That was the argument proposed by such philosophers as John Locke (1632-1704), who in his Essay Concerning Human Understanding dismissed the belief that concepts can be generated by the mind alone. Ideas, said Locke, can come only from experience, from the perceptions brought to us by our senses. Locke did distinguish between simple ideas, those that are drawn directly from sense-perception, and complex ideas, which combine several perceptions into something that is seemingly new. The idea of color is a simple idea: we perceive red, blue, yellow, and so forth. The idea of heat is a simple idea also: stick your finger into a candle’s flame and you’ll discover it quickly. The idea of shape likewise: we look at a tennis ball, a pencil, a snake, or that candle flame of a moment ago, and we see that each of them has an individual and easily distinguishable shape. Then combine these perceptions into a complex one—a snake out of whose mouth comes hot red flame—and we are well on our way toward designing a dragon. It’s fairly certain that dragons don’t exist in our world, but the idea of dragonness does, conjured up out of the combination of heat, redness, snakeness, flameness.

Is the dragon a new concept? Well, yes, to the extent that fire-breathing serpents are imaginary creatures. But our dragon is made up out of familiar components. To put them together is indeed an act of the creative imagination, but it still relies, nevertheless, on previous perceptions of what actually exists. I can cite scriptural authority for that: Ecclesiastes, chapter 1, verses 9 and 10, where it is written, “There is no new thing under the sun. Is there any thing whereof it may be said, See, this is new? it hath been already of old time, which was before us.” Here, says the science fic-
tion writer, is a smeerp: it is green, it has three eyes, it has six legs. But it also has long ears and a little puffball of a tail and a twitching nose, because in fact smeerps are rabbits underneath it all, funny-colored rabbits with too many eyes and legs, but rabbits even so. The mythmakers of ancient Greece gave us plenty of bizarre monsters that would fit very nicely into any tale of adventure on an alien world, but all of them obeyed John Locke’s principle that new things must be created out of previous sense-perception. The dread Chimaera had the head of a lion, the body of a goat, and the tail of a serpent. The Centaurs were human down to the midsection, horses below. The Sirens had human heads but birds’ bodies terminating in fishtails. The demigod Proteus was human in form but had the power to change shape at will, turning himself into a lion, a panther, even into water or fire. Briareus had a hundred arms and fifty heads. The roster goes on and on.

When modern science fiction writers need to invent alien creatures, they must, of necessity, work the way those old-time Greeks did: they have no choice but to assemble them out of the assortment of spare parts that the real world provides. Thus H.G. Wells, whose 1897 novel The War of the Worlds was one of the first to give us a good look at aliens, describes the invading Martians as round creatures about four feet in diameter, with “a pair of very large, dark-colored eyes, and just beneath this a fleshy beak. . . . In a group round the mouth were sixteen slender, almost whip-like tentacles, arranged in two bunches of eight each.” That is to say, a redesigned octopus.

Stanley G. Weinbaum’s story “A Martian Odyssey” (1934) became instantly famous for its depiction of Tweel, a funny, charming sort of Martian much more likable than the sinister creatures of the Wells novel. Tweel is a creature with a flexible beak eighteen inches long, a few feathery appendages, and legs “about as thick as golf sticks. . . . It had four-toed feet, and four-fingered things—hands, you’d have to call them—and a little roundish body, and a long neck ending in a tiny head.” There aren’t any Tweels on Earth, but Tweel is, basically, an ostrich with some extra parts—“that freak ostrich,” one of Weinbaum’s space explorers calls him.

In 1938 John W. Campbell’s tense and powerful novella “Who Goes There” gave us an unforgettable account of the events that occur when an Antarctic exploration expedition accidentally defrosts a terrifying alien being that had been stranded on Earth long ago. “Three mad, hate-filled eyes blazed up with a living fire, bright as fresh-spilled blood, from a face ringed with a writhing, loathsome nest of worms, mobile worms that crawled where hair should grow—” Nasty, yes. But Campbell’s alien is just another collection of spare parts—part snake, part octopus, with a bunch of snaky tendrils borrowed from the Gorgons of Greek mythology. The true horror of the story is generated not by the alien’s appearance but its ability to alter its body cells to imitate the shape of any Earthly life-form it sees; but that’s the Proteus of the Greeks all over again. What is specifically science fictional about the story, the original part, is the ingenious method Campbell’s characters devise to identify and destroy the imitative alien life-forms.

Yet what else can science fiction writers do but model their aliens after real-world beings? They can make their aliens look like elephants (I once did), or butterflies, or like combinations of elephants and butterflies, they can add extra eyes or stick tentacles on cats or wings on lizards, but coming up with a life-form from absolute scratch seems to be impossible.

Even the most inventive of all science fiction writers, Olaf Stapledon, ran up against the problem of devising something that has no real-world antecedent. His astounding Star Maker of 1937 gives us many sorts of intelligent beings, one that is something like a starfish, one that is something like a mollusk, one that is something like a whale with a sail on its back, and many more; but the key phrase is always the inescapable something like. In a late novel called The Flames (1947) Stapledon por-
trayed an intelligent energy-creature: “Its core seemed to be more brilliant than its surface, for the dazzling interior was edged with a vague, yellowish aura. Near the flame’s tip, surprisingly, was a ring or bulging collar of darkness, but the tip itself was a point of brilliant peacock blue. Certainly this was no ordinary flame. . . .”

No ordinary flame, no, as the story strikingly demonstrates. But even an extraordinary flame, even a flame with consciousness and intelligence, is still a flame. We are up against an inherent and inescapable problem here: how does one describe something that doesn’t exist without recourse to comparison with things that do? It is easy enough to say, “the tentacles were like those of a squid,” differing in this way or that, or that the elephant-like aliens are green instead of gray and have spiny crests down the middle of their skulls, but that begs the question just as the old Greeks did when they constructed their Chimaeras out of lions, goats, and serpents. The only alternative is to describe the indescribable, that for which no simile can be found, and that is a logical impossibility, because it contains a built-in contradiction. (It’s logically possible for pink objects to fall faster than blue ones, though in fact that doesn’t happen, but a square circle is an impossibility, because circles are by definition round, and no writer worth his Hugos would describe something as “like a circle, only square.”) And so we can’t invent a truly alien smeerp from scratch; we have to start with a rabbit, or something, and then tinker with the basic model. (Some courageous writers have tried to show us the truly alien, as Terry Carr did in his 1968 story, “The Dance of the Changer and the Three,” which straightforwardly tells us, “All right, I know a lot of this doesn’t make sense. Maybe that’s because I’m trying to tell you about the Loarr in human terms, which is a mistake with creatures as alien as they are.” Carr then goes on to prove his own point: despite a valiant effort, most of what he tells us about the Loarr doesn’t make sense, and the part that does has to be described through analogies to human life.) Jack Vance’s story “The Men Return” (1957) bravely attempts to depict a world in which cause and effect have become detached, but stories, unfortunately, require effect to be hinged to cause in order to be coherent, and Vance runs up against the limitations of logic.

We need to be gentler with the writers who call rabbits smeerps. They’re doing the best they can with the limited means of invention at their service. What matters is not what sort of second-hand parts the smeerp is made of, but what is done with it once the writer has engendered it. If the smeerp is just a rabbit under another name, hopping around and chewing carrots, nothing science fictional has been achieved. But Poul Anderson and Gordon Dickson demonstrated long ago that real science fiction stories could be created using beings that looked pretty much like teddy bears, and not just by renaming them Hokas, either. A dazzlingly original story called “The Light of Other Days,” by Bob Shaw (1966), showed us what would happen if a special kind of glass could be devised that slowed the passage of photons through it in an extreme way, so that a pane of it would provide a window into our yesterdays. But Shaw calls his modified glass “glass.” He didn’t need to adopt the smeerp tactic; indeed, if he had, it would have lessened the impact of the story. He could have told us that the windows were fashioned not out of modified glass but out of a newly invented substance called zvizzx-99, but he was content to call it “slow glass.” What mattered, Shaw saw, was the emotional risk of living in a world where slow glass has been invented; and that, not the name of the light-slowing substance itself, made all the difference.