



Private Astronomy

IT'S ONE THING to devise new constellations from stars not yet annexed to any recognized celestial real estate. It's another, however, to reconfigure familiar constellations into new tracts that trespass property lines established by tradition or convention.

Patterns in the stars remain a playground for fertile imaginations.

Roy A. Gallant, an otherwise responsible writer, invited readers of his 1979 book *The Constellations: How They Came to Be* to contrive their own star patterns. He argued that it's "an excellent way of remembering the constellations and the stars they contain" and added, "you will end up with your own sky theater inhabited with figures of your own invention."

You can, in fact, manufacture even more private astronomy by mapping constellations with stars that don't exist. An idiosyncratic constellation of Bix Beiderbecke's legendary jazz cornet on the cover of *Private Astronomy*, a CD recorded in 2003, trumpets the Beiderbeck music performed by Geoff Muldaur's Futuristic Ensemble.

The cover of Juan Garcia Esquivel's LP, *Exploring New Sounds in Hi-Fi*, had already embraced the concept of private astronomy more than four decades earlier. Accompanied by a telescope, the musician sat in front of a personalized backdrop of musical-instrument constellations.

The urge to redesign the sky is hardly new. In the 6th century AD, Gregory of Tours, a Frankish bishop and historian, wanted no part of the astrology and astral religion

of the ancients. In his treatise *De Cursu Stellarum* ("On the Course of the Stars"), he replaced the traditional figures with more suitable Christian imagery. Cygnus, the Swan, became the Greater Cross. Delphinus, the Dolphin, and Lyra, the Harp, which flank Cygnus, were transformed into Alpha and Omega, the first and last letters of the Greek alphabet. In Christian symbolism, they represent totality and often accompany the Cross.

Similarly disturbed by the pagan origin of the ancient constellations, Bede of Jarrow, an English monk, advocated replacement of the 12 constellations of the zodiac with 11 Apostles and John the Baptist.

Almost a millennium later, in 1627, Julius Schiller's biblical reformation of the sky turned all of the constellations into a new celestial testament. Schiller was a German Catholic lawyer committed to astronomical cartography. His *Coelum Stellatum Christianum* populated the northern celestial hemisphere with New Testament figures like Mary Magdalene (Cassiopeia), St. Peter's Boat (Ursa Major), and the Apostle Paul (Perseus). Characters from the Old Testament, including King David (Canis Major) and Abraham and Isaac (Centaurus), put chapter and verse into the southern half of the sky.

Although the Dutch cartographer Andreas Cellarius included Schiller's scripturally correct skies in *Harmonia Macrosmica seu Atlas Universalis et Novus* in 1660, Schiller's evangelical astronomy did not permanently convert the constellations to Christianity.



MUSIC OF THE SPHERES Left: Rearranging Bix Beiderbecke's "futuristic 1920s music," Geoff Muldaur took a musical cue from Lyra, the Harp, and put some private astronomy on public display. Right: Unsatisfied with the traditional celestial sheet music, Juan Garcia Esquivel reorchestrated the sky.



STAR STRETCH Disney's animated *Hercules* (1997) correctly recognized the traditional assignment of a constellation to that hero, but the star pattern showcased at the end of the film — as shown on this 1998 philatelic souvenir sheet from Grenada — bears no resemblance to the Hercules that appears on this month's all-sky star chart.

guaranteed the titles of 88 constellations. But that hasn't stopped independent redistricting proposals and personal exercises in eminent astronomical domain.

Alan Patrick Herbert, a British barrister, member of Parliament, and humorist was concerned that the official constellations offered little relevance to everyday life. So he supplied alternatives in *A Better Sky* (1944). He rededicated Ursa Major as Great Britain and renamed its stars for British luminaries like William Shakespeare. Leo became Russia, with stars for Lenin, Stalin, and Tolstoy.

Patrick Moore, one of the best-known personalities in modern astronomy, has highlighted the arbitrary nature of constellations. Although they possess symbolic value, cultural meaning, and historic content, they have no physical influence. In *Stars of Destiny*, Moore's 2004 skeptical commentary on astrology, he suggested we might as well "create a totally new zodiac." He also presented his own constellational innovations. Gemini, the Twins, was recategorized into Vacca Volans, the Flying Cow. Similarly reconstituted, Scorpius, the Scorpion, became a Brontosaurus, and Sagittarius, the Archer, was retooled to dispense fuel as Antlia Gasolina, the Petrol Pump.

Without the same critical purpose that mobilized Patrick Moore, *Mad* magazine had already reformatted the stars in the September-October 1957 issue. In "Mad's Up-to-date-sky," writer Frank Jacobs and artist Ben Clark affirmed, "Nowadays constellations are behind the times." Determined to "modernize the whole shebang," they paired their new constellations — sky vs. sky — with the "dull" and "dusty" originals. Mantle, the Slugger, replaced Orion, the

Hunter, while Ursa Major became Smokey the Bear. Icons of advertising and popular culture all went to work in the sky. Miss America, the Gal on the Throne, unseated Cassiopeia. Canis Major retained its canine character as Canis Victor, the RCA Dog, listening to "his master's voice."

Without any regard for the true disposition of the stars, Chuck Jones, the Academy-Award-winning director of numerous Warner Bros. Looney Tunes cartoons, rocketed Wile E. Coyote, ever in asymptotic pursuit of the Road Runner, into space to become a Coyote constellation in *Beep Prepared* (1961).

Hollywood, where the private lives of stars are often on public display, is never encumbered with astronomical accuracy. It lets the stars fall where they may and drops its own constellation onto the boulevard as Walk of Fame, the Hollywood Sidewalk. *

In the 18th century there was still plenty of room between the constellations to accommodate the invention of fresh ones. John Hill, who in 1754 deposited 13 newly coined constellations into unincorporated sky, also reallocated stars from constellations other people had recently created. The exceptionally eccentric Englishman's work added unexpected animals to the heavenly zoo (S&T: April 1983, page 316). Unlikely creatures like Bufo, the Toad, and Hirudo, the Leech, appeared in Hill's *Urania*. Hill also turned Scutum, the Shield, which Johann Hevelius had created in 1687, into Pinna Marina, a mussel-like shellfish. In another stellar metamorphosis, Gottfried Kirch's Brandenburg Scepter joined Hill's menagerie as Limax, the Slug.

The entire sky was officially subdivided, once and for all, in 1922, when the International Astronomical Union



REDRAWING SPACE After Julius Schiller traded out Hercules, the Strongman, for Three Kings in his *Coelum Stellatum Christianum* (1627), those Three Wise Men followed lots of stars to the west.

E. C. KRUPP is a faint star in Griffith, the Observatory, a familiar constellation in the sky over Los Angeles, California.