

friend Arthur Hallam in Vienna. They had met at Trinity College, Cambridge in 1828, and had taken two continental trips together, which had deeply impressed the poet. Tennyson's continual and intense brooding over the loss yielded many manuscript drafts, which he finally combined in his major poetic sequence, *In Memoriam*, published anonymously in 1850. Later he gained fame for a number of individual shorter poems, as well as for the Arthurian cycle, *The Idyls of the King* (1859). Profiting from the innovations of the romantic poets, Tennyson enjoyed a superb ear, and was able to combine color and richness of imagery with ethical statement. By no means the apologist for Victorian beliefs that he is sometimes taken to be, Tennyson found the way to capture some of the chief moral dilemmas of his age in verse of matchless eloquence.

From the first, *In Memoriam* puzzled and disconcerted many of Tennyson's admirers. It is difficult to avoid the challenge of a prolonged expostulation to a dead friend that speaks of "A spectral doubt which makes me cold,/ that I shall be thy mate no more." For Tennyson, Hallam had once been "the centre of a world's desire," its "central warmth diffusing bliss." The years had only brought more depth of feeling: "My love involves the love before;/ my love is vaster passion now;/ tho' mixed with God and Nature thou,/ I seem to love thee more and more."

In a contemporary review of *In Memoriam*, Charles Kingsley found the poetic sequence a descendant of "the old tales of David and Jonathan, Damon and Pythias, Socrates and Alcibiades, Shakespeare and his nameless friend, of 'love passing the love of woman.'" Benjamin Jowett, wondering whether it was manly or natural to linger in such a mood, excused the poems by speaking vaguely of their "Hellenism." For a century and a quarter after the publication critics twisted and turned to avoid directly addressing the disturbing implications of this pivotal work. To be sure, Tennyson complicated

matters by conflating the love of his dead comrade with the love of Christ. Probably in his own mind the poet laureate was never sure what the meaning of the whole searing experience was. It is significant that he was able to marry his cousin Emily Sellwood, as he had long planned, only after the final publication of *In Memoriam*.

BIBLIOGRAPHY. Christopher Craft, "Descend and Touch and Enter: Tennyson's Strange Manner of Address," *Genders*, 1 (1988), 83-101; Alan Sinfield, *Alfred Tennyson*, Oxford: Basil Blackwell, 1986.

Wayne R. Dynes

TESLA, NIKOLA (1856-1943)

Serbian-American scientist and inventor. Born the son of an Orthodox priest in the village of Smiljan in the province of Lik, he received his higher education at the Technische Hochschule in Graz and at the Charles University in Prague. In 1882 he worked for the telephone company in Budapest and invented the amplifier, and in February of that year discovered the phenomenon of the reverse magnetic pole. Between 1882 and 1884 he worked in Paris and Strasbourg, rebuilding the Edison dynamos. Then he came to America and worked with Edison himself for a time. In 1886 he invented the arc lamp for lighting city streets, and in April 1887 he founded the Tesla Electric Company. He also built the first high-efficiency multiphase current machines and motors. In November and December 1887 he applied for patents for the Tesla induction coil and other inventions. In 1888-89 he worked for Westinghouse in Pittsburgh, applied for a patent for the transmission of alternating current, and built the first high-frequency generators, and in 1890 he discovered high-frequency currents. In 1892 he patented a transformer to increase oscillating currents to high potentials, and began his work on wireless telegraphy.

Between then and 1899 he pioneered in the development of radio communication and in the transmission of electricity without wires, which he realized at a distance of more than 1000 kilometers. This marked the end of his creative period, though he continued to be an active inventor for more than twenty years afterward. He became an American citizen and lived in New York until his death in 1943.

Tesla never married; no woman, with the exception of his mother and his sisters, ever shared the smallest fraction of his life. He believed that he had inherited his abilities as an inventor from his mother. As a young man he was not unattractive, though too tall and slender to be an ideal masculine type; he was handsome of face and wore clothes well. He idealized women, yet planned his own life in a coldly objective manner that excluded women entirely. Only the highest type of woman could win his friendship; the remainder of the sex had no attraction for him whatever. In 1924 he gave an interview published in *Collier's* magazine in which he asserted: "The struggle of the human female toward sex equality will end up in a new sex order, with the females superior. . . . The female mind has demonstrated a capacity for all the mental acquirements and achievements of men, and as generations ensue that capacity will be expanded; the average woman will be as well educated as the average man, and then better educated. . . . Women will ignore precedent and startle civilization with their progress."

Tesla tried to convince the world that he had succeeded in eliminating love and romance from his life, but he merely drew a veil over the secret chapter of his life which an intolerant world had no right to know. The mystery of his devotion to science is one of those episodes in the annals of invention and discovery that are illuminated by insight into the androgynous character of genius.

BIBLIOGRAPHY. Margaret Cheney, *Tesla: Man Out of Time*, New York: Laurel, 1983; John J. O'Neill, *Prodigal Genius: The Life of Nikola Tesla*, New York: Ives Washburn, 1944.

Warren Johansson

THAILAND

Previously known as Siam, in 1939 the country was officially renamed Prathet Thai, or Thailand—literally, "the land of the free." The change of name closely followed a change in the country's form of government, from the previous absolute monarchy to the modern constitutional monarchy with a representative legislature. With some fifty-two million citizens, Thailand occupies a key position in the rapidly developing Asian economic sphere, and aspires to join Taiwan and Korea as a world-wide economic force.

An ethnically and linguistically diverse nation, Thailand began to assume its present shape only within the last thousand years, and many key elements of Thai culture reached their present form in the relatively recent past. The formation of the nation began with the arrival in Thailand of members of a linguistic and cultural group designated by the term "Tai." (Some important members of this group are the Siamese, the Lao, and the Shans of northeastern Burma; altogether the "Tai" comprise about 70 million persons in southeast Asia.) The modern Thai may be a descendant of the incoming Tai, but he may also come from the indigenous Mon and Khmer groups whom the Tai joined, or from much later Chinese and Indian immigrants to Thailand. The modern Thai is not so much a member of a race as a person claiming fealty to the state of Thailand; secondarily, a Thai is identified by his language ("a speaker of Thai").

During the eighteenth and nineteenth centuries, Thailand managed to avoid colonization by any European power: the primary foreign influence was