which are multiplied regressively;[2] there are concrete vestiges of them all, but only those that are posterior to the Creation have really existed. There are skeletons of glyptodonts in the gorge of Luján, but there have never been glyptodonts. Such is the ingenious (and, above all, unbelievable) thesis that Philip Henry Gosse proposed to religion and to science.

Both rejected it. The newspapers reduced it to the doctrine that God had hidden fossils under the earth to test the faith of the geologists; Charles Kingsley denied that the Lord had carved a "superfluous and vast lie" into the rocks. In vain, Gosse explained the metaphysical foundation of his thesis: that one moment of time was inconceivable without the moment before it and the one after it, and so on to infinity. I wonder if he knew the ancient sentence that is quoted at the beginning of Rafael Cansinos Asséns' Talmudic anthology: "It was only the first night, but a number of centuries had already preceded it."

There are two virtues I would claim for Gosse's forgotten thesis. First: its somewhat monstrous elegance. Second: its involuntary reduction to absurdity of a *creatio ex nihilo,* its indirect demonstration that the universe is eternal, as the Vedanta and Heraclitus, Spinoza and the atomists all thought. Bertrand Russell has brought this up to date. In the ninth chapter of his book, *The Analysis of Mind* (London, 1921), he imagines that the planet was created only a few minutes ago, with a humanity that "remembers" an illusory past.

Postscript: In 1802, Chateaubriand (*Génie du christianisme* I, 4, 5), for aesthetic reasons, formulated a thesis identical to that of Gosse. He denounced as banal and ridiculous a first day of the Creation, populated by baby pigeons, larvae, puppies, and seeds. "Without this original antiquity, there would have been neither beauty nor magnificence in the work of the Almighty; and, what could not possibly be the case, nature, in a state of innocence, would have been less charming than she is in her present degenerate condition," he wrote.

[1941] *[EW]*

[2]Cf. Spencer, *Facts and Comments* [1902], 148–151.

Circular Time

I tend to return eternally to the Eternal Return. In the following lines I will attempt (with the aid of a few historical illustrations) to define its three fundamental modes.

The first has been attributed to Plato, who, in the thirty-ninth paragraph of the *Timaeus,* claims that once their diverse velocities have achieved an equilibrium, the seven planets will return to their initial point of departure in a cycle that constitutes the perfect year. Cicero (*On the Nature of the Gods* II) acknowledges that this vast celestial period is not easy to compute, but holds that it is certainly not an unlimited span of time; in one of his lost works, he sets it at twelve thousand nine hundred and fifty four "of what we call years" (Tacitus, *Dialogue of the Orators,* 16). Once Plato was dead, astrology became increasingly popular in Athens. This science, as no one can pretend not to know, maintains that the destiny of men is ruled by the position of the stars. An unknown astrologer, who had not read the *Timaeus* in vain, formulated this irreproachable argument: if the planetary periods are cyclical, so must be the history of the universe; at the end of each Platonic year, the same individuals will be born again and will live out the same destinies. Posterity would attribute this conjecture to Plato himself. In 1616, Lucilio Vanini wrote, "Again will Achilles go to Troy, rites and religions be reborn, human history repeat itself. Nothing exists today that did not exist long ago; what has been, shall be; but all of that in general, and not (as Plato establishes) in particular" (*De admirandis naturae arcanis,* dialogue 52). In 1643, Thomas Browne defined "Plato's year" in a note to the first book of the *Religio Medici:* "A revolution of certain thousand years when all things should return unto their former estate and he be teaching again in his school as when he delivered this opinion." In this initial conception of the eternal return, the argument is astrological.

The second is linked to the glory of Nietzsche, the most touching of its

inventors or promoters. It is justified by an algebraic principle: the observation that a quantity *n* of objects—atoms in Le Bon's hypothesis, forces in Nietzsche's, elements in the *communard* Blanqui's—is incapable of an infinite number of variations. Of the three doctrines I have listed, the most well-reasoned and complex is that of Blanqui, who, like Democritus (Cicero, *Academic Questions* II, 40), packs not only time but interminable space as well with facsimile worlds and dissimilar worlds. His book is beautifully entitled *L'Eternité par les astres*; it dates from 1872. A laconic but sufficient passage from David Hume dates from long before that; it appears in the *Dialogues Concerning Natural Religion* (1779), which Schopenhauer proposed to translate. As far as I know, no one has pointed it out until now. "Instead of supposing matter infinite, as Epicurus did; let us suppose it finite. A finite number of particles is only susceptible of finite transpositions: And it must happen, in an eternal duration, that every possible order or position must be tried an infinite number of times. This world, therefore, with all its events, even the most minute, has before been produced and destroyed, and will again be produced and destroyed, without any bounds and limitations" (*Dialogues* VIII).

Of this perpetual series of identical universal histories, Bertrand Russell observes:

> Many writers have imagined that history is cyclic, that the present state of the world, exactly as it is now, will sooner or later recur. How shall we state this hypothesis in our view? We shall have to say that the later state is numerically identical with the earlier state; and we cannot say that this state occurs twice, since that would imply a system of dating which the hypothesis makes impossible. The situation would be analogous to that of a man who travels round the world: he does not say that his starting-point and his point of arrival are two different but precisely similar places, he says they are the same place. The hypothesis that history is cyclic can be expressed as follows: form the group of all qualities contemporaneous with a given quality: in certain cases the whole of this group precedes itself. (*An Inquiry into Meaning and Truth* [1940], 102)

I now arrive at the final mode of interpreting eternal repetitions, the least melodramatic and terrifying of the three, but the only one that is conceivable. I mean the concept of similar but not identical cycles. The infinite catalogue of authorities would be impossible to complete: I think of the

days and nights of Brahma; the epochs whose unmoving clock is a pyramid slowly worn down by a bird's wing that brushes against it every thousand and one years; I think of Hesiod's men, who degenerate from gold to iron; the world of Heraclitus, which is engendered by fire and cyclically devoured by fire, and the world of Seneca and Chrysippus, annihilated by fire and renewed by water; I think of Virgil's fourth *Eclogue* and Shelley's splendid echo; Ecclesiastes, the theosophists, Condorcet's decimal history; I think of Francis Bacon and Ouspensky; Gerald Heard and Spengler; Vico, Schopenhauer, and Emerson; Spencer's *First Principles* and Poe's *Eureka*. . . . Out of this profusion of testimony I will cite only one passage, from Marcus Aurelius:

> Though the years of your life numbered three thousand, or ten times three thousand, remember that none can lose another life than that he lives now, nor live another than that he loses. The lengthiest and briefest periods are equal. The present belongs to all; to die is to lose the present, which is the briefest of lapses. No one loses the past or the future, because no man can be deprived of what he does not have. Remember that all things turn and turn again in the same orbits, and for the spectator it is the same to watch for a century or for two or infinitely. (*Reflections* II, 14)

If we read the preceding lines with any degree of seriousness (*id est*, if we decide not to consider them a mere exhortation or moral object lesson), we will see that they proclaim, or presuppose, two curious ideas. The first is a negation of the reality of the past and the future, enunciated in the following passage from Schopenhauer:

> The form of the phenomenon of the will is really only the *present*, not the future or the past. Future and past are only in the concept, exist only in the connection and continuity of knowledge in so far as this follows the principle of sufficient reason. No man has lived in the past, and none will ever live in the future; the *present* alone is the form of all life. (*The World as Will and Representation* I, 54)

The second is a negation of all novelty, following the author of Ecclesiastes. This conjecture—that all of mankind's experiences are (in some way) analogous—may at first seem a mere impoverishment of the world.

If Edgar Allan Poe, the Vikings, Judas Iscariot, and my reader all secretly

share the same destiny—the only possible destiny—then universal history is the history of a single man. Marcus Aurelius does not, strictly speaking, force this enigmatic simplification upon us. (A while ago I imagined a fantastic tale in the manner of León Bloy: a theologian dedicates his entire life to refuting a heresiarch; he bests him in intricate polemics, denounces him, has him burned at the stake. In Heaven he discovers that in God's eyes he and the heresiarch form a single person.) Marcus Aurelius affirms the analogous, but not identical, nature of multifarious human destinies. He affirms that any time span—a century, a year, a single night, perhaps the ungraspable present—contains the entirety of history. In its extreme form, this conjecture is easily refuted: one taste is different from another, ten minutes of physical pain are not the same as ten minutes of algebra. Applied to lengthier periods, to the seventy years of age that the Book of Psalms allots us, the conjecture is plausible and tolerable. It becomes no more than an affirmation that the number of human perceptions, emotions, thoughts, and vicissitudes is limited, and that before dying we will exhaust them all. Marcus Aurelius repeats: "To see the things of the present moment is to see all that is now, all that has been since time began, and all that shall be unto the world's end; for all things are of one kind and one form" (*Reflections* VI, 37).

In times of ascendancy, the conjecture that man's existence is a constant, unvarying quantity can sadden or irritate us; in times of decline (such as the present), it holds out the assurance that no ignominy, no calamity, no dictator, can impoverish us.

[1941] *[EA]*

John Wilkins' Analytical Language

I see that the fourteenth edition of the *Encyclopedia Britannica* has omitted the article on John Wilkins. The omission is justifiable if we recall its triviality (twenty lines of mere biographical data: Wilkins was born in 1614; Wilkins died in 1672; Wilkins was the chaplain of the Prince Palatine, Charles Louis; Wilkins was appointed rector of one of the colleges of Oxford; Wilkins was the first secretary of the Royal Society of London; etc.) but inexcusable if we consider Wilkins' speculative work. He was full of happy curiosity: interested in theology, cryptography, music, the manufacture of transparent beehives, the course of an invisible planet, the possibility of a trip to the moon, the possibility and the principles of a world language. He devoted a book to this last problem: *An Essay Towards a Real Character and a Philosophical Language* (600 pages in quarto, 1668). Our National Library does not have a copy; to write this note I have consulted *The Life and Times of John Wilkins* by P. A. Wright Henderson (1910); the *Wörterbuch der Philosophie* by Fritz Mauthner (1924); *Delphos* by E. Sylvia Pankhurst (1935); and *Dangerous Thoughts* by Lancelot Hogben (1939).

All of us, at one time or another, have suffered through those unappealable debates in which a lady, with copious interjections and anacolutha, asserts that the word *luna* is more (or less) expressive than the word *moon.* Apart from the obvious comment that the monosyllable *moon* may be more appropriate as a representation of a simple object than the disyllabic *luna,* nothing can be contributed to such discussions; except for compound words and derivatives, all the languages in the world (not excluding Johann Martin Schleyer's Volapük and Peano's romantic Interlingua) are equally inexpressive. There is no edition of the Royal Spanish Academy Grammar that does not ponder "the envied treasure of picturesque, felicitous, and expressive words in the riches of the Spanish language," but that is mere boasting, with no corroboration. Meanwhile, that same Royal Academy