

contrast of light and shade. The photograph had forgotten nothing. It had equally preserved the contour of the everlasting mountains and the passing smoke of a bandit-fire.

Are there, then, contained in the brain more permanently, as in the retina more transiently, the vestiges of impressions that have been gathered by the sensory organs? Is this the explanation of memory—the Mind contemplating such pictures of past things and events as have been committed to her custody. In her silent galleries are there hung micrographs of the living and the dead, of scenes that we have visited, of incidents in which we have borne a part? Are these abiding impressions mere signal-marks, like the letters of a book, which impart ideas to the mind? or are they actual picture-images, inconceivably smaller than those made for us by artists, in which, by the aid of a microscope, we can see, in a space not bigger than a pinhole, a whole family group at a glance?

The phantom images of the retina are not perceptible in the light of the day. Those that exist in the sensorium in like manner do not attract our attention so long as the sensory organs are in vigorous operation, and occupied in bringing new impressions in. But, when those organs become weary or dull, or when we experience hours of great anxiety, or are in twilight reveries, or are asleep, the latent apparitions have their vividness increased by the contrast, and obtrude themselves on the mind. For the same reason they occupy us in the delirium of fevers, and doubtless also in the solemn moments of death. During a third part of our life, in sleep, we are withdrawn from external influences; hearing and sight and the other senses are inactive, but the never-sleeping Mind, that pensive, that veiled enchant

ress, in her mysterious retirement, looks over the ambrotypes she has collected—ambrotypes, for they are truly unfading impressions—and, combining them together, as they chance to occur, constructs from them the panorama of a dream.

Nature has thus implanted in the organization of every man means which impressively suggest to him the immortality of the soul and a future life. Even the benighted savage thus sees in his visions the fading forms of landscapes, which are, perhaps, connected with some of his most pleasant recollections; and what other conclusion can he possibly extract from those unreal pictures than that they are the foreshadowings of another land beyond that in which his lot is cast? At intervals he is visited in his dreams by the resemblances of those whom he has loved or hated while they were alive; and these manifestations are to him incontrovertible proofs of the existence and immortality of the soul. In our most refined social conditions we are never able to shake off the impressions of these occurrences, and are perpetually drawing from them the same conclusions that our uncivilized ancestors did. Our more elevated condition of life in no respect relieves us from the inevitable operation of our own organization, any more than it relieves us from infirmities and disease. In these respects, all over the globe men are on an equality. Savage or civilized, we carry within us a mechanism which presents us with mementoes of the most solemn facts with which we can be concerned. It wants only moments of repose or sickness, when the influence of external things is diminished, to come into full play, and these are precisely the moments when we are best prepared for the truths it is going to suggest. That mechanism is no respecter of persons. It neither

permits the haughtiest to be free from the monitions, nor leaves the humblest without the consolation of a knowledge of another life. Open to no opportunities of being tampered with by the designing or interested, requiring no extraneous human agency for its effect, but always present with every man wherever he may go, it marvelously extracts from vestiges of the impressions of the past overwhelming proofs of the realities of the future, and, gathering its power from what would seem to be a most unlikely source, it insensibly leads us, no matter who or where we may be, to a profound belief in the immortal and imperishable, from phantoms which have scarcely made their appearance before they are ready to vanish away.

The insect differs from a mere automaton in this, that it is influenced by old, by registered impressions. In the higher forms of animated life that registration becomes more and more complete, memory becomes more perfect. There is not any necessary resemblance between an external form and its ganglionic impression, any more than there is between the words of a message delivered in a telegraphic office and the signals which the telegraph may give to the distant station; any more than there is between the letters of a printed page and the acts or scenes they describe, but the letters call up with clearness to the mind of the reader the events and scenes.

An animal without any apparatus for the retention of impressions must be a pure automaton—it cannot have memory. From insignificant and uncertain beginnings, such an apparatus is gradually evolved, and, as its development advances, the intellectual capacity increases. In man, this retention or registration reaches perfection; he guides himself by past as well as by

present impressions; he is influenced by experience; his conduct is determined by reason.

A most important advance is made when the capability is acquired by any animal of imparting a knowledge of the impressions stored up in its own nerve-centres to another of the same kind. This marks the extension of individual into social life, and indeed is essential thereto. In the higher insects it is accomplished by antennal contacts, in man by speech. Humanity, in its earlier, its savage stages, was limited to this: the knowledge of one person could be transmitted to another by conversation. The acts and thoughts of one generation could be imparted to another, and influence its acts and thoughts.

But tradition has its limit. The faculty of speech makes society possible—nothing more.

Not without interest do we remark the progress of development of this function. The invention of the art of writing gave extension and durability to the registration or record of impressions. These, which had hitherto been stored up in the brain of one man, might now be imparted to the whole human race, and be made to endure forever. Civilization became possible—for civilization cannot exist without writing, or the means of record in some shape.

From this psychological point of view we perceive the real significance of the invention of printing—a development of writing which, by increasing the rapidity of the diffusion of ideas, and insuring their permanence, tends to promote civilization and to unify the human race.

In the foregoing paragraphs, relating to nervous impressions, their registry, and the consequences that spring from them, I have given an abstract of views presented in my work on "Human Physiology," published in

1856, and may, therefore, refer the reader to the chapter on "Inverse Vision, or Cerebral Sight;" to Chapter XIV., Book I.; and to Chapter VIII., Book II.; of that work, for other particulars.

The only path to scientific human psychology is through comparative psychology. It is a long and wearisome path, but it leads to truth.

Is there, then, a vast spiritual existence pervading the universe, even as there is a vast existence of matter pervading it—a spirit which, as a great German author tells us, "sleeps in the stone, dreams in the animal, awakes in man?" Does the soul arise from the one as the body arises from the other? Do they in like manner return, each to the source from which it has come? If so, we can interpret human existence, and our ideas may still be in unison with scientific truth, and in accord with our conception of the stability, the unchangeability of the universe.

To this spiritual existence the Saracens, following Eastern nations, gave the designation "the Active Intellect." They believed that the soul of man emanated from it, as a rain-drop comes from the sea, and, after a season, returns. So arose among them the imposing doctrines of emanation and absorption. The active intellect is God.

In one of its forms, as we have seen, this idea was developed by Chakia Mouni, in India, in a most masterly manner, and embodied in the vast practical system of Buddhism; in another, it was with less power presented among the Saracens by Averroes.

But, perhaps we ought rather to say that Europeans hold Averroes as the author of this doctrine, because they saw him isolated from his antecedents. But Mo-

ammedans gave him little credit for originality. He stood to them in the light of a commentator on Aristotle, and as presenting the opinions of the Alexandrian and other philosophical schools up to his time. The following excerpts from the "Historical Essay on Averroism," by M. Renan, will show how closely the Saracenic ideas approached those presented above:

This system supposes that, at the death of an individual, his intelligent principle or soul no longer possesses a separate existence, but returns to or is absorbed in the universal mind, the active intelligence, the mundane soul, which is God; from whom, indeed, it had originally emanated or issued forth.

The universal, or active, or objective intellect, is uncreated, impassible, incorruptible, has neither beginning nor end; nor does it increase as the number of individual souls increases. It is altogether separate from matter. It is, as it were, a cosmic principle. This oneness of the active intellect, or reason, is the essential principle of the Averroistic theory, and is in harmony with the cardinal doctrine of Mohammedanism—the unity of God.

The individual, or passive, or subjective intellect, is an emanation from the universal, and constitutes what is termed the soul of man. In one sense it is perishable and ends with the body, but in a higher sense it endures; for, after death, it returns to or is absorbed in the universal soul, and thus of all human souls there remains at last but one—the aggregate of them all. Life is not the property of the individual, it belongs to Nature. The end of man is to enter into union more and more complete with the active intellect—reason. In that the happiness of the soul consists. Our destiny is quietude. It was the opinion of Averroes that

the transition from the individual to the universal is instantaneous at death, but the Buddhists maintain that human personality continues in a declining manner for a certain term before nonentity, or Nirwana, is attained.

Philosophy has never proposed but two hypotheses to explain the system of the world: first, a personal God existing apart, and a human soul called into existence or created, and thenceforth immortal; second, an impersonal intelligence, or indeterminate God, and a soul emerging from and returning to him. As to the origin of beings, there are two opposite opinions: first, that they are created from nothing; second, that they come by development from preëxisting forms. The theory of creation belongs to the first of the above hypotheses, that of evolution to the last.

Philosophy among the Arabs thus took the same direction that it had taken in China, in India, and indeed throughout the East. Its whole spirit depended on the admission of the indestructibility of matter and force. It saw an analogy between the gathering of the material of which the body of man consists from the vast store of matter in Nature, and its final restoration to that store, and the emanation of the spirit of man from the universal Intellect, the Divinity, and its final reabsorption.

Having thus indicated in sufficient detail the philosophical characteristics of the doctrine of emanation and absorption, I have in the next place to relate its history. It was introduced into Europe by the Spanish Arabs. Spain was the focal point from which, issuing forth, it affected the ranks of intelligence and fashion all over Europe, and in Spain it had a melancholy end.

The Spanish khalifs had surrounded themselves with all the luxuries of Oriental life. They had magnificent palaces, enchanting gardens, seraglios filled with beautiful women. Europe at the present day does not offer more taste, more refinement, more elegance, than might have been seen, at the epoch of which we are speaking, in the capitals of the Spanish Arabs. Their streets were lighted and solidly paved. The houses were frescoed and carpeted; they were warmed in winter by furnaces, and cooled in summer with perfumed air brought by underground pipes from flower-beds. They had baths, and libraries, and dining-halls, fountains of quicksilver and water. City and country were full of conviviality, and of dancing to the lute and mandolin. Instead of the drunken and gluttonous wassail orgies of their Northern neighbors, the feasts of the Saracens were marked by sobriety. Wine was prohibited. The enchanting moonlight evenings of Andalusia were spent by the Moors in sequestered, fairy-like gardens or in orange-groves, listening to the romances of the story-teller, or engaged in philosophical discourse; consoling themselves for the disappointments of this life by such reflections as that, if virtue were rewarded in this world, we should be without expectations in the life to come; and reconciling themselves to their daily toil by the expectation that rest will be found after death—a rest never to be succeeded by labor.

In the tenth century the Khalif Hakem II. had made beautiful Andalusia the paradise of the world. Christians, Mussulmen, Jews, mixed together without restraint. There, among many celebrated names that have descended to our times, was Gerbert, destined subsequently to become pope. There, too, was Peter the Venerable, and many Christian ecclesiastics. Peter

says that he found learned men even from Britain pursuing astronomy. All learned men, no matter from what country they came, or what their religious views, were welcomed. The khalif had in his palace a manufactory of books, and copyists, binders, illuminators. He kept book-buyers in all the great cities of Asia and Africa. His library contained four hundred thousand volumes, superbly bound and illuminated.

Throughout the Mohammedan dominions in Asia, in Africa, and in Spain, the lower order of Mussulmen entertained a fanatical hatred against learning. Among the more devout—those who claimed to be orthodox—there were painful doubts as to the salvation of the great Khalif Al-Mamun—the wicked khalif, as they called him—for he had not only disturbed the people by introducing the writings of Aristotle and other Greek heathens, but had even struck at the existence of heaven and hell by saying that the earth is a globe, and pretending that he could measure its size. These persons, from their numbers, constituted a political power.

Almansor, who usurped the khalifate to the prejudice of Hakem's son, thought that his usurpation would be sustained if he put himself at the head of the orthodox party. He therefore had the library of Hakem searched, and all works of a scientific or philosophical nature carried into the public places and burnt, or thrown into the cisterns of the palace. By a similar court revolution Averroes, in his old age—he died A. D. 1198—was expelled from Spain; the religious party had triumphed over the philosophical. He was denounced as a traitor to religion. An opposition to philosophy had been organized all over the Mussulman world. There was hardly a philosopher who was not

punished. Some were put to death, and the consequence was, that Islam was full of hypocrites.

Into Italy, Germany, England, Averroism had silently made its way. It found favor in the eyes of the Franciscans, and a focus in the University of Paris. By very many of the leading minds it had been accepted. But at length the Dominicans, the rivals of the Franciscans, sounded an alarm. They said it destroys all personality, conducts to fatalism, and renders inexplicable the difference and progress of individual intelligences. The declaration that there is but one intellect is an error subversive of the merits of the saints, it is an assertion that there is no difference among men. What! is there no difference between the holy soul of Peter and the damned soul of Judas? are they identical? Averroes in this his blasphemous doctrine denies creation, providence, revelation, the Trinity, the efficacy of prayers, of alms, and of litanies; he disbelieves in the resurrection and immortality; he places the *summum bonum* in mere pleasure.

So, too, among the Jews who were then the leading intellects of the world, Averroism had been largely propagated. Their great writer Maimonides had thoroughly accepted it; his school was spreading it in all directions. A furious persecution arose on the part of the orthodox Jews. Of Maimonides it had been formerly their delight to declare that he was "the Eagle of the Doctors, the Great Sage, the Glory of the West, the Light of the East, second only to Moses." Now, they proclaimed that he had abandoned the faith of Abraham; had denied the possibility of creation, believed in the eternity of the world; had given himself up to the manufacture of atheists; had deprived God of his attributes; made a vacuum of him; had declared him inac-

cessible to prayer, and a stranger to the government of the world. The works of Maimonides were committed to the flames by the synagogues of Montpellier, Barcelona, and Toledo.

Scarcely had the conquering arms of Ferdinand and Isabella overthrown the Arabian dominion in Spain, when measures were taken by the papacy to extinguish these opinions, which, it was believed, were undermining European Christianity.

Until Innocent IV. (1243), there was no special tribunal against heretics, distinct from those of the bishops. The Inquisition, then introduced, in accordance with the centralization of the times, was a general and papal tribunal, which displaced the old local ones. The bishops, therefore, viewed the innovation with great dislike, considering it as an intrusion on their rights. It was established in Italy, Spain, Germany, and the southern provinces of France.

The temporal sovereigns were only too desirous to make use of this powerful engine for their own political purposes. Against this the popes strongly protested. They were not willing that its use should pass out of the ecclesiastical hand.

The Inquisition, having already been tried in the south of France, had there proved to be very effective for the suppression of heresy. It had been introduced into Aragon. Now was assigned to it the duty of dealing with the Jews.

In the old times under Visigothic rule these people had greatly prospered, but the leniency that had been shown to them was succeeded by atrocious persecution, when the Visigoths abandoned their Arianism and became orthodox. The most inhuman ordinances were issued against them—a law was enacted condemning

them all to be slaves. It was not to be wondered at that, when the Saracen invasion took place, the Jews did whatever they could to promote its success. They, like the Arabs, were an Oriental people, both traced their lineage to Abraham, their common ancestor; both were believers in the unity of God. It was their defense of that doctrine that had brought upon them the hatred of their Visigothic masters.

Under the Saracen rule they were treated with the highest consideration. They became distinguished for their wealth and their learning. For the most part they were Aristotelians. They founded many schools and colleges. Their mercantile interests led them to travel all over the world. They particularly studied the science of medicine. Throughout the middle ages they were the physicians and bankers of Europe. Of all men they saw the course of human affairs from the most elevated point of view. Among the special sciences they became proficient in mathematics and astronomy; they composed the tables of Alfonso, and were the cause of the voyage of De Gama. They distinguished themselves greatly in light literature. From the tenth to the fourteenth century their literature was the first in Europe. They were to be found in the courts of princes as physicians, or as treasurers managing the public finances.

The orthodox clergy in Navarre had excited popular prejudices against them. To escape the persecutions that arose, many of them feigned to turn Christians, and of these many apostatized to their former faith. The papal nuncio at the court of Castile raised a cry for the establishment of the Inquisition. The poorer Jews were accused of sacrificing Christian children at the Passover, in mockery of the crucifixion; the richer were denounced as Averroists. Under the influence of Torquemada, a

Dominican monk, the confessor of Queen Isabella, that princess solicited a bull from the pope for the establishment of the Holy Office. A bull was accordingly issued in November, 1478, for the detection and suppression of heresy. In the first year of the operation of the Inquisition, 1481, two thousand victims were burnt in Andalusia; besides these, many thousands were dug up from their graves and burnt; seventeen thousand were fined or imprisoned for life. Whoever of the persecuted race could flee, escaped for his life. Torquemada, now appointed inquisitor-general for Castile and Leon, illustrated his office by his ferocity. Anonymous accusations were received, the accused was not confronted by witnesses, torture was relied upon for conviction; it was inflicted in vaults where no one could hear the cries of the tormented. As, in pretended mercy, it was forbidden to inflict torture a second time, with horrible duplicity it was affirmed that the torment had not been completed at first, but had only been suspended out of charity until the following day! The families of the convicted were plunged into irretrievable ruin. Llorente, the historian of the Inquisition, computes that Torquemada and his collaborators, in the course of eighteen years, burnt at the stake ten thousand two hundred and twenty persons, six thousand eight hundred and sixty in effigy, and otherwise punished ninety-seven thousand three hundred and twenty-one. This frantic priest destroyed Hebrew Bibles wherever he could find them, and burnt six thousand volumes of Oriental literature at Salamanca, under an imputation that they inculcated Judaism. With unutterable disgust and indignation, we learn that the papal government realized much money by selling to the rich dispensations to secure them from the Inquisition.

But all these frightful atrocities proved failures. The conversions were few. Torquemada, therefore, insisted on the immediate banishment of every unbaptized Jew. On March 30, 1492, the edict of expulsion was signed. All unbaptized Jews, of whatever age, sex, or condition, were ordered to leave the realm by the end of the following July. If they revisited it, they should suffer death. They might sell their effects and take the proceeds in merchandise or bills of exchange, but not in gold or silver. Exiled thus suddenly from the land of their birth, the land of their ancestors for hundreds of years, they could not in the glutted market that arose sell what they possessed. Nobody would purchase what could be got for nothing after July. The Spanish clergy occupied themselves by preaching in the public squares sermons filled with denunciations against their victims, who, when the time for expatriation came, swarmed in the roads and filled the air with their cries of despair. Even the Spanish onlookers wept at the scene of agony. Torquemada, however, enforced the ordinance that no one should afford them any help.

Of the banished persons some made their way into Africa, some into Italy; the latter carried with them to Naples ship-fever, which destroyed not fewer than twenty thousand in that city, and devastated that peninsula; some reached Turkey, a few England. Thousands, especially mothers with nursing children, infants, and old people, died by the way; many of them in the agonies of thirst.

This action against the Jews was soon followed by one against the Moors. A pragmática was issued at Seville, February, 1502, setting forth the obligations of the Castilians to drive the enemies of God from the