

# The Open Court

A MONTHLY MAGAZINE

Devoted to the Science of Religion, the Religion of Science, and the  
Extension of the Religious Parliament Idea

Founded by EDWARD C. HEGELER

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THE RUINS OF PETRA.

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## PETRA.

BY ROY PETRAN LINGLE.

"It seems no work of man's creative hand,  
By labor wrought as wavering fancy planned;  
But from the rock as if by magic grown,  
Eternal, silent, beautiful, alone!  
Not virgin white, like that old Doric shrine  
Where erst Athena held her rites divine;  
Nor saintly grey, like many a minster fane,  
That crowns the hill and consecrates the plain,  
But rosy-red as if the blush of dawn  
That first beheld her were not yet withdrawn;  
The hues of youth upon a brow of woe,  
Which man deemed old two thousand years ago.  
Match me such marvel save in Eastern clime,  
A rose-red city half as old as Time."

—From Burgon's "Petra".

PETRA, or Wady Musa, was until recently one of the three "forbidden" cities of the world; the others being Mecca, also in Arabia, and Lassa in Thibet. It is the most extensive of the rock-cut cities like Machu Pichu in Peru and the cliff dwellings of China and the southwestern United States. Among these Petra is unique in its contacts with ancient civilizations and with the leading western oriental religions. Cave-dwellers and sun-worshippers, priests of Baal and Hebrew prophets, Greek pagans and Roman patriarchs, Christian iconographers and Mohammedan iconoclasts have in turn shared its glory or menaced and massacred its inhabitants and destroyed their works.

With an origin before the dawn of history, with an impregnable location, in its transition from wealth and power to utter desolation, in mystic beauty, fearful prophecies, strange legends—Petra is matchless. Yet, hidden away and lost to civilization for over a thousand years, it has been almost forgotten because of this delitescence.

On a straight line half way between the Dead Sea and the Gulf of Akaba, the northern finger of the Red Sea, in the wildest part of the Arabian desert, rise the Sacred Mountains of Edom. Their peaks first appear as a castellated mass of minarets, domes, turrets and other fantastic outlines, like an oriental Garden of the Gods. Yet even the pinnacles are smooth and round, softened by a diaphanous veil of light. The colors range from snow white to purple, yellow, and rose—the predominant hue. In the crimson heart of this glowing mass lies the ancient city.

The rocky ramparts, abrupt on the outer edges, are further guarded by a natural barbican of rugged pinnacles and deep fissures surrounding the stronghold. From the east, through the bewildering maze, winds a stream fringed with wild-fig trees and oleanders, leading past the rock-cut tombs of the valley to the labyrinthine entrance of the city. Plunging past the octagonal portals, the waters rush under the ruins of an arch through a hidden entrance in the towering cliff. This is the Sik, a narrow *crevasse* in the mountain. Away back in the remote past some great cataclysm, or convulsion of Nature, must have split this passage. Through it flows the water from the spring Ain Musa. Tradition links this fountain with the name of Moses. The Koran calls it the "water of strife" or "well of judgment", where Moses struck the rock. Another Mohammedan version, doubtless arising from the crimson coloring of the stream bed, identifies it as a fountain flowing with blood which Moses miraculously changed to water. According to this legend, the cleft itself, several miles in length and in places almost a thousand feet deep, was opened by a single stroke of the magic rod. Hence the name Wady Musa, or watercourse of Moses. It forms the most original and tortuous approach to any city in the world.

Down through this narrow Sik, or shaft, the only natural entrance to the impregnable mountain fortress, men came before the dawn of Time. The population in 2700 B. C. has been estimated at a quarter of a million. Forty thousand people were said to live in one rock wall, like bees in a honey comb. Traditionally first were the Horites, or cave dwellers. Then in historic times came the Edomites—the sons of Esau—a proud and warlike people. Red Edom, under its great Duke Iram, was a terror to the ancient world thousands of years before the modern "Reds". The Children of Israel, seeking the Promised Land through the Wilderness, were refused passage by the Edomites. (Deut. ii, 4-8). The

Hebrews buried Aaron on Mount Hor, fifteen miles away, (Numb. xx, 23-29) and the forced detour protracted their wanderings many years. During the wars of that ruthless strategist, Joshua, the Edomites remained unconquered. Joshua's power over the sun failed to daunt the Sun-worshippers, and the priests of Baal defied the Israelites from the High Places. But one Biblical account records the slaughter of ten thousand of the children of Seir, flung by order of Amaziah from the cliffs to the plain below. (2 Chr. xxv, 12-13). The city itself is mentioned at least eleven times in the Old Testament, usually under the name *Sela* or the "rock-cleft." (Cf. 2 Kings xiv, 7; Isaiah xvi, 1; and in revised version Isaiah xlii, 11; Judges i, 36; 2 Chr. xxv, 12-13; Obad. 3). The region was cursed by the Hebrew prophets with hearty unanimity.

These prophetic denunciations, in retaliation for the churlish inhospitality of the Edomites and their aversion to Hebrew rule, are among the most savage vaticinations in the Bible. Joel, Amos, Jeremiah, Ezekiel, Malachi and Isaiah predicted its utter desolation. Obadiah wrote "The pride of thine heart hath deceived thee—thou that dwellest in the clefts of the Rock, whose habitation is high; that saith in his heart, who shall bring me down to the ground? Though thou exalt thyself as the eagle, and though thou set thy nest among the stars, thence will I bring thee down, saith the Lord." (Obad. 3). And in time, conquered by David and other Hebrew warriors, the proud and powerful Edomites disappeared forever from history.

Their remnants were supplanted by the Nabatheans, originally a nomadic Arab tribe. The newcomers encouraged commerce with outside nations. As traders they were world-famed. The Greeks called the region Idumea and re-named its chief city Petra or the "Rock". Petra became the center of caravan trade, a metropolis of the desert, with routes leading to Egypt, Eastern Arabia, the Persian Gulf, and Palestine. The rock city formed a safe deposit vault for priceless treasure. Caravans from Petra to Leuce Como on the Red Sea were vast as armies. Camels filed through the narrow gorge laden with frankincense, myrrh, silver—all the spices, incense, dye-stuffs, fabrics and precious stones of the Orient. One may imagine the relief of the desert travelers, plashing safely through the cool waters of Wady Musa, in the deep shadow of the cliffs, after escaping the burning heat and roving pirates of the desert.

For centuries fabulous wealth poured into this narrow valley, scarcely a mile square even with its lateral clefts. Kings, queens and conquerors entered to gaze upon the rock-cuttings and inscriptions of the Nabatheans and to revel in their pomp. The King of Arabia issued from the gloomy gorge at the head of fifty thousand men to lay siege to Jerusalem. Secure in power and wealth, the Nabatheans forgot the curse hovering over Mount Seir, or only laughed at the fanatical Hebrew prophets.

Again came a change. The Romans, relentlessly pushing back their boundaries, attained the utmost confines of their domains. Under the Emperor Trajan, in 106 A. D., Cornelius Palma, Governor of Syria, conquered and organized the province of Arabia Petraea. Petra reached the zenith of its glory. The Romanized population is said to have numbered two hundred and sixty-seven thousand. The indomitable Romans pushed three additional roads over the ramparts through rock portals into the heart of the city,—one leading south to Egypt and two north to Palestine and the Hellespont. In lines sweeping grandly and imperturbably over Syria, the basaltic blocks and milestones still remain as monuments to the engineering skill that joined Arabia and Britain, the farthestmost limits of Imperial Rome. Aqueducts conveyed the water down the now-paved Sik. On the plain arose temples, a forum, baths, palaces, arches of triumph, in all varieties of classic architecture. Taking their cue from the Nabatheans the Romans continued the rock-cuttings. Tombs, temples, palaces and treasure vaults grew in the marvelously colored rock walls. These still remain, long after the structures in the valley have toppled and crumbled into ruin. The most beautiful mural monuments of Petra date from the Roman occupation. An altar niche in Al Deir—"The Convent"—gives proof of Christian worship. Evidences of the strength of Christianity in these regions are remarkable. Presumably the persecutions of Diocletian drove many exiles from Rome to the provinces. But again the veil of mystery covers the possible greatness of Petra as a Christian outpost.

As a center of wealth and luxury, however, the city could scarcely be surpassed. Rome and Athens, in their days of grandeur as world capitals, rest secure in fame by their contributions in art, law and philosophy. Petra, remote and unsung, shared in the classic culture. A Greek amphitheatre, seating five thousand persons, is carved at the base of a cliff in strata of rose, purple and saffron sandstone. Around and above are hewn the tombs of the



dead. In this appropriate setting an audience might witness the tragedies of Sophocles, Aeschylus and Euripides and solemnly meditate upon the immanence of death; or riotously applaud the comedies of Aristophanes, Plautus and Terence to forget the tragedy of life and the inexorable fate that overhung the city.

After the Second Century A. D. the history of Petra is shrouded in obscurity. No written records from the Third, Fourth and Fifth Centuries have survived. Priceless manuscripts must have been lost or destroyed during the abandonment. Judging by sculptural and architectural remains, a literature and philosophy second to none may have been denied the world. As for the final calamity, in the words of John Masefield, "None knows what overthrew that city's pride." (Sonnets in "Enslaved").

From comparative history we may conjecture the bare outlines of Petra's fate. With Goths, Vandals and Huns ravaging the Empire, the Roman legions were withdrawn, as they were from Britain, to protect the Eternal City. The incense-route had shifted. Palmyra had become the objective of caravans. Lacking protection and commerce, the Romanized inhabitants were harassed by the fierce Arab tribes. Their ultimate fate is veiled in a terrible mystery. *Not even the relics of the dead remain.* The desolation may have been gradual. But possibly a sudden catastrophe overwhelmed the population. The absence of written records supports the latter hypothesis. Ingenious besiegers may have cut off the water supply from above. The very strength of the city may have proved its weakness. Caught like animals in a trap, starved and thirsting in the midst of wealth and splendor, the survivors may have been wiped out or captured in a final desperate battle. Probably not all were lost. Traditions account for descendants in Syria and Italy, thence scattering through Europe. Fascinating and fantastic, as the city itself, is the theory that with the decline of power and the encroachment of enemies, came a Great Fear, born of the Biblical curse. The Christianized inhabitants may have fled in panic terror. Whatever the cause, we only know that "they are gone; ay, ages long ago."

How the shade of grim Isaiah must have exulted, after the lapse of long centuries, to recall his curse on Idumæa:

"From generation to generation it shall lie waste. . . . He shall stretch out upon it the line of confusion and the stones of emptiness. . . . All her princes shall be nothing. . . . And thorns shall come up in her palaces, nettles and brambles in the

fortresses thereof; and it shall be an habitation of dragons and a court for owls." (Is. xxxiv, 10-13).

Daniel might also be pardoned a complacent chuckle for his prediction of the transitory Roman dominion: "And he shall plant the tabernacles of his palace between the seas in the glorious holy mountain; yet he shall come to his end and none shall help him." (Dan. xi, 45). The "glorious" land of Daniel included Edom and Moab. (Dan. xi, 41).

The Abomination of Desolation had come to pass. For over thirteen hundred years Petra was almost utterly lost to civilization. Only the Crusaders, battling Saladin around Kerak and Shobek to the north, for a time occupied this strategic point. The attitude of Islam supplemented that of the Hebrew prophets. The Koran recognized Petra as a sacred and mysterious, if not a holy city. The most solemn interdictions against habitation seem to have been placed upon it by the Mohammedans. Nomadic Arabs, discovering the hidden entrance, gazed in awe upon the ancient wonders. Once outside, the more intrepid were often baffled in attempts to return. Legends grew of a wondrous enchanted city, appearing and vanishing like a mirage. (Iliowizi, *The Weird Orient*). Coupled with these were awe-inspiring tales of the dire fate of beholders. A religious or superstitious veneration hallowed the place. It was known, but not inhabited, by the desert tribes. It became a city of mystery—a City of Dreadful Beauty,—like a desert Medusa, itself turned to stone. It meant death or worse to the profaner. Even today the bolder guides will offer to show only by night what they dare not reveal by day. There are legends of treasure still buried or hidden among the ruins. Petra has never been thoroughly explored.

In 1811, Burckhardt, a Swiss traveler, crossing the desert wilderness, stumbled weak and weary upon this refuge. He immediately knew it for the long lost city. The fierce and greedy Arabs stole even the rags that bandaged his bleeding ankles. Burckhardt escaped with his life,—to die only a few years later. Following him came Irby and Mangles; then Laborde and Linant, who made a hasty survey-map but were driven out. John Stephens, an American with a special permit, was the first to spend a night among the ruins. He died shortly afterward. Other travelers, misinterpreting the prophetic words of Ezekiel, "Thus will I make Mount Seir most desolate, and cut off from it him that passeth out and him that returneth," (Ezek. xxv, 7) were deterred from

the journey by what they considered a divine threat. Then, too, the route over the desert was long and dangerous. The Arab tribes were fierce, fanatical and extortionate. The indomitable Kitchener, with Hull and Armstrong, failed to penetrate the valley in 1883, but viewed its beauties from the ramparts. Undaunted by prophecies and perils, perhaps twenty white men and six white women have left records of visits to Petra during the nineteenth century. The number who perished in the attempt is unknown. Colonel Libbey of Princeton was one of the last desert travelers to force his way past the threatening guardians of the Sik.

In 1904 the Hedjaz Railroad to Maan, constructed by German engineers, part of the Turkish-German dream of a pan-Islamic Empire, brought Petra within thirty miles of civilization. In 1917 General Allenby also opened up the region with an Egypt-to-Palestine road. Now Petra is comparatively accessible. Under a friendly King of the Hedjaz, travelers may be assured protection in the future.

Those fortunate few who have visited Petra say that its strange beauty can never be pictured or described. The Roman roads, High Places, Citadel Rock, sandstone walls honeycombed with tombs and temples are all cut in strata of the most marvelously variegated colors. Such monuments as the Rainbow Temple, Corinthian Tomb, Al Deir, and the Amphitheatre are matchless combinations of the handiwork of Nature and of man. Of the Khaznah Firaun, or Treasury of Pharaoh, its hundred foot sunlit façade looming up through the darkness of the Sik, John Stephens wrote:

“Even now . . . I see before me the façade of that temple; neither the Coliseum at Rome, grand and interesting as it is, nor the ruins of the Acropolis at Athens, nor the Pyramids, nor the mighty temples of the Nile are so often present in my memory.” (*Arabia Petraea*).

William Libbey describes this rock-cut cameo in the gateway of the mountains of mystery: “Carved with matchless skill, after the conception of some master mind; gathering the beauties of the stream, the peerless hues of the sandstone, the towering cliffs, the impassable ravine, the brilliant atmosphere and the fragment of the blue sky above,—it must have been enduring in its effect on the human mind. We saw it in its desolation, a thousand years after its owners had fled, after a cycle of storm, tempest, flood and earthquake had done their worst to mar and disfigure it, and

we must confess that its impression upon our hearts and memories is deathless." (*The Jordan Valley and Petra*, Vol. ii, p. 94).

Petra has been almost neglected in art and literature. Even Jules Guerin's richly tinted paintings from Egypt and the Holy Land fail to include the Khaznah Firaun. Literary men and artists never visited Petra during the nineteenth century. A few have heard of the place. Edgar Allen Poe mentions the glories of Petra in his critical review of Stephens' "Arabia Petræa". And another American poet, Whittier, celebrating "The Rock in El Ghor, writes:

"Dead Petra in her hill-tomb sleeps,  
Her stones of emptiness remain;  
Around her sculptured mystery sweeps  
The lonely waste of Edom's plain.

From the doomed dwellers in the cleft  
The bow of vengeance turns not back;  
Of all her myriads none are left  
Along the Wady Musa's track.

Unchanged the awful lithograph  
Of power and glory undertrod,—  
Of nations scattered like the chaff  
Blown from the threshing-floor of God."

This place may have been the inspiration of Kipling's City of the Desert in the words of Dick Helder:

"What do you think of a big red dead city built of red sandstone on honey colored sands? There are forty dead kings there, each in a gorgeous tomb finer than all the others. You look at the palaces and streets and shops and tanks and think that men must live there. Then evening comes and the lights change until it's just as though you stood in the heart of a King Opal. Then the night wind gets up and the sands move, and you hear the desert outside the city singing 'Now I lay me down to sleep.' And everything is dark till the moon rises." (*The Light that Failed*).

John Masefield must have had in mind the cities of the Arabian desert, perhaps Petra, when he wrote the sonnets in *Enslaved*.

It is strange that so little is known of a spot so intimately connected with the history of mankind and of Christianity. As the Abomination of Desolation it was denounced, shunned and hidden for ages. But there was a glorious promise for the future. Isaiah also wrote of Idumæa, "The desert shall rejoice and blossom as the rose; . . . and a highway shall be there, and a way." (Is. xxxv, 1, 8). Its further destiny may be hinted in Matthew and Mark at the time when "The abomination of desolation, spoken of by Daniel the prophet, stand in the holy place." (Matt. xxiv, 15) (Mark xiii, 14). The holy cities of Rome and Jerusalem have been justly famed in hymn and story. Petra needs no praise but knowledge. It stands absolutely alone and incomparable, as the strangest, most mystically beautiful place in the world: "a rose-red city, half as old as Time."

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## ISLAMIC INFLUENCE ON JESUIT ORIGINS.

BY DUDLEY WRIGHT.

THE story of the origin of the religious confraternity known as the Society of Jesus, or the Jesuits, is one that is generally overlooked in favor of the history of the developments of the Society, to which feature historians have always paid considerable attention.

In 1521 Ignatius was wounded in both legs when defending Pampeluna against the troops of Francis I. The reading of the *Flowers of the Saints* during his convalescence led to his conversion and he resolved to devote the remainder of his life to the service of God. His first idea was to become a kind of religious Don Quixote and make war against the Moors of Catalonia and Aragon, where, at that period, the Mohammedans were very numerous, commerce being in the hands of the Jews and Mussulmans. The Moors and Moriscos were not then assimilated with the Jews and placed under the surveillance of the Inquisition: they could meet together without fear of disturbance, provided they exercised prudence and tact. The incurable lameness of Ignatius, a permanent result of the conflict in which he had been engaged, rendered the accomplishment of this aim impossible and he then announced that he had received from God a special mission to undertake the conversion of the Mohammedan peoples and particularly those resident in the Holy Land. He was on his way to the Shrine of Our Lady at Montserrat to ask a blessing on his enterprise when he encountered a Saracen of lofty mien, one who had put on a thin mantle of Christian profession in order that he might remain unsuspected and unmolested in Spain. As the twain travelled together, the farther the Moor got from the town and the ears of inquisitive listeners the more pronounced became his expressed contempt for the Christian faith, until presently he uttered

an insult to the Virgin Mother of Christ. It was then that the warrior spirit in Ignatius was aroused and the Saracen, perceiving this, fled at a gallop. Ignatius, hand on sword, hesitated as to whether he should follow and slay the blasphemer, but left the decision to God and was taken on the road to Montserrat. It is asserted by some writers, although there is no proof, that the Saracen was a member of one or other of the Mussulman secret societies then in existence. It is, however, by no means improbable as the operations of these societies were very widespread and the membership in all countries where Mohammedans dwelt a very large and secret one.

At Montserrat Ignatius lighted upon a copy of the *Spiritual Exercises* of Garcia of Cioneros, a collection of mystical meditations and ascetic rules. This work, in combination with the rules and practices of various Islamic secret monastic societies, then in full swing, formed the basis of the more famous volume, the *Spiritual Exercises of St. Ignatius*. It was while he was at Manresa that he conceived the project of his Company or Society and that there germinated in his mind the idea of founding within the Catholic Church, conformably with its dogma and discipline, an association which, whether intentional or otherwise, was founded on the model of the Islamic societies, then a very powerful factor among the Mussulmans.

Points of resemblance between the Society of Jesus and the Sanusiyya Order have been noted, but it was impossible for the former to have been founded upon the latter, seeing that the Jesuits came into existence in 1540, whereas Sanusi, the founder of the Islamic Society which took his name was not born until 1791. There were, however, in existence in the fifteenth and sixteenth centuries numerous Islamic congregations or societies, the majority of which are still in being, whose constitutions and rules bear, in many ways, a striking similarity to those adopted by Ignatius.

The Kuadryas, established in Asia Minor by Sid Abdel Quader, date from twelfth century. The descendants of the founder introduced the Order into Spain, where it made rapid progress. After the taking of Grenada, the majority of the Spanish members fled to Morocco. Nevertheless there remained some who crossed the peninsula until the Inquisition, in 1524, was charged by Charles V, with their pursuit. Then there were the Kadelyas, an Order founded by Sid-Abou-Median, who was born

in Seville and who distinguished himself as a professor in the Universities of Seville and Cordova. The third Sheikh of the Order, Sid-Abou-Hassan-Chadely, was a man venerated throughout Islam and particularly renowned throughout Spain and the north of Africa, in which countries were various groups more or less attached to the primitive organization.

The Qalenderis was an Order founded by Qalender Yusuf Endelusi, a Spanish Moslem, who died A. D. 1323. Nicholas Nicholay, who visited Constantinople in 1551, describes the Qalenderis as glorying in chastity and abstinence and living in little "churches" called Tekyes. Tekieh is, however, the Turkish name for the monasteries in which the Dervishes, or Islamic monks, live. There were twelve of these Orders originally, the earlier ones dating from the time of Mohammed and his immediate successors; to-day, in spite of the suppression and decay of many, they number thirty-three. Qalender required of his proselytes purity of heart, spirituality of mind, exemption from all worldly defilement, and that they should travel constantly teaching the tenets of the faith as they interpreted them, living wholly upon alms. They were also required to practice acts of severe austerity, in order that they might attain to heavenly favor and, more especially, to a state of ecstasy and illumination.

After recognizing the impossibility of becoming an active warrior in the cause of the Catholic Church against the Mohammedans, Ignatius devoted all his energies to the furtherance of his spiritual mission in the Holy Land and the cause of the early hostility to the Society which he afterwards founded, was the settlement of its members in countries other than Palestine. Father Genelli, in his *Life of St. Ignatius of Loyola*, says that:

"Everything tends to show that Ignatius, in making the journey to Jerusalem, had no other object than to take up his abode near the sepulchre of our Lord, and there labour to extend the Kingdom of Christ and to make war upon His enemies. It was not then a simple pilgrimage that he was making, for the East had been his first thought after his conversion. He had the idea of at once establishing, on the spot sanctified by the presence of our Lord in the flesh, a Society of Jesus, composed of apostolic evangelical labourers, whose spiritual welfare in the midst of the children of Mohammed should pave the way to new triumphs of the Catholic Church. This was, without doubt, a noble conception, which the swords of the Christian chivalry of Europe had not



been able to realize by the efforts of Catholicism of centuries. That this was the real design of St. Ignatius is proved by the pains he took to gain a footing in Palestine. . . . To the last years of his life he thought seriously of securing at last an entrance for the Society in Jerusalem."

When Ignatius left Manresa in 1523 he undertook a voyage which is passed over by many historians of the Society. It was to Palestine in general and to Jerusalem in particular. Father Dominic Bonhours, in his *Life of St. Ignatius*, tells us that in the early days of his conversion he did not desire to make this pilgrimage to do honour to the places consecrated by the presence and blood of Jesus Christ, but that "he undertook it at the time (doubtless after contact with Moors or Moriscos at Manresa) with the desire of working for the salvation of infidels".

These "infidels" were, of course, the followers of the creed of Mohammed. During the two months of his sojourn in Palestine he endeavoured to approach the Mussulmans and even ventured into the secret meetings of the Islamic confraternities, open only to the initiated. Henin de Cuvilliers says that he was nearly murdered. At any rate, his zeal for proselytising was so untimely that the Franciscans, the guardians of the holy tomb, called upon him, under pain of excommunication, to renounce an enterprise which aroused the fury of the Mussulman societies against the Christians, and to return to Europe.

Ignatius obeyed and returned to Spain. He went to the University of Alcalá, which Cardinal Ximenes had founded for the Moriscos and for the instruction of missionaries who were to labour for the conversion of the Moors. The Inquisitors by this time, however, had concentrated attention upon Ignatius and, having surveyed his apostolate, they suspected him of being a "Mahometiser". They demanded his arrest, which they secured, and he was detained for several days in the dungeons of the Inquisition. On his release, Ignatius decided that he would go to Salamanca, which he did, but new suspicions arose and for the second time he was arrested at the instigation of the Inquisitors. His close connection with the Moors, his unusual interest in the Islamic faith and in Mohammedans generally had made him suspected once again of Mahomedanism. This time he was detained for twenty-five days and it is not known on what terms he was able to secure his release on this occasion, but immediately

on attaining his freedom he went to Paris and at Montmartre he definitely founded the Company of Jesus.

Ignatius did not abandon his project for the conversion of the Mohammedans. Don Pedro de Zacata de Bermeo, the commander of the Knights of the Holy Sepulchre at Jerusalem, endeavoured to promote the interests of Catholicism in the Holy Land, and particularly those of Ignatius and his followers. He addressed himself to Pope Julius III, from whom he obtained, in 1554, a Bull authorizing him to found in the name of the Society of Jesus, three colleges in the East, which should belong to that Society—one at Jerusalem, one at Constantinople, and the third at Cyprus. In anticipation of the Bull, Ignatius, in 1553, had sent Simon Rodriguez with a companion to Jerusalem, to wait there until a favourable opportunity presented itself for establishing the proposed college. Rodriguez went no further than Venice where he fell so sick that he was utterly unable to continue the voyage. The provisions of the Bull were never acted upon and the scheme fell through. Although Ignatius continued to speak of the conversion of the Mohammedans as his chief mission, his actions now began to suggest the growth of a wider alternative.

It is in the organization and rules governing the Society of Jesus that the influence of the Islamic confraternities is seen. One of these societies is known as the Order of the Kheloua, a word which means "retreat" and the members make this devotional act a special feature of the Order. Before initiation into any of the Islamic societies in existence at the time of Ignatius, however, a retreat of from thirty to forty days had to be undertaken by every candidate. Concerning this M. A. le Chatelier writes:

"Mussulman doctors compare the initiation and the Keloua to a poison, deadly if it is taken in too strong doses at the beginning, but which can be assimilated by progressive usage. The Keloua, which, at the beginning, lasts for one day only, is, by degrees, prolonged through weeks. The initiate ought then, in order to isolate himself, to remain in one room of his dwelling, or in the cell of a zawiyah, or in a cavern, or in the depth of a forest. Whatever, however, may be the place of his retreat, he ought to speak to no one during his retreat, except to the Sheikh, or Moquaddim, the representative of the Sheikh. If he wants anything he will make demands by signs or in writing. His abstinence during the day must be absolute, but may be broken at night, though only in order to take the quantity of nourishment

strictly necessary. The hours of sleep are rigorously limited. Vocal prayer—the repetition of the same formulæ up to one or two thousand times—and meditation ought exclusively to occupy the adept, to whom, in certain approved cases, the reading of certain books may be permitted as an assistance, as a means to the desired end. Outside the time devoted to reading the candidate ought to ‘close his eyes in order to illumine his heart.’”

In the Society of Jesus a retreat of from thirty to forty days is similarly demanded. The novice ought, according to the *Exercises of St. Ignatius*, to employ the first week in the purification of the mind. During this week he is deprived entirely of the light of day, save for reading and eating. He is prohibited from indulging in laughter or in any conversation which tends to laughter. He sees only his director and speaks only to him, who fixes for him his fasts and labours. For four hours in the day and one hour in the middle of the night he is absorbed in meditations on death and hell. The same formula of prayer is repeated innumerable times until a condition of vague unconsciousness is reached—the same as happens with the Mohammedan initiate.

Attention is directed in both the Mohammedan and the Ignatian societies as to the posture of the body during prayer and meditation and the gaze has to be directed to and kept fixed upon a certain point.

St. Ignatius prescribed a special method of prayer, which he set out in the following words:

“The third method of prayer is that with each breath or respiration one is to pray mentally, saying one word of ‘Our Father’ or of any other prayer that is being recited, so that one word only is said between one breath and another; and in the length of time between one breath and another, one is to look chiefly on the meaning of such word, or to the person to whom one recites it, or to one’s lowly estate, or to the difference between such high estate and such reliance of man.”

This practice was known to the Moslems of the ninth century. The Kadriyas, in particular, had the practice laid down in their rituals of praying “in measure” or “in time”, that is to say, of giving to each respiration or breath one of the names of Allah, or one of the attributes of God, forcing themselves to hold the breath for as long time as possible on the name or attribute and the great care is never to have more than one name or attribute uttered between two breaths.

In the *Exercises of St. Ignatius* great attention is paid to what is called "the application of the senses". The first point is to see the person with the sight of the imagination, meditating and studying in particular their circumstances and gathering some fruit from the sight. The second is to hear with the ear of imagination the things that they say, or may say, and reflect upon them, then wisely to gather some profit. The third is to smell and taste the infinite fragrance and sweetness of the Godhead of the soul and its virtues, reflecting inwardly and gathering thence some profit. The fourth is to touch with the touch of imagination, to embrace and kiss the place where such persons tread, always contriving to gather profit thence.

This was a practice with both Gnostics and Mussulmans, who sought "to see, touch, hear, feel, and taste the object of their meditations", for example, "Paradise, the place of eternal delights, which God has prepared for prophets and believers" or "the torments of Gehenna, or Hell". Thus Ignatius said: "In the first place I see with the eyes of imagination those immense fires and the reprobate souls enclosed within the body of fire. In the second place I hear by the aid of imagination the groanings, the cries, the blasphemies against Jesus Christ, our Saviour, and against all the saints. In the third place I imagine to myself that I inhale the fumes, the sulphur, the stench of a sink of vice, and of putrefying matter. In the fourth place I imagine myself to taste bitter things, such as tears, sadness, the raging sea of conscience. In the fifth place I touch these avenging flames and force myself lively to comprehend how they surround and burn the souls of the reprobate."

The Kadriyas had, and have, five tests for every initiate after emerging from the retreat. They were: 1, serving the poor in imitation of the "saint" who founded the Order, who walked along the streets carrying a leathern bottle filled with fresh water and offering a drink to the poor people and weary travellers; 2, making a pilgrimage to Mecca or to the tomb of a Sheikh venerated in the Order; 3, performing domestic duties for a period; 4, teaching the Koran to the people; 5, serving as preacher for a stated period. The Jesuits have precisely the same tests after the candidate has been accepted and when he has passed satisfactorily through the retreat. He has: 1, to serve the sick poor for a month, in memory of the sojourn of St. Ignatius at Manresa, where he tended the infirm and pilgrims; 2, to make a pilgrimage

to some sanctuary selected for him; 3, to engage in menial work allotted to him at the seminary; 4, to teach children; 5, to preach as directed.

In the Islamic Orders promotion is at the will of the Sheikh; in the Society of Jesus it is at the will of the General or his representative. The General can retain a member of the Society for any period he wills in any class, or reduce him to any position, even the lowest, he has already passed through, or he may promote him to the highest grade. In Mussulman confraternities the authority of the Sheikh is absolute. As guide he takes the place of Mohammed and the candidate takes an oath that he will obey the Sheikh as he would obey God. The rule is absolute despotism. By the constitutions of the Society of Jesus the same despotic principle prevails. The General must be obeyed as God would or should be obeyed. The candidate for admission into Islamic Orders in existence in Ignatius's day, when he was accepted, handed over to the Sheikh all flocks, goods, and property that he possessed. Likewise all that the Jesuit owns passes, on his admission, into the exchequer of the Society. The Mussulman in the hands of his Sheikh is told to be as a body in the hands of the washer of the dead. The Jesuit is told that he must permit himself to be moved and directed by his superiors just as if he were a corpse.

In this adoption, or adaptation, of the Islamic monastic constitutions by St. Ignatius a criterion was set for what became, in after years, a not uncommon practice of Jesuit priests engaged in missionary labours. In the work issued under the initials "B. N." entitled *The Jesuits, their Foundation and History*, published by Burns and Oates), we read (p. 371, vol. 1):

"The Jesuits, as has been seen, had made an attentive study of the peculiar character of the Chinese, had come to the conclusion that the chief obstacle preventing them from embracing Christianity was an intense attachment to certain national customs. . . . They . . . finally adopted a rule, which has since been given by the Holy See to Vicars-Apostolic in foreign missions, that the missionaries were not to oblige the people to change their ceremonies, customs, or manners unless these were contrary to religion or morality."

Then there is the case of Father Robert de Nobili, an Italian of Roman birth and a nephew of Bellarmine, who is described as "one of the greatest of Jesuit missionaries", whose career cer-

tainly is of singular interest. The following description of the methods he adopted for the conversion of the Brahmins is taken from the work quoted above:

“He resolved to become a Brahmin himself, and to renounce all intercourse with Europeans and with members of the lower castes. By this means alone could he hope to gain an influence with those whose welfare he had at heart. . . . He announced himself to be a Roman Rajah, or noble, and a Saniassi, or one who had renounced the pleasures of the world, two perfectly accurate statements. He separated entirely from the other Jesuits, who, by mingling with the Pariahs, had lost caste in the eyes of the higher classes; and having adopted the language, costume, and manners of a Brahmin, he retired to a hut built of turf, and surrounded himself with a mysterious prestige well calculated to excite curiosity and interest. One of the chief crimes of the Europeans, in the opinion of the Brahmins, was their use of meat and strong liquors, and Fr. de Nobili conformed himself strictly to the mode of life observed by the native doctors: rice, herbs, and water were his only food once in twenty-four hours; his solitude was only broken by visits from the Brahmins; prayer and study were his constant occupations. By degrees his patience was rewarded. Attracted at first by his retired and mortified life, the Brahmins were fascinated by his learning and especially by his perfect knowledge of their Vedas or sacred books. Gradually he led them to the clear understanding of the Catholic faith and conversions became numerous among the class in which the truth had hitherto encountered insuperable opposition.”

Nobili was afterwards authorized by a Bull from Pope Gregory XV, dated 31st January, 1623, to pursue the course he had hitherto followed, which Bull justified him in all that he had done. One of the chief accusations against him had been that he allowed his disciples to paint a mark on their foreheads, made of a certain paste called sandal, and to wear cords or girdles composed of 800 yellow threads. The Bull decided that both those customs, being regarded merely as distinctive marks of nobility, might be allowed to the Christian Brahmins, on condition that the cords should be blessed by a priest and received from his hands. The Pope, after careful examination, was convinced that to abolish these practices, puerile in appearance, but in the eyes of the natives invested with extraordinary importance, would have been to render their conversion well nigh impossible.

This imposture continued throughout the seventeenth century and on the death of Fr. de Nobili in 1656 it was claimed that he had made 100,000 high caste converts and that one of his colleagues had made 30,000 converts. Benedict XIV, by his Bull of 12th September, 1744, authorized the Jesuits to have two classes of missionaries, one for the nobles and one for the pariahs.

Then there is the case of the Norwegian Jesuit Nicolai, who presented himself to the Protestant clergy at Stockholm and said that having spent some years at southern universities, he would like a place as professor in the new college they were forming. He asked them to recommend him to the king, which in time they did and he secured the appointment. He had been sent from Rome with instructions to act as he did. He seems to have held the chair of Lutheran theology for a considerable time until, eventually, he became rector of the college.

Not only is the historical connection between Islamic monasticism and the Society of Jesus demonstrated by their likeness one to another, but their actual relationships are such as to prove the filiation possible, and, further, the hypothesis fits in with all the ascertained relevant facts.

## EVOLUTION OF SOCIAL QUALITIES.

BY SANFORD A. MOSS.

OUR young tom-cat caught a mouse this morning! This is not an article on nature study, so I will not dwell upon the way he tossed it about, and scampered around the kitchen. He did just what other cats do always under the circumstances, and this is the point I do want to dwell upon. Our cat never had lessons in mouse-catching and never acquired from external sources any information as to what to do when a mouse became an element in his environment. What then is this internal thing called "instinct" which resulted in his doing what other cats always do? I am going to try to give a partial answer to this question, with which I hope the reader will agree. Then I will extend the discussion to human qualities in a way which I also will try to make satisfactory. I will finally draw some resultant conclusions as to the foundations of human society which, while they may not be wholly new, are not as current as I think they should be.

We must, of course, dig a little into the details of this phenomenon of nature which we call "instinct". Merely knowing of it and giving it a name does not count for much. The physiologists have done enough to make it certain that the cat's instinct is connected in some way with its brain. We can therefore make a good beginning by consideration of the "matter" of which the brain and nerves are composed. In order to begin far enough back in this study of "matter", let us start with any piece of "dead" matter, say a lump of coal.

Its properties seem fairly simple to our understanding, so that it furnishes a good object with which to make comparisons.



The physicists tell us that the lump of coal is composed of molecules, atoms and electrons, and that it is held together by cohesion and burns because of the chemical affinity of carbon and oxygen.

Furthermore, there are vibrations of these molecules, atoms and electrons, due to temperature and radiation, so that really our piece of coal is far from dead. On the contrary, the electrons are whirling around and the molecules bearing back and forth in a most lively way.

But as the physicists well know, they have only begun to scratch the surface of knowledge about such a piece of matter. They have only recently begun to know a little about electrons, radio-activity and the like.

In what way do the carbon molecules differ from the oxygen molecules and what is the origin of their "love" or affinity for each other and what is a molecule, anyway? The physicists themselves know little more about this than a high school freshman who has flunked in his "physics".

Hence we shall have to agree that even such an apparently simply thing as a lump of coal is really complex, infinitely beyond our moral understanding.

So our analysis of details can only go so far as to note that there are things called atoms and molecules which, for some reason or other, have all sorts of powers of attraction and aggregation. These unite elements such as carbon and oxygen, and to hold together mobile drops of water, so that they become solid ice, and draw together falling particles of ice so as to form the beautiful hexagonal snow crystals, and react in many other such ways.

When certain combinations occur of such molecules of certain highly complex forms, we have what the biologists call a "cell". The particular form of affinity which makes them aggregate or "grow", we call "life". We need not here consider whether or not this "life" involves anything beyond the physical and chemical aggregating forces such as cohesion, crystallization, chemical affinity and the like. But whatever it is that makes cells multiply, they do form trees, bacteria, sea-anemones, starfish, and animals. Why they do this we understand no more and no less than we understand the lump of coal.

Our lump of coal responds to external influences in many well-known ways. Thus, a piece breaks off if it is shipped, the

volume expands slightly due to rise of temperature and there is a sound wave transmitted through the entire lump and into the surrounding atmosphere if the coal is struck. There is a chemical combination called combustion if there is contact with oxygen at a certain temperature, and so on.

We may call such effects "reaction to environment". So also a cell or aggregation of cells reacts to environment. With simple cell aggregation such as in trees, and low forms of animal life, the reaction is merely local. The tree exudes sap if cut, the low animal retracts if touched, and they both absorb nourishment from their surroundings if the necessary chemical reactions occur properly. The cat's bones are somewhat similar cases.

The biologists distinguish forms of life reaction to environment, of successively greater complexity. The simplest is the local effect already mentioned. Next there is intervention of a complex cell system called a "nerve" so that an environment effect at one place causes an effect at some other place. Next there is the local "ganglion" or nervous center which receives "afferent nerves" of simple type from various nearby points and sends out "efferent nerves". And finally, there is the system of the cat with which we started off, where there is a central brain which receives afferent nerves from senses of different kinds and sends out efferent nerves to muscles of different kinds. The system of most mammals is like this in a general way.<sup>1</sup>

We shall later return to the discussion of the reactions of the cat's brain cells. We will stop now with the generalization that our tom-cat has a system of senses with nerves going to a brain and nerves coming from it to muscles. These nerves, brains and the like, which are the seat of the cat's instincts, are all composed of cells with chemical affinities, molecular properties, and all sorts of such actions. They react to environment just as do the successively simpler organizations down to our lump of coal, but in ways billions and trillions of times more complex. We say we understand the properties and reaction of the lump of coal, and in the same sense

<sup>1</sup> In the *Monist*, January, 1921, I have tried to demonstrate that man, as distinguished from animals, has a nervous system of a still higher grade, with the addition of a "memory organ", which stores records of past environments, which are recalled by associations of present environment, so that the next effect produced on the brain at any instant is due not only to the existing environment as transmitted to the brain by the senses, but also to past environments recalled from the memory by associations due to the present environment.

we understand the reactions of the cat's sense, nerve and muscle system.

We can pause for breath after this rapid excursion through matters which have taken years for development by physicists, chemists, biologists and other scientists. We have collected enough data on points usually agreed upon, to enable us to start on the cat's instinct.

First, what do we mean by "instinct"? We have already skimmed over the mechanism which is concerned with instinct, consisting of the senses, afferent nerves, brain, and efferent nerves. By the operation of this mechanism, when the cat which is furnishing our text, saw or smelt or heard the mouse, it pricked up its ears, sought a favorable position, crouched, and at the proper instant leaped, stretched out its claws and captured its prey. All of these actions followed the perception of the mouse, and I need not expend any philosophy on the point that the perception and subsequent action had the relation of cause and effect. Neither need I spend any time in proving that the entire mechanism between perception and action exists within the cat's body. There are no waves or psychic influences or any other agencies whatever outside of the cat's own skin, which have any part in the performance. The entire drama (the mouse would call it a tragedy) of the capture, comprised the cat, the mouse and the forces of nature immediately adjacent, such as gravity, temperature, radiation, and the like.

Physiologists understand the sense mechanism fairly well and are quite certain about the pulses already mentioned from senses to brain and back again from brain to muscle. They are also quite certain that something goes on in the brain which, upon receipt of the incoming pulses, acts in some way or other to send out the outgoing pulses. This something is the "instinct" toward which we have been leading. With the data we have been collecting in the rapid trip we have just completed thru realms of physics, biology and what not, we ought now to be able to show just how instinct operates. But, alas, we are far from being able to do this completely because physiologists do not yet know the details of the brain cell processes. But between the physiologists and psychologists, we do know a great deal, however.

For one thing, we cannot escape the conclusion already mentioned that instinct is purely a matter of brain cell reaction. The

brain ends of the afferent or incoming nerves deliver their pulses to the adjacent brain cells, and some sort of cellular effect occurs in the midst of the brain and in turn the brain ends of the efferent or outgoing nerves are affected and their pulse started. While the action is so wonderfully complex that we can have no conception of the details, we are forced to conclude that for every possible combination of incoming nerve pulses, due to environment effects on the senses, the brain cells produce such reaction as to send out a consequent or corresponding set of outgoing nerve pulses which make the muscles perform the action which matches with the environment. We have already discussed the molecular and atomic reactions of dead matter, as well as the claim of the school of vitalists that the cat's cells are subject to "vital forces" beyond the attracting and aggregating forces and the like, of dead matter. But whatever is the cause of these reactions, the cat's brain cells certainly do react to the incoming nerve pulses, which are produced by the environmental effect on the cat's senses caused by the mouse, and as a result, outgoing nerve pulses are produced which result in the muscle movement which effect the capture.

The cat's instinct, then, resides in the configuration or quality or other properties of its brain cells, which make them react to given nerve influences in a definite way.

We define "instinct" therefore as a reaction or other such effect which occurs in brain cells when an afferent nerve pulse is received from senses, and which serves to send forth a corresponding efferent nerve pulse to muscles.

This is, of course, no explanation of instinct, but it is a distinct clarification of the idea. Furthermore, it is the first step in that complete explanation for which all biologists strive. We do not have the overwhelming mystery of the behavior of the cat as being possibly the result of influences from supernatural beings, as supposed by the Egyptians or being due to a supernatural soul transmigration from some previous being, or as being due to influences from the moon or stars.

We have, on the other hand, localized the reasons for the cat's behavior as being due to reactions of atoms and molecules of life cells of a certain group called the brain, definitely located within the cat's skull. We still have the overwhelming mystery of the nature of the reactions of the brain cells, but these are identical with or allied to the reactions of the atoms and molecules of the

lump of coal, so that we have some complete or partial analogies to guide our analysis of the cats' instincts.

Another evidential matter is the fact that our particular cat caught its mouse and played with it afterwards in much the same way as does your cat or any of the cats we knew in our childhood. These cat actions the reader knows perfectly well from personal experience. We also all know how they differ from dog actions under similar circumstances. The theory of instinct which has been given explains this adequately. The same sort of brain cells grow up inside the skulls of all cats, and the reactions of these cells must be the same.

The hypothesis that the reactions of the molecules of the lump of coal are a similar sort of thing to the reactions of the cat's brain cells, is important enough to warrant a little further discussion.

A simple oxygen molecule is bound to react in a definite way in an environment comprising high temperature and carbon molecules. The point we seek to make is that in a similar sort of way the vastly more complex molecules of the brain cells, and the incomprehensibly complex aggregation which constitutes the cell itself, and the trillion times more complex aggregation of cells in a section of cat brain, will react in a perfectly definite way to any given environment of pulses from sense nerves so as to send an exactly resultant pulse along muscle nerves.

Molecules, like the simple aggregations of a few elements such as carbon and hydrogen, are more complete than the oxygen molecule. These have certain properties and do certain things under given environmental conditions of a much more complex nature than oxygen reactions.

Such reactions give us the various effects produced by chemists and engineers. The carbon in steel is arranged so as to give it various properties; and thereby bridges, automobiles and skyscrapers are produced. The lump of coal is manipulated so as to make the atoms of carbon and hydrogen associate first into coal tar and then into dye-stuffs with all of the colors of the rainbow, or into explosives used to charge bombs.

The biologists tell us that molecules in living protoplasm are much more complicated aggregates of carbon, hydrogen and other atoms, than the molecules with which chemists and engineers deal. Their reactions are therefore correspondingly complicated. A cell is a complex organization of several different types of matter, each

portion containing countless molecules. Hence the parts of the cat's brain which receive the pulses from the sense nerves have countless possible kinds of reaction corresponding to the different kinds of effect transmitted from the senses. A single carbon atom such as in the lump of coal has a few simple reactions when subjected to certain effects. We can conceive a numerical calculation of the greater number of reactions which a brain cell can have, based on the permutations and combinations of the effects due to its billions on billions of atoms, combined in many ways in countless molecules of many different types, and these further combined in all sorts of living matter forming cell nuclei, cell walls and other kinds of brain cell substance.

Simple reactions of living matter have been studied by biologists and the exact occurrences analyzed under the name "tropism". Light, heat, stimulation and other environmental effects make simple aggregations of living cells perform definite actions which are well understood in many cases. There are increasingly complex reactions of living matter in plants and trees and in the cells of the cat's muscles and stomach. Finally, when we come to the cat's brain cells, the complexity is past all understanding. In the ascending scale from the oxygen molecule, through more complex chemical compounds, through simple life cells, and more complex ones in various parts of the cat's body, and finally to the cat's brain cells, there is never any point where anything occurs that cannot be referred to increasingly complex reactions of matter.

Ever since alchemists tried to find the Philosopher's Stone, finite hands have made all sorts of combinations of matter, and have recombined systems so as to initiate all sorts of reactions. The alchemists themselves made sulphuric acid and many kinds of simple chemicals. Their successors, the modern chemists, make tri-nitro-toluol and coal tar colors. But no finite hand has ever created an atom of the things we know as matter, nor a bit of the other thing we call energy. The philosophers called "vitalists" therefore maintain that there is a third thing called "life" which endows matter and energy with properties not otherwise possible. However, we need spend no time on this problem, but can confine our attention only to the reactions of life calls such as in the cat's brain, without inquiry into the distinction, if any, between life processes and the reactions of non-living matter. They are all reactions of one sort or another and it is not our present purpose to

distinguish between the sorts. The cat stopped for no philosophy as to why he acted as he did when the mouse appeared, and we can watch him do it and trace the affair back to brain cell reaction, without going back any further, as to the ultimate how and why the brain cells came to be and to react.

The common way of starting a discussion of "how life cells multiply", is to begin with the growth of crystals. There often has been given the description of how the molecules have an affinity or love for each other in certain ways, so as to build up an aggregation with the characteristic structure. Thus certain salts crystalize out of a saturated solution, or ice crystals form in slowly cooled water. Unfortunately, I cannot here keep on with the concrete case of a lump of coal, in order to fix attention in this matter of crystallization. The molecules of carbon in the lump of coal do form crystals, but if I knew how to describe the action, I would be manufacturing artificial diamonds instead of writing this article.

The complex molecules of living matter aggregate and grow in much more complicated ways than do crystals, and furthermore, have the marvelous faculty of reproduction, whereby a new organization is started, which aggregates and grows in the same way as the parent. But we have no intention of going into the biological details of how a tom-cat will transmit his instincts to his kittens.

There is one point which we do want to make, however, and that is that the kittens, in common with all other reproduced offspring, differ slightly from the old cats. This is a sudden plunge into the midst of evolutionary theory, but we have no space for the details. The various schools of evolution are having a merry quarrel about the exact reason for the "variations" or slight differences between the old cats and the kittens, so that we laymen had better steer clear of this particular point. There are, however, certain things upon which the various evolutionists do agree, in between the times when they are disagreeing. Fortunately, therefore, an author may assume that his readers nowadays, will also agree on the general principle of evolution.

Instead, then, of the allegory in the first chapters of Genesis we have the statement that all life has grown up from more elementary forms. There are differences in successive generations of offspring, such as to better and better fit them to survive amidst their environment. So have successive generations of plants, ani-

mals and all living things acquired coverings, frames, internal organs and means of reproduction which fit the individual and the race to survive.

The reason then, why our tom-cat has claws and teeth and a furry tongue is because the possession of these things has assisted survival.

One purpose of this article is to convince the reader that the instincts of the cat, mouse-catching and otherwise, are just as much a part of the cat's evolutionary heredity as its claws. The brain cell formation which, when subject to the environment of the mouse, reacts so as to make the claw muscles move in a certain way, is a physical thing of exactly the same sort as the claw itself. The shape of the claw, its sharpness and hardness, we call a physical formation. The shape of the cat's brain cells, which react so as to make the claw move in a certain way, when subjected to a certain nerve pulse stimulation, is a physical formation of exactly the same nature. Thus far the reader will probably go with me without question. I hope the evidence I have already submitted will insure this. The point which I hope the reader will concede also, is that the cat's instincts, since they are things of the same nature as its physical qualities, are transmitted by the same evolutionary laws. This is really not violently novel. It is not difficult to conceive that only those cats survived who had brain cells which reacted so as to move the claws and do the other mouse catching acts. Just as the claw mechanism was evolved through countless generations of cats, so as to have a shape well suited to catch mice, so the brain cells whose reactions served to move the claw muscles, were evolved also. This aspect of evolutionary theory seems very important and very evident to me, and yet it is dwelt upon but little. Darwin himself gives scant attention to this point. So far as I know, the Mendelian experimenters have never devoted any attention to transmission of instincts. Yet there must be Mendelian transmission of instinctive characteristics just as of physical characteristics.

While nothing probably has been actually recorded for cats, there are certainly records for some breeds of dogs, showing that rat catching ability is hereditary. This means not only inheritance of the claws, muscles and other obvious physical configurations which make efficient rat-catchers, but also inheritance of the brain cell configurations called "instincts" which give reactions which



properly operate the obvious parts. Many breeds of dogs have perfectly good paws and claws for catching rats, but do not have brain cells which react so as to operate the paws and claws in a way which makes for success. We must conclude then, that instincts are due to brain cell configurations which react in definite ways as the result of sense and nerve influences and that these configurations are evolved in exactly the same way as are the cells which produce protective colorings, sense organs and other elements in the theories of "Survival of the Fittest".

We have concentrated attention upon the effects which the brain cells at the ends of the cat's afferent nerves, have upon other brain cells as the beginnings of its efferent nerves. However, while the initial configuration of these two molecular organizations is possibly the principal thing, there are many other agencies in the cat's body which affect the condition of these cells and their reactions. The blood, digestive juices, glandular secretions and the general physiology of the cat all have some influence on the general way in which the brain cells react, but we have neither space or knowledge to go into such details. We generalize, by saying that the cat's instincts are due to its physical organization as evolved by the law of the survival of the fittest.

Of course the reader has long since penetrated the innocent little camouflage I have adopted of using our tom-cat as a means of fixing the attention in the matter of instincts in general. The human animal has a set of instincts of exactly the same kind as the cat. Due to these, the new born infant makes its discomfort and hunger known by cries, or suckles when there arrives a combination of hunger and opportunity. As the infant matures and becomes an adult, there are many other things which it does as a matter of instinct with the same sort of brain cell reaction as in the case of the cat. There also may be things which a human being does which may not be a matter of instinct. Some would include in this category, so-called reasoning and will power. Such things are not our present subject. There are, however, enough human actions to occupy our attention, which I hope to show are plainly matters of the same sort of hereditary transmission of brain cell configuration as those which govern the cat's instincts.

A good example of an instinct common to man and many animals is the one of "self preservation". We include a vast complex of heterogeneous brain reactions in this category. The reader

has a good general idea of the matter and can take the detailed analysis for granted without being bored here by it. One of the first things to appear, as animal life has evolved from lower to higher forms, is retreat in the face of danger. The tiny kitten with no actual experience with dogs will back into a safe place and arch its little back in a most ludicrous way at the approach of a dog. Similar instances could be tabulated without number culminating in the efforts at self-preservation of an unreasoning human infant. If the infant is in a safe and comfortable situation it rests quietly and mayhap coos with pleasure. But if it is placed in an uncomfortable or dangerous situation, it struggles blindly until accidentally extricated by its own efforts or by some adult attracted by its lusty cries. All infants who did not have such protective instincts were evolved out of existence when our race was in its early wild state.

Similar sorts of instincts keep us alive in our adult period. We have instinctive fears and struggles in the face of real or fancied dangers. A sleeping person will struggle to extricate himself from an uncomfortable situation with no knowledge of the matter when he awakes.

There are a great many other instincts of animals and humans which have not the immediate effect of those cited above but which make for preservation in the long run. An animal prepares a lair or cocoon in summer which protects him in winter, birds build nests and squirrels store nuts. Men build houses, lay in coal for winter, serve an apprenticeship at a trade, save up for old age, and do a quantity of similar things covered by the term "provident".

Some people lack such instincts and so much of our poverty arises. The African savages are at one extreme in this matter and the prosperous Anglo-Saxon middle class is at the other, and there are all grades between. There is obviously an inborn difference in the mental characteristics of various classes, so far as providence for the future is concerned. I hope I have given enough evidence to prove that this is due to a difference in physical configuration which cause different kinds of noses, hair or skin pigment.

The grasshopper, who in the fable, sings all summer and the ant who stores for the winter, have the same inborn differences. Each reacts in a way which has been evolved through countless generations to fit its own race to survive.

This instinct of self-preservation of course has a certain ele-

ment of selfishness. In order to preserve its own personality and its own kind, each individual is, upon occasions, more or less indifferent or even antagonistic to other individuals or other races.

It would seem that a certain amount of selfishness is necessary for self-preservation. However, there is one unselfish instinct necessary for survival. This is the one which leads to mating, and to care and nurture of the young. Female chickens, dogs, birds and many other animals will reverse their usual instinct to seize food, in order to benefit their young. Man has similar instincts, developed much more highly, however. We have love and marriage and great sacrifice for the sake of offspring. Most parents will protect their children at any cost. Yet this is not inevitable and there are frequently fathers, as well as mothers, who lack the usual parental instincts. We call such cases abnormal. They are clearly due to a difference of brain structure from the usual type. Such a difference should obviously evolve into rarity, and this has actually occurred, since these cases are known to be "abnormal".

Most human animals, particularly females, at all times, have instincts which lead them to protect children. A little girl plays with dolls and a grown woman with live babies. On the other hand, most other female animals only nurture young for a period after they have been mothers. Any young ones, whether of her own litter or not will be nursed by a female mammal for a certain time. At other times, they wholly ignore young. Carniverous males will freely attack the young of other species but instinctively leave unharmed the young of their own kind. All of these instincts obviously have been evolved and any race whose individuals do not possess them, obviously will not survive.

Mankind has many attributes beyond the instincts of animals, which of course, help in determining his relations to others. Among these are habit, reasoning ability, will and power to follow precept and example. The explanation of these attributes has been a matter of philosophical discussion for centuries. There are the "mechanists" who believe that everything we do is a matter of cell reaction and the like. These reactions are immensely complicated perhaps, but still, they believe, differ only in complexity and not in kind from the reactions of crystals or plants.

There are other philosophers, whose views are shared by the majority of people, who hold that in addition to the cell structure of the brain, with the reactions which we have been discussing,

there is a "personality" or "soul" with will-power of a non-mechanical kind. We do not need here to take sides on any of these points. In any case, the exact configurations of the brain cells have an appreciable influence and we need not agree on the exact extent of this influence. The particular kind of action which occurs in any case is still largely matter of the fundamental brain formation, regardless of the kind of philosophy we hold. If a brain lacks those qualities which tend to make the individual considerate of others, we say he is born selfish. We know well that people are born misers, spendthrifts, "poor white trash", laggards and so on. These things are all to some extent matter of a physical brain, regardless of soul, will or reason. There must exist therefore some fundamental brain formation which enables exercise of reasoning, will power, or attention to precept from others. In other words, whether or not human beings have any mental power beyond purely mechanical results of cell reaction to environment, these powers are, more or less, dependent upon the existence of a physical brain with a definite cell formation which has been evolved on the basis of the survival of the fittest.

We make the hypothesis therefore that *the ethical and social qualities which we possess are due to evolution, and are such as have made our race survive*. The exact combination of selfishness and altruism which the average human being possesses is such as has kept the race in existence, and enables it to evolve from lower forms. Of course the evolution is still in process and those social qualities are sure to become more predominant which best assist survival.

It will be worth while to consider a few more examples of this fundamental premise. Certain animals and a few abnormal men cannot tolerate others, even of their own kind, and have what we call ferocious "instincts". It is obvious that a race with such characteristics cannot survive. On the other hand, most if not all races of animals which have survived, do not usually attack their own kind. However, most animals will attack their own kind if their personal privileges are encroached upon. Obviously, individuals which would passively submit to encroachment would be soon evolved out of existence. On the other hand, a certain amount of aggressiveness and desire to seize what is needed for existence, is also necessary for survival. Thus has been evolved the compromise

already mentioned between selfishness and indifference to others, which governs the social relation of most animals.

It is to be noted that what are called "abnormal mental characteristics" such as idiocy and insanity are simply extreme variations in the physical configuration of the brain. They are the same kind of variations as give evolution in general. In this case, there is a form of "unfitness". Such variations automatically evolve themselves into rarity and this is the reason they are unusual or abnormal. Evolutionary theory tells us that variations are always occurring for better or for worse, in shapes of paws, claws and physical characteristics in general, as well as in those physical configurations of the brain which give mental characteristics.

As already noted, most animals passively tolerate others of their kind and actively and unselfishly assist young of their kind under certain circumstances. Observation shows that most humans go much further than this and often unselfishly assist adults of their own kind, as well as other animals. If a healthy animal has a comfortable lair safe from the elements, and a sick one approaches, it is at least unusual, and perhaps unheard of, for the strong to give place to the weak, at the expense of his own exposure to the elements. Yet occurrences such as this are normal for human beings, and in many ways we have practice of the "Golden Rule."

Now it is not inevitable that a human being should practice the Golden Rule. Animals do not, and savages do so, to a much less extent than a modern Anglo-Saxon. In many cases, there is more toleration of others with neither friendship nor animosity. There are, however, some selfish persons who are not merely indifferent towards others, but positively hostile. In cases where it adds to their own comfort, they try to get what they themselves need even at the expense of others. There are at a further extreme, cruel persons, who discommode or torture others without actual gain to themselves, but merely because they have pleasure in seeing others suffer.

After all of the discussion above, I hope it will be agreed that the various kinds of attitudes towards others are matters of fundamental arrangements of the brain cells, as transmitted by heredity. In other words, one is not selfish because he wants to be or because

he wills to be, but because his brain has an inborn twist in that direction.

There are, as already remarked, many parts of the physical organization which participate in the action of the brain, such as the glands and digestive juices. We always refer to every part of the physical system, which influences the brain when we briefly mention "brain configuration".

It has also been noted that the actual brain reactions are affected by an individual's experience, and by the precepts he has received. However, as has been pointed out, there remains always a large influence due to the inherited brain configuration, and this is the thing we are here discussing.

Due primarily to an evolved brain configuration, and secondarily, to environment and experience, human beings of a race grow up with certain ideas of "right" and "wrong". Some races have strongly defined instincts regarding lying or stealing, which is easily developed by precept into a definite code of morality. Others have less pronounced instincts in this direction, but of sufficient strength to be developed by precept into a similar code. Still other races and individuals are deficient in these particular instincts, so that they never see impropriety in fibbing, or appropriating property of others. A similar situation exists with regard to selfishness and altruism, care of the aged and sick, and many similar ethical and social attributes.

As far back as our knowledge of the human race goes, many of these criteria of right and wrong have been said to have come from supernatural sources. I have no intention of controverting any present day ideas in this matter. I believe it will be freely admitted, however, that many such ideas of ancient races, have really not been supernatural, but have grown up through purely human agencies, notwithstanding ideas to the contrary, at the time. No God or other supernatural agencies ever made it "right" to sacrifice human beings, or even animals, or to burn widows on funeral pyres, or, coming down to our own Christianity, to burn and torture people for witchcraft and heresy.

Many types of religion, ancient and modern, teach morality and altruism, and much of the progress of mankind in ethical directions has been due to religious influences. Here again, however, there must also be an hereditary factor. The fact that an individual or race will attend to ethical teachings of a religion is

due to the sort of fundamental brain configuration of which we have so often spoken. The conclusion which I hope to draw is that ideas of right and wrong are matters of the same sort of instinct as led the tom-cat to catch the mouse, and are therefore matters of brain configuration as evolved by laws, such as that of survival of the fittest.

Much as we may hate to admit it, many races have survived whose instincts have led them to think it right to war on other more peaceful nations and take land and goods from them. Most other races think it right to defend themselves from such warlike ones.

It is desirable to develop further the point already mentioned, that there is always a great influence upon a given individual, due to environment, and to example and precept from parents, associates, teachers and preachers. Thus a neutral person may under differing circumstances become either a moderately truthful person or a moderate liar. On the other hand, there is a type so well known as to have given rise to the popular term "natural born liar". Such a person under differing circumstances would become either a moderate or a great liar. In other words, the fundamental characteristics are greatly modified, restrained or developed by circumstances, environment, will-power, reason, precept and perhaps other things besides heredity. The fact that these things can have an influence is more or less of an hereditary trait. However, the exact relation between influence of hereditary and of other things has involved a great deal of biological discussion, and I have no intention of dragging it into this article. I have no doubt that it will be admitted that heredity has *some* influence on the moral characteristics of an individual, and that is enough so far as this article is concerned.

A kitten may become a ferocious alley cat of ugly mien, with one eye out and with ears and tail chewed off, ready to fight for its life under most adverse circumstances. On the other hand, the same kitten could grow up to be a children's pet, fat and lazy, spending its days basking in the sun and preening its handsome fur, with practical loss of the mouse-catching instinct with which we started. In both cases, however, the inherited brain configuration has a great influence in spite of other circumstances. So it is with human mental characteristics, the evolved inheritances plays a great part, but other things are modifying factors.

One very important instinctive brain configuration possessed by

many animals including man, is the one which gives the inclination to follow the leader. This is axiomatic in the case of sheep. In the case of humans, we call it "custom". We very often have a conflict between this general instinct to follow custom, and an opposing individual instinct. This general instinct to follow custom is probably the means whereby various types of individual instincts which have enabled a race to survive, are made use of by other individuals who may not possess the original instincts. On the other hand, custom also often tends for a period to preserve things which do not on the whole assist survival. Evolution teaches us, however, that in the long run, even such things will be eliminated. But in whatever way it acts, the instinct to follow custom is due to a brain configuration which has its effect in common with many others in determining the evolutionary development of our race.

Another characteristic of the brain configuration of animals and men is the ability to form habits. Here again there must be a fundamental ability to form the habit. Only certain types of dogs can be given the habit of herding sheep, and only certain men can learn to juggle balls.

Many physical characteristics are inherited which are neutral so far as survival is concerned. It is probable that a sharp thin nose or a broad flat nose, or blue or green eyes are matters of development. A similar situation must exist with many mental characteristics. However, if I list some mental characteristics which appear to me to be non-essential, I might offend a reader who may have some, which he thinks are essential. I will escape this difficulty by letting the reader supply his own list.

The evolution of mankind itself makes changes in essentiality of characteristics. When our ancestors lived in woods and caves, those who had instincts which made them successful fighters, hunters and fishers were the ones which survived, while those who had characteristics, which nowadays make them mechanics, engineers, chemists or the like, did not get on so well. Existing vestiges of the early instincts of the race are shown by those who hunt, fish or engage in athletics for sport. We would now have vastly greater abilities in physics, chemistry and engineering if they had always been as important factors in survival as they are today. But so far as social and ethical qualities are concerned, there has been no such change. It has always been as important for survival as it is today, that members of a race should assist each other, and should not lie



or steal. The ethical instincts we have are therefore of very early origin.

It is possible to classify the ethical instincts possessed by various kinds of living things. Plant and low forms of animal life have no ethics whatever. They have tropisms or instincts which tend to preserve themselves and propagate their kind with complete disregard of the rest of the universe. They nourish themselves regardless of whether or not they deprive other living things of nourishment.

Next comes those animals which tolerate others of their kind under most circumstances. They may deprive some others of food or even devour others, but usually respect certain or all of their own species. Next are animals which unselfishly nurture the young, but merely tolerate others. The highest degree of all comprises those who assist others. Human beings possess this instinct to some degree or other. Perhaps dogs possess it to a slight degree.

The way in which there are transmitted those social characteristics which assist survival, is well known to us through the story of the evolution of paws, claws, and other purely physical characteristics. For some reason or other, a variation from the usual brain configuration occurs. Such things are now occurring all of the time. Many individuals have criminal instincts, are kleptomaniacs, or otherwise possess something which we term degeneracy or deficiency. On the other hand, there are geniuses, philanthropists, and many who possess special skill or other unusual qualifications not in an evil direction. But these two types are only manifestations of differences. If those things we call "evil" would assist survival, they would be the normal things. The fact that they seem evil to us is because they do not coincide with the brain configurations, which have been the normal ones to survive. And so these "evil" instincts, since they do not assist survival, are not propagated and die out as often as they accidentally occur. The other "good" instincts do, however, propagate themselves, and when one accidentally occurs, it tends to become permanent.

The way evolution acts with physical characteristics is so well known, that I need spend no further time on the identical actions with mental characteristics. Of course our race is evolving all of the time, and those ethical and social characteristics which best fit us to survive ultimately are being approached as the centuries go by. A century or two is nothing to Nature, as she evolves char-

acteristics, both mental and physical, so that we see no rapid change. I think, however, that we can see ethical changes in historical times, and on the basis of these, make some predictions for the future.

Our race has certainly become more observant of the golden rule. One prominent change is in the matter of cruelty. Public sentiment has so evolved that there is a great decrease in the matter of torture and infliction of pain upon persons who may be for any reason in the power of others. It also seems self-evident that the instincts of the human race as an average have evolved within historic times in regard to slavery, unjust imprisonment, and similar matters. The present inhabitants of the globe differ greatly in all such instincts. Some races deem it cruel to destroy any animal life, and even go to the extreme of having two little stilts on each shoe to avoid crushing anything under foot as far as possible. A second class comprises those races or individuals who will not knowingly make animals suffer, but are willing to kill them for self-protection or food. Those of a third class go further and in addition will hunt and fish for amusement even when they do not need food, but will not wantonly be cruel to animals.

These two latter classes include such instincts as are considered normal, while the next two classes are considered abnormal. Those of the fourth class are indifferent to the sufferings of animals, while those of a fifth class find pleasure in the sufferings of animals and even of human beings. It seems to me that evidence can be given showing that the human race is evolving in this matter. Perhaps, we are approaching the second class above mentioned.

Another matter in which the human race is evolving at an appreciable rate is in the matter of superstition. We all have certain beliefs that this or that theory is truly based on more or less reliable evidence. We now know that many once firmly held beliefs were really false. We know of the falsity of the astronomical beliefs of those who tortured Galileo, of the beliefs in mummies of the Egyptians, of the beliefs in witchcraft of the Puritans, and of the beliefs in their Gods of the early Greeks. Present day normal beings do not believe in the supernatural origin of dreams, nor in lucky charms, love philters, fortune telling and astrology.

We are evolving so that we fix our beliefs more and more on definite evidence, and less and less on insufficient evidence or "faith". We may be sure that this evolution will continue. Many religious beliefs now considered as matters of life and death, or

even as matters of eternity, will be found false by the human race evolved in time to come. This is not necessarily because of any intrinsic tendency of the human race toward truth, but solely due to the fact that in the long run those who have such brain configurations as enable them to weigh evidence and assign natural occurrences to their true causes, are better fitted to survive than those who are deluded by superstition. One who believes it unlucky to go under a ladder because he has been told so, and perhaps has seen a few accidental instances, has a brain configuration less adapted to survival than another who can analyse cause and effect so as to realize that there can be no natural law connecting the ladder with succeeding occurrences.

Slight accidental variations in brain configurations of successive generations are just as likely to give instincts in one of these directions, as in the other, but as with every variation, those which tend to cause proper analysis of cause and effect, survive by natural selection, and those which tend toward unreasoning superstition are gradually evolving themselves out of existence.

Another matter of brain configurations in which I hope we are going through visible evolution, is the matter of "war". Certain races think it right to attack other more peaceful nations and to take land and goods from them. Many think that war is a "biological necessity". Others think that it is proper for so-called civilized races to impress their "culture" on so-called barbarians by warlike means. Other races or individuals do not think it right to make offensive war, but do think it right to defend themselves. It seems to me that this is the state toward which mankind is evolving. The warlike races and individuals are probably being eliminated by effect of their own instincts. Some people claim that they will not provide for their own defense from warriors. They will probably be eliminated also.

Therefore, as in all of the other cases we have considered, each being has a fundamental brain configuration which largely determines his ideas and actions in the matter of war. We cannot say that anyone's ideas are intrinsically right or wrong, but only that those ideas which best assist survival will be the ones to persist.

It is probable that there has been an evolution within historic times in the matter of individualism versus socialism. Our present average instincts are such that all attempts have failed to substitute pure socialism for the competition of individualism. Never-

theless, the most advanced races have a good measure of association for public good, in the way of roads, postoffices, schools and Government activities in general. We will probably have evolved to degrees of socialism now impracticable in the course of some thousands of years. It must be remembered always that an individual must possess enough selfishness for self-preservation. We are evolving toward the best balance of selfishness and altruism.

We may conclude then that anything which will be good for the human race as a whole will inevitably become a predominating characteristic, be it physical or mental. Those mental, social or ethical characteristics which best assist survival, are the ones which will necessarily persist. Hence those whose fundamental brain configurations are such as to make them think that those characteristics which are going to survive, are "right", are the ancestors of the future races. There is no other criterion of "right" and "wrong". We have come a long way from the catching of the mouse to this conclusion and it will be well to make a brief resume of the individual steps.

(a) Molecules and atoms, in both "dead matter" and in living cells, have all sorts of reactions, which cause them inevitably to do definite things under given environmental conditions.

(b) The reactions to environmental conditions, of organized beings such as animals and men, are in many cases due to "instincts" which are similarly due to reactions of certain brain cells upon other ones.

(c) The "instinct" or particular kind of reaction which occurs under any given environment is due to the quality or configuration of the brain cells and related parts of the animal organization.

(d) The brain and other qualities or configurations which determine instincts in animals, are inherited from parents just as are purely physical characteristics, such as paws and claws.

(e) Physical characteristics are transmitted from parents to offspring with slight irregular differences or variations.

(f) Such of these differences as make the offspring better fitted to survive, become permanent characteristics of the future race, and we have evolution.

(g) The brain and other configurations which determine instincts are transmitted by the same laws of evolution as are physical characteristics.

(h) Therefore the instinctive action of animals, including human beings, are such as have been evolved by the law of survival of the fittest.

(i) The relations of animals and men one to the other, i. e., their social qualities or ethics, are determined largely by instinct, and hence these qualities have been evolved by the law of the survival of the fittest.

(j) The social qualities which are best adapted to give survival to the race as a whole, will be the ones to persist. The individuals whose brain configurations are such as make them believe those things are "right", will be the ones to perpetuate the race.

What is "good" for one individual is "evil" for another. What is "right" for man's actions toward animals is "wrong" from the animal's point of view. Hence there can be no fundamental criterion. The only thing we do have is the definite law of evolution, that the fittest will survive.

(k) Altruism, observance of the golden rule, and elimination of cruelty of all kinds, are the sort of qualities which will best assist survival of human beings, and we can therefore be sure that evolution will slowly but surely advance such qualities, and gradually eliminate antagonistic ones.

Normal civilized beings now regard as "right" many such qualities which appear to assist survival. Hence the progress of the human race is certain to be in the direction of many of the ideals of present normal civilized beings. This is not because of the intrinsic Right or Beauty of such ideals, but by virtue of the slowly working, but inevitable laws of evolution.

## THE CHALLENGE OF ASIA.

BY HERMAN JACOBSON.

**T**HIS is the white man's world. He owns it. He inhabits two-fifths of it and lays down the law for nine-tenths of it. His armies master the continents. His navies circle the seas. His flags wave from pole to pole.

He outnumbered every other race. He has doubled his population in the eighteenth century and tripled them in the nineteenth. Two hundred years ago he made up a bare hundred million. Today he makes up more than six hundred million. In 1700 A. D. he totaled ten per cent of the human race. Today he totals thirty-five per cent. If all men—whites, blacks, browns, yellows, reds—were mustered on a single field more than one in every three would be white.

He is the world's master—infallible, invincible, secure—as secure as have been the countless races before him who have once shaken this earth with their ephemeral joys.

But since the Russo-Japanese war, and especially since the beginning of the Great War, Asia has begun to challenge his mastery.

The Russo-Japanese war has sent a tremor of surprise down the spine of Asia, reverberating throughout the "color" world, which till then had stood in awe and fear of the uncanny wisdom and power of the white man: He was not invincible! Liliputian Japan, a mere suckling at the breast of the white man's civilization, had sent reeling the war-inveterated white giant who had bullied all Asia and had sprawled out, dog-in-the-manger fashion, over half the white and yellow men's worlds.

Indeed, even the white man himself was thrilled. He had found his peer. He shook his hand with a profusion of respect; flattered him, made much of him; invited him to table and led him to the seat of honor.

The little yellow man was perplexed: "We have been sending him our works of art, our silks, our joinery, and decorations for generations, but he still regarded us as mere barbarians. We show ourselves at least his equal in scientific butchery, and at once we are admitted to his council tables as civilized men. . . . The imbecility of white wisdom!"

Then came the Great Disillusionment—the World War. That monstrous fratricide exposed all the weaknesses of the white man, showing him up at his worst. Among other things, it brought home to Asia the fact that the white man's most cherished treasure—his Science—was a double-edged weapon in the hands of a spirited youngster at the height of his pugnacity. She had been led to believe that that instrument was for the purpose of creating beautiful and necessary things. Now she saw him cut his own throat with it.

Unlike in America, in Asia the stupendous catastrophe was not minimized by distance. The hundreds of thousands of Asians, whom Europe had imported to assist in her self-annihilation, understood the significance of the struggle better than we did, better than Europe. They were outsiders and had no occasion to be swept off their feet by the emotion of the moment. They understood at once that no matter who came out victorious, the fight would knock to atoms the whole economic, physical, moral, and cultural life of the white man's home-land.

After the carnage, Asia watched Europe's convalescence. And she saw that recovery would not be so soon—if at all.

For, among many other things less possible of exact calculation, the Great War cost the white man three hundred and fifty billion dollars, "a figure too overwhelming to carry conviction." More, all the machinery of production and exchange were in a heap. Her whole financial system was represented by a vast sea of banknotes—some genuine, some spurious, but all worthless. All Europe was living by the beggar's staff. Even the countries which emerged least damaged—the countries which won the most signal victories had to turn themselves into vast charity institutions, doling out free rations on an international—wide scale.

More frightful yet was the physical collapse. Even before the war, factory production, accompanied by long hours indoors, underfeeding, poor housing, had sapped the strength of her manhood. One-third of the English people, among the sturdiest in Europe, could not qualify physically for military duty. The

Great War killed off nearly ten million and maimed nineteen million more of the most fit. The least fit survived—to reproduce themselves and their unfitness. To these must be added the twelve million children which would have been born under normal circumstances, as well as the tens of millions that were born of mothers whose constitutions had been too shattered by the roar of cannon to grow up fit—if they grow up at all. Millions more were carried off by typhus, influenza, and other plagues. There are today fifteen million adult women in Europe doomed to a life of celibacy, for there are no husbands for them. As a result of moral and mental distress, physical shock, and world-wide insecurity, millions of married women in Europe have been rendered sterile.

More. Asia sees a bloodless generation growing up in Europe. A writer with the Hoover Mission says: "I visited large country districts where ninety per cent of all the children were rickety and where children of three years are only beginning to walk . . . tiny faces with large dull eyes overshadowed by huge, puffed, rickety foreheads; their small bodies just skin and bones. . . ." The investigation commission of doctors appointed by the medical faculties of Holland, Sweden, and Norway, reported: "Tuberculosis, especially in children, is increasing in an appalling way, and, generally speaking, malignant, . . . assuming unprecedented aspects, such as have hitherto only been known in extreme cases. The whole body is attacked simultaneously, and the illness . . . is practically incurable. . . . It appears in the most terrible forms, such as glandular tuberculosis, which turns into purulent dissolution."

In a word, Asia sees that Europe is face with the zero hour, "the first cold flicker of the dawn for the signal to go 'over the top.' The people behind the trenches are now going 'over the top.' . . . An extraordinary tremor has run through the spinal marrow of Europe. . . . She recognizes herself no longer. . . . The rolling of the ship was so heavy that the best burning lamps have been upset." (Paul Valéry).

On the other hand, the least informed knows that rejuvenescent Asia, with her teeming millions and vast spaces, containing more than half the human race, is today a mighty giant ready for a race after a long rest. From the white man's war, she has suffered not at all. Japan is dazzling the world with her powers of assimilation and initiative. Her industrial, literary, philosophic,



commercial, scientific, and agricultural achievements have become the marvels of our day. China is not far in the rear of Japan. And India is just now holding the earth breathless. It is thus safe to say that if Asia continues at her present rate of progress she will be in a generation or two where Europe was in 1914. Then, if not superior, surely the equal of Europe, she will demand a Day of Reckoning.

The feeling of Asia on this point is best expressed by a Central Asian of great vision and powerful intellect: "Hatred universal reigns from the Siberian tundras to the burned south of India. We hate the European because we consider him an intolerable barbarian, who bullies where his wheedling is unsuccessful. We hate him because . . . he is tortuous and cannot speak the truth; because he prates about his new-found hygiene, but is personally unclean compared to the majority of Asians. We despise him as a hypocrite who ships whisky, rifles, disease, and missionaries in the same mixed cargoes. We despise him because he is a recent parvenu. We are convinced that in spite of his present leadership in mundane affairs, he is our inferior physically, morally, and mentally."

With this Day of Reckoning in view Japan has turned herself into a veritable Prussia; and is rapidly adjusting her present strained relations with China. Pacific China has begun to study the manuals of arms which in the ages past her military leaders have composed, and which the greatest European soldiers—Frederick the Great, Napoleon, Hindenburg, etc.—have used with success. India has entered upon a career of passive resistance which threatens to become more potent than the pagodas of arms of the whole Western world. In Central Asia and in Mongolia, whether at the camp fire at the end of the caravan's day's journey or at the feet of the itinerant story teller in front of the mosques in Bukhara—the tale is heard again how mighty Attila had shaken the white world like a reed; how Genghis Khan and Tamurlane had lorded over two continents and had kept the white man in humble subjection. All Asia—in fact, the whole "color" world—is being welded together by the most potent of all life forces—Self-preservation.

At any rate, a Race War is no less possible in the near future than the Great War was quarter of a century ago. Many, many wise men showed then that a big war in Europe was impossible—religious and moral ties; mutual sympathy, understand-

ing, blood-relationship; socialism, unionism, internationalism; finance and exchange; immigration and emigration; music, art, letters—would make war in Europe impossible, we were assured by the optimist. Then all these theories went up in smoke.

Yet the causes for a Race War are today far more numerous—with practically none of the preventive factors—than were the causes for the Great War twenty-five years ago.

Of course, the members of the "Rocking-Chair Fleet" will shout: "Let her come! Let John Chinaman and his crew put up their dukes! We will show them who is who!"

Mr. Swashbuckler is always certain who is to come out victorious. When the Russo-Japanese war broke out General Kuropatkin shouted: "Me yikh shapkami zakinnim!" (We will shoo them off with our caps.) But the man who investigates, thinks, and weighs, is not so sure. Professor A. E. Ross, one of the foremost social students in America, says:

"To the West the toughness of the Chinese physique may have a sinister military significance. Nobody fears lest in a stand-up fight Chinese troops could whip an equal number of well-conditioned white troops. But few battles are fought by men fresh from tent and mess. In the course of a prolonged campaign involving irregular provisioning, bad drinking water, . . . loss of sleep, exhausting marches, . . . excitements and anxiety, it may be that the white soldiers would be worn down worse than the yellow soldiers. In that case the hardier man with less of the martial spirit might in the closing grapple beat the better fighter with the less endurance."

It is worth recalling that this is just what happened during the Russo-Japanese war.

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Above all else, while considering the Asian problem we must not allow our minds to become befuddled by the base propaganda which would lead us to believe that the Asian is a barbarian, inferior to ourselves morally, spiritually, and mentally. Let us keep before us the fact that it was Asia which has given the world all the basic discoveries, without which the greatest part of our civilization were absolutely impossible. Among many other things, China has given us the water-wheel, the cart-wheel (without which practically none of our machines, from the simple pulley to the locomotive, would be possible), the science of irrigation, bridge-building, finger prints, bronze-casting, porcelain-making, printing,

paper-making, gunpowder, the compass, silk-culture, etc. In political life, the Chinese are in some respects our superiors even today. They know nothing of racial prejudice, religious intolerance, nationalistic fire-eating. They have outgrown them thousands of years ago. When all Europe was torn to pieces by religious bigotry, inquisition chambers, witch-burning; when the sole object of government in the white man's world was the gratification of the vicious caprice of the governors—China held in her dominion all sorts of races, religions, and creeds, exercising herself almost always prudently and equitably. Her officials got into office by means of competitive examinations, which we are copying in the best ordered departments of our own government. And popular opinion among us to the contrary notwithstanding, her literati officials have not yet been matched in honesty and integrity.

If we are ever to solve the Asian problem, let us not forget during moments of self-exaltation that it was India which gave us the decimal system, our algebra and most of our geometry, without which no mathematical science—the bedrock of our material civilization—were possible. With all our achievements in architecture, what have we to match the Taj Mahal, perhaps the most noble monument to human building ingenuity of all time. It was India that taught us our knowledge of anatomy and much of our physiology. India has fathomed the mysteries of the circulation of the blood a thousand years before Harvey saw the light of day. In the realm of abstract thought, remarks Professor Rawlinson, "There is scarcely a problem in the science of ontology, psychology, metaphysics, logic, or grammar which the Indian sages have not sounded as deeply and discussed as elaborately as the Greeks." The reader who would dwell on the poetic fervor and intellectual magnitude of the Persian need but think of the Tent Maker, Omar, whose verses—*Rubaiyat*—shall endure as long as human tongue utters speech.

Last, let us not forget that it was Asia which gave the world her greatest religions. Confucianism, Buddhism, Zoroasterism, Mohammedanism, Judaism, Christianity—they all hail from Asia.

Under these circumstances, is the Asian to be reproached if he remarks: "We look with a smile at the paralyzing feeling of superiority of the European. . . . We know how very recent is the present European hegemony, how shallow, how tinselly, how altogether parvenu. . . . We smile when we are called 'barbarians.'"

Let us be frank, the best of us, are full of the prejudices of barbarians when dealing with Asia. From childhood on, we are taught the dark side of Asia. We grow to manhood with no other knowledge or understanding of her than that her inhabitants are barbarians, heathens, idol-worshippers, and what-not, most of whom, like so many sheep, owe us their wool. All we know about them is that they are ignorant—though there is not a Chinaman, assures us Mr. Hyndman, who does not know how to read and cast accounts—superstitious, filthy, lazy, vicious, criminal—yellow devils who spend their worthless lives smoking opium and cheating white men—the best of them fit only to bake our beans and make our beds.

On the other hand, the white man forgets that he really is an upstart. The average European, even the cultured one, often thinks of his greatness—his science, his art, his hygiene; his whole culture—as reaching back to the day of creation.

In reality nothing is further from the truth. Before the Reformation the life of the average European was but a step above the life of the barbarian. Shakesperian England, to mention one illustration, consisted of clusters of filthy hamlets dignified by the name of towns, where plagues, due to an unmentionable lack of sanitation, periodically carried off half the population. The pedestrian paddled through the streets knee deep in mud. The crowd was often entertained by gallants pommelling each other over the heads to hasten a decision as to who had the right of way afforded by a couple of brickbats in the middle of a mud-puddle at the street-crossings. Even in London, the world's metropolis of our day, the visitor of a hundred and fifty years ago was warned to "hug the wall," meaning that if he ventured within throwing distance from a window, he ran the risk of having a slop jar emptied on his new silk hat. Our standards of comfort, of wealth, hygiene, were undreamed of by the European of two hundred years ago. His chief asset usually consisted of a huge pile of manure decorating the front entrance of his house. He lived with his pig and his horse under the same roof—as he still does in many parts of Europe. His political life consisted of his own total exclusion from any participation in the affairs which governed his world. The vast majority of his governors were men who bought their way to office with money, blackmail, or both—and were not ashamed of it. (Think of Francis Bacon.) The slightest concession of freedom was wrung from his governors

only at the threat of immediate hanging. One needs not stretch his imagination too much to catch a peep of the Europe of two or three centuries ago as a vast penal colony where the inmates lived solely for the glory of the king and the priest.

Our apologists have succeeded in making us believe that our ill-treatment of Asia is due to her senseless determination to remain in isolation. From the child in the grades to the writer of our encyclopaedias, we have all been painstakingly rehearsed in the myth of Asia's stubborn opposition to our Promethean efforts to bring her Light, and her refusal to accept it—her determination to stay in Darkness. If this were true we would have reason to rejoice. The fate of Prometheus is no longer visited upon the bearers of Light. Prometheus illuminates the earth with his torch and the children of darkness are chained to a rock, a vulture devouring their entrails. Christ is in His Kingdom and Satan is on the Cross. Truly, the Messiah is at hand!

But is this really the case? Well, let the reader think the matter over.

So far as this point concerns Asia, Professor Benoy Kumar Sarkar, Chinese scholar of great erudition, challenges: "Can the combined intellect of Europe and America point to a single period of Chinese history in which the country was closed to foreigners? Is there a 'Cycle of Cathay' during which the Chinese refused to receive new arts and sciences from outsiders?" Then he proves that China had intercourse with Byzantium, Rome, Western Europe, Africa,—with the whole known world. He further shows that China never knew what it meant not to tolerate strangers. From time immemorial there lived in China Jews, Christians, Mohammedans, etc., etc. And none ever met with a lack of toleration. Indeed, the very word toleration, which, in the West of even our own day, presupposes the privilege not to tolerate if those in power so choose—has no existence in China.

The reason Asia refused to deal with the modern European is to be found in the fact that from the moment he landed he proved an arrogant trouble-maker, in spite of the fact that he was most hospitably received. He sent armed bands into the interior and hunted and victimized the inhabitants, selling the women into a life of shame and the men into slavery. He set afoot a multitude of intrigues and waged wars to gain concessions to sell poison to the people, (the Opium War) and put up signs on the parks he chose to frequent: "No dogs and Chinamen admitted." In fact,

even the best of his immigrants proved not altogether desirable. Asks Mr. Hyndman: "What would be the fate of a body of Chinese propagandists who occupied themselves in London in publicly denouncing the faith of common Englishmen, and wax insistent upon pointing out what seemed to them the absurdities of the Trinity."

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Confronted with the possibilities of such a monstrous catastrophe as a Race War is sure to precipitate, even if we came out victorious, the white man must turn about in search of something that promises to halt it. For at best, such a war would thrust us back to the plane of the cave men.

The first thing to do is to begin combatting the hate literature among us. Hate literature may help win wars but it does not help win peace.

The next thing is to take some of the billion and a quarter which we are now annually appropriating for armament, get a few great philanthropists to contribute liberally, and set afoot a campaign of education along the following lines:

Put a chair on Asian affairs in every university and a brief course in every high school—the courses being prepared by a joint commission of whites and Asians; launch a number of publications of a popular nature dealing with the life of Asia, past and present; put out a few million feet of film picturing their life honestly and truthfully and sympathetically; organize a few groups of liberal and broad-minded men of both sides to co-operate in curbing the greedy aggressions of their respective trouble-makers—and a new understanding and a new sympathy will arise between the "color" world and the white world in the course of a single generation.

Those who think this too optimistic and too easy, need but think of the fact that it was really "Education" that "won" the Great War. There is no reason why we should not be able to put forth as much effort in time of peace as we have put forth in time of war, if need be, to prevent war—war more certain and far more catastrophic than all previous wars combined.

There are a few who insist that a clash is imminent, no matter what is done to prevent it. They assure us that the Asian problem can be solved by no amount of sympathy, understanding, and education. They point out that the whole problem is based on the difficulty of finding room for the eighteen million new

mouths which yearly come to the world's dinner table. Those left without seats have no choice but start a fight during which they hope to grab a seat. "The enemy of the dove of peace is not the eagle of prey nor the vulture of greed; but the stork."

These people must be shown that the problem of finding room at the world's dinner table is far from serious. In fact, it is no problem at all for the present. Statisticians have shown that even if both production and the present rate of increase in population remain the same, there is room enough and food enough for the next two hundred years. The United States alone could easily support, under existing conditions, more than two hundred million people. Siberia could support twice as many; while she at present contains only about twenty million. The unoccupied tracts of Central and South America, Canada, Australia, etc., are equally spacious. In fact, the problem of finding room at the world's dinner table may be dismissed even if everything remained the same.

Whereas in reality the present rate of production is bound to increase and the rate of increase in population is bound to diminish. In the past fifty years Swift's dream of two blades growing where one used to grow has been surpassed twenty fold. Again, half a century ago not one man in a hundred knew anything about the secret of directing the flight of the stork. Today from five to ten per cent know all about it; and their percentage is constantly on the increase with the increase of intelligence.

For the past few decades we have been living by the jingo dictum pronounced by Kipling:

East is East and West is West,  
And never the twain shall meet.

If we are to save ourselves from the consequences of this barbarian dictum we must adapt the more noble one pronounced by Goethe:

Who himself and others knows  
. . . is rightly guided;  
Orient and Occident  
Are no more divided.  
Proper it is through both to roam  
And in either feel at home.

# HOW THE RABBIS REGARDED THE COMMANDMENTS.

BY JULIUS J. PRICE.

**F**OR the bulk of the Jewish nation, the law was and is the formulation of all religion: it was and is the supreme guide of life; and as being for the Jew the articulate expression of the divine will it was and is the final appeal in all matters of religious life and practise. As the law did in the past so also does it in the present represent the essence of Judaism and as it formed part of the background and of the basis of the newer teachings which were to come, it is important that some insight into the Jewish conceptions of it and of the individual attitude of the Jew towards it, should be illustrated by citations from the Talmud which is based on it.

The influence and power of the law was largely due to the fact that from earliest childhood its practical carrying out was witnessed in the home; the husband taught his wife, the father his child, the master his servants, the precepts of the law and the need of observing them. The commandments seemed to be spoken to the individual soul. "I am the Lord thy God." Each of the assembled Israelites at Sinai was but one among many myriads, and yet he was alone—alone with that voice. "This commandment which I command thee this day, it is not hidden from thee, neither is it far off. But the word is very high unto thee in thy mouth, and in thy heart, that thou mayest do it."

The law does not require the belief of man in certain speculative or supernatural theories; such hidden things belong to God, man's happiness consists in following the commandments of the Lord. There is an equal law for everybody; for the free born and for the stranger, for the free man and for the slave. *Lev.* xvix. 33-34, "And if a stranger sojourn with thee in your land, ye



shall do him wrong. The stranger that sojourneth with you shall be unto you as the home born among you, and thou shalt love him as thyself; for you were sojourners in the land of Egypt. I am Jehovah, your God." And again, *Num.* ix. 14, "And if a stranger shall sojourn among you and will keep the passover unto Jehovah, according to the Passover of the statute of the Passover, and according to the ordinance thereof, so shall he do; ye shall have one statute both for the sojourner and for him that is born in the land." Nobody is above or beneath the law.

Israel was to be the priestly people; the sheltering ark in which the pledge was entrusted contained a true knowledge of God and was the positive and preserved. With the divine promise that made Israel the elect of all nations, there is transmitted to them the moral and spiritual equipment which justifies its fulfilment.

The Jewish law was to bring true happiness to all men, hitherto a barren wish. The Torah prohibits the shirking of man's duties to his fellow men, or his sinking in the barren attempt to obtain salvation by castigating the flesh. On the contrary Judaism is impregnated with the spirit of optimism and joy of life.

Fidelity to the law and steadfastness in the knowledge and service of Jehovah was to be the strength and the noblest feature of the Jewish people. Nothing could better express the firm determination to cling unswervingly to the ancient traditions than the words of Mattathias, the first of the great Maccabæan leaders: "If all the nations that are in the house of the king's dominion hearken unto him, to fall away each one from the worship of his fathers and have made choice to follow his commandments, yet will I and my sons and my brethren walk in the covenant of our fathers. Heaven forbid that we should forsake the Law and the ordinances. We will not hearken to the king's words, to go aside from all worship, on the right hand nor on the left." Or better still at the time when Pilate set up the Roman eagles with the images of the Emperor in Jerusalem, the Jews crowded to Cæsaræ and remained for six days in supplication before the prætorium: on the seventh day the procurator surrounded them with his troops and threatened to move them down: but they threw themselves down on the ground, bared their necks and called on Him to kill them rather than impose on them a breach of their law. This spirit was typical of hundreds of thousands of other Jews, who

willingly laid down their lives rather than swerve from what they believed to be the right path. As a result then of Israel's great fidelity in the law and its careful adherence to the commandments "The Holy one—blessed be He!—Was pleased to render Israel meritorious, therefore He multiplied unto them the Law and the precepts, as it is said (Isa. xlii:21), "The Lord is well pleased for His righteousness' sake. He will magnify the Law and make it honourable." Rabbi Samlaii explains that six hundred and thirteen commandments were communicated to Moses—three hundred and sixty-five negative, according to the number of the days of the year, and two hundred and forty-eight positive, according to the number of members in the human body. Rav Hamunah was asked what was the Scripture proof for this. The reply was (Deut. xxiii:4), "Moses commanded us a Law." Torah, Law by gematria, answers to six hundred and eleven. "I am" and "Thou shalt have no other," which were heard from the Almighty himself, together make up six hundred and thirteen . . . David reduced these to eleven, as it is written (Psxv. 1-5). . . . Iraiah reduced them to six, as it is written (Isa. xxxiii:15). . . . Micah reduced them to three, as it is written (Micah vi:8). . . . The second Isaiah again reduced these to two, as it is said (Isa. lvi:1). "Keep judgment and do justice." Amos reduced these to one, as it is said (Amos v:4). "Seek ye me and ye shall live". But to this it was objected that it might mean "Seek ye me by the performance of the whole and entire Law; "but it was Habakkuk who reduced all to one, as it is said (Hab. ii:4), "The just shall live by his faith."

It was a custom with the people of Jerusalem when a person went out of his house on the Feast of Tabernacles, to carry a palm frond in his hand; when he went to the synagogue, he still carried it with him; when reciting the Shema or repeating the usual prayers, he still retains it. When called up to the reading of the Law, or when a priest had to lift up his hands to bless the congregation, then, and then only, did he lay down the palm fond on the ground. When he went to visit the sick or to comfort the mourner, he carried the palm with him; when, however, he went to the Bethhammidrash (academy or lecture hall), he sent it home by his son or some other messenger. Well, what is the import of all this? It is to inform us how heartily the people of Jerusalem observed the precepts. Resh Lakish says, "Even over the transgressors of Israel the fire of Gehinnom will have no

power." This is argued a fortiori; if the golden altar, which was overlaid with gold no thicker than a denar and the wood under the protection of the gold resisted the influence of the fire for many years, how much less will the fire of Gehinnom have power against the transgressors of Israel, who are as full of precepts as a pomegranate is full of pits: as it is written (Cant. lv:3), "Thy temples are like a piece of pomegranate." Read not Thy temples, but read the empty ones; even they that seem to be empty of any good are nevertheless full of good works, as a pomegranate is full of pits."

The school of Shammai say, "He who, having eaten, and has forgotten to return thanks, must go back to the place where he had eaten and there return thanks; "but the school of Hillel say, "He may return thanks on the spot where he called to mind his omission." . . . The latter observed to the former, "according to your words, if one has eaten on the roof of a palace and has forgotten to return thanks he must go back to the roof of the palace and there make up for his omission." The school of Shammai replied to the school of Hillel, "According to your words, if one have left his purse on the roof of a palace, will he go back again to the spot and fetch it? If, then, he returns for his own honour, how much more ought he to return for the honour of Heaven?" There were two scholars, one of whom by mistake followed up the rule of the school of Shammai and he found a purse of gold; the other intentionally followed out the rule of the school of Hillel and he was devoured by a lion. Rabbah, the grandson of Channah, was once travelling in a caravan and having finished his meal, he forgot to repeat the usual thanks on the spot. "What shall I do?" said he. "If I were to tell them that I forgot to repeat the thanksgiving and must therefore return to the place where I had my meal, then they would say, 'Repeat it here, for wherever thou sayest it, thou sayest it to God, who is everywhere.' It is therefore best that I should tell them that I have forgotten a golden dove and must go back and fetch it and ask them to wait here for me." He went and returned thanks upon the spot where he had taken food, and there he actually found a golden dove. But what made him say a golden dove? Because the community of Israel is compared to a dove, as it is written (Ps. lxxviii:13), "Ye shall be as the wings of a dove covered with silver and her feathers with yellow gold." As a dove finds no deliverance but by means of her wings, so like-

wise Israel are not delivered from persecution but by the practice of the commandments.

All precepts which Israel has performed in this world will appear in the next, and smite the nations in the face, as it is said (Deut. iv:6), "Keep therefore and do them, for this is your wisdom and understanding in the sight of the nations." Scripture does not say "before the nations," but "in the eyes of the nations", which teaches that the precepts will appear in the world to come, and smite the nations on the face.

Rabbi bar Rev. Josi expounded (Prov. vi:23), "For the commandment is a lamp, but the Law is a light. "The Scripture compares the former to a lamp and the latter to a light, which is to teach thee as a lamp shines only at night, and only for an hour or so, so also the commandment is a protection only during the short time in which it is being performed; but as the light shines all day long, and continuously, so also is the Law; it protects those that study it for ever, for the same Scripture says (ibid., ver. 22), "When thou goest it shall lead thee, when thou sleepest it shall keep thee and when thou awakest it shall keep thee," in the right way; "Where thou sleepest," in death, "it shall keep thee" in safety, and preserve thee unto eternal life; "and when thou awakest," at the resurrection of the dead, "it shall come with thee," and for thee it will be thy mediator and intercede on thy behalf, that thou mightest live forever in glory. There is a parable: It is like to a man who travels along a road in a very dark night and is in fear of thorns, of thistles, of ditches, of wild beasts and highwaymen. Having a lighted torch, he is safe from thorns and thistles and also from ditches, but is still in dread of wild beasts and highwaymen, and in doubt as to the road on which he travels. When the morning dawns he is safe also from wild beasts and highwaymen, not free from anxiety as to the road, for he may be going the wrong way. Once having reached the well-beaten track, he is safe from all danger and free from fear and anxiety.

While all Israel on leaving Egypt were busily engaged in spoiling the Egyptians of their gold and silver, Moses was engaged in the performance of the precepts, as it is written (Prov. x:8), "The wise in heart will receive commandments."

Every precept fulfilled in this world goes before and anticipates in the world to come the man who did it, as it is said (Isa. lviii:8), "Thy righteousness shall go before thee." And he

who commits a sin in this world, that sin folds itself round him and goes before him to day of judgment, as it is said (Job. vi:18), "They are folded round as leaven round the heart of a cabbage, by the paths of their way; they go to nothing and perish." Rabbi Elzer says "the sin he has committed is to him like a dog."

Rav. Tuvi bar Kisna asked Rava: "We are taught that he who observes a precept shall receive favour from above; this implies that he who does not observe a precept shall not receive a reward; but we are also taught that he who is passive and commits no sin, a reward is given to him, as if he had actively observed a precept?" Rava replied, "If one is exposed to sin and he resists it, then only is he rewarded as if he had actually performed a precept, as the case of Rabbi Chanina bar Pappa will illustrate. A Matrona (A Roman Lady) solicited him to sin but he in order that she should take a dislike to him, uttered a name (a cabbalistic formula) and at once he became covered with boils and ulcers. But she as quickly cured him by witchcraft, and he ran away and secreted himself in a ruined bath, into which when even two entered at daytime they were injured by evil spirits that haunted the place; but they injured him not. On the following morning he was asked by the Rabbis, "Who protected thee?" He replied, "Some dignitaries of the emperor watched over me all the night." They remarked, "Probably thou wast tempted to an immorality and wast thus rescued therefrom for we are taught, He who is tempted to an immorality and is rescued from it, a miracle is performed on his behalf."

It is Rabbi Jacob who says that there is no reward in this world for the performance of a precept, for tradition teaches that Rabbi Jacob said, "Every precept recorded in the law, by the side of which a reward is expressly attached, the bestowal of that reward depends not on this life, but on the life hereafter, i.e., at the revivification of the dead. For instance, with regard to the precept (Deut. v:16). 'Honour thy father and thy mother', the reward expressly attached to its is, that thy days may be prolonged and that it may go well with thee.' By the precept, 'Let the dam go' (Deut. xxii:7), the reward is stated by the side of it, 'that it may be well with thee, and that thou mayest prolong thy days'. Now a father says to his son, 'Go up to the tower and fetch me a brace of young pigeons.' He goes in obedience to his father and does 'let the dam go', and takes only the young in fulfilment of the precept, as the law directed him: but on coming

down from the tower, he falls and is killed. Where is the good and the long life promised as a reward for the fulfilment of these two precepts? It is plain, therefore, that there is no reward in this world, but in the world which is perfectly good and without end. The remark arises, 'Perhaps this never happened.' 'Rabbi Jacob witnessed the fact', is the response. 'Perhaps he intended to commit sin, and he was punished.' 'God does not reckon and punish and evil intention a sinful act.' But 'Blessed is the man that feareth the Lord, that delighteth greatly in His commandments' (Ps. cxii:1). In His commandments but not in the reward of His commandments; and this it is that we are taught, "Be not like servants who serve their master on condition of receiving a reward, but be like servants who serve the master without the condition of receiving a reward."

Both the new as well as the old commandments demand rigorous observance. Rava has expounded what is written in Cant. vii.13, "the mandraks give a smell", as these are the young men of Israel that have never tasted sin. "And at our gates are all manner of pleasant fruits;" these are the young daughters of Israel that tell their husbands, etc., etc. "New and old which I have laid up for thee, O my beloved." The community of Israel said before the Holy One blessed by He—"Lord of the universe! I have imposed upon myself many new decrees, besides the old decrees Thou hast imposed upon me, and I have observed them." Rav Chasda asked a certain disciple of the Rabbi's, who was making up a Haggada before him, "Hast thou not heard what the meaning of "New and Old is?" He replied, "The meaning is, the 'New' are the light, and the 'Old' are the 'weighty' commandments." "What!", asked Rav Chasda, "was the Law given twice? But let me tell thee the 'Old' means the words of the Law, and the 'New' means the words of the Scribes. Give heed, my son, to the words of the Scribes more than to the words of the Law, for the words of the Law consist of positive and negative commandments, the transgression of which is often punished by the infliction of stripes only, but whosoever transgresseth the words of the Scribes is always guilty of death."

Be swift in the performance of a light precept as in that of a weighty one, and flee from transgression. For the fulfilment of one precept leads to the fulfilment of another and one transgression leads to another so that the fulfilment of a second precept is the reward for the first and one transgression is the recompense for

another. "Flee from that which is ugly and from that which is unsightly in appearance"; therefore, the sages say, "flee from a light sin, lest it induce thee to commit a weighty one; pursue a light precept, that it might induce thee to perform a great one." But for the transgression of a light or weighty precept a like punishment is decreed, for the Rabbis inform us "The ministering angels said before the Holy one—blessed be He—"Lord of the universe! why didst thou decree death upon the first Adam?" He replied, "Because I commanded him a light precept and that he transgressed." They further asked, "And did not Moses and Aaron, who kept the whole and entire Law, also die?" He replied unto them (Eccles. ix:2), "There is one chance for the righteous and the wicked," etc.

Rabbi Akiva says, "Whosoever associates with transgressors partakes of their punishment, though he has not transgressed like them; and whosoever accompanied those who perform a precept, though he himself does not do like them, he partakes of their reward."

"Since scripture punished as sinners those who associate with sinners, how much more will it reward those who associate with them that fulfil the commandments, as if they themselves had actually fulfilled them." And Scripture considers him who causes another to fulfil a commandment as if he himself had fulfilled it, as it is said. (Exod. xxvii:5), "And thy rod wherewith thou smotest the river." Did Moses smite the river? Was it not Aaron that smote it? (Exod. xvii:5). But this is to tell thee that who so causeth his companion to fulfil a commandment Scripture considers him as if he had himself fulfilled it. Rabbi Yochanan says, "Every woman who solicits her husband to fulfil the precept (par excellence) will have sons whose equals were not found even in the generation of Moses."

What is the meaning of "that thought upon His name?" (Mal. iii:16) Rav Ashi says, "It means if a man purposes to do a commandment, but is forcibly prevented doing it. Scripture counts it as if he had actually performed it. But if one has kept himself from the performance of a precept and has engaged himself in the commission of a sin, his wife will finally die of the plague, as it is said (Ezek. xxiv:16), "Son of man, behold I take away from thee the desire of thine eyes (thy wife) with a stroke." Yet Rav Nachman bar Yitzchak said, "Sin committed with a good motive is better than a precept fulfilled for a bad motive."

Tradition records that Rabbi Simon ben Gamliel said, "All those commandments which Israel have accepted with joy such, for instance as circumcision, as it is written (Ps. cxix.162), 'I rejoice at Thy word as one that findeth great spoil'—are still observed by them with joy; but all those commandments which they have accepted with ill-will—such as the prohibition of incest, as it is written (Num. xi:10), 'Then Moses overheard the people weep throughout their families', i. e., about the prohibition of consanguinity—are still observed by them with ill will; for there is not a marriage without some quarrel connected with it." Rabbi Simon ben Elazer said, "All those commandments upon whose account during their interdiction by the government, Israel have laid down their lives, such as those relating to idolatry and circumcision, are still scrupulously observed by them; but all those commandments for the observance of which they would not have had to forfeit their lives at the time the interdict was force, such as that relating to the phylacteries, etc., are still but loosely observed by them."

Regarding the relative values of the precepts, the Rabbis say "Visiting the sick has not limited measure." Rav Joseph thought that its reward was commensurate, but Abaii said to him, "Is there, then, a limited measure to the reward for the performance of any other precept? For we are taught: Be diligent in the performance of a light precept as of a weighty one; for thou knowest not which of the precepts has the larger reward." But the meaning of this is, said Abaii, "Visiting the sick has not limited measure; even those of exalted station in life should visit those who are of low estate." Rava said, "No limited measure means to visit even a hundred times in a day if needs be." Rabbi Acha bar Channina says, "He who visits the sick takes away a sixtieth part of his illness." "If that be the case," observed Abaii, "let sixty visitors go at once and they would raise him from his illness." Rabbi Acha replied, "It means the sixtieth part according to the tithing scale of Rabbi, and the visitor must have been born under the same star which was in the ascendant when the invalid was born."

Rabbi Meir says, "Great is the precept of circumcision, for there is no one who has engaged himself in the performance of the commandments as our father Abraham did, and yet even he was not called perfect, but on account of circumcision, as it is said (Gen. xvii:1), 'Walk before me and be thou perfect;' and



immediately after it is written (Ibid. ver. 2), 'And I will make my covenant (of which circumcision is the sign) between thee and me.' Again, great is the precept of circumcision; for in weight it is equal to all the commandments recorded in the Law; for it is said (Exod. xxxiv:27), 'After the tenor of these words (of the commandment) I have made a covenant the sign of which is circumcision) with thee and Israel.' "

It is a precept binding upon a debtor to pay his debts.

With regard to entering and leaving the synagogue, it is said that he who comes out of the synagogue should not make long steps (as if glad to get away quickly from the place of worship). Abaii says, "This is said only with reference to coming out from the synagogue; but with respect to going into it, it is a commandment to run, for it is said (Hosea vi:3), 'Let us run on to know the Lord.' "

Rabbi Illaa said in the name of Rabbi Elazer ben Rabbi Simon, "It is lawful for a man to prevaricate or quibble in the interest peace, as it is said (Gen. 1, 16, 17), 'Thy father did command before he died,' etc." Rabbi Nathan said, "To quibble is a command; for it is said (1 Sam. xvi:2), 'How can I go? If Saul hear it, he will slay me, and the Lord said, take an heifer with three and say, I am come to sacrifice to the Lord.' "

The Rabbis differentiated between the precepts that were binding upon men and women. We read "All precepts concerning a father toward his son are binding upon men only, but not upon women; all precepts concerning a child's duty towards his father are obligatory both upon men and women. (This is a Mishna—it is thus explained in the Gemara:) The Rabbis teach, "A father is bound to circumcise his son, to redeem him if he is a firstborn, to instruct him in the Law, to provide him with a wife, and to teach him a trade;" some say "he is to teach him also to swim." Rabbi Yehudah says, "He who does not teach his son a trade teaches him as it were to rob."

The precept "Be fruitful and multiply" (Gen. i:28) is obligatory on man only, but not on woman. Rabbi Yochanan ben Berokah says, "It is obligatory upon both for it is said, 'And God said unto them, be fruitful and multiply.' "

A hundred Mizwot ought to be fulfilled by the Israelite each day, and seven ought to surround him constantly like guardian spirit. But there are, however, several classes of individuals who are exempt from these commandments, viz.: Professional writers

of holy books, phylacteries and Mezuzahs (i. e., doorpost charms), as also the vendors of such articles, their agent, and every one that deals in the sacred trade, including the sellers of purple and wool for fringes, are exempt from reading the Shema, from repeating the usual prayers, from wearing phylacteries, and from all the commandments recorded in the Law. This corroborates the words of Rabbi Yosi the Galilean, who used to say "He who is engaged in the performance of one precept is free from the performance of another." The Rabbis also relate that, "A deaf-mute, an idiot and a child, are free from all the precepts contained in the Law." "He who has a corpse before him is exempt from reading the Shema, from prayer, from the phylacteries and from all the commandments mentioned in the Law." A mourner, however, is bound to observe all the commandments mentioned in the Law, excepting phylacteries, for they are named a "Tire" an ornamental headdress, as it is said (Ezek. xxiv:17), "Bind the tire of thine head upon thee."

Tradition teaches that Rabbi Simon ben Gamliel says, "For the sake of a living child only a day old the Sabbath may be desecrated, but it may not be desecrated for a dead child; no, not even for David the King of Israel." In the former case the Law says, "Desecrate one Sabbath for the preservation of the child, in order that he may observe many Sabbaths afterwards"; but in the latter case the Sabbath is not to be desecrated, for when a man dies he is exempted from the commandments; and this is what Rabbis Yochanan said (Ps. lxxxviii:5), "Free among the dead" i. e., when a man is dead he is freed from the commandments."

Each prohibition inculcates its individual meaning, viz.: the suppression of sensuality, of selfishness, the consecration of life and especially the sentiments. The following extracts from the Talmud will well illustrate the above contention: (a) "He who obliterates one letter from the written name of God break a negative command, for it is said (Deut. xii. 3, 4), 'And destroy the names of them out of that place. Ye shall not do so unto the Lord your God.'" (b) "He who has intercourse with a female slave is guilty of breaking fourteen negative precepts, and shall be cut off by Heaven. He is guilty because (1), 'Thou shalt not sow thy vineyard with diverse seeds'; (2), 'Thou shalt not plough with an ox and ass together'; (3), 'Thou shalt not wear a garment of diverse sorts, etc., etc., etc. . . . He who marries a suitable wife, Elijah will kiss him and God will love him; but he who

marries an unsuitable wife, God will detest him and Elijah will chastise (55) him." (c) Rabbi Akiva says, "He who marries a woman not suited to him violates five negative precepts: (1) 'Thou shalt not avenge'; (2) 'Thou shalt not bear a grudge'; (3) 'Thou shalt not hate thy brother in thine heart'; (4) 'Thou shalt love thy neighbor as thyself'; (5) 'That thy brother may live with thee.' For if he hates her, he wishes she were dead and thus (virtually) he diminishes the population." (d) "He who is party to a quarrel breaks a negative command, for it is said (Numb. xvi:40), 'Be not as Korah and his company.'" (e) Rabbi Yehoshua ben Levi says, "He who partakes of anything belonging to the avaricious breaks a negative precept, for it is written (Prov. xxiii:6, 7), 'Eat thou not the bread of him that hath an evil eye.'" etc. Rav Nachman bar Yitachak says, "He breaks two negative precepts, 'Eat thou not' and 'Desire thou not.'" (f) Rava said, "He who discourses common talk (that is, converses upon any other subject but Scripture) transgresses a positive precept, for it is said (Deut. vi:7), 'And shalt talk of them.' 'Of them,' but not of other matters."

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On a day at last, when the sun is low,  
And the shadow creeps from the wooden glen,  
In the friendly mist of the shrouded glow,  
I shall slip away from the haunts of men.

With the eager zest of a wond'ring child  
That is told of the lovely land of Nod,  
I shall enter upon the trackless wild  
Of the outer vales of the realm of God,

On the final quest of a human soul  
Thro' the mystic maze of eternity,  
With an unmarked staff and a creedless scroll,  
And a faith untaught of a sophistry.

I shall meet, perchance, in some flow'ry way,  
With the friends I loved that are gone before,  
In the heritage of a deathless day  
With its joy unending forever more.

Or, perhaps, to find that the soul but clears  
For its swift return to enrich some birth  
With the spark of life to endow its years  
For the cycled way in the mortal earth.

But if endless sleep be the goal at last,  
In oblivion heav'n must be as sweet—  
With the journey done, and the fretful past  
Blotted out from Elysium's peace, 'twere meet.

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# SCIENCE PROGRESS

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