INTEENTH-CENTURY science was rigidly deterministic. Every event, men were told, was merely the resultant of forces and counterforces, all of them ruled by very definite laws. If one could at any instant know the motions of all the particles in the universe, he could predict the exact state of every particle a hundred years from now. Carried to the extreme, this system would not admit the intervention of God in the world — or even the intervention of human free will.

Present-day science is not so sure of itself. Deterministic laws have been supplanted for the most part by statistical laws. The events that we observe in the macroscopic, visible world are really the resultants of microscopic forces that follow no law themselves, but whose combinations give the appearance of an ordered universe because the law of averages takes on greater probability where the particles involved are innumerable. To propose an analogy: if I mix white and black pepper in a bottle, I can never be sure whether a definite spot would be occupied by a white or a black particle. But I am rather certain that the whole bottle will give the appearance of a gray mass with very little difference of color.

Such a system, if considered a comprehensive explanation of all events, also rules out real miracles. Miracles are exceptions to the laws of nature — but there can be no exceptions where the laws themselves are not fixed. Every event is a law
unto itself. Our “natural laws” would be no more than formulations of the usual way things happen. And more to the point: even if miracles did occur, they could never be recognized as God’s intervention in nature. Scientists would only consider them as extraordinary deviations from the usual course of nature, due to a fortuitous rearrangement of the microscopic forces concerned.

And yet the Vatican Council insists that “miracles show forth clearly the omnipotence of God; they are most certain signs of divine revelation, suited to the intelligence of all.” Against the determinists of the past century the Council claims that the laws of nature are not so rigid and intransigent as to preclude the intervention of God. Against the relativists of today it holds that these laws are not so chaotic as to prevent our recognizing such intervention should it occur.

But can we really recognize true miracles for what they are, in the face of the modern scientific syntheses? How can we distinguish a true intervention of God in nature’s course from mere natural “freaks” which might result from a once-in-a-lifetime combination of microscopic forces?

THE CASE OF JEANNE FRETEL

Since it is rather unwieldy to be talking of “miracles” in the abstract, let us consider one concrete example—an extraordinary cure that occurred in Lourdes on October 8, 1948. We must remember that the various inquiries connected with this case are normal procedure for all extraordinary cures attributed to Our Lady of Lourdes.

Jeanne Fretel, thirty-four years old, was brought to Lourdes unconscious, dying from “tuberculous peritonitis with meningeal symptoms.” Her case was fully documented by eighteen pages of hospital records, X-ray records and laboratory analyses. Since 1939 she had had thirteen operations, all to no avail. By the time she came to Lourdes in 1948, she had been bedridden for three years. Her abdomen was swollen and pain-
ful. Pus and black blood flowed abundantly in her stools and vomit.

She received Communion at the Mass of the Sick on October 8. The priest gave her only a small particle, reluctantly, because of her constant vomiting. But at the moment of Communion all pain disappeared. In a matter of minutes Jeanne’s abdomen shrank to normal size and she was seized with an extraordinary hunger. She was cured. A thorough examination by five doctors the next day ended with the comment: “Everything is perfectly normal except for muscular atrophy of the legs—very natural after such a long period of inactivity.”

The next year Jeanne returned to Lourdes for another examination, this time by twenty-one doctors. The examination, aided by medical reports and X-ray charts taken during the year, ended with a declaration signed by all doctors present: “No medical explanation of this cure can be given. It is outside natural law.”

A third examination of all the documents concerned was made by the Medical Commission in Paris. The examination proved favorable, and a final scrutiny was made by the Canonical (Ecclesiastical) Commission in Rennes. This Commission consists of five members, two of whom must be physicians.

Finally all these documents and findings were forwarded to Cardinal Roques, Archbishop of Rennes, who officially declared Jeanne Fretel a true miraculée in November of 1950.

THE ROLE OF THE SCIENTIST

The first point we must note about these investigations is that the scientist is never asked to pronounce any cure “miraculous”—that is not his domain. He is merely asked “whether in the present state of science, any natural or scientific explanation can be given.” A question framed in this way the physician can answer with the aid of his stethoscope and X-ray machine.

Strictly speaking, the scientist as scientist cannot raise the question of miracles. On the other hand, neither can he deny that miracles are possible. The very methodology of his science
makes him incompetent to frame such conclusions. Modern science limits its investigation to what occurs in nature and according to nature. Its task is the formulation of laws governing the mutual functional relations of the events of nature. It is interested in these events only insofar as they are dependent on other events in nature. Scientific method assumes that no particle has been introduced into nature from without, that nature suffers no external influence. But the moment the scientist converts this methodology into an adequate explanation of all being, he ceases to be a scientist and plays the philosopher. Since the viewpoint of science is "horizontal" and concerned with the order of "next-to-one-another within nature," it can say nothing of the relation of nature itself with a Being above it. If an extrinsic cause were to exercise its influence on nature, true scientific investigation would discover only that an event now within nature does not seem to have a cause within nature—that its cause is "unknown".

The scientist, then, who refuses to examine the facts which have been proposed as "miraculous" on the ground that "there are no such things as miracles" is not honest with himself. Further, the scientist who refuses to investigate a miraculous event because he is "not interested"—as happened in the cure of Guy Leydet, to be mentioned later—may well be true to the abstract notion of science; but he certainly fails humanity itself. True, miraculous events are not scientifically usable because they cannot be "controlled"—they are events which do not occur regularly and which cannot be reproduced in a laboratory. No scientific laws can be formulated as a result of their occurrence. But miracles, if they really occur, are very important in the moral and religious life of man. And it is for the sake of morality and religion that the scientist is asked to investigate the miracle, not for the sake of science. But then, it is well for the scientist to do this, for he is not Science Incarnate—he is first and foremost a man and a creature of God.

It is concerning the "controllable" aspects of a miracle that the scientist is called to testify. For example, in the cure of a cancer victim the physician can, with the scientific means at
his disposal, ascertain the patient’s condition before and after the alleged cure. And as an expert he can give his studied opinion on the vital question: is the cure explainable by any laws of nature now known to science? If he answers no, then the way is open for the reasonable recognition of a true miracle. The scientist’s task is thus purely negative but essential. He merely testifies that if this event were declared miraculous on other grounds science would not oppose the verdict, because it cannot find in nature itself a probable cause for the event.

STATISTICAL LAWS OF NATURE

It has been claimed that statistical laws have rendered true miracles unrecognizable even if they did occur. An objective study of miraculous facts quickly disproves this claim. The recognition of miracles is according to macroscopic laws. Microscopic motion might indeed seem chaotic (although Einstein himself was convinced that beneath statistical laws lie more deterministic ones). But the resultants of these forces in the macroscopic, visible world are harmonious and uniform; so much so that scientists have formulated laws which enable them to predict the workings of nature and control them. The very progress and success of science proves that these laws are valid. They may be conventional; but they are not arbitrary. They may not be accurate to the minutest detail, but their margin of error is so infinitesimal that we may disregard it in practical decisions of any importance.

And in the concrete, when faced with an extraordinary cure such as that of Jeanne Fretel, the unbelieving scientist does not call on “statistical” laws for an explanation. He will fall back more naturally on “unknown laws”—about which we shall see more later. He knows too well that although there are fluctuations in the macroscopic effects due to the unpredictability of microscopic motion, the abnormal fluctuations are infinitesimally small. For example, if two cubic centimeters of air were placed in a container, the chances that one side would vary in pressure from the other by so much as one percent is

$$10^{-6} \times 10^{14}$$

or one divided by one followed by 600 million
millon zeros. Although theoretically possible, such fluctuations just do not happen.

THE POWER OF SUGGESTION

We must also say something of that remarkable yet truly natural force which has wrought wonders in the world of medicine. It has even been proposed as the main explanation for the miracles of Lourdes and of Christ. I refer to the power of “faith”—not faith in God which evokes from Him an extraordinary response, but a psychological force awakened by suggestion. Diseases have been cured or at least mitigated by hypnotism and psychotherapy.

But again, the power of suggestion cannot explain true miracles. A man may indeed rid himself of some mental block or the paralyzing result of a trauma by the power of suggestion. But the range of such therapy is very limited. Modern psychologists tell us that the only diseases which can really be cured by suggestion are those which have been brought about by suggestion. “Faith” can heal functional diseases sometimes, but it is powerless in the face of truly organic disorders. One simply cannot suggest tuberculous germs out of existence or atrophied organs back to health or lesions into healing themselves instantaneously.

Not even “religious faith”—unless coupled with effective intervention of God—can explain true miracles. No authenticated cures of Christian Scientists and faith-healers have ever exceeded mere psychological cures. Persons with merely functional diseases have been healed. Even those suffering from serious organic diseases such as tuberculosis were prevailed upon to rise from their stretchers. But none of these “organic cures” were ever permanent. They were rather the effect of a tremendous effort to “believe” in the faith-healer, often with disastrous after-effects.

On the other hand, the cures which have been recognized at Lourdes and in the canonization of saints are all cures of organic diseases. The Medical Bureau at Lourdes dismisses at once any cure in which a clearly organic change has not taken
place. And a constant medical check-up during the year following the cure guarantees that it is real. The Bureau is strict on this point. It dropped the case of a man cured in 1954 of a brain tumor which had paralyzed him completely simply because no electroencephalogram of his former condition could be found. Medical dossiers attesting to the tumor were not sufficient. Only the encephalogram could guarantee that the illness of which he had suddenly been cured had indeed been a tumor and not a functional disability.

The same severity disqualified the case of Guy Leydet. At the age of five Guy was struck with acute meningo-encephalitis which damaged his brain and left him a complete idiot paralyzed in both arms and legs. The condition of postencephalitic idiocy is completely incurable. Two years later, in 1946, his parents brought him to Lourdes, where he was cured instantly. He grew up to be a normal boy with superior intelligence. But his case has never been officially proclaimed miraculous because the doctors who attended the boy before his visit to Lourdes have absolutely refused to submit any records or certificates. They are simply “not interested” in miracles. There are enough witnesses to be had, but the doctors at Lourdes want to be medically sure.

A further consideration is this: the power of suggestion cannot explain the sudden cures of unconscious persons and little children. And there are enough of these at Lourdes. Jeanne Fretel herself did not know where she was until her cure. The very first patient cured in the spring of Lourdes was a two-year-old boy, Justin Bouhohorts. Francis Pascal, cured at Lourdes in 1938 of meningitis which had blinded and paralyzed him, was not quite four. Guy Leydet, just mentioned, was seven and a total idiot. Certainly no one will suggest that the power of suggestion had a hand in these cures.

**UNKNOWN NATURAL LAWS**

The miracles of Lourdes (and the same must be said of miracles investigated in the process of canonization) cannot be explained by mere human intervention, not even by the great-
est results we can hope for from mere suggestion. Once this fact is established, science has reached its final verdict on the miracle. There are only two possible explanations left: unknown natural forces, or an agent external to the natural order known to science. The scientist as a scientist has no further competence to choose between the two alternatives. His final conclusion can only be a negative one: this fact is not explained by the natural laws known to me. Any further investigation must be made according to the principles of philosophy and theology.

Now in cures such as those we have mentioned there are traits which mere natural laws, known or unknown, cannot adequately explain. One of them is the evident intelligent finality that distinguishes the cures. Natural laws are neither intelligent nor religious. They are not respecters of persons. They do not answer prayers. But the force that brings about the cures of Lourdes is clearly intelligent and religious.

The pilgrims who came to Lourdes and the faithful who pray at a Lourdes shrine in other parts of the world ask God through Mary for an extraordinary favor, and a definite favor. Then something extraordinary follows precisely with respect to those who have asked for it, and at the time they asked for it. And more, the extraordinary event occurs precisely as begged for. We must note that the cure cannot be attributed merely to the psychological powers of the patient—this we have demonstrated above.

If “unknown natural forces” alone account for the cures, how explain that such unknown forces are activated only when God’s intervention is invoked? Natural laws of themselves do not listen to invocations. More unbelievable still, one would have to call upon many and various natural forces, all hitherto unknown, to explain the prodigies that occur. Lourdes water is applied, and various kinds of diseases are healed. Tuberculosis is cured. So is cancer. Must one resort to a different kind of natural force in each case? Sometimes sanity is restored to a total idiot; or sight is given to “dead” eyes. Still other “natural forces” would have to be called on here.
On the other hand, the same kinds of diseases are cured under different circumstances. Tuberculosis is suddenly cured after a bath in the springs, or after the Benediction of the Blessed Sacrament, or even on the way home from Lourdes. Would the same “natural force” be activated in each of these instances, whose only common characteristic is an appeal for help from God through His saints?

And even in the cure of one disease, more than one “unknown natural force” must be resorted to. In the cure of Jeanne Fretel, for example, one such cause would exterminate the tuberculous germs in an incredibly short time; another would instantly heal the lesions which were oozing pus and blood; a third would in a matter of minutes shrink the organs which had been grotesquely distended. And all three “unknown forces” must act simultaneously on the same person.

It would seem that the “unknown forces of nature”, usually so retiring, had suddenly converged on this village in the Pyrenees and had gone wild in its atmosphere of prayer. And more astonishing still, they show a marked predilection for people who invoke Our Lady of Lourdes or the saints of the Catholic Church.

The only honest conclusion from all this is that no mere natural force, no matter how “unknown”, can of itself serve to explain a miracle. A miracle is truly caused by an intelligent agent above and beyond the laws of nature. He is not a sincere man who would resort to “unknown natural forces” when there are positive indications that point to a known cause, though admittedly above nature. And the positive indications are here, demanding the intervention of an intelligent power higher than man.

OFFICIAL PROCLAMATION OF A MIRACLE

Once it has been established that a certain event must be attributed to an intelligent agent higher than man, there remains the further task of determining whether this agent is benign or malignant. “From their fruits you shall know them,” said Christ to His Apostles; and the Church applies the prin-
ciple to superhuman works. The circumstances of the case are studied, the character of the persons concerned, the sincerity of their testimony, the effects on the witnesses of the event.

The cure must bear clearly religious characteristics. Someone must have prayed for the patient: either the patient himself or someone interested in him. The circumstances must not be marked by impropriety or frivolity. If there is a "wonderworker" involved, this person must be saintly. (It is true that sinners can also perform miracles if God so wills, but this is not the usual case.) If the cure has taken place amid signs of excessive fervor, the whole case must be reexamined in more quiet circumstances.

The process of canonical examination is long. In the end it is the Bishop or the Pope who passes the final verdict declaring the cure "miraculous". They alone have full competence in the matter since it is primarily a religious one. The previous examinations of the physicians and theologians are indeed necessary, but only preliminary. Their votes are only consultative.

The severity of all these inquiries is apparent from the fact that of the thousands of extraordinary cures recorded at Lourdes only fifty-two have been declared miraculous by the Church as of January, 1956.

A SCIENTIST'S OBJECTION

There is a serious objection which sincere scientists may lodge against the fact of miracles. It is this. Such exceptions to nature's laws will wreak havoc with our physical laws. They would constitute deviations which would force us to revise these laws. After all, natural laws are only generalizations culled from repeated observations. Hence, if miracles take place, they will be observed, and will have to be taken into account when we draw up these laws.

We answer that for the scientist who acknowledges that natural laws are "closed" to supernatural forces only because scientific method demands such abstraction from extrinsic causes and not because science has really proven their non-ex-
istence there is no need for embarrassment. Since the intelligent and religious characteristics of miraculous cures manifest a superhuman intelligent agent at work, we need not consider these phenomena in our formulation of natural laws. Miracles are exceptions to the law in the full sense. The laws of nature left to themselves cannot explain the miracle, especially in its religious and intelligent reality. Miraculous events, then, are invalid as manifestations of natural law, because of the evident intervention of an external agent.

But for the scientist who believes that natural laws really do explain everything, that there is no free agent outside of nature, there can only be frustration. Dr. Pellé, the physician who attended Jeanne Fretel before her cure and who examined her for a year afterwards, contributed much to her final recognition as a miraculée. But for Dr. Pellé himself there was only hopeless perplexity. The cure and the subsequent medical examination shattered the entire framework of medical laws with which he had been familiar for years. Dr. Pellé was an agnostic. The pithy comment of Franz Werfel applies here with striking appropriateness: for those who believe, no explanation is necessary; for those who do not, no explanation is possible.

CONCLUSION

Let us end this article with a warning which Cardinal Ottaviani, Assessor of the Holy Office, thought very necessary for Catholics eight years ago: Catholics must indeed believe that miracles are possible, and that they have occurred; but in the concrete, prudent Catholics should be the last to accept an event as truly miraculous. St. John of the Cross said that the Catholic must not accept a miracle unless forced to do so by the facts. The occasion of ridicule and scandal provided by credulous Catholics (and pious non-Catholics) who enthusiastically crowd about fraudulent and neurotic “seers”, or who stoutly defend functional cures as miraculous, needs no comment. A danger just as real is that of disobedience to Church authorities, and even rebellious opposition to them, when they caution prudence in the face of the extraordinary — such as happened, Cardinal Ottaviani relates, in Voltago, Italy, and in
Necedah, Wisconsin, U.S.A. We can only thank God that no such disobedience flared up when, much to our dismay since we are only human, the ecclesiastical authorities declared that "there is nothing supernatural" in the events which occurred at Lipa. The submission of Filipino Catholics is a sign that in many ways Catholicism has really come of age in this country.

REFERENCES


