**THE FIRST DISCUSSION**

Ghazali says:

According to us the connexion between what is usually believed to be a cause and what is believed to be an effect is not a necessary connexion; each of two things has its own individuality and is not the other, ‘ and neither the affirmation nor the negation, neither the existence nor the non-existence of the one is implied in the affirmation, negation, existence, and non-existence of the other-e. g. the satisfaction of thirst does not imply drinking, nor satiety eating, nor burning contact with fire, nor light sunrise, nor decapitation death, nor recovery the drinking of medicine, nor evacuation the taking of a purgative, and so on for all the empirical connexions existing in medicine, astronomy, the sciences, and the crafts. For the connexion in these things is based on a prior power of God to create them in a successive order, though not because this connexion is necessary in itself and cannot be disjoined-on the contrary, it is in God’s power to create satiety without eating, and death without decapitation, and to let life persist notwithstanding the decapitation, and so on with respect to all connexions. The philosophers, however, deny this possibility and claim that that is impossible. To investigate all these innumerable connexions would take us too long, and so we shall choose one single example, namely the burning of cotton through contact with fire; for we regard it as possible that the contact might occur without the burning taking place, and also that the cotton might be changed into ashes without any contact with fire, although the philosophers deny this possibility. The discussion of this matter has three points.

The first is that our opponent claims that the agent of the burning is the fire exclusively;’ this is a natural, not a voluntary agent, and cannot abstain from what is in its nature when it is brought into contact with a receptive substratum. This we deny, saying: The agent of the burning is God, through His creating the black in the cotton and the disconnexion of its parts, and it is God who made the cotton burn and made it ashes either through the intermediation of angels or without intermediation. For fire is a dead body which has no action, and what is the proof that it is the agent? Indeed, the philosophers have no other proof than the observation of the occurrence of the burning, when there is contact with fire, but observation proves only a simultaneity, ‘ not a causation, and, in reality, there is no other cause but God . For there is unanimity of opinion about the fact that the union of the spirit with the perceptive and moving faculties in the sperm of animals does not originate in the natures contained in warmth, cold, moistness, and dryness, and that the father is neither the agent of the embryo through introducing the sperm into the uterus, nor the agent of its life, its sight and hearing, and all its other faculties. And although it is well known that the same faculties exist in the father, still nobody thinks that these faculties exist through him; no, their existence is produced by the First either directly or through the intermediation of the angels who are in charge of these events. ‘ Of this fact the philosophers who believe in a creator are quite convinced, but it is precisely with them that we are in dispute.

It has been shown that coexistence does not indicate causation. We shall make this still more clear *through an* example. Suppose that a man blind from birth, whose eyes are veiled by a membrane and who has never heard people talk of the difference between night and day, has the membrane removed from his eyes by day and sees visible things, he will surely think then that the actual perception in his eyes of the forms of visible things is caused by the opening of his eyelids, and that as long as his sight is sound and in function, the hindrance removed and the object in front of him visible, he will, without doubt, be able to see, and he will never think that he will not see, till, at the moment when the sun sets and the air darkens, he will understand that it was the light of the sun which impressed the visible forms on his sight. And for what other reason do our opponents believe that in the principles of existences there are causes and influences from which the events which coincide with them proceed, than that they are constant, do not disappear, and are not moving bodies which vanish from sight? For if they disappeared or vanished we should observe the disjunction and understand then that behind our perceptions there exists a cause. And out of this there is no issue, according to the very conclusions of the philosophers themselves.

The true philosophers’ were therefore unanimously of the opinion that these accidents and events which occur when there is a contact of bodies, or in general a change in their positions, proceed from the bestower of forms who is an angel or a plurality of angels, so that they even said that the impression of the visible forms on the eye occurs through the bestower of forms, and that the rising of the sun, the soundness of the pupil, and the existence of the visible object are only the preparations and dispositions which enable the substratum to receive the forms; and this theory they applied to all events. And this refutes the claim of those who profess that fire is the agent of burning, bread the agent of satiety, medicine the agent of health, and so on.

I say:

To deny the existence of efficient causes which are observed in sensible things is sophistry, and he who defends this doctrine either denies with his tongue what is present in his mind or is carried away by a sophistical doubt which occurs to him concerning this question. For he who denies this can no longer acknowledge that every act must have an agent. The question whether these causes by themselves are sufficient to perform the acts which proceed from them, or need an external cause for the perfection of their act, whether separate or not, is not self-evident and requires much investigation and research. And if the theologians had doubts about the efficient causes which are perceived to cause each other, because there are also effects whose cause is not perceived, this is illogical. Those things whose causes are not perceived are still unknown and must be investigated, precisely because their causes are not perceived; and since everything whose causes are not perceived is still unknown by nature and must be investigated, it follows necessarily that what is not unknown has causes which are perceived. ‘ The man who reasons like the theologians does not distinguish between what is self-evident and what is unknown, z and everything Ghazali says in this passage is sophistical.

And further, what do the theologians say about the essential causes, the understanding of which alone can make a thing understood? For it is self-evident that things have essences and attributes which determine the special functions of each thing and through which the essences and names of things are differentiated. If a thing had not its specific nature, it would not have a special name nor a definition, and all things would be one-indeed, not even one; for it might be asked whether this one has one special act or one special passivity or not, and if it had a special act, then there would indeed exist special acts proceeding from special natures, but if it had no single special act, then the one would not be one . But if the nature of oneness is denied, the nature of being is denied, and the consequence of the denial of being is nothingness. ‘

Further, are the acts which proceed from all things absolutely necessary for those in whose nature it lies to perform them, or are they only performed in most cases or in half the cases? I This is a question which must be investigated, since one single action-and passivity between two existent things occurs only through one relation out of an infinite number, and it happens often that one relation hinders another. Therefore it is not absolutely certain that fire acts when it is brought near a sensitive body, for surely it is not improbable that there should be something which stands in such a relation to the sensitive thing as to hinder the action of the fire, as is asserted of talc and other things. But one need not therefore deny fire its burning power so long as fire keeps its name and definition.

Further, it is self-evident that all events have four causes, agent, form, matter, and end, and that they are necessary for the existence of the effects-especially those causes which form a part of the effect, namely that which is called by the philosophers matter, by the theologians condition and substratum, and that which is called by the philosophers form, by the theologians psychological quality . The theologians acknowledge that there exist conditions which are necessary to the conditioned, as when they say that life is a condition of knowledge; and they equally recognize that things have realities and definitions, and that these are necessary for the existence of the existent, and therefore they here judge the visible and the invisible according to one and the same scheme. ‘ And they adopt the same attitude towards the consequences of a thing’s essence, namely what they call ‘sign’, as for instance when they say that the harmony in the world indicates that its agent possesses mind and that the existence of a world having a design indicates that its agent knows this world? Now intelligence is nothing but the perception of things with their causes, and in this it distinguishes itself from all the other faculties of apprehension, and he who denies causes must deny the intellect. Logic implies the existence of causes and effects, and knowledge of these effects can only be rendered perfect through knowledge of their causes. Denial of cause implies the denial of knowledge, and denial of knowledge implies that nothing in this world can be really known, and that what is supposed to be known is nothing but opinion, that neither proof nor definition exist, and that the essential attributes which compose definitions are void. The man who denies the necessity of any item of knowledge must admit that even this, his own affirmation, is not necessary knowledge.

As to those who admit that there exists, besides necessary knowledge, knowledge which is not necessary, about which the soul forms a judgement on slight evidence and imagines it to be necessary, whereas it is not necessary, the philosophers do not deny this. And if they call such a fact ‘habit’ this may be granted, but otherwise I do not know what they understand by the term ‘habit’-whether they mean that it is the habit of the agent, the habit of the existing things, or our habit to form a judgement about such things? ‘ It is, however, impossible that God should have a habit, for a habit is a custom which the agent acquires and from which a frequent repetition of his act follows, whereas God says in the Holy Book: ‘Thou shalt not find any alteration in the course of God, and they shall not find any change in the course of God. ‘If they mean a habit in existing things, habit can only exist in the animated;; if it exists in something else, it is really a nature, and it is not possible that a thing should have a nature which determined it either necessarily or in most cases. If they mean our habit of forming judgements about things, such a habit is nothing but an act of the soul which is determined by its nature and through which the intellect becomes intellect. The philosophers do not deny such a habit; but ‘habit’ is an ambiguous term, and if it is analysed it means only a hypothetical act; as when we say ‘So-and-so has the habit of acting in such-and-such a way’, meaning that he will act in that way most of the time. If this were true, everything would be the case only by supposition, and there would be no wisdom in the world from which it might be inferred that its agent was wise.

And, as we said, we need not doubt that some of these existents cause each other and act through each other, and that in themselves they do not suffice for their act, but that they are in need of an external agent whose act is a condition of their act, and not only of their act but even of their existence. However, about the essence of this agent or of these agents the philosophers differ in one way, although in another they agree. They all agree in this, that the First Agent is immaterial and that its act is the condition of the existence and acts of existents, and that the act of their agent reaches these existents through the intermediation of an effect of this agent, which is different from these existents and which, according to some of them, is exclusively the heavenly sphere, whereas others assume besides this sphere another immaterial existent which they call the bestower of forms.

But this is not the place to investigate these theories, and the highest part of their inquiry is this; and if you are one of those who desire these truths, then follow the right road which leads to them. The reason why the philosophers differed about the origin of the essential forms and especially of the forms of the soul is that they could not relate them to the warm, cold, moist, and dry, which are the causes of all natural things which come into being and pass away, ‘ whereas the materialists related everything which does not seem to have an apparent cause to the warm, cold, moist, and dry, affirming that these things originated through certain mixtures of those elements, just as colours and other accidents come into existence. And the philosophers tried to refute them.

Ghazali says:

Our second point is concerned with those who acknowledge that these events proceed from their principles, but say that the disposition to receive the forms arises from their observed and apparent causes. However, according to them also the events proceed from these principles not by deliberation and will, but by necessity and nature, as light does from the sun, and the substrata differ for their reception only through the differentiations in their disposition. For instance, a polished body receives the rays of the sun, reflects them and illuminates another spot with them, whereas an opaque body does not receive them; the air does not hinder the penetration of the sun’s light, but a stone does; certain things become soft through the sun, others hard;’ certain things, like the garments which the fuller bleaches, become white through the sun, others like the fuller’s face become black: the principle is, however, one and the same, although the effects differ through the differences of disposition in the substratum. Thus there is no hindrance or incapacity in the emanation of what emanates from the principles of existence; the insufficiency lies only in the receiving substrata. If this is true, and we assume a fire that has the quality it has, and two similar pieces of cotton in the same contact with it, how can it be imagined that only one and not the other will be burned, as there is here no voluntary act? And from this point of view they deny that Abraham could fall into the fire and not be burned notwithstanding the fact that the fire remained fire, and they affirm that this could only be possible through abstracting the warmth from the fire (through which it would, however, cease to be fire) or through changing the essence of Abraham and making him a stone or something on which fire has no influence, and neither the one nor the other is possible.

I say:

Those philosophers who say that these perceptible existents do not act on each other, and that their agent is exclusively an external principle, cannot affirm that their apparent action on each other is totally illusory, but would say that this action is limited to preparing the disposition to accept the forms from the external principle. However, I do not know any philosopher who affirms this absolutely; they assert this only of the essential forms, not of the forms of accidents. They all agree that warmth causes warmth, and that all the four qualities act likewise, but in such a way that through it the elemental fire’ and the warmth which proceeds from the heavenly bodies are conserved. The theory which Ghazali ascribes to the philosophers, that the separate principles act by nature, not by choice, is not held by any important philosophers; on the contrary, the philosophers affirm that that which possesses knowledge must act by choice. However, according to the philosophers, in view of the excellence which exists in the world, there can proceed out of two contraries only the better, and their choice is not made to perfect their essences-since there is no imperfection in their essence-but in order that through it those existents which have an imperfection in their nature may be perfected.

As to the objection which Ghazali ascribes to the philosophers over the miracle of Abraham, such things are only asserted by heretical Muslims. The learned among the philosophers do not permit discussion or disputation about the principles of religion, and he who does such a thing needs, according to them, a severe lesson. For whereas every science has its principles, and every student of this science must concede its principles and may not interfere with them by denying them, this is still more obligatory in the practical science of religion, for to walk on the path of the religious virtues is necessary for man’s existence, according to them, not in so far as he is a man, but in so far as he has knowledge; and therefore it is necessary for every man to concede the principles of religion and invest with authority the man who lays them down. The denial and discussion of these principles denies human existence, and therefore heretics must be killed. Of religious principles it must be said that they are divine things which surpass human understanding, but must be acknowledged although their causes are unknown.

Therefore we do not find that any of the ancient philosophers discusses miracles, although they were known and had appeared all over the world, for they are the principles on which religion is based and religion is the principle of the virtues; nor did they discuss any of the things which are said to happen after death. For if a man grows up according to the religious virtues he becomes absolutely virtuous, and if time and felicity are granted to him, so that he becomes one of the deeply learned thinkers and it happens that he can explain one of the principles of religion, it is enjoined upon him that he should not divulge this explanation and should say ‘all these are the terms of religion and the wise’, conforming himself to the Divine Words, ‘but those who are deeply versed in knowledge say: we believe in it, it is all from our Lord’. ‘

Ghazali says:

There are two answers to this theory. The first is to say: ‘We do not accept the assertion that the principles do not act in a voluntary way and that God does not act through His will, and we have already refuted their claim in treating of the question of the temporal creation of the world. If it is established that the Agent creates the burning through His will when the piece of cotton is brought in contact with the fire, He can equally well omit to create it when the contact takes place.

I say:

Ghazali, to confuse his opponent, here regards as established what his opponent refuses to admit, and says that his opponent has no proof for his refusal. He says that the First Agent causes the burning without an intermediary He might have created in order that the burning might take place through the fire. But such a claim abolishes any perception of the existence of causes and effects. No philosopher doubts that, for instance, the fire is the cause of the burning which occurs in the cotton through the fire-not, however, absolutely, but by an external principle which is the condition of the existence of fire, not to speak of its burning. The philosophers differ only about the quiddity of this principle-whether it is a separate principle, or an intermediary between the event and the separate principle besides the fire.

Ghazali says, on behalf of the philosophers:

But it may be said that such a conception involves reprehensible impossibilities. For if you deny the necessary dependence of effects or their causes and relate them to the will of their Creator, and do not allow even in the will a particular definite pattern, but regard it as possible that it may vary and change in type, then it may happen to any of us that there should be in his presence beasts of prey and flaming fires and immovable mountains and enemies equipped with arms, without his seeing them, because God had not created in him the faculty of seeing them. And a man who had left a book at home might find it on his return changed into a youth, handsome, intelligent, and efficient, or into an animal; or if he left a youth at home, he might find him turned into a dog; or he might leave ashes and find them changed into musk; or a stone changed into gold, and gold changed into stone. And if he were asked about any of these things, he would answer: ‘I do not know what there is at present in my house; I only know that I left a book in my house, but perhaps by now it is a horse which has soiled the library with its urine and excrement, and I left in my house a piece of bread which has perhaps changed into an apple-tree. ‘ For God is able to do’ all these things, and it does not belong to the necessity of a horse that it should be created from a sperm, nor is it of the necessity of a tree that it should be created from a seed; no, there is no necessity that it should be created out of anything at all. And perhaps God creates things which never existed before; indeed, when one sees a man one never saw before and is asked whether this man has been generated, one should answer hesitantly: ‘It may be that he was one of the fruits in the market which has been changed into a man, and that this is that man. ‘ For God can do any possible thing, and this is possible, and one cannot avoid being perplexed by it; and to this kind of fancy one may yield ad infinitum, but these examples will do. ‘

But the answer is to say: If it were true that the existence of the possible implied that there could not be created in man any knowledge of the non-occurrence of a possible, all these consequences would follow necessarily. But we are not at a loss over any of the examples which you have brought forward. For God has created in us the knowledge that He will not do all these possible things, and we only profess that these things are not necessary, but that they are possible and may or may not happen, and protracted habit time after time fixes their occurrence in our minds according to the past habit in a fixed impression. Yes, it is possible that a prophet should know in such ways as the philosophers have explained that a certain man will not come tomorrow from a journey, and although his coming is possible the prophet knows that this possibility will not be realized. And often you may observe even ordinary men of whom you know that they are not aware of anything occult, and can know the intelligible only through instruction, and still it cannot be denied that nevertheless their soul and conjecturing power’ can acquire sufficient strength to apprehend what the prophets apprehend in so far as they know the possibility of an event, but know that it will not happen. And if God interrupts the habitual course by causing this unusual event to happen this knowledge of the habitual is at the time of the interruption removed from their hearts and He no longer creates it. There is, therefore, no objection to admitting that a thing may be possible for God, but that He had the previous knowledge that although He might have done so He would not carry it out during a certain time, and that He has created in us the knowledge that He would not do it during that time.

I say:

When the theologians admit that the opposite of everything existing is equally possible, and that it is such in regard to the Agent, and that only one of these opposites can be differentiated through the will of the Agent, there is no fixed standard for His will either constantly or for most cases, according to which things must happen. For this reason the theologians are open to all the scandalous implications with which they are charged. For true knowledge is the knowledge of a thing as it is in reality. ‘ And if in reality there only existed, in regard both to the substratum and to the Agent, the possibility of the two opposites, ; there would no longer, even for the twinkling of an eye, be any permanent knowledge of anything, since we suppose such an agent to rule existents like a tyrannical prince who has the highest power, for whom nobody in his dominion can deputize, of whom no standard or custom is known to which reference might be made. Indeed, the acts of such a prince will undoubtedly be unknown by nature, and if an act of his comes into existence the continuance of its existence at any moment will be unknown by nature.

Ghazali’s defence against these difficulties that God created in us the knowledge that these possibilities would be realized only at special times, such as at the time of the miracle, is not a true one. For the knowledge created in us is always in conformity with the nature of the real thing, since the definition of truth is that a thing is believed to be such as it is in reality. b If therefore there is knowledge of these possibles, there must be in the real possibles a condition to which our knowledge refers, either through these possibles themselves or through the agent, or for both reasons-a condition which the theologians call habit. ? And since the existence of this condition which is called habit is impossible in the First Agent, this condition can only be found in the existents, and this, as we said, is what the philosophers call nature.

The same congruity exists between God’s knowledge and the existents, although God’s knowledge of existents is their cause, and these existents are the consequence of God’s knowledge, and therefore reality conforms to God’s knowledge . If, for instance, knowledge of Zaid’s coming reaches the prophet through a communication of God, the reason why the actual happening is congruous with the knowledge is nothing but the fact that the nature of the actually existent’, ‘ is a consequence of the eternal knowledge, for knowledge qua knowledge can only refer to something which has an actualized nature. ‘ I The knowledge of the Creator is the reason why this nature becomes actual in the existent which is attached to it. ‘ Our ignorance of these possibles is brought about through our ignorance of the nature which determines the being or non-being of a thing. If the opposites in existents were in a condition of equilibrium, both in themselves and through their efficient causes, it would follow that they neither existed nor did not exist, or that they existed and did not exist at the same time, and one of the opposites must therefore have a preponderance in existence. And it is the knowledge of the existence of this nature which causes the actualization of one of the opposites. And the knowledge attached to this nature is either a knowledge prior to it, and this is the knowledge of which this nature is the effect, namely eternal knowledge, or the knowledge which is consequent on this nature, namely non-eternal knowledge. The attainment of the occult is nothing but the vision of this nature, and our acquisition of this knowledge not preceded by any proof is what is called in ordinary human beings a dream, and in prophets inspiration. The eternal will and eternal knowledge are the causes of this nature in existents. And this is the meaning of the Divine Words: ‘Say that none in the heavens or on the earth know the occult but God alone. ‘This nature is sometimes necessary and sometimes what happens in most cases. ‘ Dreams and inspiration are only, as we said, the announcement of this nature in possible things, and the sciences which claim the prognostication of future events possess only rare traces of the influences of this nature or constitution or whatever you wish to call it, namely that which is actualized in itself and to which the knowledge attaches itself.

Ghazali says:

The second answer-and in it is to be found deliverance from these reprehensible consequencesb-is to agree that in fire there is created a nature which burns two similar pieces of cotton which are brought into contact with it and does not differentiate between them, when they are alike in every respect. ? But still we regard it as possible that a prophet should be thrown into the fire and not burn, either through a change in the quality of the fire or through a change in the quality of the prophet, and that either through God or through the angels there should arise a quality in the fire which limited its heat to its own body, so that it did not go beyond it, but remained confined to it, keeping, however, to the form and reality of the fire, without its heat and influence extending beyond it; or that there should arise in the body of the person an attribute, which did not stop the body from being flesh and bone, but still defended it against the action of the fire. For we can see a man rub himself with talc and sit down in a lighted oven and not suffer from it; and if one had not seen it, one would deny it, and the denial of our opponents that it lies in God’s power to confer on the fire or to the body an attribute which prevents it from being burnt is like the denial of one who has not seen the talc and its effect. ‘ For strange and marvellous things are in the power of God, many of which we have not seen, and “, by should we deny their possibility and regard them as impossible?

And also the bringing back to life of the dead and the changing of a stick into a serpent are possible in the following way: matter can receive any form, and therefore earth and the other elements can be changed into a plant, and a plant, when an animal eats it, can be changed into blood, ‘ then blood can be changed into sperm , and then sperm can be thrown into the womb and take the character of an animal. , This, in the habitual course of nature, takes place over a long space of time, but why does our opponent declare it impossible that matter should pass through these different phases in a shorter period than is usual, and when once a shorter period is allowed there is no limit to its being shorter and shorter, so that these potencies can always become quicker in their action and eventually arrive at the stage of being a miracle of a prophet.

And if it is asked: ‘Does this arise through the soul of the prophet or through another principle at the instigation of the prophet? ‘-we answer: ‘Does what you acknowledge may happen through the power of the prophet’s soul, like the downpour of rain or the falling of a thunderbolt or earthquakes-does that occur through him or through another principle? What we say about the facts which we have mentioned is like what you say about those facts which you regard as possible. And the best method according to both you and us is to relate these things to God, either immediately or through the intermediation of the angels. But at the time these occurrences become real, the attention of the prophet turns to such facts, and the order of the good determines its appearance to ensure the duration of the order of religion, and this gives a preponderance to the side of existence. The fact in itself is possible, and the principle in God is His magnanimity; but such a fact only emanates from Him when necessity gives a preponderance to its existence and the good determines it, and the good only determines it when a prophet needs it to establish his prophetic office for the promulgation of the good. ‘‘

And all this is in accordance with the theory of the philosophers and follows from it for them, since they allow to the prophet a particular characteristic which distinguishes him from common people. There is no intellectual criterion for the extent of its possibility, but there is no need to declare it false when it rests on a good tradition and the religious law states it to be true. Now, in general, it is only the sperm which accepts the form of animals-and it receives its animal potencies only- from the angels, who according to the philosophers, are the principles of existents -and only a man can be created from the sperm of a man, and only a horse from the sperm of a horse, in so far as the actualization of the sperm through the horse determines the preponderance of the analogous form of a horse over all other forms, and it accepts only the form to which in this way the preponderance is given, and therefore barley never grows from wheat or an apple from a pear. ‘ Further, we see that certain kinds of animal are only produced by spontaneous generation from earth and never are generated by procreation-e. g. worms, and some which are produced both spontaneously and by procreation like the mouse, the serpent, and the scorpion, for their generation can come also from earth. Their disposition to accept forms varies through causes unknown to us, and it is not in human power to ascertain them, since those forms do not, according to the philosophers, emanate from the angels by their good pleasure or haphazard, ‘ but in every substratum only in such a way that a form arises for whose acceptance it is specially determined through its own disposition. These dispositions differ, and their principles are, according to the philosophers, the aspects of the stars and the different relative positions of the heavenly bodies in their movements. And through this the possibility is open that there may be in the principles of these dispositions wonderful and marvellous things, so that those who understand talismans through their knowledge of the particular qualities of minerals and of the stars succeed in combining the heavenly potencies with those mineral peculiarities, and make shapes of these earthly substances, and seek a special virtue for them and produce marvellous things in the world through them. And often they drive serpents and scorpions from a country, and sometimes bugs, and they do other things which are known to belong to the science of talismans.

And since there is no fixed criterion for the principles of these dispositions, and we cannot ascertain their essence or limit them, how can we know that it is impossible that in certain bodies dispositions occur to change their phases at a quicker rhythm, so that such a body would be disposed to accept a form for the acceptance of which it was not prepared before, which is claimed to be a miracle? There is no denying this, except through a lack of understanding and an unfamiliarity with higher things and oblivion of the secrets of God in the created world and in nature. And he who has examined the many wonders of the sciences does not consider in any way impossible for God’s power what is told of the wonders of the prophets.

Our opponents may say: ‘We agree with you that everything possible is in the power of God, and you theologians agree with us that the impossible cannot be done and that there are things whose impossibility is known and things which are known to be possible, and that there are also things about which the understanding is undecided and which it does not hold to be either impossible or possible. Now what according to you is the limit of the impossible? If the impossible includes nothing but the simultaneous affirmation and negation of the same thing, then say that of two things the one is not the other, and that the existence of the one does not demand the existence of the other. And say then that God can create will without knowledge of the thing willed, and knowledge without life, ‘ and that He can move the hand of a dead man and make him sit and write volumes with his hand and engage himself in sciences while he has his eye open and his looks are fixed on his work, although he does not see and there is no life in him and he has no power, and it is God alone who creates all these ordered actions with the moving of the dead man’s hand, and the movement comes from God. But by regarding this as possible the difference between voluntary action and a reflex action like shivering is destroyed, and a judicious act will no longer indicate that the agent possesses knowledge or power It will then be necessary that God should be able to change genera and transform the substance into an accident and knowledge into power and black into white and a voice into an odour, just as He is able to change the inorganic into an animal and a stone into gold, and it will then follow that God can also bring about other unlimited impossibilities. ‘

The answer to this is to say that the impossible cannot be done by God, and the impossible consists in the simultaneous affirmation and negation of a thing, or the affirmation of the more particular with the negation of the more general, or the affirmation of two things with the negation of one of them, and what does not refer to this is not impossible and what is not impossible can be done. The identification of black and white is impossible, because by the affirmation of the form of black in the substratum the negation of the form of white and of the existence of white is implied; and since the negation of white is implied by the affirmation of black, the simultaneous affirmation and negation of white is impossible. ‘ And the existence of a person in two places at once is only impossible because we imply by his being in the house that he cannot be in another place, and it cannot be understood from the denial that he is in another place that he can be simultaneously both in another place and in the house. And in the same way by will is implied the seeking of something that can be known, and if we assume a seeking without knowledge there cannot be a will and we would then deny what we had implied. And it is impossible that in the inorganic knowledge should be created, because we understand by inorganic that which does not perceive, and if in the organic perception was created it would become impossible to call it inorganic in the sense in which this word is understood.

As to the transformation of one genus into another, some theologians affirm that it is in the power of Gods but we say that for one thing to become another is irrational; for, if for instance, the black could be transformed into power, the black would either remain or not, and if it does not exist any more, it is not changed but simply does not exist any more and something else exists; and if it remains existent together with power, it is not changed, but something else is brought in relation to it, and if the black remains and power does not exist, then it does not change, but remains as it was before. And when we say that blood changes into sperm, we mean by it that this identical matter is divested of one form and invested with another; and it amounts to this, that one form becomes nonexistent and another form comes into existence while the matter remains, and that two forms succeed one another in it. And when we say that water becomes air through being heated, we mean by it that the matter which had received the form of the water is deprived of this form and takes another, and the matter is common to them but the attribute changes. And it is the same when we say that the stick is changed into a serpent or earth into an animal. But there is no matter common to the accident and the substance, nor to black and to power, nor to the other categories, and it is impossible for this reason that they should be changed into each other.

As to God’s moving the hand of a dead man, and raising this man up in the form of a living one who sits and writes, so that through the movement of his hand a well-ordered script is written, this in itself is not impossible as long as we refer events to the will of a voluntary being, and it is only to be denied because the habitual course of nature is in opposition to it. And your affirmation, philosophers, that, if this is so, the judiciousness of an act no longer indicates that the agent possesses knowledge is false, for the agent in this case is God; He determines the act and He performs it. And as to your assertion that if this is so there is no longer any difference between shivering and voluntary motion, we answer that we know this difference only because we experience in ourselves the difference between these two conditions, and we find thereby that the differentiating factor is power, ‘ and know that of the two classes of the possible the one happens at one time, the other at another; that is to say, we produce movement with the power to produce it at one time, and a movement without this power at another. Now, when we observe other movements than ours and see many well-ordered movements, we attain knowledge of the power behind them, and God creates in us all these different kinds of knowledge through the habitual course of events, through which one of the two classes of possibility becomes known, though the impossibility of the second class is not proved thereby.

I say:

When Ghazali saw that the theory that things have no particular qualities and forms from which particular acts follow, for every thing is very objectionable, and contrary to common sense, he conceded this in this last section and replaced it by the denial of two points: first that a thing can have these qualities but that they need not act on a thing in the way they usually act on it, e. g. fire can have its warmth but need not burn something that is brought near to it, even if it is usually burnt when fire is brought near to it; secondly that the particular forms have not a particular matter in every object.

The first point can be accepted by the philosophers, for because of external causes the procession of acts from agents may not be necessary, ‘ and it is not impossible that for instance fire may sometimes be brought near cotton without burning it, when something is placed with the cotton that makes it non-inflammable, as Ghazali says in his instance of talc and a living being.

As to the point that matter is one of the conditions for material things, this cannot be denied by the theologians, for, as Ghazali says, there is no difference between our simultaneous negation and affirmation of a thing and our simultaneous denial of part of it and affirmation of the whole. And since things consist of two qualities, a general and a particular-and this is what the philosophers mean by the term ‘definition’, a definition being composed according to them of a genus and a specific difference-it is indifferent for the denial of an existent which of its two qualities is denied. For instance, since man consists of two qualities, one being a general quality, viz. animality, and the second a particular, viz. rationality, man remains man just as little when we take away his animality as when we take away his rationality, for animality is a condition of rationality and when the condition is removed the conditioned is removed equally.

On this question the theologians and the philosophers agree, except that the philosophers believe that for particular things the general qualities are just as much a condition as the particular, and this the theologians do not believe; for the philosophers, for instance, warmth and moisture are a condition of life in the transient, because they are more general than life, just as life is a condition of rationality. But the theologians do not believe this, and so you hear them say: ‘For us dryness and moisture are not a condition of life. ‘ For the philosophers shape, too, is one of the particular conditions of life in an organic being; if not, one of two following cases might arise: either the special shape of the animal might exist without exercising any function, or this special shape might not exist at all. ‘ For instance, for the philosophers the hand is the organ of the intellect, and by means of it man performs his rational acts, like writing and the carrying on of the other arts; now if intelligence were possible in the inorganic, it would be possible that intellect might exist without performing its function, and it would be as if warmth could exist without warming the things that are normally warmed by it. b Also, according to the philosophers, every existent has a definite quantity and a definite quality, and also the time when it comes into existence and during which it persists are determined, although in all these determinations there is, according to the philosophers, a certain latitude. ‘

Theologians and philosophers agree that the matter of existents which participate in one and the same matter sometimes accepts one of two forms and sometimes its opposite, as happens, according to them, with the forms of the four elements, fire, air, water, and earth. Only in regard to the things which have no common matter or which have different matters do they disagree whether some of them can accept the forms of others-for instance, whether something which is not known by experience to accept a certain form except through many intermediaries can also accept this ultimate form without intermediaries. For instance, the plant comes into existence through composition out of the elements; it becomes blood and sperm through being eaten by an animal and from sperm and blood comes the animal, as is said in the Divine Words: ‘We created man from an extract of clay, then We made him a clot in a sure depository’’ and so on till His words ‘and blessed be God, the best of creators’. The theologians affirm that the soul of man can inhere in earth without the intermediaries known by experience, whereas the philosophers deny this and say that, if this were possible, wisdom would consist in the creation of man without such intermediaries, and a creator who created in such a way would be the best and most powerful of creators; both parties claim that what they say is selfevident, and neither has any proof for its theory. And you, reader, consult your heart; it is your duty to believe what it announces, and this is what God-who may make us and you into men of truth and evidence-has ordained for you.

But some of the Muslims have even affirmed that there can be attributed to God the power to combine the two opposites, and their dubious proof is that the judgement of our intellect that this is impossible is something which has been impressed on the intellect, whereas if there had been impressed on it the judgement that this is possible, it would not deny this possibility, but admit it. For such people it follows as a consequence that neither intellect nor existents have a well-defined nature, and that the truth which exists in the intellect does not correspond to the existence of existing things. The theologians themselves are ashamed of such a theory, but if they held it, it would be more consistent with their point of view than the contradictions in which their opponents involve them on this point. For their opponents try to find out where the difference lies between what as a matter of fact the theologians affirm on this point and what they deny, and it is very difficult for them to make this out-indeed they do not find anything but vague words. We find, therefore, that those most expert in the art of theological discussion take refuge in denying the necessary connexion between condition and conditioned, between a thing and its definition, between a thing and its cause and between a thing and its sign. All this is full of sophistry and is without sense, and the theologian who did this was Abu-l-Ma’ali. ‘ The general argument which solves these difficulties is that existents are divided into opposites and correlates, and if the latter could be separated, the former might be united, but opposites are not united and correlates therefore cannot be separated. And this is the wisdom of God and God’s course in created things, and you will never find in God’s course any alteration. ‘ And it is through the perception of this wisdom that the intellect of man becomes intellect, and the existence of such wisdom in the eternal intellect is the cause of its existence in reality. The intellect therefore is not a possible entity which might have been created with other qualities, as Ibn Hazm imagined.