## Einstein-Sonrobe Dialogue: A Search for the Logic of Peace and the Unified Field Theory

by E. Martin Schotz

[Enter KING MALCOLM W.E.B. ALI SONROBE, a tall black man dressed as Othello with a golden cape. Despite his dress SONROBE's movement and manner of expression are unaffected, warm, and direct. He leans over EINSTEIN.]

EINSTEIN: My God, it is you.

SONROBE: Albert, how good to see you. How are you? [shaking EINSTEIN's hand with both of his.] It is a pleasure to be able to thank you in person for your public statements in my behalf.

EINSTEIN: Oh please, King, think nothing of it, but now I must ask your help. Is it true that you are the Greatest?

SONROBE: Albert, you know many people think that; but I fear that in doing so, they are mistaking me for the folk from which I have sprung.

EINSTEIN: I understand, for People make the same mistake with me. But nevertheless, the people judge you their greatest and that is good enough for me. Tell me, what is the plan that you use to win all your fights?

SONROBE: [laughing] It's quite an exaggeration to say I win *all* my fights. And as for a plan, Albert? Listen, if your car breaks down on the road, do you want a mechanic coming out with a plan or do you want him coming out with his tools? You need a lot more than plans to change things in this world. You've got to get your tools together, go to the scene of the trouble, analyze the problem on the spot, and settle things then and there.

EINSTEIN: Please, King, don't josh with me at such an important moment. I am trying to a find the law which will reveal the way everything in the universe is united and in so doing explain the motion of all bodies.

SONROBE: [laughs again] What sort of bodies do you have in mind, Albert?

EINSTEIN: All bodies.

SONROBE: What makes you think that all bodies obey one law? For as anyone can see, there are different types of bodies, with different types of motion, and these different types are moved by different kinds of forces.

EINSTEIN: No, you don't understand. I am not interested in how things appear. I am interested in the underlying motion of which everything else is a reflection.

SONROBE: No, Albert. It is you who don't understand. If you want to truly understand the motion of bodies you must understand overarching motions as well as underlying ones.

EINSTEIN: What is an overarching motion?

SONROBE: An overarching motion is a motion which overarches and dominates a motion which underlies.

EINSTEIN: That doesn't help me understand it, for you are simply defining one in terms of the other.

SONROBE: It is not I who is doing this but the motions themselves.

EINSTEIN: Well, then give me an example of an underlying motion and its overarching relative.

SONROBE: Take, for example, plants and animals. As a rule, which is to say almost always, animals run around and eat plants. Thus the law of the motion and development of animals stands in overarching relation to the law of motion and development of plants.

EINSTEIN: But still, King, are not these two forms of being, plants and animals, based on the same underlying laws?

SONROBE: Well, it is true that what underlies plants must also underlie animals. But still the motion of animals is guided by principles that are unknown to plants in themselves.

EINSTEIN: For example?

SONROBE: Animals struggle to survive and in this struggle have the capacity of self locomotion. Plants struggle to survive but their motion is limited to growing up. Thus animals can move themselves in relation to their natural conditions. They can go after what they want. They can adapt to nature in ways that are unknown to plants.

EINSTEIN: I am seeking the law which unifies all the forces in the universe.

SONROBE: I am seeking not only the laws of such a universe but that universe itself. I am convinced that such a universe must depend on justice.

EINSTEIN: And what do you mean by justice?

SONROBE: The people in command of their labor and enjoying together its fruits.

EINSTEIN: This is interesting, but we are drifting far afield from the question which I started out asking you. Would you say that my search for a unified field theory, my search for an understanding of the unity between gravity and the other forces of nature, that this search is foolish?

SONROBE: Well, that depends. What is your notion of gravity?

EINSTEIN: It is not my notion. It is everyone's notion. Gravity is the force of attraction between bodies. But you see I have discovered that what Newton and others thought of as an attractive force acting between bodies can just as properly be conceived of as the resistance of bodies to being accelerated.

SONROBE: In other words, from one point of view the force with which bodies are attracted to each other is from another point of view their resistance to a change in their form of action.

EINSTEIN: Hmm . . . resistance to a change in their form of motion . . . I guess you could say that.

SONROBE: Fine, go on.

EINSTEIN: Well, I am simply asking to understand the law in the universe which will explain the link between gravity and the other forces of nature.

SONROBE: But Albert, which gravity do you have in mind?

EINSTEIN: What do you mean "which gravity"? Gravity is a force which is the same throughout nature and depends only on the inertial mass of the body.

SONROBE: Here, Albert, I think you are forgetting something.

EINSTEIN: What do you mean?

SONROBE: We have agreed that gravity is the force with which bodies attract one another or the resistance they demonstrate to a change in their form of motion. I have no problem with this. But as we have already established, there are many different forms of motion in which matter exists, and as a result there are many different forms of resistance and many different forms of attraction. Thus there is not one gravity but many.

EINSTEIN: Huh . . . different forms of motion mean different gravities. Perhaps I need to understand better what you mean by a form of motion.

SONROBE: Well, for instance, let us take mechanics. Mechanics concerns itself with the movement of bodies from one place to another. Now some bodies are inanimate and so are only moved from outside while other move themselves and are called "alive."

EINSTEIN: Yes.

SONROBE: Well the problem of the displacement of inanimate bodies in space is not the same as the displacement of animate bodies in space.

EINSTEIN: For example?

SONROBE: Moving an opponent with a punch is a lot different from moving a punching bag.

EINSTEIN: OK, so we must differentiate between those bodies which do and do not move themselves.

SONROBE: Yes, and we must begin differentiating the variety of ways in which self-moving bodies

move. For example, I have in mind the different ways plants animals and humans attract and are attracted or resist a change in their form of motion.

EINSTEIN: How would you differentiate animal motion from human motion?

SONROBE: With the emergence of human motion life ceases to be determined.

EINSTEIN: You mean you believe life depends on chance, that God plays dice with the universe?

SONROBE: [laughs] No, I don't believe that life hinges on chance. Of course God plays dice at times, but not as a rule with the universe. We all know it's mankind who is doing that at the moment.

EINSTEIN: All right, but if you do not believe life is a matter of chance then you must grant me that it is determined.

SONROBE: Well, if I grant you that life is determined, will you grant me that what is determining life is alive?

EINSTEIN: What do you mean "what is determining life is alive"?

SONROBE: I mean that not only is history determined, but determinism is historical, that new forces are growing up in our world constantly, that new overarching relations are forever emerging, and that these new relations subdue and negate the old ones.

EINSTEIN: Well, OK, I see no harm in believing that, but you said before that life had ceased to be determined.

SONROBE: That I did, for humans are those beings who, laboring on nature, transform her from something standing in opposition to them into something for them. We, humans, humanize nature and in the process create our own nature, rather than leaving it to some outside determining force.

EINSTEIN: So the overarching law of human motion is that human beings make themselves, that they are their own cause and are not determined from outside.

SONROBE: Not determined except for the historical limitations of any particular period.

EINSTEIN: So any person's particular historical period determines what he or she is free to cause.

SONROBE: Precisely.

EINSTEIN: At the moment I'm afraid that our historical limitations include the real possibility that mankind may not have a future.

SONROBE: Yes. It's a terrible irony.

EINSTEIN: And the very thought of this makes me shudder at what I've helped humans create! How stupid is this race to nuclear weaponry!

SONROBE: Stupid, Albert? No. Criminal, crazy, absurd, yes. But stupid, no.

EINSTEIN: You don't think it is stupid that mankind, faced with a choice of peace or nothing, wouldn't choose peace?

SONROBE: No, not at all, for peace is not something that can simply be chosen. It must be built, for it represents a whole change in our form of motion, and there is much resistance to it.

EINSTEIN: But tell me, King, if our future is not in the hands of chance and is not determined, what will determine it?

SONROBE: The question is not *what* will determine our future but *who* will determine it. Will our people continue to move with their traditional inertia or will they take the lead, and in so doing change themselves into a new force of attraction, a new human historical gravity worthy of its possibilities?

EINSTEIN: Do you see evidence of this new human gravity which can insure the future?

SONROBE: Yes, I see it everywhere in the people's movements. America doesn't know it yet but the people of Africa, Asia, and Latin America are on the move.

EINSTEIN: So you think human beings can build a form of gravity which can overarch the danger inherent in my formula, E=mc<sup>2</sup>, the formula which reveals that the energy of the atom equals its mass times the speed of light squared?

SONROBE: Yes.

EINSTEIN: If only human energy could express itself as simply.

SONROBE: Well, it's not as simple but I do have a formula for what I've been saying.

EINSTEIN: Yes?

SONROBE: Yes, I call it the law of the masses energy: "When an idea seizes the masses it becomes a material force."

[EINSTEIN bursts into laughter]

SONROBE: What are you laughing about Albert?

[EINSTEIN and SONROBE are both laughing]

EINSTEIN: Your law is the same as my law. Look here. E=mc<sup>2</sup>. Energy equals the masses times light squared, the masses with light reflected, an idea.

EINSTEIN: So you have no plan for your fights, eh? What about E=mc<sup>2</sup>? That's a great plan for our fights. But of course mankind will need all its tools — its arts, its sciences, its religions, if it is to survive.

SONROBE: Yes!

EINSTEIN: How funny, and you think there is no guiding hand here? But now I see a problem. For

before you said that peace depends on justice. But for me there must be peace or there will be no justice. For today the law of the atomic bomb stands before mankind, dominating everything.

SONROBE: And what is that law?

EINSTEIN: Without peace there will be no life, and without life there is no justice.

SONROBE: Perhaps that is your unified field theory, Albert. For what you are saying is that as we human beings look into the atom through human history we now see staring back at us the words: As you do unto others, so will be done unto you.

EINSTEIN: Not a bad formula, the human energy for peace as the masses in possession of the fruits of their labor, including Christ's gospel.

SONROBE: [smiling] I prefer to think of the human energy for peace as the struggle of masses for possession of the fruits of their labor, including Christ's gospel.

EINSTEIN: Yes.

SONROBE: You know, Albert, what you've just said has got me to thinking. Do you think it makes sense for me to continue going around killing Desdemonas?

EINSTEIN: Why not? Wasn't it you yourself who argued that however misguided your wrath, it was not a crime of passion but an assertion of the just wrath of one who has been betrayed?

SONROBE: It's true I said that. But times change and so must our plays. I am not sure we can afford today any misguided wrath, lest we purchase an untellable tragedy. No, Albert, today I want to arouse people with a different vision, to stir them up and help them look beyond Iago and Desdemona. I want them to see the farce of military superiority. I have a hunger to exchange this King's robe for simpler garb. But it's getting late and I must be off.

EINSTEIN: Can you not stay a bit longer?

SONROBE: I wish I could, but it's not possible. [SONROBE embraces him, and then takes his leave.]