#### Discussion

### Professor Yoshiharu Akishige:

It is clear that modern psychology, which tries to throw light upon the nature of mental life, has adopted the discipline of stochastics and developed greatly on them. By making a more fruitful use of the increased knowledge of stochastics, it will make a further development in the future.

Much interested in Buddhist philosophy, I have studied it together with scientific psychology in which I specialize, and come to realize that there is not only no drastic contradictions between the two ideas, but that Buddhist philosophy has much to offer to modern psychology. I am very glad to know that Professor Barankin has a similar view of the matter.

As my knowledge of stochastics is very limited, it is doubtful whether or not I understand correctly his views on the relations between stochastics and Buddhist thought. As far as I understand him, however, I have, in the main, nothing to say against his opinion.

## Professor Chikio Hayashi:

We are very glad that Professor Barankin as an Occidental gives us, Japanese, valuable suggestions in this paper. As he points out, it is an Occidental thought that the reality is regarded as stochastic phenomena, i.e., is formulated by probabilistic concepts. We—I mean people of the East he says—grasp the reality as a whole and as it is, and think that the world is mutable. Of course, all of us do not so. This is a general saying. We think also that the stochastic expression is a scientific formulation and l'idée fixe. The essence of thought of Buddhism is in transcending l'idée fixe. The thought of Buddhists, as it is, brings in no scientific formulation of the reality as stochastic concepts, because it denies l'idée fixe which is indispensable in science. Occidental people may consider from the outside that our thought is a way of thinking which is both multidimensional and stochastic, but it is too optimistic that they believe that we are a spearhead in new science in future. I think, the thought of Buddhism could favorably contribute to development of science in the points as below:

- 1) to contemplate without l'idée fixe,
- 2) to grasp the phenomena as a whole, and in dynamic relations of the activities of the elements—for example, concept of thing-event as he points out—and thus to formulate the complicated reality as an organized complexity,
- 3) to advance in problem-finding taking into account the limit of the current scientific method or thinking, (this reduces to 4)),
- 4) to transcend l'idée fixe developing the scientific method by l'idée fixe. These points are rather useful in science, but science may not develop only by these. The harmony between the Occidental thought and Oriental thought (Buddhism) is necessarily desirable though it is not easy. I think we and they

(Occidental people) should make efforts to harmonize the Occidental thought and the Oriental at first. Then, it will be most effective if the harmonization is accomplished spontaneously. At least now, we Japanese must behave in scientific thinking with the thought of the East.

## Professor Hajime Nakamura:

Professor Barankin's article: PROBABILITY AND THE EAST is fascinating. It displays his deep insight into Eastern thought. I got the impression that the renowned professor has not only applied Eastern thought (chiefly Buddhistic) to problems of statistics, but also he has made clear the significance of Buddhist thought (and probably Jain thought, although he does not refer to it ostensibly) in the setting of contemporary thought. I think this short article of his is a great contribution to the development of thought in the future in the respect that he has ventured to pave a new way of approach which was not tread by modern thinkers who have been under strong influence of Western tradition. I have found many lines in which I whole-heartedly agree with him.

May I take liberty of telling him two things which I hope he will kindly take into consideration?

- 1) On p. 201 he says: "The next big step in the progress of fundamental scientific theory will be distinctly Oriental in character." But the term "Oriental" is inaccurate in this context. Probably he does not mean Near Eastern or Western Asia by that term, but Buddhist (and, maybe, Hindu) tradition. If he should say "peculiarly Far Eastern" or something like that, it would be fit for the purpose.
- 2) In his article the term 'stochasticity' plays an important role. This term must be well-known to all statisticians, and needs no explanation. But it is known to few outsiders, how much less to Buddhist scholars! I looked it up in AMERICAN COLLEGE DICTIONARY, and I did not find the heading. I found the word in an English-Japanese dictionary with no explanation. I hope that this term would be defined and explained a bit more in detail, for this article is very much edifying and should be read widely and appreciated greatly by outsiders, i.e., scholars who are laymen in the field of statistics.

Professor Akichika Nomura:

December 31, 1963

#### Dear Professor Barankin:

First I would like to express to you my gratitude for the kindness that you have shown me during the past year.

If you had not read that morning paper of May 13 in Kyoto and had not hastened to Tokyo to attend the Tuesday morning plenary session of the Joint

Meeting of the Japanese Society of Psychiatry and Neurology and the American Psychiatric Association, I could not have had the opportunity of meeting you.

The fact that you found the detailed program of the plenary session proceedings in the newspaper and the fact that you were interested in Professor Daisetsu T. Suzuki's "Zen in Psychiatry" and "Psychotherapy in the East and West" were, I suppose, what you would call "eventualities." And your eagerness to see and listen to the proceedings made you hasten to come up to Tokyo. This, it would seem, was an "act" brought about by the convergence of eventualities upon you, the individual. It was thus that you happened to hear my paper entitled "Morita Therapy, A Psychotherapy Developed in Japan." And it is thus in turn that, in answer to your recent letter, I have sat down today to add some random thoughts which I hope will be found of some interest.

Morita conceived of one form of neurosis as arising from the patient's unrealistic attitude toward life; the patient enslaves himself by trying futilely to meet impossible demands that he makes upon himself, mistakenly believing that to fulfill such demands is to answer his life-urge. Morita interpreted the appearance of symptoms on the basis of Buddhist ideology. When a patient was afraid that his particular situation was inevitable, impossible to change for the duration of his life, Morita advised encouraging him not to attempt to escape from his anxiety, but to accept his particular situation.

Morita therapy is marked by a period of bed rest followed by a period of ever-increasing participation in light activities. This is followed by a final period during which the patient engages in responsible work in a guided social environment. This final period continues until eventually the patient realizes that he can live a normal, realistic life free of neurotic symptoms. In this treatment, the patient experiences what Zen calls *satori*, or "enlightenment of the soul." The Morita therapy lasts from fifty to sixty days and good results are obtained in 63.3 per cent of neuroses thus treated.

I remember at our meeting on June 20 of this year at Jikei Medical University in Tokyo I talked to you about Morita's thinking concerning the mind. Apropos of that subject, perhaps the following example may be of some further interest. There is an old Japanese poem which goes,

Kane ga naru ka ya Shumoku ga naru ka Kane to shumoku no ai ga naru

Is it the bell that rings, Is it the hammer that rings, Or is it the meeting of the two that rings?

Morita used this poem in explaining his theory. He likened the bell to the human body, the force of the hammer to environmental stimulation, and the meeting of the two to a psychic phenomenon.

One of the big problems we have when we attempt to elucidate Morita's theory to Westerners is that of language. Many of the words and phrases such as jijitsu tadashii, shisô no mujun, aru ga mama, narikiru, etc. are, as you

know, without direct equivalents in English.

The two paragraphs which you have quoted in your "Probability and the East" from my paper on Morita's theory are those in which I stated that the points in the Morita theory coming from Buddhistic ideology were not understood by Western psychiatrists of his day. You state that these quotations are exceedingly rich in content for the purpose of your thesis. You say that "What is significant is that along with recognizable cognate notions of structural elements of reality and their integration into a single whole, Buddhism contains also the notion of stochasticity inherent in the nature of things."

While Westerners must wrestle with the problem of the raison d'être of Morita therapy, we Japanese in turn find it extremely difficult to grasp your concept of a stochastic process. Dr. D. E. Cameron, Director of the Allan Memorial Institute of McGill University in Montreal, Canada, who, at the May 14 plenary session, spoke on psychotherapy in North America, told us that expressions of social beliefs and aspirations which are among the most profoundly important in the culture of the North American continent are found in the thinking of William James and John Dewey. Among these beliefs and aspirations are those such as "a deeply felt belief in the importance and powers of the individual" and the "basic national conviction that a man can change himself." He added that "in all psychotherapies in the United States there are inherent two basic premises: that the individual continually seeks to reorganize himself to his most effective level, and that the individual is not complete in himself." These points are very revealing in that they all reflect thinking nearly diametrically opposed to that of the average Japanese.

At our June 20 meeting at Jikei with K. Kondô and others, you will recall that Dr. Hasegawa asked whether or not your thinking has been influenced by Williams James' pragmatism. Your instant reply was "No," but you added that you were somewhat influenced by the thinking of Ernst Mach when you were in high school. In asking this question, Dr. Hasegawa was, I believe, in search of a clue which would lead to our understanding of your thinking on stochasticity. Your answer helped at least to start us in what I believe is the right general direction.

Still we find it difficult to understand the concept of a stochastic process in mathematical terms. After I received and read your paper entitled "Concerning the Mind-Body Problem," however, my interest was aroused in the incidence of speech difficulty in the individual you call M. In reading over M's case, I noted that his case history is very similar to that of several of the patients with whose problems our clinic is now dealing. After reading this passage, I feel that perhaps I have at least begun to understand your definition of stochastic process, but there are still numerous points which remain unclear to me.

The problem of my personal tenuous powers of comprehension aside, I entertain great hopes that some day your theory can come to serve as a convenient instrument and helpful measure in aiding Westerners to understand the Japanese way of thinking.

Sincerely yours,

Akichika Nomura

#### Professor Seizo Ohe:

The mathematical theory of probability and statistics in its most fashionable development has recently been tackling the subtle and acute problems of human behavior such as the theory of games, the problem of decision making under uncertainty, etc. It is no wonder that a thinking mathematician, as Professor Edward W. Barankin is, has been caught by a deep scepticism around this development. Certainly, everyone is well aware of the patent inadequacy of all these mathematical theories of the so-called rational human behavior. But, unlike the majority of his colleagues, Prof. Barankin takes the matter very seriously and goes to its roots in the scientific conception of reality in the Western intellectual tradition and finds there the rigid conceptual frame of a "thing-in-itself" and its "non-participating observer", while, as he strongly asserts, this observer himself "is a participant in the flow of reality, a single unitary reality", or "the unique, individual thing-events of which the universe is composed." Evidently, Prof. Barankin's position here is positivistic in the sense of Zen Buddhism, and he himself compares the latter's view with his own: "that real entities are marginal and conditional processes of single joint stochastic processes—and perhaps of a single, overall stochastic process." Upon the basis of such a "stochastic view of reality", he seems to strive toward a new, broader mathematical theory of probability with the idea "that a set function, instead of a point function, might provide the much greater range and flexibility of description that are needed in order to have a theory that truly reflects the vast intricacies and complexities of human behavior"-probably in a certain analogy to the well-known revolutionary development in the foundations of theoretical physics.

It is quite natural that man should return to the immediate reality of his own experience, the ever-creative process of human consciousness as such, whenever the prevailing scientific doctrine breaks down, as has often been evidenced by recurrent positivist movements in the history of scientific thought in Europe. It is true also that the positivism at the basis of Buddhist philosophy is much broader and deeper than any of its kind in the West. We must admit, however, that this great, radical positivism of the East has so far never produced any effective scientific theory, except Morita Therapy, if it may be counted as such, though it has created many illuminating works of art. But, if this all-embracing consciousness-reality of Buddhist positivism is the very source of all human creative activity, it will not be impossible for human beings to obtain from this source fundamental insights necessary for the creation of a new scientific theory, as Prof. Barankin intends to do. Some European physicists, Werner Heisenberg among others, have even suspected the comparative ease with which Japanese physicists command the revolutionary change in contemporary physical theories to be due to their inborn heritage of Buddhist thought.

For my part, however, I still wonder whether some kind of thorough-going re-examination or re-orientation at the very core of this great Eastern heritage will not be necessary—especially on the part of its traditional beneficiaries—before such a courageous attempt becomes a real success. In this sense, Prof. Barankin seems to me to be still too helplessly alone in his belief, and I fear

the whole situation might not be so simple as he imagines it to be.

## Professor Natuhiko Yosida:

I reserve my judgement as to whether Professor Barankin's thesis that probability and utility are the same thing is right or wrong, because it is proposed without complete proof in his article. In other words, I do not think there are any *a priori* grounds on which one can decide the validity of the thesis before reading its proof.

Now, there are some contexts in which I find it convenient to use the Japanese expression which corresponds to the English expression "sure, this table is real...look, I can touch it." But this does not prevent me from seeing the logical possibility of Professor Barankin's thesis. And I do not think my case is the exceptional one. (I happen to be neither a Christian nor a Buddhist.) That is, I do not think it is difficult for anyone to use such expressions in some contexts and at the same time to see the logical possibility of Professor Barankin's thesis (or of any other thesis which, seemingly, cannot be asserted in the same contexts in which such expressions are used.) Of course there may be exceptional cases. For example, there may be a very stubborn statistician who maintains that, because he uses such and such words in such and such manner in the context in which he expresses his religious faith, he must use the same words in the same manner in statistics also. This stubborn statistician seems to believe that religion can prescribe to statistics what to take as primitive notions and how to use them. But this belief is wrong, for, if not, there is no need for a statistician to try hard to find a new theory to overcome his difficulties, but he has only to ask the priests of his religious sect what he should do in statistics.

So, I cannot agree with Professor Barankin as to his second thesis that the Buddhists who do not use such expressions as "this table is real" in the context in which they express their religious faith are more likely to be able to see the logical possibility of a new theory than the Westerns who use such expressions when they confess their religious faith or their Weltanschauung.

Although I am not a Buddhist, in holding that one is not necessarily bound by his Weltanschauung in developing his theory in sciences, I may have been influenced by the Eastern tradition of this land. That is, what distinguishes an Occidental scientist from an Oriental one may be the fact that the former desires to unify the mode of using the words in the context of Weltanschauung with that in the contexts of sciences whereas the latter does not. If so, I can agree with Professor Barankin concerning his second thesis, in somewhat different sense from what I said above. That is, I hold Professor Barankin's mode of thinking is typically Occidental because he is too worried by the problem of Weltanschauung in developing his new theory.

# Responsive comments by Professor Barankin

Professor Akishige points out the very pertinent fact that the mathematical theory of probability has been, and continues to be, fruitfully applied to psychology. This effort is referred to as the study of stochastic models of psychological phenomena. The word "model" here is unfortunate, in my point of view. It has the force of maintaining a very heavy curtain between psychology and mathematics. The consequence of this is that psychologists will continue to feel and act as if their penetration to fundamental understanding in their subject is to be achieved altogether apart from any essential employment of concepts out of mathematics. And on the other side, mathematicians will go on thinking that the world of their labors is a world to itself, elevated far above the mundane, that may condescend in moments and in parts to assist the "practical" scientists, in particular psychologists, to organize the regularities in the phenomena they study. I foresee-to the contrary of this-that there are mathematical concepts, yet to be fully thought out, which will contain the instruction for psychologists (among others) as to what the fundamental nature of their subject-matter is; and in the reverse direction, a close feeling for real phenomena such as psychology studies will aid the mathematician in developing these concepts, which are for him likewise fundamental. Thus, I see a relationship between the fields that includes no curtain. And to impute a curtain with our choice of words is to interfere with our search.

I hope, along with Professor Akishige, that psychologists will undertake the learning of more and more of the mathematical theory of probability, and that they will consider it just as carefully and critically as they consider the notions they call their own.

I will insist that Professor Hayashi's tone of comment is one of sincere modesty in behalf of Japanese culture (-and I would have expected exactly this on the basis of our chats over the saké cup-), and that his specific comments do not take any issue with my position. He raises a good point in discussing the idée fixe, and I think we understand each other pretty well concerning this not very easily defined notion. I agree that traditional science finds the idée fixe indispensible (though the wave-particle duality in physics cuts into this rigidity.) And I see this in the present day representation of probability in, for example, the formal presumption of specifying "all" the eventualities on a given occasion. Such idealizations as this, and the notion of a thing-in-itself, are gone from the context of ideas I have presented; and as I have indicated, this finds a reflection in Buddhist thought. I see this (when, one day, it becomes fully precise) as the transcendence over the reliance on the idée fixe, which reliance we have in science up to the present time. are undoubtedly those who will argue that this is not the transcendence intended in Buddhist philosophy. But this gives no occasion for argument. It is not in my thesis, or necessitated by it, to defend a comprehensive interpretation of Buddhist philosophy. I am here concerned with the progress of science, and with Buddhist ideas only insofar as I see them to touch helpfully on this task. In the text, I have said how I think such help can come through. And I find

that Professor Hayashi's four points are in perfect agreement with my suggestions.

The kind words of Professor Nakamura, a scholar whose stature is recognized equally in the East and the West, are reassuring to one like myself, so newly come to an appreciation of the treasures of the Orient. Treasures not as gems that serve only our present, evanescent fancy, but treasures rather to be likened to the ores of metals, which, when we have come to know them well, lead us to substance and sense into the indefinite future. In my talks with Professor Nakamura, in Tokyo and later in Berkeley, I have come to see it as a piece of extreme good fortune that my paper has early come under his erudite scrutiny. A complex of ideas that touches many disciplines implies a particularly strong request for examinations of its suggestions, and for elaborations, in the several fields, that can lend to the greater efficacy of those examinations. It is to one important such elaboration that Professor Nakamura is pointing in his first comment. I stand at this time totally instructible regarding the finer distinctions to be drawn within the body of thought of the Eastern world. Coming to know a part of that body of thought and feeling, at first hand, in Japan has afforded me some of the richest intellectual experiences of my life. In consequence of that much learning I know that the phrase "peculiarly far Eastern" certainly describes what I wished to say in the sentence quoted by Professor Nakamura. However, my differential knowledge is not yet sufficient to have assured me that with such a phrase I would not be excluding from credit other areas of the Orient to which credit was due. I am grateful to Professor Nakamura for this observation.

The second point raised calls for a few words here. Dictionaries appear to be no help yet at this stage. Indeed, it is only as late as the 1961 edition that Webster's New International Dictionary has gone over to the current use of the term "stochastic"; but it gives merely "RANDOM(~processes)(~variables)", thus offering no explanation. (The 1959 edition still offers the meaning "conjectural; given to, or skillful in, conjecturing", which will be seen to be related to present use, but is not equivalent to it.) The word "stochastic" has reference to the nature of phenomena. In saying that a phenomenon is stochastic we mean that on one or more occasions in the evolution of that phenomenon there are several possibilities for the actual state of the phenomenon, and for each such occasion just which of the several possibilities will come to pass is not a pre-determined matter. For example—a most customary example-if a coin is tossed three consecutive times, there are the three occasions when the coin is lying on the floor, having landed after a toss, and showing either a head up or a tail up; whether, on each of these occasions, it is actually a head up or a tail up is not pre-determined. To prevent myself from going on and on, I shall stop now, hoping that this brief explanation will suffice as a starter. But with one further essential word: The expression "not pre-determined" is susceptible of various interpretations; exactly what interpretation should be taken is precisely today's problem of finding out what probability is. In the heart of my thesis is the contention that there is only one proper interpretation, and this is that the lack of predetermination is inherent in the very nature of things.

By way of a final comment, I would ask Professor Nakamura's indulgence in permitting me to interpret at a little greater length a statement he has made. He writes that I have "...applied Eastern thought (chiefly Buddhistic) to problems of statistics,...". This verbatim statement induces a ludicrous image in the mind of the general Westerner; he would see a statistician concerned with, for example, the problem of determining the better of two drugs for treating a particular disease, and proceeding to open a bible to some chapter and verse from which to find the answer to the problem. I have already, in the text of my article, sounded a warning against such misunderstandings. Let it be sounded once again. The problem of finding out what probability is-this I have called a statistician's problem. And therefore, Professor Nakamura is literally correct in his phrasing, "problems of statistics". My approach to this problem—a purely scientific approach—I have found to involve ideas that other men have come upon in other shapes and forms, among these men there being the philosophers of the East. If one imagines all of these ideas pooled together, and if one chooses to put a label reading "Eastern thought" on the container (which one may do as one possibility), then in this sense one may say, as Professor Nakamura has, that I have "applied Eastern thought." But I have applied it, or rather I seek its application, in another sense also, which I think Professor Nakamura means to include as well. Namely, in exhorting Oriental statisticians in particular to think about the problem of the fundamental nature of probability, because they have grown in a climate of Eastern thought and therefore it will have its influence in the thinking they do on the problem. Thus, if properly understood, Professor Nakamura's statement is valid. I know that he feels as strongly as I do about the sad waste of energy in unnecessary misunderstandings, when there is so much promise in looking for the synthesis of our cultures.

# Dear Professor Nomura:

The gracious opening paragraphs in your communication here carry me back in feeling to the pleasant, relaxed atmosphere that prevailed over our discussions in Tokyo. I intend to enjoy it once again, through the device of likewise addressing you directly in my present remarks.

In your customary way of touching the inmost heart of always important matters, you have commented here on the various aspects of the difficulty of mutual understanding in regard to the questions that concern us. In reflecting on the points you raise, I have come to think that perhaps we are a lot closer to understanding each other—in both the cross-discipline and cross-cultural senses—than appears on the surface. I am certain, in fact, that we lack only enough cumulative intercommunication to date to see clearly how we are converging on a common conceptual ground, that our bases already overlap significantly. Let me expand on this. To begin with, of course, it is precisely to this effect that my thesis speaks, in the text of my paper where I have endeavored to cite correspondences between Oriental philosoph-

ical concepts and technical notions in the context of stochastic processes. be sure, I have found the possibility of doing this as a consequence of an entirely different interpretation of mathematical probabilistic description. But that new interpretation came first, and independently, so that there is indeed exemplified in this the converging on a common conceptual ground. In this particular case the burden of building and expanding communication will continue to fall to me for a while since I am for the present the sole exponent of this complex of interpretations. But-assuming there will be others to see things as I do-this need not remain so for long. Because competence in the present-day mathematics of probability, on either a modest scale or a more advanced one, is not difficult to come by. There is the immediate possibility of much inter-communication at this level. In particular, Japan has many fine scholars and teachers in the field of probability and statistics, and its educational institutions are currently expanding their instruction in this field. Thus, the up and coming young men in your profession and related ones have the possibility of devoting some time during their years of schooling to picking up a measure of understanding of the calculus of probabilities and thereby of entering actively, and (I might add) indispensibly, into the general deliberations on the nature of things. Whether or not the particular theoretical structure that I foresee turns out to be established, the men so trained will get below the surface to where the emerging common ground is visible. I would strongly recommend such enhancement of curriculum where it does not already exist.

As to the area of cross-cultural understanding in the field of psychiatry. I am extremely optimistic. And I can quite readily portray the basis for this optimism by allusions to your remarks and to Dr. Cameron's talk. (He, too. was kind enough to give me a copy of his manuscript, and I have had the opportunity of studying his statements more closely.) Indeed, I would start out by asking if you wouldn't perhaps agree that there is a very promising potential for an increasing meeting of minds reflected in the second premise of psychotherapy cited by Dr. Cameron, namely, "that the individual is not complete in himself." To elaborate this, Dr. Cameron goes on to say the following. "[The individual] is not complete constitutionally as can be seen in his sexual organization and in the extent to which the need for affectional relationship is inborn. And since our culture demands prolonged dependency for the purposes of modern education, in this too, he is incomplete." It can be argued that this is the merest beginning of a concession to the profound fact (—I venture to call it a fact—) of the basic unreality of the "thing-in-itself". Certainly, it speaks of interrelations which are readily in evidence, which—to adapt a descriptive vernacular expression-don't have to hit one in the face before one notices them. But on the other hand, the recognition of such phenomena to the extent of isolating their principle as a basic factor-this is no small step to be accomplished while laboring under the aegis of traditional science. Treading carefully in order to remain secure within a familiar conceptual framework, Western psychiatry may insist on interpreting this premise as saying nothing more surprising than that there are certain forces inevitably at work between well-recognized "things-in-themselves" (individuals and environmental elements). But in a discussion of actual instances, will not East and West surely sense some commonness of ground? Are not Dr. Cameron's above-quoted examples saying that it is neither the bell alone nor the hammer alone that rings, but the meeting of the two that rings?

Elsewhere in his paper Dr. Cameron has the following paragraph. "Among [the] major basic concepts [of general psychotherapy] is that the organism reacts as a whole. This idea opens the way on the one hand to the use of adjuvants and, on the other hand, to the avoidance of the impression that an illness exists separate from its manifestations or symptoms. The second concept is that environmental factors may play a more important part in the production of mental illness and that these factors may operate at any time in the individual's life. This in turn leads to the need to understand the psychological structure of the patient's home and of his work and other environmental settings. Psychiatric illness is seen as multi-causal and the human organism is seen as being governed by multi-causality. In other words, a deterministic causality is not sufficient to account for an illness."

I think you may sense along with me, Dr. Nomura, that the second part of this statement represents a moving ahead, in psychiatric theorization, from the old classical determinism to something perhaps already looking to the stochastic conception. Terms like "multi-causality" and "deterministic causality" are, however, not altogether self-explanatory, and therefore we should all have to talk at length together to know exactly where we stand relative to each other (—here again is the communication problem, and this time entirely confined to the English language!) But certainly the statement is quite explicit about the importance of the environment, and this again suggests the common ground I have pointed up. The same may be said in regard to the earlier part of the statement. Recognizing that the "organism reacts as a whole" and that an illness does not exist "separate from its manifestations or symptoms," this is definitely to be feeling out toward new (non-classical) fundamentals, and we discern that the direction is toward notions long familiar in the Eastern context.

In the light of these evidences I cannot help but feel that if Dr. Morita were expounding his ideas initially today, there would be a readier appreciation of his concepts and less general consternation over the mode of his thinking. As to his particular structuring within the framework of these concepts to obtain a particular theory of the unconscious, validating his particular therapeutic method, this theory and practice coming out to be at variance with those in the West—alas, I am not qualified by experience or training to comment on the intimate details of this. But I think I may properly make some observations which will, even on this matter of a presently very specific divergence of opinions, at least defend my contention that continuing intercommunication will find us understanding each other quite well indeed in terms of the concepts that are emerging (in and around the psychiatric field) into common ground. Let us take the formulation of the problem as you gave it in your talk at the Tokyo meeting: "... The question—posed by a number of American psychotherapists—was something to the following effect. 'In psychoanalysis, the principle is to attempt, during the course of the therapy, to bring to consciousness the complexes that had been repressed into the subconscious and to sublimate them, but in Morita Therapy, the principle seems to aim at sinking into the subconscious the different concepts that are bothering the patients with their

outspokenness. Is that right?'..." You then proceeded into a discussion of the difference between Morita's and Freud's theories of the unconscious. As I have said, I shall not presume to join the discussion at that level. But if I consider the posed question from the overt behavioral standpoint, I find, on the basis of my first-hand experience of life in America and in Japan, definite correlations with the cultures of these two countries. The Japanese environment contains a fairly elaborate system of cushionings for the individual, and he has in turn developed in the culture to avail himself of these in return for his indispensible compliance with rules of conduct that would enable so many to live harmoniously in so small an area (-a condition which has simultaneously fostered some of the most beautiful artistry in the world.) By comparison, the individual in the American culture is "on his own"; he has only his own resources to fall back on, and he must make the most of these in the individual-by-individual competition in that society; he has correspondingly developed to expect no quarter which he cannot gain by individual superiority within rules and standards of conduct that ever shift and press to preserve an unqualified preëminence of the individual over the group. Under these circumstances, and as long as they prevail, it seems most natural that a successful Japanese therapy should be stressing the unlabored acceptance of the individual by the group, while a successful American therapy pretends to the goal of unrestricted development of all the potentials in the individual. These facts of the American scene are the realization of the spirit expressed in the phrases you have quoted from Dr. Cameron: the deeply felt belief in the importance and powers of the individual, the basic national conviction that a man can change himself, and the premise that an individual continually seeks to reorganize himself to his most effective level. The contrast between our two cultures that I have here reported out of my own experience. I find likewise indicated in certain remarks of Dr. L. Takeo Doi in his article "Morita Therapy and Psychoanalysis" (Psychologia, Vol. V, No. 3, September, 1962). He says the following: "I think this difference between Morita therapy and psychoanalysis in terms of their attitude toward dependency is a reflection of different characteristics of Japanese society and Western societies. In Japanese society there are so many channels in which one can easily gratify one's dependency wishes. Only if one can transcend one's petty conflicts over dependency can one easily be integrated into the society. But in Western societies the requirement for an individual seems to be nominally high. Unless one becomes truly independent, one cannot satisfactorily function in those societies. Hence one would have to undergo a longer period of re-education or longer apprenticeship, which is what psychoanalysis certainly looks like to the Japanese in comparison with Morita therapy."

Now, my point is this: may there not be a certain task to be accomplished, namely, to eliminate from psychiatric theorization the circumstance that data pertaining to the particular imbedding culture are erroneously treated as basic general features of behavior? Such errors would account for the fact of different theories of the unconscious by Morita and Freud. Furthermore, the presence of *precisely* such errors, *on both sides*, is strongly suggested by the close correlations between therapy and culture in the respective cases. When sufficient, truly fundamental understanding of behavior is at hand, such errors

vanish, and mutual puzzlement over cultural variants of therapy would vanish with them: the human unconscious being what it is, and culture A being what it is and culture B being what it is, it follows that adequate and suitable therapy in culture A will be of such and such a character while adequate and suitable therapy in culture B will be such and such.

The word "error" in the preceding paragraph is, of course, too strong a word. All of our theorizing takes place in an environment which supplies us with the intuitions for our theories. When that environment expands we come upon new phenomena which then challenge the existing theories and send us back to the search after more adequate theory. It is a learning process rather than an error-correcting process.

If we were truly speaking to each other in person now, Dr. Nomura, this is a point at which I would cease to speak, and turn to asking and listening. I would want to know if you see the contrasting aspects of our present societies as I see them; if you find in the Japanese setting, at one extreme, the same prevalent phenomenon that I find in the Western setting at another extreme, namely, the merciless cultural driving of individuals to very limits of human feasibility where they founder in collapse or failure. In such comparing of notes we should find our environments expanding, and the sooner come upon the rapid growth of our common ground of concepts and understanding. As I have maintained through all the above pages, and as the trend of theorizing is seen to be going, that common ground will be more recognizably familiar to the average Oriental than to the average Westerner. Yes, Westerners will of needs be aided to understand the Japanese way of thinking.

My kindest regards to Professor Kora, Dr. Hasegawa and Dr. Kondô, and to the others.

Sincerely,

Edward W. Barankin

It soon became evident to me in conversations with Professor Ohe that he has submitted the philosophies of both East and West to very careful scrutiny. His remarks, therefore, to the point that the Eastern heritage may need deep re-examining, and that the situation may not be a very simple one. I do not take lightly. It is perhaps specifically the weakness of those whose principal training is in mathematics, to fall into a strong conviction regarding precise structure of real phenomena. Yet, there are degrees and varieties of this inclination; and there are the facts of scientific history, establishing its validity. It is possible that Professor Ohe and I are not as far removed from each other in point of view as might at first appear. I say this because the notions that I have been talking about are still far from being fully precise. For example, I am pretty sure that the concept of "eventuality", when correctly grasped and set forth, will not present us with simply the algebra of sets, as we have it today. Thus, it may be that the locating of the correct, or a more correct, precision that I envisage will provide also some of the reorientation that Professor Ohe feels to be necessary.

The position of Professor Ohe rests in part—quite realistically—on the fact that the Oriental tradition "has so far never produced any effective scientific theory..." For my part, I find this perfectly understandable, and constituting no prejudice to the promise in Oriental philosophy or any reflection on the Oriental scientific mind. Indeed, there is at least one corresponding instance in the West: I would give the same explanation for both. The case in point is that of the two hundred years of exclusive reign of the wave theory of light between the time of Newton's conception of a corpuscular nature for light and the ultimate establishment of that conception by Einstein, Compton and others. (Incidentally, the coming of this particle concept was nevertheless not to the total exclusion of the wave concept, as we well know. And this provides an example of the concomitant reorientation I have alluded to above.) In this sequence out of Western intellectual history, just as in the case of the Eastern story, there is an initial intuiting of a sound idea or ideas, but then a long lapse of time during which the ideas can move no further to verify themselves. The reason for this blank period is that the requisite precision machinery, that is, the necessary mathematics, has not yet come forth. With Newton and his time, mathematical analysis was in its bare infancy, in the discovery of the infinitesimal calculus. From there to the matured studies of operators on a Hilbert space —which are the means of our confident grasp of the particle-wave picture of matter and light-is quite a long way. So is it a long way from the era in which the Oriental notions of reality were formulated, to the day of mathematical understanding adequate to their full substantiation. But from the present day it may not be too far into the future.

One might raise the question: if men in the West were able to develop, in something over two hundred years, the mathematics that was needed to ground a subtle conception, why should not the Orientals have achieved the corresponding result for their basic ideas, and in perhaps a comparable length of time? This is a difficult question; it cannot be answered fully without reference to geographical, social, political, economic and other such forces at play over the centuries. But one strongly determining factor can be conjectured. While human beings differ in many respects individually, group-wise, area-wise and even hemisphere-wise, they are obviously also similar in many ways. One of the points of similarity would seem to be that the historical development of the complex of mathematical concepts cannot proceed, with any group, essentially differently from the way it has proceeded. That is, the human being, being the particular kind of real process he is and having the particular kinds of interrelationships he does have in the context of all reality, his build-up of mathematical concepts would necessarily take place, in any case, in roughly the same order as has actually happened. If this is true, then the answer to the question raised may be put thus: even in the Western world, where the evolution of interest in the environment has fostered the very rapid realization of mathematics, we still have not attained to the mathematical notions needed to elaborate the Eastern intuitions.

After receiving and reading Professor Yosida's comments I feel much regret that there was not the time for us to meet in Japan. In the second part of his

discussion he has sallied forth so lustily and delightfully concerning one of my premises that I think it would be an exceptionally pleasurable and profitable occasion to discuss these matters with him in person. I hope we shall one day meet.

Before going to his second point, let me make a brief comment on the remark in his first paragraph. No one will ever read a proof of the fact that utility and probability are same thing. No one has ever, or will ever, read a proof that Newtonian dynamics is "correct". No one has ever, or will ever, read a proof that space and time are a single 4-dimensional continuum. Such "facts" as these are only verified in the long run as they accumulate successes in explaining phenomena that were previously less well understood. And that word "verified" means far less than "proved". Theories follow upon theories in the course of human history, and each improves upon the preceding ones. The evidence is that we may always expect a given theory to eventually turn out to be less than perfect, to fail to explain some things suitably. Thus, for example, Newtonian dynamics met its limit when experimentation turned up enough information about electromagnetic phenomena. The word "verified" always contains the potential of ultimately meaning "partially valid". It is to the verification that utility and probability are the same that I assert we can look forward, not to its proof.

In order to be perfectly clear as to why I answer as I do, I wish to set down my precise understanding of Professor Yosida's second comment. He develops his point in several steps: (1) Apart from isolated exceptions, Oriental thinkers—and he cites himself as an example—are capable of utilizing different, alternative sets of concepts on different occasions, as convenience dictates. (2) Therefore, on this account, he cannot agree with my contention that the ideological atmosphere in which a person grows up will influence the way that person thinks about fundamental questions; in particular, he does not agree that the growing up under the influence of Eastern thought need give Oriental scientists any advantage in finding new theory. (3) On the other hand, this very quality that he has cited and exemplified in himself-that of being able to entertain various, alternative points of view—this quality he suggests may be one that distinguishes the Orient from the Occident, and he acknowledges that its presence in him may be a consequence of the influence of Eastern thought. He presents this phase of his critique in terms of a particular form of the quality in question: absence of the inclination or need to coordinate one's scientific point of view and one's general Weltanschauung. (4) On this alternative account, then, he finds that he can agree with me in my contention regarding the influence of a prevailing philosophy on a growing person and its implications for his later creative work: whereas he feels no need for such a concern he finds that I-under Occidental influence-am very much concerned with the consequences for a Weltanschauung of a potential new scientific theory.

Professor Yosida has, thus, for one thing, offered a brief discussion, pro and con, of my affirmation that significant parts of our creative adult selves are molded by the ideas and attitudes that surround us as we advance from the cradle. It seems to me that his argument against it has nowhere near as much force as his later argument for it. When he describes himself (and notes

that he is not the exception) as having been formed by prevailing Eastern attitudes in his ability to look at things now in one way, now in another, he is well illustrating the phenomenon I speak of. But when he sees this quality as arguing against my contention, he is confounding the phonomenon in question with an altogether different one. It is one matter to accept several different ways of looking at the same or related things, ways that have all shown some validity and each of which is serviceable under certain conditions. It is a completely different matter to set oneself to work, to draw on all of one's resources, in order to try to produce a new way of looking at things—to do this because there are still big gaps in our understanding. What are those resources in each of us that we draw on? They are not just our late scientific training. They are much more than that. I do not think I have to go on into extended supportive detail here. Psychologists can offer a great deal of evidence for this statement. It is verified by retrospective studies of long cultural periods, which show clearly defined themes running through creations in all fields during those periods. And (I cannot repress this one last word!) it seems rather clearly implied by the concepts I have set forth.

In his suggestion that East and West are distinguished in the respect that an Occidental concerns himself with the coordination of scientific understanding and Weltanschauung, whereas the Oriental does not do so (or not to the same extent) but, rather, easily accepts many different modes of understanding without a sense of contradictoriness—in this suggestion I think Professor Yosida is, in the main, correct. I can say this on the basis of my experiences in Japan. Yet, there are qualifications to be added to this statement, and an interesting complementarity to be brought out. The usual Westerner is, in fact, not concerned with such coordination to a really great extent; his concern falls far short of what it can fully be in consideration of the questions of the time. I believe it is fair to say that the nature of his concern is actually only this: he does not want to be caught missing a situation in which his logic and scientific precision can be applied. This kind of motivation can, and does, imply far less than "coordination with Weltanschauung". The Japanese, on the other hand, has in his background philosophy a basically universal and unified conception of reality. Yet, he accepts with ease many diverse points of view and lives comfortably with such a multiple amalgam. Can any explanatory note be given on this? I will venture a guess. I think there is at work here the error of believing that one is pursuing a unitary spirit of understanding when one is merely collecting, without any integration, one idea and another idea and yet another and another. And I think this state of affairs is intimately tied to the historical absence, in the Orient, of the spirit of precision in understanding, which it has been the West's task to develop. It is only with the attitude, methods and tools of precision that concepts can be studied, examined, melted down and reformed into a single, integrated whole. Failing this precision, the Orient has not been able to realize fully its unitary inspiration; it has gone off instead into a spurious activity. Matching this, the West, for its part, with its precision, has evolved to a myopic conception of understanding. It serves its vast numbers of clutched and clutching egos with the idolatry of understandingin-the-small; a new theorem here—but stay within "the field of mathematics"! a new model there-but stay within "the field of psychology"! Fields come

to be bridged, by efforts sometimes valiant, sometimes otherwise, and then the same story is repeated. The East on its side, and the West on its side—each of them stands alone as half of what could be. And these two halves are the complements of each other.

Let me close with a direct word in response to Professor Yosida's statement that I am "...too worried by the problem of Weltanschauung...". It is a little strong to say that I am "worried"; but this is not the main point. I wish to say to Professor Yosida that he is right; but I wish also to tell him—or rather, to reiterate to him—in what sense he is right. Science and Weltanschauung are not two different things to me. The problem of securing world peace, the problem of reducing human misery, both personal and collective, the problem of knowing what faith consists in, and what are its blessings and what are its curses—these are, to me, no less problems for solution through eventual precise understanding than are, for example, the problems of transplantation of vital organs into human beings. And precise understanding is precisely science.