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THE ACQUSITION OF KNOWLEDGE

(A discussion in dialogue form)

By

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Setting for the dialogue: Mantu meets Nisha in the realms of eternity where in all knowledge and truth make themselves manifest and discuss the philosophical questions of truth and knowledge. Mantu starts the dialogue on the question of "What is knowledge?" and after some length of discussion they arrive at an understanding of its parts.

I, Eternity, witnessed the discussion and I now relate it to mankind for their benefit and instruction.

Mantu: Greetings Nisha my companion. It is good to meet you again in the realms of Eternity.

Nisha: Salutations to you also my friend. Eternity our father is good to us. He has seen fit within himself to make all things manifest to us, that we may know them.

Mantu: But, Oh my friend, what is knowledge? How do we see into the eternities and obtain it unto ourselves?

Nisha: That is a very good question. It would seem to me that when we talk of knowledge we mean we have an awareness of facts, truths, and principles and that this awareness is understanding.

Mantu: Do you mean that knowledge is equivalent to understanding instead of a process by which we obtain and in the end attain it.

Nisha: Yes I mean that.

Mantu: Thou hast said rightly for the truth of this makes itself maifest to me intuitively and therefore can not be doubted.

Nisha: It can not be doubted of course my friend. That
which is always true never can. That which is never true
can not be doubted either. Whatsoever is contingent can
though.

Mantu: You understand my thoughts. They have made them-
selves manifest to you. That which is always true makes
itself manifest and when we become aware of it we have
knowledge. You said part of knowledge is an awareness of
facts. What do you mean by this my friend Nisha.

Nisha: An awareness of facts is simply an awareness of
the states of affairs entailed in actuality and possibility.
In actuality states of affairs are contingent but in reality
or all possibility they are always true, never true and
contingent.

Mantu: What do you mean by always true?

Nisha: I mean that which is tantologous or self evidenc-
ing.

Mantu: What do you mean by never true?

Nisha: I mean that which is contradictory or self refuting.

Mantu: But are not contradictions impossible? How then
can states of affairs be contradictory in all reality or
possibility?

Nisha: It would seem that all possibility would have to
be equal with all actuality for this to be the case.

Mantu: I don't see how that changes it any.

Nisha: In actuality things are contingent. In reality they

are necessary. In order for contradictions to be possible the states of affairs which make them impossible would have to be non actual and non possible.

Mantu: Do you think such a possibility exists?

Nisha: I am not sure let's return to this later.

Mantu: May we say that knowledge is an awareness of that which is always true, never true, and/or contingent in possibility and/or actuality.

Nisha: Yes we may.

Mantu: You also said that knowledge is an awareness of truths. What do you mean by truths?

Nisha: By truths I mean those things which correspond with the facts having truth values.

Mantu: But my friend you said facts may be contradictory can truths be contradictory?

Nisha: They can, relatively to different spheres of under-standing. If we take two different opposing spheres of truth and try to fuse these spheres they will be contradictory. However both will be true relatively.

Mantu: Could both be true absolutely?

Nisha: I think not.

Mantu: If they were both true absolutely would all things be true?

Nisha: I think so.

Mantu: Wherefore if we can find two relative truths that when conjoined are both true at the same time absolutely in a new sphere of truth which joins their relative spheres

into one contradictory absolutely true whole, all things would be true. Do you think such a possibility exists?

Nisha: I think not but if it did all things would be possible and all possibility would be equal with actuality.

Mantu: That would prove to be an interesting world my friend, lets put aside this for awhile and go back to what we were discussing earlier. Nisha from what we have just said may truths be tautologous contradictory, and contingent at least relatively?

Nisha: Yes they could, if we were to compare different spheres of truth or worlds one with another.

Mantu: May we then assume that knowledge is an awareness of truths and that an awareness of truths is also an awareness of the tautologous, the contradictory, and the contingent?

Nisha: That we may.

Mantu: May we then assume that the awareness of facts and truths relative to their sphere is the same thing?

Nisha: That we may also.

Mantu: You also stated my friend that knowledge is an awareness of principles. What do you mean by that, Nisha?

Nisha: I mean that principles are those things which manifest unto us how different worlds or spheres of truth are related.

Mantu: My friend it would seem to me that if two spheres were related they could be either contingent on each other or non contigent on each other.

Nisha: What do you mean by non contingent on each other
Mantu?

Mantu: Only that they contradict each other and are there-
fore independent of each other causally and logically.

Nisha: My friend it would seem that once again we have
arrived at the belief that knowledge is a awareness of the
contradictory, and the contingent. I would add again the
tautologous to this because when we are aware that a harmony
exists between all the worlds in a certain point we also have
an awareness of the tautologous principles. Knowledge it
seems breaks down to an awareness of the tautologous, the
contradictory, and the contingent.

Mantu: You are right my friend. Facts, principles, and
truths, all become different names for the same things. It
would seem to me Nisha that knowledge is understanding these
three things and where they define the limits between spheres
of truth relatively and where no limits exist absolutely.
Knowledge it seems would also be an understanding of the
difference between the relative and the absolute. Do you
agree my friend?

Nisha: I do. Mantu it seems to me that contradictions
show the differences separating the spheres and that contingen-
cies make up the spheres and that tautologies unify the spheres.

Mantu: Very good that is my understanding also my friend.
But what would this tell us about the necessary and the contin-
gent?

Nisha: I believe that it would tell us that necessity hold up the spheres and separates them and contingency constitutes the difference within each sphere.

Mantu: How would necessity separate the spheres Nisha?

Nisha: Contradictions are necessary separations due to the laws of logic. Separation becomes necessary because of the law of Contradiction without a separation contradictions would be true absolutely.

Mantu: Very good, Nisha but what are all the contradictions based upon?

Nisha: It would seem to me that the contradictions result from the differences in the contingencies from sphere to sphere. When we try to harmonize two spheres where harmony is impossible due to the divergent contingencies within them.

Mantu: But Nisha what gives the contingencies in the spheres their truth values?

Nisha: Deductive relations.

Mantu: Can you conduct a sound deduction without at least one "true" premise?

Nisha: No.

Mantu: From this it follows necessarily that there must be a true premise or "if you will" a tautology in the sphere in order to derive the truth values of the contingencies. Thus it would follow that all contingencies must ultimately be based upon the tautologies underlying the spheres where then,

Nisha, can there appear contradictions from deductions of the contingent relations based upon the necessary tautologies that are the same and are inherent to all spheres of relative truths?

Nisha: It would seem that contradictions are impossible.

Mantu: Nisha, have we not overlooked the fact that contradictions as well as tautologies are necessary truths due to their necessary truth value?

Nisha: That we have. It would follow from that, that contradictions result among the sphere from basing the contingencies in the spheres or contradictions in place of tautologies. Since contradictions are also necessary relations.

Mantu: In the relation of inclusive or we find the relation not A or A when transposed by implication becomes ȯf A, then A which is a tautology. Which is necessarily true. What would be the problem in the inclusive or relation here?

Nisha: It could seem to me that when one tried to base a contingency relation on this tautology they they have overlooked the possibility that under the inclusive or relation if not A and A were both true it still would be true. But this is a contradiction and is clearly false under the relation absolutely.

Mantu: Could we say then my friend that one has turned an inclusive or relation into a tautology when in fact it should have been turned into a contradiction namely A and

not A. There seems to be a problem with using the inclusive or relation when dealing with only one term. Would you say the problem is here or in another place?

Nisha: I would say that the problem seems to result from thinking that a contradiction could be true absolutely and thus not sensing that any variable can only have one interpretation at any given time. Thus having a case where A and Not A are both true at the same time would seem impossible.

Mantu: Could we say that relativity must be over time and not at any given time.

Nisha: We could. It would also appear my friend that all relativity could be based upon this misapplication of basing contingency or necessary contradictions that appear to be tautologies.

Mantu: Would it follow from this that relativity and contradiction between the spheres is impossible unless contradictions are necessarily true?

Nisha: It would my friend. But clearly there are relative spheres and conflicts between the spheres.

Mantu: It appears only that there are relative spheres. If the law of non contradiction is true there can be no relative truth at any given time. All that appears to be relative would be based on false premises. But if the law of non contradiction was not a necessary relation and in fact false, relative truths would be possible of any given time and in effect all things would be possible. Do you

understand what I mean by all things would be possible?

Nisha: You mean that if there were no absolute truths all things would be relative and all things could be true and possible and that which is possible could only be that which is actual.

Mantu: You understand me completely. May I say as well that the impression that relative truths exist at any given time is based upon faulty comprehension of the absolute truth and mans misinterpretation of the states of affairs. This is also a type of false premise based notion or imperfect conceptualization of notions.

Nisha: But Mantu can not relative be used to denote an absolute truth in part also?

Mantu: Yes it may and in this sense relative truths and relative knowledge is a subset of absolute truth and knowledge not its opposite. But the relative used in this sense would in effect be a smaller sample of the absolute and be a smaller body or sphere of absolute truth. Relative used in this manner I take to be a faulty use of the word.

Nisha: Would it not be the case that on the condition that either all things are absolute or all things are relative at any given time, in the exclusive sense, that it would follow that there is only one sphere of truth and not many independent spheres; assuming of course that all things are absolute.

Mantu: That it would.

Nisha: Would it not also be true that if all things are

relative there would be as many spheres of truth as there
are truths?

Mantu: That it would also.

Nisha: Absolutes would give rise to a fixed and rigid
description of things but relatives over time would give
rise to a mechanistic or causal description of things.
Relativism may give rise to a teleological explanation
of things.

Mantu: Very good Nisha. I agree fully with your observa-
tion. Absolutism implies how things are but relativism may
deal also with why things are. Absolutism also gives rise
to having fixed "values" where relativism does not. But
Nisha my friend we have come to the conclusion that either all
things are absolutely true or all things are relative but
what have we based this conclusion upon?

Nisha: I don't understand what you mean Mantu?

Mantu: When I asked you what gives the contingencies
in their spheres their truth values? "What did you answer?"

Nisha: I understand you now our division of knowledge
into the two extreme possibilities - all absolute or all
relative in the exclusive sense is based upon the assumption
that deduction is the process by which the truth values
of the contingencies contained therein may be derived due
to the premisis given.

Mantu: This assumption, Nisha, has lead us to conclude
these things certainly. By what other method can we use
to derived the truth of things besides deduction?

Nisha: Induction.

Mantu: Right, could there be any other method to derived
the states of affairs besides deduction or induction?

Nisha: I think not.

Mantu: What about a priori and a posteriori distinctions?

Nisha: I would say they are predicates describing aspects
of the method but are not the method themselves.

Mantu: What about synthetic and analytic distinctions?

Nisha: I would say they describe the propositional form
and structure of our observations of the states of affairs
but do not describe the method by which we access how states
of affairs are. The relationships between states of affairs
constitutes truth or facts and our awareness of this consti-
tutes knowledge.

Mantu: I agree with your observations my friend we must
return later and discuss these distinctions but first we
must conclude our discussion on induction and deduction.
Would induction used as the process of deriving the truth
of things change any of our conclusions we reached about
either things are absolute or they are relative but not
both?

Nisha: It would not. But we must realize that if we use
induction as the method for ascertaining the truth of things
to give us knowledge. That induction is based upon a belief
that things are absolute and truth is constant. Induction
becomes useless as a method of ascertaining truth unless

things are uniform in all spheres and subsets of truth and understanding.

Mantu: It would seem if we are to understand anything about the states of affairs in a "valuable" way over time there must be some absolutes underlying the relative nature of contingency over time and they must be universal and fixed in nature. Furthermore all causality and contingency must come to some point of necessary tautologous states of affairs upon which all subsequent things would be dependent. Relatively must proceed in an orderly manner.

Nisha: I agree Mantu my friend. If thing were relative they would not say anything without some type of ordering of them. There could be no real "value" in trying to access how things were and are and how they are related in time. Time would become just one thing after another with no necessary relationships between events. All things would become functional not valuable. If man were free it would not make any difference in a relative world void of underlying absolutes because acts would have no connections with any type of consequence. There could be no freedom in this   ‑ situation because there is no responsibility and you can not make sense of freedom without responsibility. Where there is no constancy or causal connections knowledge of anything but mans absurdity becomes impossible. No real "valuable" knowledge would be possible. Science, Ethics, History, Arts, Psychology, and civilization in general would be futile. All "so-called" civilization would be one big

accident created by chance events. When casualty is dropped
from the picture even simple manufacture of a chair is a
great miracle when there is no causal connection between
shaping the materials a step at a time and the resultant pro-
duct a miracle has indeed taken place. Furthermore_____

Mantu: Nisha my friend excuse my butting in like this
but now you've caught the vision you could go on forever
unless I stopped you. I agree totally with your observations.
In assuming that induction is a method by which we may access
the truth, facts and principles relating things we have
assumed that absolutism is the way things are in truth. It
would be futile to continue our discourse unless we at this
point assume that relativism is wrong as the ultimate base
and absolutism is its only alternative as the ultimate base
and is right. We would have nothing further to discuss
from this point on if we assumed the converse. It would
make no sense to talk of things void of causal relationships
and indeed all that could be said would be that "things are",
they contradict and are meaningless and in effect that life
is absurd.

Nisha: I agree fully lets finish our discourse and when
we arrive at its conclusion access if our assumption makes
the truth of itself manifest sufficiently that it will no
longer be an assumption but a tautologous self manifesting
absolute truth. Let us proceed.

Mantu: Let us return now to questions of analytic and
synthetic distinctions. What did we decide that they had

reference to?

Nisha: We came to the conclusion that they are structural types or forms we give to our observations about the "states of affairs" and not that they were the method by which we access the current states of affairs.

Mantu: How does the structure of a synthetic proposition differ from the structure of an analytic proposition?

Nisha: Analytical propositions are biconditional in structure where as synthetic propositions conditional in structure.

Mantu: Let us discuss analytical propositions first and then we will return to discuss synthetic propositions. What do you mean Nisha when you say analytic propositions are biconditional in structure?

Nisha: I mean that they are definitional and the meaning is self-contained in the proposition and futhermore that they are always true and this is evidenced by their structure, content, and meaning alone.

Mantu: Could you illustrate this with analytic propositional examples for the sake of clarification, Nisha?

Nisha: An example of an analytic proposition would be arithmetic equations for example 2+3 = 5 is an analytic proposition. It is definitional clearly 2+3 is equal to 5 is of a definitional nature and the equation is self contained. The structure, content, and meaning by themselves-evidence clearly its tautologousness. The word 'biconditional' de-notes also that as well as 2+3 = 5 being true 5 = 2+3 is

true.

Mantu: Very good. But can you give me an example of
analytic propositions of other than an arithmetic nature?

Nisha: Linguistic definitions are also of an analytic
nature. For example the proposition stating, "Men are the
male of the human species and women are the female of the
human species" is an analytical proposition. It is self
evidencing, self contained, and tautologous. It is also
clearly definitional and both side of the conjunct are
clearly biconditional in nature.

Mantu: Would the statement, "Pens are writing utensils"
in your estimation be analytical in nature?

Nisha: I would think so.

Mantu: But Nisha, it is not biconditional in nature,
clearly pens are writing utensils, but writing utensils
are not pens. Can it therefore be an analytical proposition,
or is the criterion that analytical propositions must be
biconditional mistaken?

Nisha: I would think that analytical propositions need
not be biconditional in nature and that when I said they
were that I was mistaken.

Mantu: How then, Nisha, can we distinguish between analytic-
al and synthetic propositions? For, if both are conditional
in nature your first explantion of how they differ is not
adequate to determine the difference between them. What I
suggest that we do at this point is to examine some synthetic
propositions and then return to this question. For clearly

it appears that analytical propositions are conditional in nature and if synthetic propositions are also conditional in nature then we must return to distinguish as to whether they differ in how they are conditional or if they do not differ at all in this respect. Nisha, would you please tell me what you conceive synthetic propositions to be. That we may get started in the comparison and contrast of the two propositional types.

Nisha: It would seem to me Mantu, that synthetic propositions are propositions which are not self evidencing, not self contained, not definitional, and they are contingent when they stand alone.

Mantu: Very good, my friend. Could you give me some examples of synthetic propositions?

Nisha: The proposition "The glass contains no liquid" is an example of a synthetic proposition. It is not self evidencing in nature. One must look and see if indeed the glass is void of liquid to assertain its truthfulness. It is contingent when it stands alone upon whether there is indeed no liquid contained in it and its truth is conditional upon this. The form of the porposition alone is not enough to determine its truthfulness and clearly glasses are not by definition void of liquid.

Mantu: Very good Nisha, my friend, could you give me an example of synthetic propositions in mathematics?

Nisha: The proposition "line XY is 3 units long" is a snythetic proposition. It is not self evidencing in nature,

clearly one must look at line XY to determine if it is
indeed 3 units in length. It is contingent and conditional
on the fact that there is indeed such a line XY and that
it is indeed units in length. The proposition itself can
not stand alone and all such lines XY are not 3 units
in length by definition.

Mantu: Bravo; it seems to me that you have indeed clearly
assertained the difference between synthetic and analytic
propositions thus far. But we still have to resolve the
business about the biconditional or conditional aspects
of analytic and synthetic propositions. Let us return to
the proposition "Pens are writing utensils" and examine
this analytical proposition more closely. Nisha, what do
you see as the difference between the antecedant and the
consequent of this conditional that prevents it from
being biconditional in nature?

Nisha: It would seem to me Mantu that pens are only
one of many writing utensils and that due to this the
conditional equation only works in one direction.

Mantu: How then could this problem be overcome?

Nisha: I would think that by clarifying the consequent
of the conditional by adding to it conjuncts we could
determine the criteria that makes a pen different from
other writing utencils. This would serve to make it bi-
conditional in nature.

Mantu: What other criteria could one conjoin to the criteria
writing utensils to make this proposition a biconditional?

Nisha: We could add the criterion that this writing
utensil uses ink. This it seems would suffice to make
this conditional analytic proposition into a biconditional
analytic proposition.

Mantu: Would you now tell me that there are conditional
and biconditional structures for analytic propositions?

Nisha: It would seem that there are.

Mantu: The conditional type analytic proposition would
seem to be a species-genus type conditional which does
seem to fit all the criterion of the analytic propositional
type.

Nisha: That appear to be the case.

Mantu: The biconditional analytic proposition would
seem to be definitional in the strict sense where as the
conditional analytic type propositions would seem to be
a classificational definitional type of proposition.

Nisha: That also appear to be the case.

Mantu: What would seem to be the distinction, Nisha, in
your estimation, between the conditional relation in the
anaylytic and synthetic proposition classifications.

Nisha: It would seem to me Mantu my friend, that the
relation between the antecedent and the consequent in the
analytic propositions have a necessary truth relationship
whereas the conditional relationship in the synthetic
propositional form have a contingent truth relationship.

Mantu: Very good Nisha, it would seem to me that another
qualification one could place on analytic propositions is

that they are necessary and another criteria of synthetic propositions is that they would be contingent. Thus it would seem that we have adequately examined analytic and synthetic propositions in isolation. But Nisha my next question is could what we have just established as a criterion for isolated analytic and synthetic propositions, be applied also to groups of propositions and their structure as a whole?

Nisha: It would seem to me that it could. But what significance would this hold for us?

Mantu: It would seem to me that the logical structure of induction and deduction are related to this type of grouping and criterion. I think it would be beneficial for us to analyze this relationship and see to what extent this is true. First however we need to discuss a priori and a posteriori distinctions. Nisha, what are the distinctions between a priori and a posteriori references and what did we decide that they were. Were they the method by which we gain knowledge or did we decide they were predicates of it?

Nisha: We decided that a posteriori and a priori were pre-dicates of the method and not the method itself.

Mantu: What do we mean by a priori; Nisha?

Nisha: We mean literally "prior to" by a priori but it is used commonly to mean independent of experience.

Mantu: What characteristics are generally ascribed to a priori knowledge?

Nisha: It is viewed as necessary and is associated with knowledge independent of physical experience.

Mantu: What do we mean by a posteriori; Nisha.

Nisha: We mean literally "posterior to" by a posteriori but it is used commonly to mean after experience.

Mantu: What characteristics are generally ascribed to a posteriori knowledge?

Nisha: It is viewed as contingent and is associated with knowledge dependent upon physical experience.

Mantu: Can you give an example of a priori knowledge?

Nisha: Knowing before we experience it, that if we jump off the top of a building that we will fall is an example of a priori knowledge. Another example would be knowing how a scientific experiment would turn out before we experience how it will turn out is another example of a priori knowledge.

Mantu: Very good. Can you give me an example of a posteriori knowledge?

Nisha: Knowing after we have jumped off a building that we would fall if we were to do it again is an example of a posteriori knowledge. Another example would be knowledge based on the results of scientific experimentation.

Mantu: It might also be contended that a priori knowledge is not informative because it is necessary nature and trivial quality and that a posteriori knowledge is informative because of its contingent nature and non-trivial quality.

Do you think this is viable?

Nisha: Yes in regard to cause and effect provisions what
one has experienced is surely more informative and non-tri-
vial to him than what one has not.

Mantu: Let us return now Nisha, my friend, and discuss
the analytical and synthetical proposition groups or
chains and their relationship to deduction and induction.
Nisha, what do you see that a group of propositions would
be like that are analytic on the whole. Let us call this
group for reference's sake analytic propositional chains.

Nisha: Mantu it would seem to me that a group of pro-
positions composing an analytic propositional chain would
have the same criteria or characteristics as an individual
analytic proposition.

Mantu: For reviews sake what were those criteria, Nisha?

Nisha: The criteria for an individual analytic proposi-
tion which would also apply to analytic propositional chains
as a whole are: Firstly that they would be necessary in
character as a whole, second that they would be definitional
in character, thirdly that they are always true and are
self contained in content and structure, and fourthly
that the truth value of the conclusion is evidenced due to
structures following from the premises given.

Mantu: Would we need to add any other criterion to these
four due to our subject now being propositional analytical
chains instead of analytic propositions in isolation?

Nisha: I think we would due to the increasing complexity
of form.

Mantu: What do you think we would need to add as a new
criteria?

Nisha: I think we would need to add the criteria that
all of the propositions within the chain must be used in
coming to a conclusion based on the chain as a whole.
And also that if there be any contingent synthetic pro-
positions within the chain that they would need to be ful-
filled as to be part of the necessary inference of the
chain on the whole.

Mantu: Is this assembling of analytic propositions of
an arbitrary nature?

Nisha: No it is not; the assembling of any chain reflects
a sphere of truth and as such can not be arbitrary but must
be orderly and the components of it must be interrelated.

Mantu: I agree with you fully. What criterion do you
think would be necessary if we were to compose a synthetic
propositional chain in the same manner as we have composed
the above analytic propositional chain? Do you think such
a formalation would be possible?

Nisha: I would think the criteria for an individual
synthetic proposition would be the same as for a synthetic
propositional chain except adapted on the whole and I do
think such a formation possible.

Mantu: By way of review what are those criterion?

Nisha: The criterion are firstly that they would be non
definitional in nature, Secondly that they would be contin-
gent in character as a whole, thirdly that their truth
values are contingent and conditional and are not self
contained in the form and structure, and fourthly that
they are not self evidencing truths as a whole.

Mantu: Would we need to add any new criterion to these
four due to our subject now being synthetic propositional
chains instead of synthetic propositons in isolation?

Nisha: I would think that this would again be necessary
due to the increasing complexity of form and structure in
the chains.

Mantu: What do you think that we would need to add as
the new criterion?

Nisha: I would think that we should add the following
criteria. Firstly that there must be at least one proposi-
tion in the chain that is still contingent. Secondly
any conclusion would be based on the chain as a whole and
that the soundness of the inference would still be tentative
and subject to change due to the contingency factor, thirdly
and lastly that the chain would use all the available in-
dividual propositions both synthetic and analytic that
pertain to it to reach a conclusion.

Mantu: Do you think this last criterion should be added
to the criteria also for analytic prepositional chains?

Nisha: That I do.

Mantu: Very good I agree with your observations fully.
Has anything familiar struck you as rather odd about the
propositional chains?

Nisha: Not really what do you mean by odd?

Mantu: I mean that they correspond with the induction
and deduction methods and process?

Nisha: In what way do you see this correspondence?

Mantu: Do you remember that before our discussion on a
priori and a posteriori distinctions that I brought up
this same point that there seemed to be a relation and
we would later discuss this?

Nisha: Yes, I do remember this but I quite haven't made
the connection yet will you please tell me what you see
that I may become enlightened in this matter?

Mantu: Analytical propositional chains are equivalent
to deduction and synthetic propositional chains are equiva-
lent to induction. Does this connection clarify that
analytic and synthetic distinctions were predicates describ-
ing the method by which we gain knowledge namely induction
and deduction and not the method itself as we previously
agreed Nisha?

Nisha: Yes it does.

Mantu: Would it seem likely that all of our knowledge
could be divided into four groups based upon the combination
of analytic and synthetic distinctions and propositional
chains with a priori and a posteriori. The four types of

knowlege namely being synthetic a priori, analytic a priori, synthetic a posteriori, and analytic a posteriori?

Nisha: It would seem this division could be possible, but would not some problems be created by these divisions if our definitions are correct.

Mantu: What type of problems do you see arising from these groupings?

Nisha: Did not we define the predicate a priori as having necessity as one of its characteristics and contingency as being a characteristic of the synthetic structure?

Mantu: Yes we did.

Nisha: It would seem we have a contradiction here then. Furthermore, did not we define the predicate a posteriori as having contingency as one of its characteristics, and necessity as being a characteristic of the analytic structure?

Mantu: Yes we did.

Nisha: It would seem that we have a contradiction here also would it not?

Mantu: It would seem such; what do you suggest we do then? Clearly either our definitions are wrong or the seeming problem could be removed by making some kind of perspective distinctions.

Nisha: I think it would be wise to investigate these types of knowledge and see if the problem could be solved due to perspective before we conclude that our definitions are wrong.

Mantu: I agree with you. Let us proceed in the follow-
ing order of discussion: first, synthetic a priori, second
analytic a priori, third, synthetic a posteriori, and
fourth analytic a posteriori. What constitutes synthetic
a priori knowledge?

Nisha: Synthetic a priori knowledge is literally knowledge
before the fact through the synthetic method. This would
mean synthetic a priori knowledge is somewhat of an observa-
tional or inductive character. Hence it must come from some
kind of experience however because it is a priori it must
be independent of experience.

Mantu: It seems we have another contradiction regarding
synthetic a priori knowledge. What types of things consti-
tute this type of knowledge? It seems that describing its
characteristics keeps pointing towards a contradiction. What
has traditionally been seen as knowledge of this type?

Nisha: Immanuel Kant the formulator of this idea believed
that our innate knowledge of space, time, and value constitute
synthetic a priori knowledge.

Mantu: How could these innate impressions be contradictory
in the manner we have discussed or are the contradictions
only an illusion due to lack of separation by perspective?

Nisha: It would seem that these three innate impressions
are necessary in that all other concepts seem to be contingent
upon them and they would seem to be contingent upon our
sensory experience.

Mantu: What do you mean by saying that all other concepts are contingent on them?

Nisha: Only that they are the most basic type of knowledge and without them all other types of knowledge would be impossible.

Mantu: Could one say that having this type of knowledge is the most basic type of awareness of facts, truth and principles?

Nisha: I think one could.

Mantu: Would it be possible to generate all other types of knowledge from these three things alone or would more things be necessary to have another type of knowledge?

Nisha: It would seem from time and space considerations that the concepts which underline mathematics both arithmetical and geometerical could be generated.

Mantu: How so?

Nisha: The concepts of time and space could give rise to the concept of number, equality, existence, conjunction, and their opposites could be derived.

Mantu: How could these be derived?

Nisha: Through a process of exclusive disjunction or a division of time a duality could be arrived at namely past and present. From this the concept of "two" arises. From this the concept of "number" comparison yields the concept of "equality", by comparing all-time with past and present a type of contrast arises.

Mantu: Would not the concept of "conjunction" necessarily arise before the concept of "equality" could?

Nisha: It would seem that the concept of "conjunction" must arise as early as the concept of "division" because they are opposites.

Mantu: We have failed to account for the fact that opposites could not arise without a concept of "negation". Where would this arise? It would seem that the concept of "negation" could not arise from space and time alone nor from division alone. Division must have preceeded conjunction. Because one cannot conjoin anything if there only exists the concept of "one" namely all that is.

Nisha: It would seem that "negation" arose second in concept. It was preceded only by the concept of "existence" which is derived from space and time notions themselves.

Mantu: What order would one give to the concepts as they arise then in way of review?

Nisha: It would seem that a concept of "existence" must arise first, second a concept of "negation," thirdly a concept of "disjunction", fourthly a concept of "number", fifthly a concept of "conjunction", and sixthly a concept of "equality".

Mantu: This still seems arbitrary to me. It would it seems better to say that the concepts of "negation", "conjunction", "disjunction", and "equality" are inseparable and arise at once being only preceded by a concept of "existence" which is inherent in the concepts of "space" and "time" itself.

However Nisha during this discussion we have failed to bring the concept of "value" into play here Kant thoughts concept of "moral imperative" was synthetic a priori also, we have termed it value here. Could this explain any of thing about the arising of these things which we have after a concept of "existence"?

Nisha: It would seem in this concept of "value" is inherent a duality in-itself. It would seem that all these thing we have said arise from the synthetic a priori triune of space, time, and value are inherent in the concepts themselves.

Mantu: The only concept named which does not seem apparent in the synthetic a priori triune is the concept of "multiplicity" or "plurality" or concept of "number" beyond "two". How could this be explained?

Nisha: Suppose, Mantu , that we are aware that we have these three types of impressions would not the concept of "multiplicity" be inherent itself in the synthetic a priori triune and all things inherently inclusive within it?

Mantu: That it would. It would seem Nisha, that all mathematics can be built from the concepts inherent in the synthetic a priori triune. But what about language how could it arise.

Nisha: I don't quite understand what you mean. Could you expand on your question?

Mantu: What concepts seem to underlie language itself?

Nisha: The concepts of "logic" seem to underlie the structural concept of language.

Mantu: What are these underlying concepts?

Nisha: "Conjunction", "disjunction", and "negation", seem to be the major concepts of logic and all other concepts are expansions upon these.

Mantu: In mathematics the same terms have been renamed the addition, the subtraction, and the inverse functions have they not.

Nisha: That they have.

Mantu: Multiplication and division are more complex forms of these as complex grammitical structures are more complex forms of the linguistic foundation it would seem. Nisha, is all our knowledge ultimately based on language definitions and mathematic axiom or theoms?

Nisha: It would seem so. Mantu, would not this show that knowledge is indeed an awareness of facts, truths and principles if this is true?

Mantu: It would seem so ultimately. Are not all facts, truths, and principles a elaboration of the synthetic a priori triune in simplicity or complexity?

Nisha: It would seem such.

Mantu: Have we not over looked one concept that must arise if a degree of complexity is to be achieved?

Nisha: I don't quite understand what you mean. Which concept do you have in mind?

Mantu: It would seem to me Nisha, that any degree of complexity must require some type of ordering and grouping.

Can you see anyway how these concepts could arise from the
synthetic a priori triune?

Nisha: It would seem that these concepts are inherent in
the concept of "value" itself. The grouping must be done
or ordering of some sort must ensue due to a sense of
value.

Mantu: I would agree with you full in this point. Kant
believed that the "categorical imperative" of morality
was synthetic a priori - however we have termed this "value"
which is far more inclusive. Why do you think that we
have chosen this term?

Nisha: It would seem that this term includes moral value
as well as truth value connotations and is a more effective
expression to use as such. It grounds our ethical theory
as well as out truth theory.

Mantu: We have discussed how the synthetic a priori triune is
necessary and independent of experience due to its a priori
nature thus far but what about its synthetic character we
said all of it is contingent on sensory information and its
accuracy. Could you explain why we must link it to sensory
experience in this manner?

Nisha: It would seem that our sense impressions of space,
time, and value can be deceptive in some ways and that when
they are right the knowledge that follows from such must
also be necessarily right. But when they are wrong our
knowledge must be wrong in part and its truth becomes contin-

gent on our impressions as such.

Mantu: It appears seming our contradiction problems have been removed here due to perspective in regards to synthetic a priori knowledge.

Nisha: It seems, Mantu, that our base of knowledge is only as clear as our sense perceptions are. It would seem our five senses convey to us all knowledge also and that through them we have our awareness of truths, facts, and principles.

Mantu: Let's discuss each of the synthetic a priori triune more closely and their implications. First let's start with time. Do you think that carefully looking at what happens in time we could understand better absolutism and relativity?

Nisha: In what way do you mean?

Mantu: Could one consider time one of the necessities which underlie the spheres of truth and understanding?

Nisha: I think one could.

Mantu: Did we not decide that all truth must be of an absolute nature due to the fact that all truth results from the necessary tautologies that underlie the spheres of understanding? If so what would seem to follow from this?

Nisha: We did, and it seem to follow that at any time "T" all truth is absolute and of the same sphere. This would be due to the fact that a time perspective is associated with all of our knowledge.

Mantu: What would seem to be implied about relativity if this notion is correct?

Nisha: It would seem that relativity deals with comparison
of the facts, truth, and principles of different times.

Mantu: But what is happening in the present sphere logic-
ally has nothing to do with the occurences in past or
future spheres it would seem.

Nisha: If that is true, contradictions between spheres
could not occur because two spheres could not exist at
the same time. It would seem that relativity could only
happen between two times and consequently contradictions
could appear only over two separate times.

Mantu: Would you think that contradictions were impossible
in a state where time is sequential?

Nisha: It would seem such. However it would seem that
the law of contradiction would not necessarily hold in
a state where time was not sequential.

Mantu: Is there any such state?

Nisha: I have heard it theorized that in the fourth
dimension all time is present at once. It would seem that
contradictions that are made impossible by the sequential
nature of time would be possible and true in such a state
and all things would be true consequently there.

Mantu: In the third dimension we talk of actuality and
possibility but do you thing any such distinction would
be applicable in the fourth dimension?

Nisha: I would think not. In the fourth dimension it
would seem that all possibility would be equal to all actuality.

Mantu: It would seem we have found such a state that
we discussed in the earlier portions of our conversation
where in all possible things are true.

Nisha: But we exist in a third dimensional state so
let us leave this and go back to our discussion on
third dimensional time.

Mantu: We decided did we not that absolutions is due to
the fact that we live in the present in other dimensional
world and as a result there exists only one sphere of
truth, in actuality. Clearly possibility makes what
would happen in the future and is "actualized" to some extent
in the past. But we only have hopes of the future and memories
of the past both existing in the present. Could one say
that they are part of our present then?

Nisha: I would think not, but clearly they affect the way
we perceive the present and the way which we may act on
our present perceptions.

Mantu: I would agree with you. Let us leave this and
discuss the secon part of our synthetic a priori triune
namely space: Does our concept of "space" have any implica-
tions for the law of contradiction.

Nisha: It would seem that two different physical things
can never occupy the same space at the same time. Therefore
we must conclude that it is impossible for something to
be liquid and solid everywhere at the same time.

Mantu: It would seem that the law of contradiction here
is still based upon the sequential time motion in the third

dimension. It would seem that a concept of "space" by itself is not enough to create a notion of the law of contradiction.

Nisha: It appears that our concept of "space" gives rise to a material notion of the world and our concept of time gives rise to order and absolutism.

Mantu: What could our synthetic a priori concept of value give rise to?

Nisha: It would seem that it gives us a concept of order. Within this concept levels, ranks, and groups appear. This world is of an absolute nature at any given moment and is teleological.

Mantu: Very good I think we've said enough about the members of our synthetic a priori triune for the present. I perceive a problem in the notion that this triune generates all other things through.

Nisha: What is that Mantu?

Mantu: It would seem to me that this triune could only give rise to structural forms. It would seem that something is lacking here. What do you suppose it to be?

Nisha: It would seem that structures alone in mathematics could not give meaning it would also seem that they could not in language either.

Mantu: What then is missing, do you think?

Nisha: It would seem that the idea of concept formation or naming is missing.

Mantu: Do you think it possible for even structural concepts to arise without a process of naming?

Nisha: I would think not, it would seem that no concept could exist without some type of word or conceptualization of it, through some sort of 'symbol' for it. It would also seem that words, numeric symbols, and relationship symbols stand for the concepts named and that each meaningful expression of these has some sort of concept for which it stands.

Mantu: When sentences are generated would one need to assemble these meaningful symbols for concepts in a proper way for the sentence to have meaning on the whole?

Nisha: I would think so. Would then it be possible to say that these sentences have a synergetic value of sorts?

Mantu: What do you mean by synergetic?

Nisha: Only that the meaning of the whole is greater than the meanings of the sum total of the parts. Do you think that sentences have synergetic value then?

Mantu: I would think so. It would seem that before the concepts inherent in the synthetic a prioi triune could arise that we must have a process of concept labeling through words. Would the statement that in the beginning was the word and from it comes all things that pertain to knowledge be true?

Nisha: I think it would. But what of the numerical and relationship symbols we spoke of are they also from the

word?

Mantu: It would seem that these symbols stand for things
that can also expressed by words and seem to be a type of
short hand for their linguistic equivalents which preceeded
them. It would also seem that the concept and the word
which express it are inseparable.

Nisha: But how could this be must not these be a concept
to name before one can assign a word to it to name it?

Mantu: It would seem not but one could not have a concept
unless there was also a word to express it. It would seem
also that unless a concept is named to distinguish it
from all others that we can not tell it from all others
and how then can we have the concept?

Nisha: It would still seem to me that we may have the
concept without a word to express it and that we may see
words which we do not understand the concept for which
they stand.

Mantu: This would only be applicable to language used
in discourse between two people.

Nisha: What do you mean by the word "this" in you referece?

Mantu: I mean the case in which we see a word but do
not understand the concept that it symbolizes.

Nisha: Would it be right to say we see a word in reference
to discurse between two persons?

Mantu: No it would not. I meant we hear a word in discour
between ourself and one or more others. But in the event of

reading one could say he sees a word and the he does not understand the concept that it symbolizes.

Nisha: It would seem to me that this would have more to do with learning an existing language rather than generating a new one. Would you agree?

Mantu: Yes I would. The other case in which it would be possible to have a concept before we have a word to express it, would seem to have to do with generating a language, or new words in a language, or even not knowing the already extent word to express our concept. Would you agree?

Nisha: I would. But Mantu, it seems like we have a problem. It now seems that we have concluded that the 'word' is the generator of all things knowable, but did we not conclude before that the synthetic a priori triune was the generator of all things? Would it be correct to say the concept of naming is either inherent in the synthetic a priori triune somehow or else the very concepts of the triune were generated by the word exclusively?

Mantu: It would seem that indeed one of the two must be the case, but which is a good question. In generating a new language we have concluded that the concept appears before the word but in learning a language the word could appear before the concept.

Nisha: I would disagree with you. It would seem that in the early stage of learning an already extant language

that one must have a concept before one could discern
which word stood for it. Clearly also if later one heard
a word unfamiliar to him or saw such a word in print un-
less he understood the concept for which it applied in
some wordless sense he could not understand what the
word meant. From this it would seem that concept always
precedes word. It would seem that the synthetic a priori
triune preceeded the word or that the concept of naming
is somehow inherent in it.

Mantu: It would seem that we could perceive of things
and have concepts without a process of naming. The process
of naming seems to be related to interaction with others
where we need a common symbol to express our concepts.
Is there any sense to this claim?

Nisha: It would seem that we could not even logically
reason in our mind without a type of language or symbol
for our concepts. It would seem our concepts without some
process of naming could never rise above raw perception.
We would perceive of the existence of things but could
say nothing of them. The concepts all would deal with
physical perceptual concepts. It would also seem that
abstract concepts would be impossible for a person to have
in isolation, unless he invented some type of symbolism
to reason on the concepts in his mind. Concepts such as
"negation", "conjunction", and"disjunction" would be im-
possible as such without some process of naming.

Mantu: It would seem from this that the concepts are said were inherent in synthetic <u>a</u> <u>priori</u> triune would be impossible without a process of naming. It would seem that if this is so the process of naming is also inherent in the synthetic <u>a</u> <u>priori</u> triune. Would you agree with this?

Nisha: I would.

Mantu: What member of the triune would this be inherent in or would it be inherent in more than one member?

Nisha: It would seem that the concept of naming would become necessary due to the law of contradiction which stems from the nature of time. The law of contradiction would create groups or spheres and naming must follow.

Mantu: But Nisha would not the law of contradiction in itself necessitate that a process of naming be prior to it to create an abstract concept of negation which without which the law of contradiction could not be formed?

Nisha: It would seem such. Could then the process of naming be inherent to the synthetic <u>a</u> <u>priori</u> concept of "value"?

Mantu: It would seem that the concept of value is of a dual nature in itself which entails a concept of negation and therefore necessitates in its nature a process of naming.

Nisha: It would seem that all parts of language fromation namely, grammitical concepts, grouping, and naming (including concept and meaning which inherent in its nature) are all inherent in the synthetic <u>a</u> <u>priori</u> triune by its very nature. It would seem that all things spring from

the triune and those things which are included in its
nature, would you agree?

Mantu: I would, and futhermore I think there are a
few more things that must follow due to the inherent
nature of the triune. Let us discuss them.

Nisha: What else do you see as following from the inherent
nature of the triune?

Mantu: Did not we say that there exists a duality in the
concept of "value" in itself?

Nisha: That we did.

Mantu: We agreed that it would be impossible to have
two differing concepts without some type of symbol or 'word'
to differentiate between them. It would seem to follow
that we could not have our synthetic a priori concept of
value unless it was preceeded by some type of naming pro-
cess to differientiate value types. Would you agree to this.

Nisha: It would seem to follow, if what you have said
is true that because the nature of the triune involves
three different parts that the symbols to differientiate
those parts must exist also before we can have any idea
of the concepts of the triune. But I think that you have
overlooked the conclusion we reached that the concept and
the word can not be separated one from another. Further-
more differentiation and concept formation are inseparable
as well. It would also seem that my awareness of different
concepts would be impossible without some type of naming

process.

Mantu: Prior to any naming process it would seem that
all awareness would be only of that which is, and that
which is, is all that is. But we have termed our synthetic
a priori notions of space, time and value a triune. What
is implied by this word?

Nisha: The word triune implies that only one thing exists
but that it has three faces.

Mantu: Would the one seem to correspond with the 'une'
part of the word 'triune' and would the one be, that which
is?

Nisha: It would seem that this would be the case.

Mantu: Could it be said that the 'une' or one, namely that
which is, precedes the 'word' or naming process?

Nisha: We could say that.

Mantu: It would also appear that the 'Tri' portion of
the word triune is not realised until after the 'word'
or naming process devides the 'une' or one into three parts.

Nisha: It would seem that the 'une', being that which
is, is nameless when it existed before the 'word' and is
named only after it becomes 'tri' after the 'word' differient-
ates it. Thus we sense the triune after the 'word'.

Mantu: But the triune exists before the 'word'; unsensed
and undistinguished; as well as after, sensed and distinguish-
ed, it seems. It would seem than without awareness of truths,
principles, and facts which come through differentation

through the 'word' that there is no sensed personal existence
only unsensed undistinguished existence of that which is.

Nisha: Would it be right to say we have no sensed personal
existence until we sense how we differ from that which is
through the 'word'?

Mantu: This would seem correct. It would also follow
that we cannot sense existence of a personal good without
the 'word' which is our process of naming and distinguish-
ing.

Nisha: It would seem that concepts could differ from person
to person - would this seem likely?

Mantu: It would seem each person must be begotten through
a type of awareness into the world of concept, through the
'word'. It would also seem that a person could not learn
a public language unless he first had a personal language
of some sort to make some type of maping even if of a
vague sort from one to the other.

Nisha: Why would you say this?

Mantu: If one cannot have a concept without some way to
distinguish it namely by symbol or word - then one can not
learn a public language without inventing some sort of
personal language first, involving at least a similar
concept. Would it seem that we have a personal language?

Nisha: Cetainly a personal language of some sort must pre-
cede a public language. But it would seem that once we
come to have a public language that we each discard our

personal language - because its use is so limited.

Mantu: Could we say then that a public language has
a far greater scope of usage than would a personal language?

Nisha: That we could. But will you clarify what you mean
by personal language?

Mantu: By personal language I mean a language one invents
by oneself to achieve understanding about things around him
which is sacrificed after one uses it as a tool to learn
the already extant public language. However if one could
teach ones personal language to another we would have a new
public language.

Nisha: You mean by personal language a language only
employeed by its inventor to give the world meaning. Might
it be possible that new languages are invented when one
makes his personal language into a public language instead
of disgarding it when he learns an already extant public
language.

Mantu: That could be the possible basis for the different
language families already now extant. But this is purely
speculation. It seems also that our notions of the triune
is contingent or our sense perceptions. We decided when our
senses were not deceiving us that all our knowledge stemming
from our conception of the synthetic a priori triune must
also be correct, but when our senses were deceiving us
that the knowledge based upon this faulty conception of
the triune would be incorrect. In what way do you see that

our senses may deceive us in relation to our notions of
space, time, and value? Give me an example of time deception
first.

Nisha: We may say that we may be deceived in our notions
of time in two ways. Either time will appear to have
passed swiftly or slowly. We say that the time sure has
passed swiftly usually when we have been involved quite
extensively in what is taking place and are sympathetic
towards it or are enjoying it. We say "time sure is
passing slowly usually when we are not involved in what is
taking place around and are unsympathetic to it or are not
enjoying it. Our perception of time may differ from the
amount of time that has taken place in actuality.

Mantu: This seems to be a psychological type of deception.
Would you agree?

Nisha: I would.

Mantu: This deception seems to be based on a lack of
awareness of the facts, principles, and truths around us.
It would appear that deceptions in relation to time are not
really "deception" in the strict sense. But are awareness
problems which are knowledge problems. We do not preceive
what is the case because we are not aware of it. Would you
agree with this notion?

Nisha: I would. It seems that the problems in our knowledge
here is a problem created through lack of knowledge, or
ignorance. Our unawareness of actual time can be corrected

by looking at actual time elapsed.

Mantu: Could you give me an example of how our sense or notion of space can be deceived?

Nisha: Optical illusions dealing with illusions of space are one example of how our notion of space may be deceived.

Mantu: It would seem that when actual knowldege of the space concept is seen through measurement that our lack of awareness or ignorance is removed and we are no longer deceived and our faulty knowledge based on the seeming contradiction is corrected. Thus faulty notions of space and time are both corrected in the same manner. What is an example of how our sense of value may be deceived?

Nisha: Take for example the color red take the same color and put it against a dark background then put it against a light background. Along side the dark background it will appear less intense than when placed next to a light background. When placed longside the light background it will appear more intence than when placed next to a light background. Surely this is an example of how our notion or sense of value may be deceived. Intensity judgements are surely not judgements of a spatial or temporal nature. They must deal with some type of valuative judgement. Would you agree with this?

Mantu: I would. Do you see any way the deceptive nature may be removed from our concept of value, much like our notions of space and time can be separated from their natures?

Nisha: A subsequent measurement of actual intensity could show our ignorance of it. The deceptive appearance causing our ignorance, once removed, would give rise to real knowledge of value. Other examples could be deceptive. The problems in these areas could be cleared up in much the same way by accurate measurements which would dispel our ignorance and make our knowledge sure.

Mantu: Might we say that all knowledge of the synthetic a priori triune comes through our five senses. Could our senses be deceived also here and if so could you give examples?

Nisha: It would seem so. First lets discuss how our sense of sight might be deceived. We have already discussed optical illusions - which deal with part of our sense of sight. We have also discussed how these illusions may be removed.

Mantu: What about our sense of touch may it be deceived in any manner?

Nisha: An example of touch deception may be shown in the following way. First prepare three bowls of water one extremely hot, one warm, and one extremely cold. Second put you right hand in the hot bowl and your left hand in the cold bowl. Do this simultaneously. Third remove your hands and place them in the bowl of warm water simultaneously You will notice at this point that the hand that was in the hot water previously will appear to feel cooler in the

water than the hand that had been in the cold water. You will also notice that the hand that had been in the cold water will feel warmer that the hand that had been in the hot water. Thus the warm water will appear to be two different temperatures to you two hands. This is an illusion of the sense of touch.

Mantu: Could this problem be removed in the same way as the optical illusion problems. Namely by accurate measurement to dispel our ignorance and give us the knowledge?

Nisha: I think it could.

Mantu: Could you give me an example of how our sense of hearing may be deceived?

Nisha: We may hear a voice in the distance that we mistake for a friends because it is obscured by other noises.

Mantu: Would it seem that this could also be removed by getting more information by accurate measurement, giving us awareness and dispeling our ignorance creating true knowledge?

Nisha: It would seem so.

Mantu: Could you give an example of how our sense of taste can be deceived?

Nisha: When one eats something sweet after something sour it appears more sweet than if you ate the same thing immediately following other sweets. In actuality it is no more sweet in either situation.

Mantu: How could this problem be removed?

Nisha: It would seem that accurate measurement could dispel false appearance and thus give us true knowledge once again.

Mantu: Could you give an example of how our sense of smell could be deceived?

Nisha: When our sense of smell is obscured by a cold it can be deceived in that it will not be as sensitive to the odors arounds us. At this time we may mistake one odor for another which we may normally not.

Mantu: Do you think this false appearance could be removed once again by some type of more accurate measurement?

Nisha: I would.

Mantu: I think it would be interesting at this point to examine what implications the very structure of our language has for human freedom. What do you see in the question form's structure and meaning that might imply human freedom?

Nisha: Certainly questions of the class involving human choice in a response would seem to imply that we are free to choose our response.

Mantu: Could you give me an example?

Nisha: Certainly. It would make no sense to say such things as "Do you want a piece of cake?" if one could not answer affirmatively or negatively. The concepts of affirmation and negation in this case imply choice and choice implies human freedom. It would seem that this class of

questions in our language imply that human freedom exists.

Mantu: Would it be correct to say that if linguistic
symbols mirror actual states of affairs and the abstract
concepts represented therein represent actual relations
or possible relations between states of affairs that man
must be necessarily free in all things except not to be
free.

Nisha: This would seem to follow.

Mantu: Let us move on away from the synthetic a priori
knowledge class and our triune to discuss the second group
namely analytic a priori knowledge type. Nisha, what do
you see as the characteristics of this type of knowledge?

Nisha: Individual propositions of an analytic type would
fall here as well as analytic propositional chains. This
knowledge would be deductive in nature, necessary, and
based on reason alone. This type of knowledge is verifiable
in the strict sense because of its deductive nature. It
is of course based entirely on the synthetic a priori triune
or knowledge type.

Mantu: What types of things do you see falling into this
classification?

Nisha: It would seem that analytical proposition of a
definitional type involving equivalence, or genus species
type definition based on the concepts which arise from the
synthetic a priori triune are of this nature.

Mantu: Does this involve linguistic as well as mathematic

analytic propositions.

Nisha: It does. It involves propositions of arithmetic
in its various systems as well as the geometric axioms of
the diggerent geometric systems. It also involves all
analytic propositions of the arithmetic and geometry which
directly follow from this. It also involves the analytic
propositions of the various systems of language which de-
fine the relations of the concepts and their limits as
expressed in the word. These definitions being of a
species genus type as well as an equivalence type.

Mantu: Would you place words themselves in the analytic
a priori distinction?

Nisha: No I would not. Propositions can only be of a
sentence like structure. Propositions involve words and
their relationships or numbers and their relationships.
They can not be words or numbers or relators alone. These
things are thing-in-themselves. Kant called all synthetic
a priori knowledge concepts by this name. Clearly words and
the abstract concepts or non abstract concepts for which
they stand are things-in-themselves and therefore synthetic
a priori in nature.

Mantu: But Nisha did not we decide that the synthetic
a priori impressions were only three in number and a triune.

Nisha: That we did.

Mantu: How then has the triune become so many things?

Nisha: We also agreed that all things were generated by

the triune and inherent in its nature. These many things
are therefore part of the three and of the one for that
matter also it would seem.

Mantu: I would agree with you. Clearly a word or a re-
lator or a number for that matter cannot be a proposition
but must necessarily be a thing-in-itself. It would seem
that rational combinations of the things-in-themselves in
an analytic manner make up the class of analytic a priori
propositions and propositional chains. Would you agree
that this is the case?

Nisha: I would.

Mantu: It would seem that a person's analytic a priori
propostion formulations would be limited by the extent
to which a person's concepts of thing-in-themselves are
formed. Does this seem logical?

Nisha: It does.

Mantu: Could one form meaningful propositions of an
analytic nature without knowing the meaning of all the
things-in-themselves contained in the proposition?

Nisha: I would think not.

Mantu: Would it be right to say that all meaningful
analytic propositions are self evidencing in respect to
their value?

Nisha: It would. But clearly the meaningful proposition
is greater in meaning than the sum of its meaningful parts.
Would it be true also that all analytic propositions have
some synergetic value?

Mantu: Clearly this follows. It seems that our analytic
a priori propositions are based on the sum total of our
world-view and that our world view is the sum total of
our concepts of word, number and relators or things in
themselves. However the sum total of our concepts namely
our world view does seem also to have some synergetic value
above the sum of its parts. Would you agree?

Nisha: Yes I would.

Mantu: At this point I think we should move on and discuss
synthetic a posteriori knowledge. What are the characteristics
of this type of knowledge?

Nisha: We arrive at our synthetic a posteriori knowledge
through a process of induction. Hence synthetic a posteriori
knowledge involves synthetic propositions and synthetic
propositional chains. All propositions of a synthetic nature
are a posteriori and thus dependent on experience.

Mantu: But if all synthetic propositions are a posteriori
how then can we be justified in claiming there is synthetic
a priori knowledge?

Nisha: We said that synthetic a priori knowledge involves
knowledge of things-in-themselves. Things in themselves alone
can never be propositions in spite of the fact that they do
have meaning in themselves. It takes more than one thing-in-
itself to form a proposition. However sometimes a single
thing-in-itself can be uttered as a proposition.

Mantu: But how can that be possible if no thing in itself
alone can be a proposition?

Nisha: Due to context, other things-in-themselves are included in the connotations of the utterance of the single thing-in-itself.

Mantu: What can some of these things be that are implied by context?

Nisha: Certainly space, time, and value are thing-in-themselves that are necessary in every context and implied in the utterance. Other things could be implied as well according to the circumstances. If these things weren't implied no proposition would have been made.

Mantu: If there is no proposition made is there any meaning?

Nisha: Yes, the thing-in-itself has conceptual meaning that is understood even out of a propositional context. However it has no propositional meaning because it has no relation to other things-in-themselves. Remember propositions have a synergetic meaning above their components meaning in isolation as things-in-themselves.

Mantu: I agree with your observations fully. What follows from the inductive nature of all synthetic propositions and propositional chains?

Nisha: It would seem that all synthetic propositions are at best contingent as are synthetic propositional chains. All conclusions of a synthetic propositional nature are therefore at best tentative. Would it seem possible to justify by experience our analytic _a priori_ propositions?

Mantu: It would seem not. It would be also wise to
note that this is what the whole scientific method for
justification tries to do. Since the method is invalid
deductively it seems that we could never be sure of anything
that it claimed to be justified. All answers therefore are
at best tentative in the justification process of science.
Nisha, could we say the scientific method is somehow linked
to the four types of knowledge and that various parts of it
correspond with them up to this point?

Nisha: It would seem possible, but what correspondence
would you suggest?

Mantu: Observation, the first step of the scientific
method, seems necessarily linked to synthetic _a priori_
knowledge impressions. Observation, tells us nothing in
itself propositionaly until we create propositions to give
it synergetic propositional meaning, hence giving some
semblance oforder to our world. These propositions we
create to give our observations order are called hypothese's.
Hypotheses formation corresponds with analytic _a priori_
knowledge formation. The scientific terminology can be
broadened to all fields when one realizes hypotheses corre-
spond with _a priori_ analytic knowledge. Nisha, could it
be said that these two types of knowledge and their
scientific model equivalents all deal with things independ-
ent of experience or prior to experience?

Nisha: Yes we could but this is entailed by the word _a priori_

which is predicated of them.

Mantu: Would it seem that experimental results and our conclusions are always based on experience.

Nisha: It would. I still don't see where this is leading though.

Mantu: We have said that when our hypothesis corresponds with a priori analytic propositions and when we try to ascertain their validity through experimentation our conclusions based on this method will be a posterior. Would it seem that a case of experimental hypothesis affirmation or experimental hypothesis negation of our theory would be possible?

Nisha: It would.

Mantu: We have said that experimental hypothesis affirmation is done through a method of induction and have since termed it all tentative in nature, because its form is deductively involved. To what does a case of experimental hypothesis negation or denial correspond?

Nisha: It would seem that experimental negation must be deductive in character. It is also a posteriori in character and hence it must be part of the a posteriori analytic knowledge group.

Mantu: Would it be correct to say it is a part of the group or would it be more correct to say that this type of knowledge gained by experimental hypothesis negation is equivalent to a posteriori analytic knowledge?

Nisha: I think it would be correct to say the latter.

Mantu: Does it seem clear now that the four types of knowledge correspond exactly with the four parts of the the scientific method?

Nisha: It would seem such.

Mantu: Would you agree then that they do correspond in the manner described?

Nisha: I would.

Mantu: Now I think we had better move on and discuss analytic a posteriori knowledge. Nisha, we have assigned analytic a posteriori knowledge a correspondence with experimental hypothesis negation. But what can we list as its characteristics?

Nisha: That it is necessary and contingent, informative and non informative, and that it is dependent on experience and not dependent on experience.

Mantu: But these appear to be contradictory. Can these seeming contradictions be reomoved by perspective distinctions as they were in our case of synthetic a priori knowledge?

Nisha: It would seem that they could.

Mantu: How so?

Nisha: Analytic a posteriori knowledge is informative in that it tells us what is not the case. It is non-informative in that it does not tell us what is the case directly. It is dependent on our experiences of what is not the case. It is necessary because of its analytic propositional

structure. It is contingent due to its <u>a</u> <u>posteriori</u> character.

<u>Mantu</u>:   What types of things would fall in this class of knowledge?

<u>Nisha</u>:   Knowledge gained through experimental hypothesis negation. It would also appear that indirect confirmation of a hypothesis falls in this class of knowledge.

<u>Mantu</u>:   What do you mean by indirect confirmation of a hypothesis?

<u>Nisha</u>:   I mean something like Hempel's Raven paradox. Where one confirms indirectly that all ravens are black by looking for non-black non-ravens.

<u>Mantu</u>:   This seems rather strange. Certainly it is logically valid, but does he give any other examples that would not seem so strange.

<u>Nisha</u>:   There is the case that one may indirectly confirm that all sodium salts burn yellow by burning things other than sodium salts and seeing that they do not burn yellow. Certainly without the process of indirect confirmation science would be impared greatly. However indirect confirmation goes on not only in science but in all other disciplines as well.

<u>Mantu</u>:   This type of knowledge is indeed important. Earlier we discussed the notion that the concept of value in our synthetic <u>a</u> <u>priori</u> triune grounds our ethical theory. Could we say that the scientific method could be applied to

our ethical theory as well?

Nisha: I would think it could.

Mantu: In what way do you suggest that we do this?

Nisha: It seems that we have concepts of moral value
namely goodness and badness as things in themselves. We then
generate hypothesis about moral behavior in the form of
rules or moral definitions these it appear are analytic
a priori propositions. Sometimes, and in fact quite
often, we try to verify these moral hypothesis by experiment-
ation. However experimental hypothesis afirmation is always
done on inductive level and by doing what our rules say is
right we can never prove to ourselves certainly, that they
are right. We then try a process of indirect confirmation,
or process of experimental hypothesis negation, that proves
to our mind certainly through the deductive method that they
are true.

Mantu: It seems likely that there is a cost in verification
by the indirect method. Do you sense what I mean?

Nisha: No, could you give me an example that will clarify
what you mean?

Mantu: What would constitute an indirect confirmation
proof for the moral hypothesis murder is wrong?

Nisha: Looking for things that aren't murder and aren't
wrong.

Mantu: What would constitute an experimental hypothesis
negation giving us new knowledge?

Nisha: A case where in murder is right. I still don't see
what your getting at by saying there are costs in the method

Mantu: Our analytic a posteriori comes to us at times by
an indirect proof in the deductive process. Could you
review the indirect method of conducting deduction for us?

Nisha: The indirect method calls for assuming the conclu-
sion is false and then working with the conclusion and the
premises until you find a contradiction from which you
can logically infer that the conclusion was indeed wrong.

Mantu: Very good. What would an assumption of the con-
clusion being false entail.

Nisha: I don't understand what you mean. Could you clarify
this?

Mantu: I mean that it would entail synthesizing other
premises that follow from it until we reach a contradiction
with our given premises or other premises that have been
generated from them. We must also set up tests to try to
prove our negated conclusion correct. If this were not
done it would mean that we were not taking our negation of
it seriously. It would mean that if we did not take the
negation seriously we could not generate things that would
follow from the negated conclusion. This means we could
never come up with a contradiction which would tell us
the conclusion we were correct initially. Do you see any
implications for this in regards to tests for our ethical
theory?

Nisha: It would seem that the conclusion 'murder is wrong'. when negated would become 'murder is not wrong'. To conduct a test of this we would kill someone, and in so doing arrive at a contradiction and prove to ourselves that indeed murder is wrong, indirectly.

Mantu: What does this imply concerning the problem of the weakness of the will?

Nisha: It would seem that one can never prove his ethical theory is true by having it hence the weakness of the will may be seen as an attempt to prove ones ethical theory is correct by violating its tenents.

Mantu: It would seem that analytic a priori knowledge by indirect proof is very costly when applied to ethical concepts or for that fact to other propositions which give our world meaning. What would be the effect if everyone were to try to prove the moral axiom 'murder is wrong' by the indirect method?

Nisha: It would seem that one person must ultimately be killed before he could prove it, and in the end, there would only remain one person living after everyone else had attempted the proof. This is indeed a rather costly proof.

Mantu: What implications does this have in regards to faith?

Nisha: It appears that we can never prove our ethical theory without violating its axioms, hence it appears also that in order to have certain knowledge it must involve suspended belief for some length of time, or perhaps even disbelief. It appears that the weakness of the will is an

abandonment of faith for rational certainty and knowledge.
Hence it also seems that certain knowledge is inferior to
probable knowledge. It appears however that this is the
case only a posteriori. A priori all knowledge is certain
but is arbitrary in that our concepts are only certain
because we regard them as such because of the way we define
them. This is due to our organization of our world. It
being a synthesis of our personal language concepts with
our public language concepts.

Mantu: But Nisha, I though we said one disgards his per-
sonal language when he learns the public language already
extant. How can our world be a synthesis of the two?

Nisha: In learning the public language our personal language
concepts are the basis on which we learn the public language
concepts. This mapping will differ from person to person.

Mantu: To what mapping are you referring?

Nisha: The mapping of public terms on to personal terms.

Mantu: Yes, but if we abandon our personal language after
we learn the public language how would this mapping remain?

Nisha: Once we abandon the personal language the concepts
of it remain but in the public language terms. Hence the
same term in our public language differs slightly in meaning
from person to person. This is due to the fact that no two
people had the same personal language. Hence their use of
the public language must differ.

Mantu: You mean then that although the personal language

is abandoned, a good deal of its concepts carry over into our use of the public language, and hence our world is a synthesis of the two.

Nisha: Yes, that is what I mean.

Mantu: It seems that we are nearing the end of our discussion. Does knowledge as we have discussed it only apply to knowledge in the Platonic sense namely as free, justified belief or does it apply to all other uses of the word as well?

Nisha: Knowledge as we have discussed it applies to all uses of the word not just the Platonic sense of the word.

Mantu: Could you explain the other uses of the word to know and how they fit into this four part scheme of knowledge?

Nisha: When one says "I know X" he may mean one or any of the following: "Don't challenge me about X", "I am absolutely certain of X", "I am familiar with X", "I am aquainted with X", "I recognize X", "I can predict things about the behavior of X", "I know that X is the case", "I know how to do X", or "I knew X in the "carnal" sense". When one defines knowledge as an awareness of the facts, truths or principles as we have all of these uses of the word are provided for in the definition. We have said what is the case for a person is what constitutes the facts, principles and truths in his world view. It should be noted also that what is not the case can also be specified

as facts, principles and truths in a person's world view.
Since world views differ from one person to another what
a person may claim to know will also likely differ. In
any case when a person claims he knows something he claims
his is aware of the facts, truths, and principles relating
to it. Thus he is saying, in effect: " I am certain of X,
don't challenge me on it," "I'm familiar with it, am aquaint-
ed with it, I recognize it, and I know that it is the case."
Mantu: It seems that these things can easily be seen to
fit into the scheme of ours; but you have not shown me how
when one say "I know X" meaning that I can predict things
about X's behavior. I know how to do X, or I knew X in the
carnal sense fit into this scheme.
Nisha: When we say we know something meaning we can
predict things about its behavior we are simply doing an
induction by innumeration based on our experiences and
coming up with a conclusion about how X will behave the
next time in similar circumstances. When says "I know
X" meaning I know how to do X they in effect are saying "I
know the principles governing activity X, hence I can perform
it if I will."
Mantu: That is good, but you have still not accounted
for the use of "I know X" meaning I knew X in the carnal
sense. Could you do so.
Nisha: When one says "I knew X" meaning I knew X in the
carnal sense they are in effect saying that it is the case

that they performed an activity of a "carnal" sort with
person X. Hence it is just a complex way of saying that
something is the case. We have already discussed how this
use fits our definition.

Mantu: It seems that we have finished our discussion on
knowledge. Perhaps some time we will have to discuss the
four classes of it more in depth.

Nisha: I agree.