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The Acquisition of Knowledge (A discussion in dialogue form)

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THE ACQUISITION OF KNOWLEDGE
(A discussion in dialogue form)

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Alva D. Mackay
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 manifest 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 themselves 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 evidencing.

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 understanding. 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 aware­
ness 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 therefore 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 contingencies 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 contingent?
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 contra-
dictions 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 re-
lations.

Mantu: In the relation of inclusive or we find the re-
lation not A or A when transposed by implication becomes
of A, then A which is a tautology. Which is necessarily
ture. 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
ture. 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 man's 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 observation. 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 premises 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 derive 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 constitutes 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 product 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
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 whereas 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 furthermore that they are always true and this is evidenced by their structure, content, and meaning alone.

Mantu: Could you illustrate this with analytic proposition-al 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' denotes also that as well as 2+3 = 5 being true 5 = 2+3 is
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 analytical 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 ascertain 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 proposition 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 synthetic 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 cannot 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 asserted 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 utensils. This would serve to make it biconditional 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 analytic 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 predicates 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-trivial 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 propositions 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 proposition 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 propositions within the chain that they would need to be fulfilled 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 contingent 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 propositions 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 proposition 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 individual 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 equivalent to induction. Does this connection clarify that analytic and synthetic distinctions were predicates describing 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
knowledge 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 following 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 observational 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 constitute 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 underlie mathematics both arithmetical and geometrical 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 preceded 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 grammatical 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 our 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 logically has nothing to do with the occurrences 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 think 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 implications 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 priori 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 preceded 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 reference?

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 discourse between two persons?

Mantu: No it would not. I meant we hear a word in discourse 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 a priori 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 a priori 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 a priori 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 formation namely, grammatical concepts, grouping, and naming (including concept and meaning which inherent in its nature) are all inherent in the synthetic a priori 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 furthermore 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 preceded by some type of naming pro­
cess to differentiate 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 differentiate
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
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?

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

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

It would seem that this would be the case.

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

We could say that.

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.

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' differentiates it. Thus we sense the triune after the 'word'.

But the triune exists before the 'word'; unsensed and undistinguished; as well as after, sensed and distinguished, it seems. It would seem than without awareness of truths, principles, and facts which come through differentiation.
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 distinguishing.

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 mapping 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: Certainly a personal language of some sort must precede 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 employed 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 discarding 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 perceive 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 knowledge 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 alongside the light background it will appear more intense 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 let's 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 your 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 than 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 friend 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 around 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 different 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 define 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 relator 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 proposition 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?
Man tu: 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.

Man tu: 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.

Man tu: 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.

Man tu: 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 propositionally until we create propositions to give it synergetic propositional meaning, hence giving some semblance of order to our world. These propositions we create to give our observations order are called hypotheses. Hypotheses formation corresponds with analytic a priori knowledge formation. The scientific terminology can be broadened to all fields when one realizes hypotheses correspond 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 independent 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 posteriori. 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 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 removed 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 a posteriori character.

Mantu: What types of things would fall in this class of knowledge?

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

Mantu: What do you mean by indirect confirmation of a hypothesis?

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

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

Nisha: 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.

Mantu: This type of knowledge is indeed important.

Earlier we discussed the notion that the concept of value in our synthetic a priori 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 experimentation. However experimental hypothesis affirmation 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 conclusion 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 conclusion 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 tenets.

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 disregards his personal 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 acquainted 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 acquainted 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.