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EDITORS

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IN MEMORIAM  
Dorothy Emmet (1904-2000)  
Ed. by Helmut Maaßen

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# Dorothy Emmet's Notes on Whitehead's Harvard Lectures, 1928-29

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## Editors' Note:

Dorothy Emmet (1904-2000), Professor of Philosophy in the University of Manchester from 1945-66, gave these Notes to James Bradley in 1998. They were taken down and typed up by her at Whitehead's request during the time he was writing *Process and Reality*. She gave one copy to Whitehead and kept one for herself. Dorothy Emmet was then a Commonwealth Fellow at Radcliffe College. The Notes are published here for the first time as a tribute to the enormous contribution she made in writing, discussion, and personal example, to the study and development of Whitehead's philosophy. (Pagination of the original manuscript is marked by [ | ] and all editors' insertions are in square brackets: [...].)

Propositions. Notion of universal that of potentiality. A form of definiteness for actualities. I apprehend blueness as realised in a coat and as possible elsewhere. If you say that blueness subsists apart from all actuality, you have an extreme realism. Whitehead's doctrine conceptualism, i.e. all efficacy derived from actuality. Relevance of universals a conceptual realisation. Through the concept, which is a form of realisation, they are relevant for physical, non-conceptual realisation, (cf. Kemp Smith on Universals, *Mind* 1927). If novelty is to come in, it means a foundational conceptual realisation of all universals. Leads to view that the very notion of an entity whether it be particular actuality or abstract universal is that it is relevant for processes of becoming. So you must have a primordial conceptual realisation of all eternal objects. This is essentially in respect to their potentiality for physical realisation, and since it is the basis of actuality, it is clothed with appetition, valuation. Reject Santayana's view of a play of detached essences, irrelevant to the actual world. But we can consider the essences in their abstract relevance to the world, i.e. to the general facts that underlie all actualities, or certain societies of actualities. Thus the essences are referent to the actual world as potentialities or impossibilities for it. Plato's Forms came from mathematics and aesthetics. Exactness an essential element in the world, what becomes exhibits definiteness. Then considered as the perfection a thing aims at and fails to get. So perfection is there for realisation. Propositions are the conceptual realisation of eternal objects in respect to their being forms of definiteness characterising a set of actualities in the definite nexus with each other. Actualities referred to the logical subjects (so propositions are not merely to be analysed in terms of universals), complex eternal objects involved the predicate, i.e. as complex form of definiteness, pattern of definite contrasts involving many actualities. If that particular form of relatedness is realised with respect to a group of actualities it is a fact. A proposition is a potentiality for fact. So its fundamental role that of a lure for feeling, either about past or purpose with respect to future, not primarily a logical judgment, true or false. Whole notion of function of propositions wrong unless you see they are lures for purpose or feeling in entertaining subject. This is why the nature of God is divided into Primordial and conse-

quent. God's conceptual realisation of the novelty an element in his consequent nature. Fundamental function of unboundedness of conceptual realisation.[II]

In a proposition you have correspondence between what is in experience physically prehended, and what is conceptually. Physically prehended actuality receives integration with the conceptual prehensions which are of possibility. When this has attained a certain complexity it is intuitive knowledge, of a proposition as true or false or as not inconsistent with prehended fact. (Difficulty from point of view of consciousness the possibility of knowledge of the antecedent universe, while this is at the same time an element in experience. Experience in the universe and the universe in experience. A true philosophy must provide for both. Same difficulty in the relation of two aspects of an occasion, as one among many and as the unification of them.) Truth and falsehood always arise out of integration: how the eternal objects as potentialities can be integrated with actual facts. Notion that there are everlasting truths really a notion about God's experience. As propositions refer to actualities, except sheer metaphysical propositions which are the same for all actualities, there must be new propositions. Hannibal could not have known "Caesar crossed the Rubicon" as the actualities weren't in existence for any occasion in Hannibal's life, nor for God as prehended in Hannibal's experience. So if there is real novelty in the world there must be real novelty in God's experience. His prehension of the actual world which forms his consequent nature has in it an element of creative advance, but it is unified into one ever present whole fact of all its elements by reason of the completeness of his primordial, conceptual nature.

Judgment. Correct or incorrect, while propositions are true or false. Two distinct ideas which have distinct regard to relation to fact and psychological state of experience. Proposition has to do with subjective form of the prehension and presupposes consciousness. An emotional feeling involving purpose and valuation. Judgement made by the judging subject concerning the universe as objectified for it. Two sorts of Judgment, Intuitive and Derivative. You must have some element which in its nature is veridical and some which is capable of error.

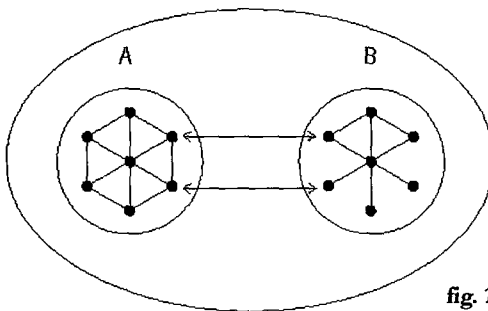


fig. 1

A complex proposition

A = nexus as physically objectified

B = nexus as mentally prehended

.. = actualities - - predicates

O round = subjective form (like the walls of a cell.

<-> = integration, fusion of the data

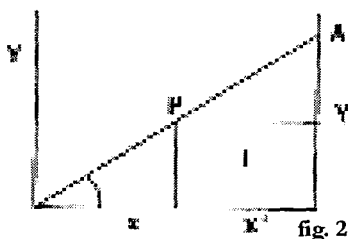
If you have a complete intuitive judgment, you get a complete comparison of

A and B (very rare).[II]

Intuitive judgment is essentially perceptive. I see what is in comparison with - hypothetical proposition of what might be. Proposition as hypothesis compared with physical prehension which is a fact. But another alternative. In datum of the complex feeling the proposition in its complex detail is felt, but the physical nexus in respect to its details of pattern is only partially felt, the remainder being dismissed into negative prehension. You then get analysis of the proposition into the intuitively verified and the intuitively not judged. But the subjective form of purpose and belief may extend to the proposition as a whole though it derives its character merely from the intuition of a part. So you have a belief extending beyond the intuition that may be correct or incorrect. So division between primary and secondary not between mental and non-mental, but what is pure and veridical and what is effected by category of transmutation, and is complex. Insofar as you have a complete analysis you have an intuitive judgment. But you usually only have some analysis which tells you direct fact. The impure part must be interpreted. Prehension of the incompatibility of the theoretical, if it were real, with the real, the intuitive judgment of the proposition being false. When however you have contrasts, i.e. intuitive judgment of diversity with possibility of contrast, there is an intuitive suspense of judgment, because the nexus as in physical prehension in that respect neither verifies nor falsifies the proposition in mental prehension. When there has been a complete intuitive comparison, you have immediate certainty as to comparison of nexus in mental and physical prehension (very rare). Consciousness arises with intuitive judgment. It can't be conscious of a red house without an intuition of red as a universal, i.e. as a background of alternatives. House is red and might not be. As soon as you are dimly conscious of this you are recognising some element of potentiality for otherness. In most cases you have a complex relationship, a welter of experience eliminated into a final judgment. Then you have a derivative judgment and the intuitive comparison is incomplete.[II]

December 4th, 1928.

Difficulties concerning basis of general truths - Induction, - come from thinking sheer words of a proposition are just the whole tale. Words "Socrates is mortal" suggest a complete abstraction - isolated, independent fact. Difficulties come from accepting this verbal suggestion. But every proposition requires for its meaning the rest of the universe not in its multiplicity of detail but as a systematic background; apart from presupposition of this background you get absolutely nothing at all. You have an indicated entity: "Socrates". But when people come to consider propositions, they only analyse them as "ideas in the mind", and so as universals, and Socrates gets left out. Socrates is the Athenian philosopher. All indication is of something as particular element in universe. Starts from my conscious intuition of particular elements in the universe. Then a chain of indications which finally lead you via spatial - temporal indications and books to S. Some of them are inferential and hypothetical. An actuality can only be indicated relevant to other actualities. But the method of indication is such that I can describe how various elements indicated to me are indicated to you. So not wholly true that knowledge related to oneself cannot divest itself of this relation (R.B. Perry's "ego-centric predicament" (dilemma?)).



(From this I can find out where P is relative to O (the knower) and also to A.)

"All knowledge must be expressed in terms relative to knower; it is impossible to analyse it so as to obtain relations between elements known in abstraction from the knower" are assumptions which are dealt with unguardedly.

If you are dealing with nexus with some systematic property you indicate via the systematic property the nexus (as in Geometry). What is general systematic property of a nexus which secures the possibility of im cation?

Notion of a relation. Ultimate facts - actualities and how they apprehend each other. So when you are talking of relation, it is how one occasion apprehends another. The "how" expresses the form of definition - why that apprehension has the form it has. (ingression of eternal object - c.f. (μέθεξις).) But ingression not the whole relation. That "A likes B" means that liking is an element in the apprehension. So a relation is an eternal object characterising a prehension - the particular apprehension of A liking B, whereas a relation is a universal - an eternal object illustrated in a prehension or "participating in it", - form of definiteness of that apprehension.

But you can very seldom get the relata down to two terms. A relation between occasions is an eternal object illustrated in the complex of mutual apprehensions by virtue of which those occasions constitute a nexus. Relation is called dual when the nexus consists of two and only two actual occasions. It may be indefinite as to the number [?] required. There will be in general an indefinite number of eternal objects thus illustrated in the mutual apprehensions of any nexus. There are an indefinite number of relations between the occasions of any nexus (as you cannot exhaust the particulars of a universal).

"Systematic". A "general principle" is an eternal object which is only illustrated through its principles which are also eternal objects. But the converse is not true - the realisation of the general principle does not involve the realm [?] - of any particular instance though it does involve one instance.

In general the instances of a general principle are mutually exclusive, so that the [II] realisation of one excludes the others. For instance, color is a general principle - each body exhibits some definite color, and is thereby colored.

A nexus exhibits an "indicative system" of dual relations among its members when:

- 1) One and only one relation of the system relates each pair of its members,
- 2) These relations are instances of a general principle,
- 3) The relation (in the system) between any member A and any other member B does not also relate A and a member of the nexus other than B,
- 4) The relation (in the system) between A and B and between A and C suffice to define the relation (in the system) between B and C, where A, B and C are any three members of the nexus. Thus if A and X be any two members, and X has knowledge of A's systematic relation to it and also of A's systematic relation to B and C and D where these are mem-

bers of the nexus, then A has knowledge of its own systematic relations and of the systematic relations between B and C and D.

So such a nexus admits knowledge of relations of its members from standpoint of any one of them. (An analysis of Aristotle's category of Position).

Every Proposition presupposes some general nexus with an indicative system. This includes its locus of judging subjects for which it has a meaning and also logical subjects. So universe is through and through indicative.

Thus in proposition certain characteristics are presupposed for judging and logical subjects. It presupposes the actual world as exhibiting some systematic aspects, and is nonsense without it. [II]

Propositions (continued')

Most general truths those conveyed by metaphysical propositions which relate simply to general being of actualities and are independent of the given particular course of events.

A general proposition is metaphysical if it:

- 1) Has meaning for any actual occasion as a subject entertaining it.
- 2) Is general in the sense that its predicate potentially relates any and every set of actual occasions suitable for the predicative pattern so far as number is concerned.
- 3) Has a uniform truth value in sense that truth value of the general proposition is = truth value of particular

propositions by restricting application of predicate to one set of logical subjects. It is obvious that if a general proposition is true 3) is unnecessary. But if false, then it is only metaphysical if in addition any of the derivative propositions are false.

Are there any general metaphysical propositions in this sense at all? W. believes any metaphysical propositions come from primordial nature of God, but doubtful if we have formulated them free from empirical elements of our cosmic epoch.

So doubts that they have been stated in their full generality - (mistakes that were made as to nature of propositions of geometry and arithmetic).

$1 + 1 = 2$  looks metaphysical. But in usual way it is put, not metaphysical, mixed up with particular assumptions of this epoch.

$1 + 1 = 2$ . See Prop. 110. 643 in Principia Mathematica. Proved, W. thinks, for the first time. Defines exactly what he means by 1, by 2 and by addition - fundamental logical notions. What these are a difficult notion - they should be metaphysical.

One entity and another entity make two entities. "Another" implies diverse entity. One actual entity and another actual entity make two. But usually asserted in sense that if you have one enduring object which is a succession of occasions, and another, it is usually assured that at any moment of time the two occasions make two separate societies - e.g. the cup and the saucer.

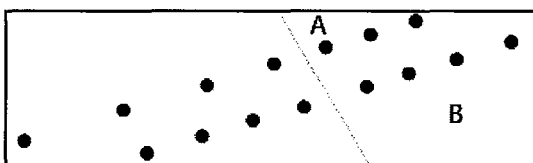
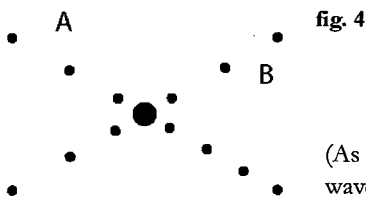


fig. 3

But why shouldn't it be like this



(As a matter of fact, if the entities are electromagnetic waves, this will be so.)

i.e. a moment of time when they are identical? One view of enduring object as serial transmission of a form, it may be serious or trivial elements in world. There may be some moments when occasions crossing may be identical - or you cannot prove abstractly that they should not be. We habitually muddle up perfectly general principles with empirical material. Having regard to mistakes in the past, and how small one's intellect is, and how little we know compared with all there is to be known, we can't be certain we have ever had a flash of insight of something free from any empirical element of this course of events. There might be cosmic epochs in which arithmetic would form a curious topic of contemplation, but be of no interest to practical people. Fact that societies are corpuscular and structured highly particular - belongs to cosmology rather than metaphysics, (philosophy often muddled the two) [II] Discrete side of the world might conceivably not be prominent in some forms of experience at all. Even in present epoch, in experience of a deep sea fish arithmetic would be very irrelevant, it would only have a sense of the continuity of its environment. Arithmetic enters into our experience as a fundamental fact - of peculiarities of our epoch.

St. Paul makes an interesting analysis of things which will be of no interest in Heaven (I Cor. XIII). What will or will not be interesting in another epoch insoluble - we only know empirical propositions will be different, and metaphysical propositions remain, but we can't be sure we have got a hold of any metaphysical proposition.

What is basis for it - for believing that law of gravitation will hold tomorrow? Proposition is true or false, what do we mean by saying it is probable? This is a judgment of it as probable on evidence before you - relation of propositions to given data from which your subjective experience arises. Data expressible if you have adequate language in terms of a multitude of time propositions. So probability is certain relation of a proposition to a set of propositions which we will term the evidence. We are right to abstract from particular experience and make it a relation of proposition to proposition, for if the probability is merely the firmness of your persuasion you can't over - or underestimate it. So there must be some relation which is not merely true or false but has to do with potentiality of truth. But difficulty about probability that it can be more or less. Suppose evidence secures all of conditions necessary to involve truth of a proposition, it guarantees absolute truth. Suppose all but one are present you are apt to say proposition though not certain is highly probable. Evidence either does or does not secure truth. If it doesn't, then it doesn't. If you are simply going to say proposition is probable when some of the conditions are present but not all, what do you mean by "more or less" probability, if it means some but not all (See J.M. Keynes on

Probability).

P (probable proposition)

- a.  $\overbrace{h1, h2, h3 \dots hn}^{\text{---}}$  (Conditions present)
  - b.  $\left\{ \begin{array}{l} \text{---}, h2, h3 \dots hn \\ h1, \text{---}, h3 \dots hn \end{array} \right.$  (Conditions present)
  - c.  $\left\{ \begin{array}{l} h1, h2, h3 \dots hn \\ \text{---}, h2, h3 \dots hn \\ h1, \text{---}, h3 \dots hn \end{array} \right.$  (Conditions present)
- fig. 5**

Is P more probable in case b) or c)? You may say one condition is more important than another - this is appealing to something which is not probability.

Probability always reckoned statistically - isn't it always an obscure reference to an arithmetical fact? (Keynes turns down statistical theory). We are always making estimates of probability not based on conscious statistical reasoning - probability based on induction of this kind. But you may have a grasp of a Statistical basis en masse (e.g. straw-hatted crowd) vaguely.

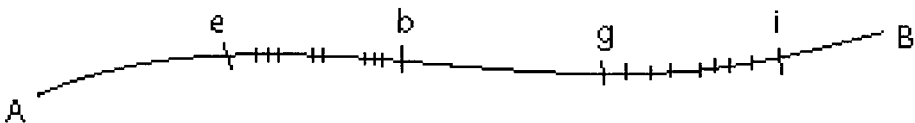
Statistical estimate of Probability.

In case of e.g. die, you judge each of 6 instances to be equally probable - probability one out of six. There must be a number of instances all of which are on same level with regard to their occurrence - notion of congruence. You must know what you mean by a definite instance, and have a class of instances. In dealing with induction, you have principle of dealing with unexamined instan-[ll] [page or pages missing here]

(Notes.

I. What is really being presupposed when we speak of four dimensions of the spatial-temporal continuum? Fact of measurement and measurability. Brings up the theory of infinitesimals. Leibniz produced a bogus solution which has dominated philosophy ever since. He said notion of fluxions of the differential calculus depended on there being an actual infinitesimal. Newton founded it on the notion of limits. But where he ought to have been explicit he became vague. Where ought to have been introduced e (which = any positive number, however small), he had a vague phrase.

Weierstrass produced the proper explanation. Nobody doubted differential calculus worked, yet till then no one could state convincingly what it was.



**fig. 6**

A to B a whole quantitative world line, which under any mode of measurement is just itself. To find out what it is, divide it into infinitesimals, and add them together. Theory of congruence means that you can compare one bit with another. Brings you to the question of the extensive quantity of the infinitesimal. This depends on congruence, some similitude of function in a system. Measurability of the world demands that there be a system in which there are analogous functions, but no actual infinitesimals, e.g.

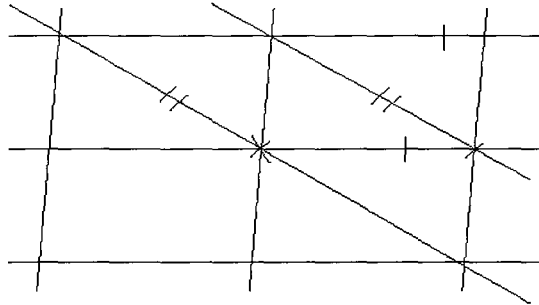


fig. 7

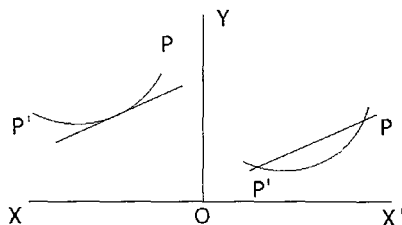
II. Two contradictory notions of points, as having position but no magnitude, and as going to make up areas.

Whitehead points out (Principles of Natural Knowledge) That what matters to science is not the inner nature of the objects, but their mutual relations, so any entities that (a) have kind of relation geometry demands, (b) such that areas and volumes can be exhaustively analysed into sets of them, can be called points.

Reasoning depends on logical or formal qualities of entities reasoned about, so that we can reason about irrational numbers like  $\sqrt{2}$  and  $\sqrt{3}$  as though they were ordinary numbers. Notion of point can be defined simply with reference to volumes and their relations to each other; all the volumes in any series that would be said to converge to a point, e.g. series of concentric spheres.

III. Whitehead's Method of extensive abstraction means that concepts of science are defined in terms of perceptible objects and their perceptible relations. From these the concepts of momentary events and moments can be approximated to, and their exact relations determined.

#### IV. Differential Calculus



If you have an equation for curve you can calculate the equation for tangent if it exists. Tangent the limit of the secant.

fig. 8

Integral Calculus

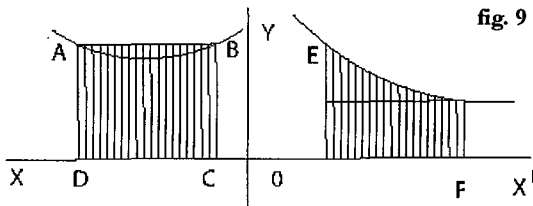


fig. 9

To measure area such as AC or EF. Think of it as made up of a lot of little rectangles such that the diameter approaches O. (Point is that you can make them as small as you like). [II]

Negative prehensions, the basis of all partial knowledge. But demonstrated factors must express thing with its status in the system, But system can be known under an abstraction, as exemplifying some universal rule. Spatio-temporal character underlying systematic character, but layers of systems, which constitute universe as constituted in the thing. Process of reception and transmission. Vague knowledge of derivation from, and transmission to.

Question of statistical laws. Environment which transmits an average predicate. Conditions having a certain average character and a certain freedom within - conditions for individual variations. Some measurable element in the conditions. Some exact fulfillment and chance variations from it.

For instance:

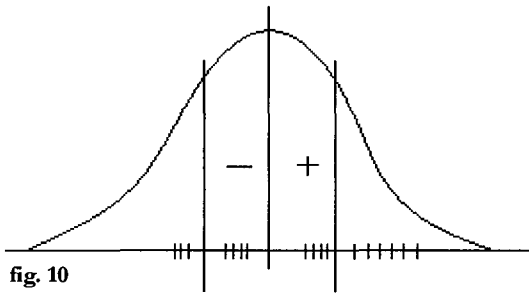


fig. 10

Ideal that mean

.....

be in middle and individual variations on either side.

Statistics presuppose determinate conditions below them. Some regularity makes shape of curve such as it is, and probable error what it is. You are expressing abstract characters which are regular, though each individual has its individual peculiarities.

or

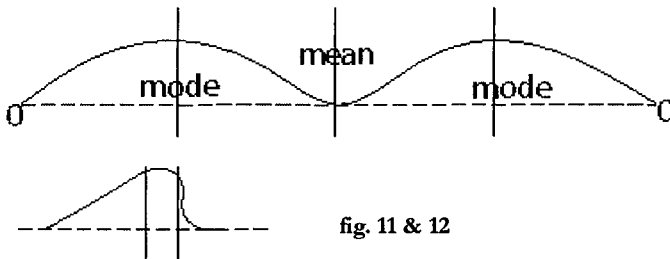


fig. 11 & 12

you want some definite standard features of symmetry. Then you want to see whether standard features connected with the shape alter - is it merely a variation of intensity or of character all through? But question of convenience what standard mean you take - then you can tell at once if some striking change is happening or not. But there must be an underlying regularity and then some conventional way of describing variation. But statistics are only to invite you to an explanation of regularity and irregularity.

CHANCE and necessity, which has to do with Causation. A given state of affairs with Wh. = that to which what is immediate has to conform - conditions it. How can there be anything which doesn't involve some contrary element - to be that is to exclude something else. Self-identity of existence to be excluding something. Wh. thinks if there is determinism in some aspects of the universe there must be chance, and vice versa. Necessity and chance mustn't have an arbitrary application, but come out of the nature of things. When you understand actuality, everything determinable in it is determined, and if you have chance, it is because it is in its nature undeterminable. Everything that is determined can be rationalized - you can give the determining causes. Is everything determinable like this? Immediate present certainly rises out of the immediate past - thread of determinism in history. [II]

But always something given you can't give a reason for. At any rate, there is the sense that the course of events viewed as a whole has a sheer arbitrary given character. Why shouldn't there have been a different world than this? - not a meaningless question. Curious mixture of what is and ought be otherwise with mutual determination. - Hume felt in experience a sense of ultimate independence, but also an element of dependence on antecedents, (cf. "distinct impressions from unknown causes". (Also your expectations arise from the impressions - association of ideas). More complex later phases arise by reason of the simpler phases. And according to Locke, experience starts conditioned by the external world. But what is the "act of experience"? Process of appropriation, taking the world as given and making it one's own. Locke, Hume, Kant, all look on it this way. Kant tried to set out the fixed principles in the process of making experience one's own. Suggests that there are determinate metaphysical principles - general character of the process. Process of constructing the world sets itself as one amid other actualities. So if notion of common world has any weight, and if you also wish to generalize the notion of an actuality, it is to generalize that of an act of experience. What seems fundamental is the act of seizing on data and making them one's own in a unity - what seems accidental the attention, consciousness. What seems essential: the clothing of the data with emotion, emphasis, purpose. Chance seems to come with the totality - total course of events. So to look for chance in an act of experience you must look at the totality. Not in the data as they are given - but on how you take the data. The emotions are inherited, but you take it, emphasize it, and direct attention. Final totality is really a final kick of emphasis.

If there is chance it is there, if moral responsibility there. But you can get only chance if you are really considering the totality - nothing outside to condition you. This means you must look on an act of experience as a totality, ultimate metaphysical fact that the totality is always one. So perfectly definite reason for chance looked on in this way. Act

of experience - the universe many becoming one and in that process when it has exhausted all conditions (the many) having nothing above it.

March 21st.

Relation of Physics to Philosophy. From about 1770 -1837, a period of three revolutions: 1) Industrial revolution, 2) American Rev. (democracy v. aristocracy). 3) French Rev. American civilization first continental one to be developed by means of railways - overcame difficulties of transport. But systematic application of science to technology not so soon - mechanics, not men of science, responsible for inventions. (One great exception Greenwich Observatory for improvement of navigation.)

Struggle between science and metaphysics due to obscurantism of philosophers of latter middle ages -fallacy of dogmatism. Science itself dogmatic and materialistic. A successful methodology fossilizing into dogmatism. Mathematics clear, distinct, certain and applied. Refusal to face moment of bewilderment root of all obscurantism. Set of people with a growing concern refuse to face something that may upset it.

Old view of Philosophy as "Moral Science" versus "Natural Science". Newton opposed intrusion of metaphysics into science. View that speculative thought was everywhere relevant not recognized. Newton's boast "Hypotheses non fingo", at same time as he enunciated his law of gravitation, [11] that every particle of matter attracted every other. Meant his law expressed a sheer fact without any element of explanation. But clutch of dogmatic finality. He was in fact making hypotheses, but not defining their scope of application. His formulae not false, only unguardedly stated as to for what circumstances they are true or false.

Doctrine that science starts from clear and distinct principles and is clearly elucidated dies hard. Popular doctrine that science is mere description of things observed and assumes nothing. So its quest is for simplicity of description and it concluded that it needs no metaphysics. But mere observations are particular occurrences - only facts in observer's biographies, a Who's Who with the names left out. Another interpretation with two new notions - Inductive Generalisation, and that of the observable, but not observed. So a speculative description of spatio-temporal occurrences, - and then predict on the basis of this. (Faraday, Clerk Maxwell, Marconi). Development of radio cannot have come from mere shorthand description of particular observations, with production of mathematical formula as intermediate step. What is the formula doing? What has it to do with experiences of multitudes of listeners to the radio?

Idea of mere description of observation and mere mathematical formula can be paralleled by conjuring tricks. But formulae etc. must be description of those features of the world that are relevant. But this introduces notion of external world as described - so brings in speculative reason as required in metaphysics. Categories of science cannot be understood apart from the wider categories required by metaphysics. They then become analytic explanations.

According to Kantian view, nature only derivative, and remote from every intuition of ultimate truth. But importance of details of phenomenal life in phenomenal world. So positivist position - we are certainly in world, but system of world throws no light on meta-

physics.

Hence antagonism between philosophy and natural science.

Now we are at a critical period, of reconstruction of categories of scientific thought.[II]

March 23rd.

### Measurement.

Certain corollation of sense perception. Relates to direct perception of the immediate present (presentational immediacy). Sense percepta the old secondary qualities. Theory that they and the spatial relations belong to a private psychological field. But if that is the case, the external world of Science has nothing to do with these measurements, which are all in the private world.

So sense perception is in a private world. So is measurement. What we perceive absolutely depends on what is going on inside the body. Conventional theory of secondary qualities makes them depend on the mind. But the evidence is that they depend on the body. Color blindness for itself is result of something in the body. Antecedent states of various parts of the body effect others - body as efficacious is essentially one fact in the common world of facts, in the whole physical system. So the private psychological world is really our intuition of a certain relationship of the body to the rest of the world. But that relation is governed by the states of my body. And what the relationship expresses is in the first place the common spatiality, and also it is completely independent of what is actually there (e.g. when we have taken drugs, or look at stars which are 1000 light years away). Present state of the world - its present spatiality in its relation to any body via radiation of luminosity.

So if you are not in a private psychological field and are knowing something about the world, you are knowing some systematic fact about it. What is disclosed - the present spatiality of the world, and if it is not a uniform system it must be a private one. i.e. Projection of sense data either tell you nothing about the world at all, or tell you about a uniform system of relations. So measurement presupposes a uniform geometry, which we find required in the theory of the projection of our sense data. Otherwise you have to say the space of sense perception is a private psychological field.

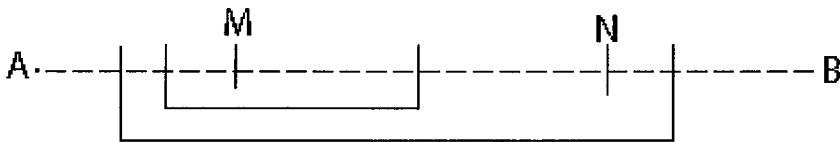
Two sorts of intuition. - Sheer intuition of coincidence, and of non-coincident congruence. But here again endeavour to over-simplify - bring down to mere fact that things are coincident. But that they have some element in their relations to each other which can coincide is what matters. Intuitions of coincidence valuable as producing belief in subsequent congruence. Thing has a property of being in a certain relation to the rest of the world (e.g. a yard long). Final judgments depend on direct judgment of stability of the circumstances. You arrange your experiment so that that judgment can be made on what experience shows to be the most favourable conditions possible, and so that slight errors in the judgment may have smallest possible effect on observed result. "Sheer observed fact" always an over-simplification of what happens. Ultimately we depend on immediate intuitions of things remaining identical. - Final intuitive judgment of congruence.

What do we mean by spatial and temporal congruence? Notion of uniform system

of geometrical relations, in which one part of space doesn't suffer from another. In congruence, two elements play the same part in system of spatio-temporal relations. Identity of role in the system. So the system must be determinate antecedently to the particular occurrences. Occurrences arising out of past must share in their system of relationships. Congruence arises out of unanalysed discernment of a scheme of relationships. What is this scheme? Let us first presuppose that we discern straight lines. What do we mean by "straight line"?

- a) Its divisibility, which is a mode of analysis, but the components are also [II] straight segments, i.e. of same order of being as the analysed complex. Then, every segment is analysable, divisible. Indefinite divisibility.
- b) Dissection - Divisible into components such that they have no part in common and no part of whole line AB which does not overlap at least one component of the dissection.

fig. 13



- c) Congruence. One part has a certain definite relation to another. Not simply a trust that they will be coincident.
- d) Congruent dissection. If a be any integral number, there is a dissection of AB into a ? parts which are congruent to each other.
- e) That a part is not congruent to the whole.
- f) Congruence is transitive - i.e. if A to B, and B to C, then A to C.
- g) Congruence is symmetrical.

b) to g) do not follow from notion of divisibility. So extensiveness is a highly specialized type of order, h) Archimedes' axiom. If AB be any segment of a straight line, you can produce it on either side beyond the segment. (Assumes order - "between" and "beyond".) Take any part of the segment AL. By taking a number of congruent parts which are not overlapping, there is a finite number such that it has final part outside segment. No segment such that you can

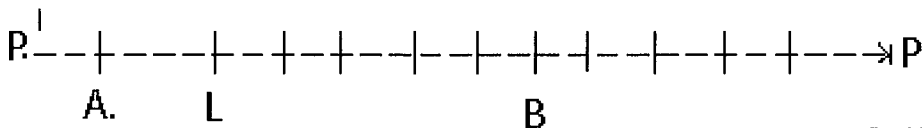


fig. 14

divide it up into an infinite number of such parts.

Riemann suggested that suppose you go on indefinitely to P, why should it not be at P', i.e. return on itself, not because is a crumpled surface in space, but simply on grounds that there is no reason if you go on long enough you shouldn't return on yourself - Riemannian

Geometry (elliptic geometry as opposed to open geometry). (2 kinds of open geometry, Euclidean and Hyperbolic).

Systematic geometrical relations. What is the relation of geometrical relations to extension, and in what sense are the final actualities extended? (underlies the metaphysical question as to what are the final actualities). Question of geometrical elements in the world - its extensiveness. - Properties of extensiveness expressed by geometrical elements - lines, points, planes etc. Point "without out parts" - (ἄμερον). Spaciness made up of these ultimate elements (Euclid). Then relation of occupation - things happening in Space, yet Space made up of points without magnitude. Real points imply Absolute Space (cf. Newton). Descartes' theory that ultimate individuality of Substance is to be a point - point the principle of individuation in Substance - means difficulty over Motion; and same extensiveness and divisibility seems to apply to Time.

So if you are going to get rid of notion of Substance, and say actuality is what happens, the event is to some extent divisible (cf. Plato who definitely looks on Forms as indivisible, and the actual world as the divisible and the changing, (cf. Timaeus 77). Certain divisibility in the ultimate actuality in respect to their extensiveness. General relation of res verae to each other the Spaciness. [II]

[In the manuscript, page 12 ends here. The next page is numbered page 15.]

Problem (1) How are we to get different kinds of abstractive sets corresponding to the different geometrical elements? Problem (2) 2 sets both converge to the same point. What is the relation between them?

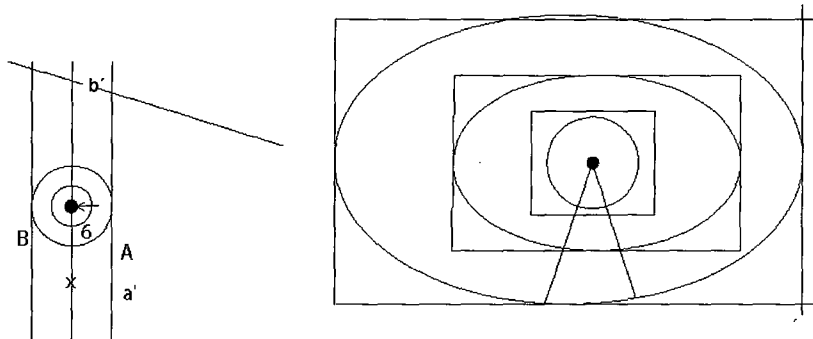


fig. 15 & 16

2 types of convergence - one to a point and the other to a segment. (Here we have two abstractive sets, each covering the other).

One abstractive set A covering another abstractive set B. A covers B when, given any member of A, members of B exist which are parts that member. (However far down you go in A, the convergent end in B lies inside it).

Two abstractive sets are equal when each covers the other. However near you go to the convergent end and choose a member of one, you can find members of the other lying inside it. (Presupposes that each abstractive set has an infinite number of members). A geometrical element is the complete group of mutually equal abstractive sets.

For many purposes the shapes of the members of the abstractive sets don't matter. An abstractive set is punctual (converges to a point) when there is no abstractive set covered by it, but not covering it. So notion of a point explained in terms of extensive connection of regions.



fig. 17

Pq a line (not necessarily straight). What is a segment of Pq? Greeks said it was terminated by points.

Must satisfy two conditions, 1) to include the 2 points. So an abstractive set, one which covers the two points and which in a way is the sharpest convergence which will do it. Every set which both covers the 2 points and is covered by the first abstractive set is equal to it.

Notion of a Segment:

But there may be another segment between Pq, as well as  $\alpha$ , namely  $\alpha'$ . Then there will be another abstractive set round  $\alpha$  [P] which fulfills condition of covering P and q, and also any other set covering it and P and q is equal to it. But no reason why it should have any relation to the first set. So there may be many segments between P and q which all fulfill the condition that any set that covers P and q and covers them, is equal to them, but which are private in their conditions.

Can we define a straight line? Euclid say it lies evenly between 2 points. 2 other notions - only one straight segment between 2 points, and that it is the shortest distance between two points. So it has been assumed that the notion of a straight line presupposes measurement. But Wh. has been arguing that measurement presupposes system, (cf. Projective Geometry), and so presupposes a straight line. [II] The Straight Line. Can we define it in terms of extensive connection? (In Concept of Nature extraneous notion of a moment and duration brought in). But now we have got rid of moments over points.

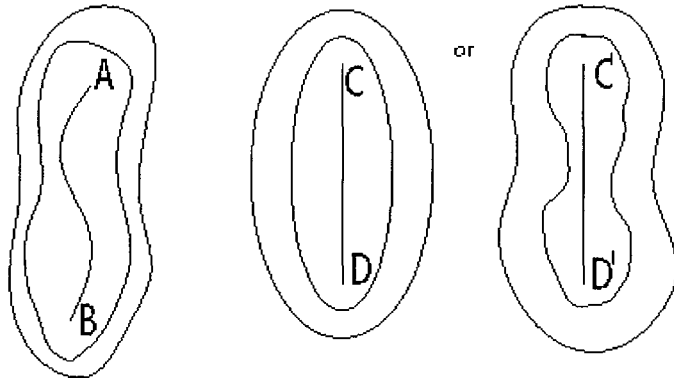


fig. 18

In the case of a straight line, you can have an abstractive set of ovals surrounding it, in the case of other lines you can't. So a straight segment can be looked on as the route of approximation of an abstractive set wholly composed of ovals. But what is an oval? Essence of a pair of ovals that they overlap in one complete intersect, whereas others intersect in two - viz.



fig. 19

But two regions neither of which are ovals can be like this.



fig. 20

So this definition by complete intersects won't quite do - (We should examine further what we mean by a "complete intersect".) So if you can't define it by a single oval, can you do it in terms of the complete class of ovals? Ovate class one such that the regions have certain relations to each other and all the regions which satisfy these conditions belong to the class. So there should be only one ovate class (but we can't prove this). Ovate class is such that 1) any two of its members that overlap have only one complete intersect 2) Any member of the class overlaps some regions not of the class in more than one complete intersect, i.e. non-uniquely. Definition: To overlap with only one complete intersect can be called overlapping uniquely. (Call it multiple overlapping and unique overlapping). 3) Any region not of the ovate class overlaps some members of the class multiply.

But



fig. 21

will satisfy all these conditions (though it is a restricted class). So next step to say 4) that every point comprises among the equal abstractive sets that constitutes it an abstractive set consisting wholly of ovals.

- 5) And every extensive region includes ovals as parts.
- 6) Any finite member of extensive regions are included as parts of one oval.
- 7) There is at least one segment adjoining any two points approximated to wholly by ovals.
- 8) The unique intersect of two overlapping ovals is itself an oval. [II]

(Point to get enough conditions so that you can have a complete class of ovals, not just a small restricted one like



fig. 22

A straight line to be defined as a segment which is approximated to by an abstractive set of ovals.

To prove:

Two abstractive sets approximating to segments with some end points are equal, i.e. cover each other (i.e. only one straight line between two points).

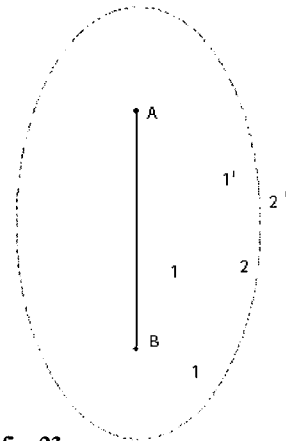


fig. 23

To show sets 1, 2 and 1', 2' are equal. (In each case 2 lies inside 1). Take the common intersect of 1 and 1' and of 2 and 2'. But since 1 is wholly contained in 1'

[2/7] is wholly contained in 1) ??

So since 2<sub>2</sub> lies wholly within 1 & 1, it lies wholly with their intersect.

So by taking the regions of the two abstractive sets and considering their intersects, it is possible to form a new abstractive set out of the intersects which is covered by both the other sets. So the point A is incident in the new abstractive set. So is the point B. But every abstractive set which satisfies the condition of covering A and B and is also covered by a set with segmental approximation, with A and B as end points, is equal to that abstractive set. The set 1 & 2, 1<sub>2</sub> & 2<sub>2</sub> are equal. There is only one straight segment between A & B.

Notion of Dimensions. Take three points: A, B, C.

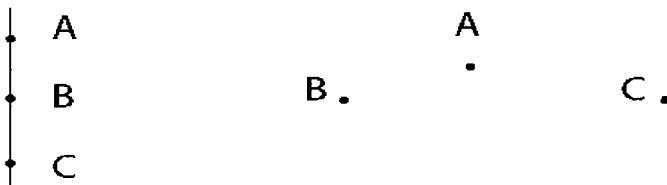


fig. 24

2 cases can occur. Suppose we consider ovate abstractive sets in which A, B, & C are incident. In the first place, it would be part of the definition that there always are such ovate abstractive sets. Then the ovate class which approximates may have two of the points as end points and one in between. Then the points are colinear.

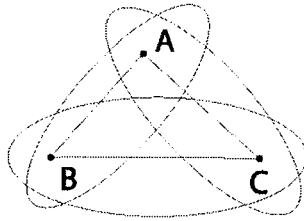
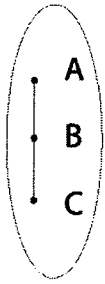


fig. 25

But if it is non-segmental, you will have three points like A. B.C. Same proof which show you there is only one triangle defined by this ovate approximation and you get triangular approximation. Similarly, by adding on triangles you will be able to define a complete straight line and a complete plane. Take 4 points, co-planer

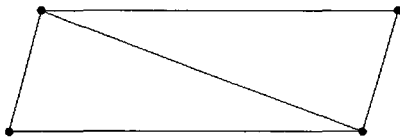


fig. 26

[II] But if you have 4 points which are not co-planer, and your region is three-dimensional, there will be no abstractive set approximating to it. So an extensive system is three dimensional if you can find any three points such that an ovate abstractive set contains them, but can find 4 points which are not contained. (In four dimensions you can find 4 but not 5 points which are approximated to). So notion of straight line and dimensions go together. (Define intersect. Any other common part either lies wholly within or wholly without it.)

April 16th. Extensive and Intensive Quantity.

Extensive quantity not a fundamental notion, because it depends on system of congruence (identity of function in a system), and division and counting. Then we come to Intensiveness, and that is something you can't analyse into anything further, cf. Kant. Axioms of Intuition in the transcendental Aesthetics -Anticipations of Perception. Kant looks on both Extensive and Intensive Quantity as categorially ultimate. (He sees that we can have an intuition of complex wholes without having intuition analytically of the component parts.) Also his insistence that experience obtains its unity as a process. Influenced here by Newton's notion of fluxions. But could only think of divisibility in terms of Euclidean Geometry. He ought to have come down on notion of "mere extensiveness".

Intensive quantity in the Anticipations of Perception. Wh. agrees with Kant that every occasion in experience has a degree of more or less reality. Kant seems to mean that you can't measure intensive quantity as such, but it can be correlated with an extensive scale, so that you can say that between the first intensive quantity and the lower limit zero, you can have an intensive degree which is qualitatively the same, but quantitatively different - e.g. heat of the thermometer:

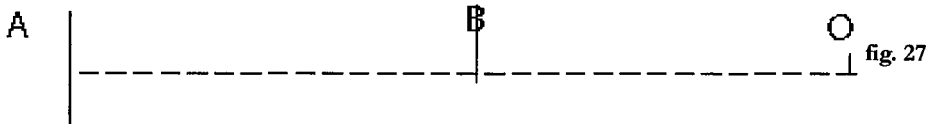


fig. 27

(Descartes assumed everything had an upper limit of perfection and a lower limit of zero - wants proof). Wh. holds that notion of intensive quantity is categorial. Intensity of moments of experience, with regard to which they can be compared. Is there a sheer qualitative element - apprehension of rightness of experience, as being really adequately all-embracing and not egotistically exclusive - cf. difference between intense physical and mental pain - is there a qualitative as well as an intensive difference?

History and Science. You can't exhaust the particular by universals. With the individual you come to a different order of being from an enumeration of universals. Particulars are found in history. Reference to history usually means reference to space and time. This unfortunate, because it suggested that Space and Time were absolute entities. Two notion of history 1) Space and Time notion, static view, of things occupying Space and Time; then the particular is the static thing, considered in abstraction from Space and Time. 2) Or the final particular is a transaction (res) and history is a concatenation of transactions, with Space and Time as certain aspects of it. Dynamic view. The other point of view deals with high abstractions. (Descartes, when dealing with bodies, makes their spaciness fundamental. But still keeps to static point of view. So treats endurance with superficiality. (But makes a profound remark that endurance may be looked on as a series of recreations. If he had developed this, he would have turned his body into a transaction). He is rather preparing for notion that Space & Time are "mere appearance".

A concatenation of transactions the particulars of history, -(cf. book on Realism by Hassau (?) [Editors' note: probably S.Z. Hasan, *Realism: An Attempt to Trace its Origin and Development in its Chief Representatives*, Cambridge: Cambridge University Press, 1928]. Talks of Realism as meaning that objects perceived are independently real. But if it means each is real in abstraction from concatenation with other particulars, no. Realists like B. Russell deny that reality is history. [II]

Can you establish a theory of many concatenated realities, or are you driven to one ultimate particularity? Then history would be the diversification of the one individual.

Notion of participation - history exemplifies universals. Science is concerned with generalities and universals. Describes the concatenation of more special universals which it says may be realized in history. But does not say which will be exemplified - only that the realization of the more special universals depends on the exemplification of these more general concatenations. Complex universals realized in history exemplify more abstract generalities which are the laws of physics.

This concatenation involves the notion of a time order. Laws of physics tell you that; given antecedent history exemplifying certain universals, subsequent history must exemplify certain others. Does this mean what is exemplified by contemporary history is entirely determined by antecedent course, or is there room for intrusion of universals not so determined?

Then there is medieval way of looking at history. Concatenation to be explained in terms of the future, not of the past. Transactions to be explained as the particulars seeking their end. Aim at the exemplification of certain universals. The given seeking to exemplify those universals that are proper to it. Notion of appetition -particular ends - can't be got rid

of.

Either of two extremes (determination by antecedents or by final end) means that in long run you can only have Spinozistic sort of view, how the ultimate monistic reality enjoys its qualification of modes. So these two extremes seem to meet.

In history you are considering the concrete reality as temporal, yet as totally dependent ? on the concatenation of things. Then you seem inevitably to get into some form of monism. Easy to slide from history to an ascription of an inferior reality of its details. You can read religious history from the point of view of the emergence of the idea of the One as eternal reality, and accomplishment of an ultimate coordination. Has an enormously powerful emotional force. Then there is the other point of view that starts from epistemology - the ultimate fact an act of experience, and history is derived from this. Then you get easily to Leibniz and Monadism. But if you say that experience is more than momentary analytic consciousness, you get the notion of a unity of experience beyond the immediate act, and so there again you have a monism.

As soon as you think of the act of experience, you come to the Greek notion - the psyche. The world as experienced has an aspect of vacuity. Air of something which is insignificant except for something else. Cannot be interpreted just in terms of its own experience. Are you going to divide actualities into two parts - these "vacuous" actualities and psychic, defining latter as those whose being can be defined in terms of their own experiences? (Presupposes a division between particular reals and universals. We must first decide what we mean by the particular reals). How are you to interpret the psyche? As a whole stream of experience with personal interconnection, or is it one occasion?

A presupposition has slipped into philosophy. Final individual fact confused with notion of permanence. Notion of inherence of qualities in an ultimate particular, confused with what is permanent in my life from birth to death (cf. Descartes' "Cogito ergo sum"). Is it always the same ultimate actuality? Hume doubts its confusion with permanence.

Locke speaks of "the mind taking notice that certain ideas go constantly together." Also his notion of powers - Causation always referred to a particular. Stubborn facts of the past the actualities as powers. Other notion that of logical conditions; and a third, that of the actuality as representing the permanence in [II] history. Essentially a notion of the particular actuality as conveying some measure of permanence. Muddling of the notion of an actuality with that of its surviving through time with adventures a mistake.

Hume has a togetherness of a stream of impressions. But the particular fact is just that they are together, and also that they are distinct existences. But yet there is unity of reaction to many impressions. (Unity of purposive emotion). He doesn't question the unity of experience in this sense, at any rate when he is talking about human action and the passions.

April 26th A book should be written on the natural history of ideas. The empirical school tried to explain ideas by their origins (e.g. religion). The Hegelian school of historical criticism mixed them with a complicated system of metaphysics. Great ideas dawn dimly, and associated with other ideas. This empirical association important for history, but apt to be misleading for metaphysics. The association need not be a fundamental relevance. Logicians

conceive ideas as they appear in propositions, and propositions from a very special point of view, as to whether they are right or wrong. But this is a highly sophisticated way of looking at ideas. Idea enters into experience as a lure for emotion and purpose - not always even conscious. Lure to action, and aesthetic enjoyment comes before the explicit judgment of right and wrong. This comes when you are consciously criticizing ideas with a view to their emphasis or repression.

The result is that ideas as in history arise with associations with other ideas that are determined by the particular course of history. History of thought the progressive analysis of general ideas so as to be able to see them apart from their associations. Cf. revival of Aristotelian philosophy in 12th and 13th century Averroes, Albertus Magnus, and Aquinas. In 1200 (?) Christian theologians would have said Aristotelian phil[.] was unchristian. Then Albertus and Aquinas accepted all the main positions of Averroes - from 1300 onward Aristotelian logic has been the foundation of the natural theology of the Catholic church. Certain general ideas had been analysed out and shown to be due to empirical associations of the middle ages. Really Aquinas had made very little change.

The effect of a great convulsion like the Reformation was that a different type of man carried on theology of the church afterwards than did before. Associations of an idea depend very much on the type of man who deals with it. Language gives you the ideas with their associations. But language only represents a certain stage, (cf. Logan Pearsall Smith "The English Language").

Seven notions, very much allied, which enter into association:-

- 1) Substance - notion of the ultimate particular -
- 2) That type of existence to which all explanation is relevant - ultimate subject of all explanation.
- 3) Aristotle's "What is always a subject and never a predicate" - primary substance.
- 4) The ultimate empirical facts in contrast to the ultimate eternal forms for empirical fact.
- 5) The ultimate agent
- 6) The psyche (cf. the cogito ergo sum).
- 7) The permanent factor in temporal flux.

All these notions have a various force of association in various periods in the history of philosophy.

Another source of philosophy beyond language - Institutions, which embody purposes, which are the outcome of ideas. Very often the ideas are still vague and have not received adequate expression in languages (A progressive philosophy must be [II] able to go beyond pre-existent language, perhaps adding to it, making it a little more comprehensive and penetrative that it was before.)

Hume's Dialogues concerning Natural Religion. Express the ruin of that line of theological thought. Two deep-seated ways of looking at it, which come out in all sorts of ultimate imaginings throughout Greek and European thought. (1) Metaphysical, 2) Legal.

Legal way produces its own metaphysics, and metaphysical way its own conception of society. From this point of view can be called the Greek and the Roman way respectively.

Scholastic Aristotelianism more the Roman way. Legal notion of mutually external individuals in contact with their contacts arranged by an external lawgiver. Clear-headed simplification. Passes into science, as the bits of matter and laws of nature. Into Christian theology as legal view of the relation of man to God. (Criminal law, relieved by equity). In metaphysics, notion of contact as opposed to participation. Latter leads you to notion of conditions, factors, immanence, former that of Law.

Hume gives you the ruin of the contact point of view. Notion of simple substances self-existent and in external relations.

When religion tries to express itself in this language, it is done. In formulation of Christian theology, we should go behind the legal point of view to the Alexandrians, who talked in terms of immanence. A divorce has been made between the metaphysics which apply to the notion of God and to temporal things. Notion of immanence as applied to God in the world not applied to temporal actualities. Result a top-sided metaphysics, which conceived the notion of immanence as a brought-in statement which was really unbelievable.

First phase of Christian theology a subtle discussion of immanence, but closely confined to the notion of the relation of God and the world. Also simple substance a shortcut to the Immortality of the Soul. But metaphysics is deeper than any profession. Lawyers made a great contribution, but it was a limited one. Hume shows if you take word "contact" seriously, you will end a sceptic. 3 speakers: Demea, Cleanthes, Philo.

All admit a principle of order in the universe to be termed God. They all admit that it is to be regarded with an emotional reverence (worship). D. [emea] the orthodox metaphysical theologian. God intellectually incomprehensible to be only spoken of by analogy (cf. 2 chapters on proof of existence on God in Gilson's book on Aquinas. Analogies, though not founded on any identity, give us some positive knowledge. Ease with which an imaginative point of view jumps the difficulties of argument. (Cf. way in which Descartes gets an extraordinarily definite idea of a perfect being out of very slender premisses.)

Cleanthes, Hume says in his letters, represents his own point of view. An 18th century man. Deduces an imposed law and lawgiver from the order of nature. The laws of nature are the laws of God.

Philo, the sceptic, urges the imperfections of nature, (cf. Essay called "Of a particular providence and a future State.", after the essay on miracles). If nature is imperfect, God is imperfect, if you know him as the maker of nature. Also this gets you no further than knowing laws of nature. But for a great part of dialogue P. agrees with D. against C. Diverge when P. insists on agnostic side. Admits to C. that experience is such that there is an element in the universe corresponding to a Divine ordering, but whose precise determination has evaded philosophy.

A crushing refutation of any theology based on the notion of simple substances with an imposed law of contacts.

What will be the notion of any actuality which has an origin which is out of time and yet performs essential metaphysical functions for actualities in time? To be construed in terms of immanence. All actualities are immanent in others which presuppose them. So all are immanent and yet transcendent. Each actually in-[[l]]-fuses its nature as a condition in

those actualities in which it is immanent; it doesn't create them but its nature is an inescapable element for the actuality for which it is immanent. Each actuality adds its own creative ways of taking and unifying the conditions of the other actualities in which it participates. So God is in nature as a condition and ideal; but nature transcends God in the same way as God transcends nature.

Elements which stand out of time are eternal objects, interconnections of possibilities, rationalities. So we can conceive a being with origin in primordial realisation in concept of all possibilities, ideals, harmonisations. This primordial nature of God out of time. No reference to what in fact comes to pass; but has its peculiar relevance to each particular actuality which arises. So in that respect immanent in each actuality. So poet, not lawgiver of universe. Abiding ideal relevant to each situation. A point of view relevant to the first phase of Christian theology.

Transfer of capital to Byzantium emphasises legal side and submerged poetic side of Greek thought and hence of Christian theology. Augustine struggles with legal difficulty, not with the underlying truth of a poetic fact.

April 30th.

One of these views emphasizes God as transcendent creator, the other as the immanent ideal. But these two notions are intermixed at the very beginning in Plato. μετέχειν, ἐφαπτεῖν, both used of relation).

History of modern phil. an attempt to express a thoroughgoing organic view in language which includes phraseology which can only be interpreted in terms of the non-organic, contact view. Kant thought experience was an organic attainment of its own unity, but he also had the ultimate notion of substance and quality, so he has to have the element of mere appearance over against the real.

Start from 'participation'. For a thoroughgoing view of organism you must extend it to the notion of actualities participating in each other (not only actualities participating in the forms). Then all the difficulties about causation and perception will be how the rest of the world enters into one's conscious being. ("Prehension" means participation in this enlarged sense.)

Then are you going to have many different types of actualities, or one general type, with derivative specific differences? Three general types in metaphysics - vacuous actuality, temporal with internal attainment (individuality), notion of God.

- 1) View that God is beyond understanding - other categories of actuality do not apply to him (cf. Demea) in the dialogue).
- 2) View that nature of God is beyond adequate expression taken to mean that any intuitions as to his nature are beyond our understanding. This should not necessarily mean that they will not be expressed in the future.
- 3) We should take a perfectly general notion of the actuality, and apply it to God and every type of temporal actuality, and then notice specific differences. Plato's view that you cannot analyse an actuality apart from the notion of forms an enormous discovery. Notion of universals, non-temporal actualities. A distinction which language notes very imperfectly. Then mixed entities like propositions involve the forms and actualities (e.g. "I am lec-

turing").

Two ways in which form has ingression into an actuality. It may be the form as completely realised, or it may enter conceptually, as appetite or purpose. It can be realised in respect to its possibility, i.e. its possibility for definiteness. All realisation involves its measure of purpose and emotion and anticipation, which arises out of the total nature of the actuality concerned. No prehension devoid of emotion, purpose or appreciation. This shows us that all actualities must be bipolar, i.e. deriving from antecedent actualities, and so setting immediate actuality [II] in a definite relation in respect to them. Each actuality arises out of, and participates in, the particularities of the antecedent world. Derives its given physical basis for emotion. This world many actualities in their interrelations. New actuality arises by a synthesis and abstraction from preceding [preceding] prehending actualities, and makes them its own in a unity of experience.

Another source of prehension, which arises in the temporal actuality as reaction-prehension of the forms conceptually, and the integration, selection, emphasis of these forms; and their integration with the many derivative experiences effected by the subjective aim at that experience which is to be the unity of the actual entity.

The actual entity arises out of its prehensions, and how it unifies itself determined by its subjective aim where by the appetite of the conceptual pole passes into actuality. This must start determinately as this process of emphasis and selection, and then in course of process it can criticize itself with regard to emphasis etc. (Must not confuse the indefinite species with the definite particularity). Like Aristotle's Prime Mover of the whole universe, but each act is the whole universe in that creative moment, and a particularity of definiteness required for the initial stage of the subjective aim. Is there any room for an actuality of this sort? You must conceive the first moment of creativity as actualising the concepts of all possibilities as a coordinated mental prehension, and this lies at the base of all particular physical realisation (Primordial nature of God). Then you get thoroughgoing notion that every actuality transcends givenness from which it starts, and is immanent, because it remains an element in whatever passes beyond it. So God is prehended in temporal world, and temporal world in God.

General topic of pluralism and monism:

Parmenides and Being as One. Cf. Wordsworth's sense of the unity of the things of nature. On the other hand, you meet a savage dog, and are acutely conscious that being is at least two! Largely a question of emphasis.

Storehouses of philosophical ideas are language, coordinated thoughts on specific topics (e.g. Law), institutions, extra-institutional actions of mankind. Or a contemplative frame of mind.

These the sources of philosophy. Platonic dialectic dealing largely with ordinary sentences. Philosophical conclusions simply based on this shaky and misleading, if it is pressed too far, though you have to start with it. Notion of relatedness has very different meaning for different types of entities and language, which has common forms, and presupposes general context, largely ignores this. Gives you meaning not analysed out, but what it comes to in practice. So we have got to use language for the critique of language. Poetry tries to excite your imagination beyond the language. Linguistic dialectic which purely takes lang-

uage at its face value misleading. Remarkable that Plato exaggerated both the linguistic and the poet side. Shows that there is such a thing as seeing what language tells you, and then he puts the rest in myth.

W. James' and Dewey's theory are better construed as theories of perception of vividness of expression, than as theories of knowledge. To be contrasted with linguistic analysis or contemplative intuition. They remind you that the most vivid normal experiences are in action. So if you are going to compare a theory with direct observation the proper way is to see whether that theory enlightens your experience when you are acting. Any abstract theory has got to pass the test that in some state of mind you say it is true. You integrate an intuition of eternal forms with your intuition of the temporal world. Judgment the bringing together of two sides of experience. When is this best done? Instrumentalist says in practice.

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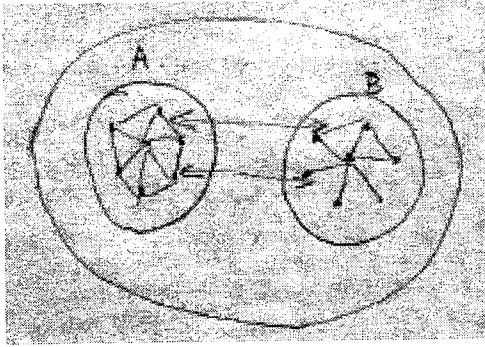


fig. 1

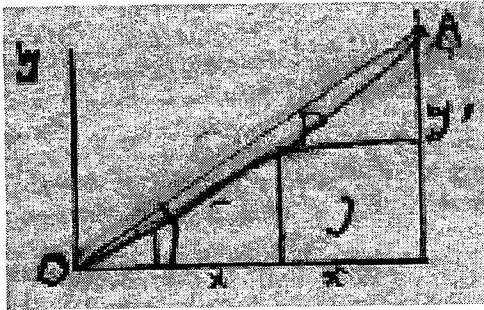


fig. 2

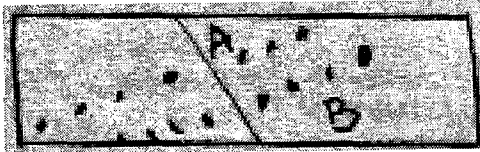


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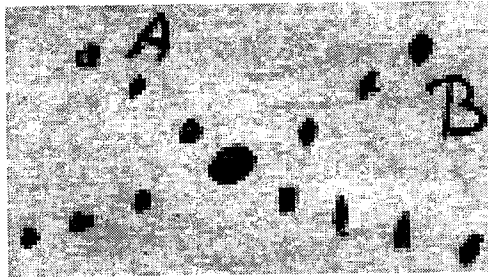


fig. 4

	P	¶ (probable proposition)
a.	{ h1, h2, h3, --- hn	(Conditions present)
b.	{ --- h2, h3, --- hn	" "
c.	{ h1, --- h3, --- hn	" "

fig. 5

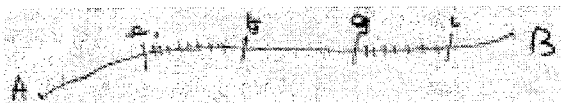


fig. 6

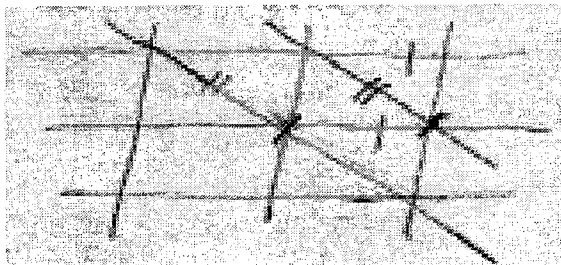


fig. 7

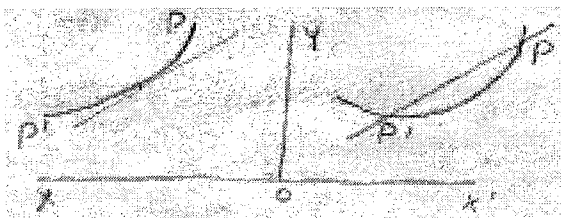


fig. 8

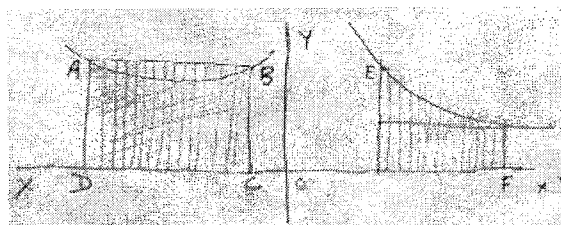


fig. 9

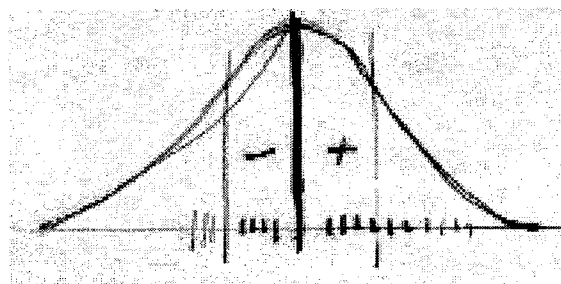


fig. 10

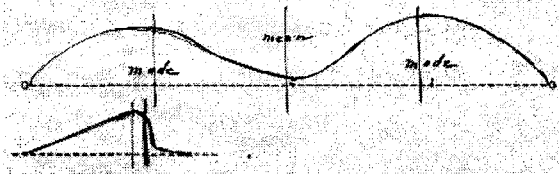


fig. 11 & 12



fig. 13

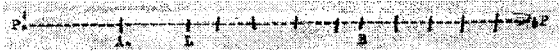


fig. 14

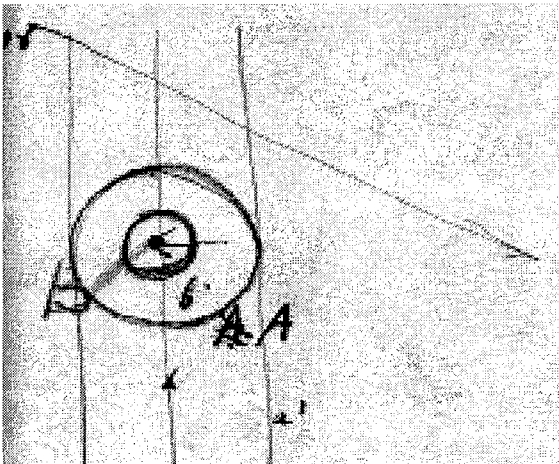


fig. 15

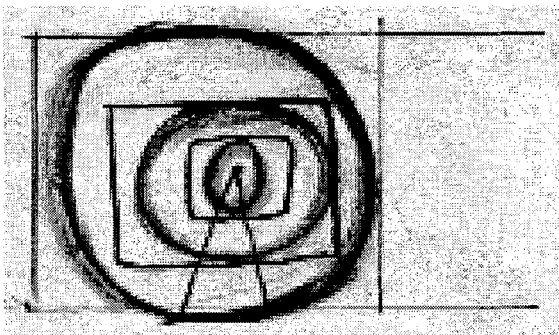


fig. 16

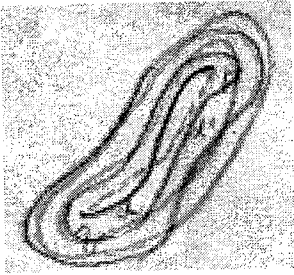


fig. 17

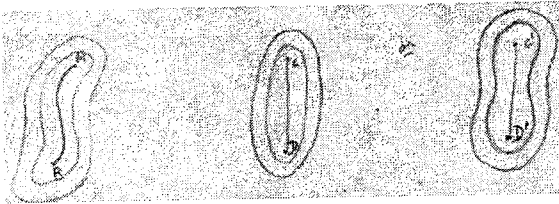


fig. 18



fig. 19

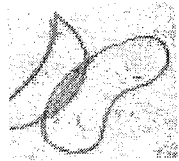


fig. 20, 20 & 22

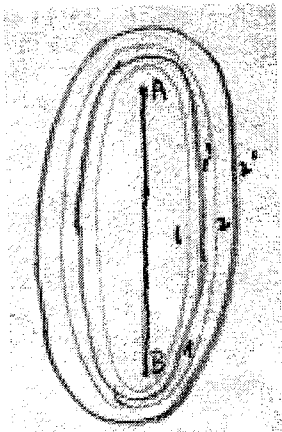


fig. 23



fig. 24

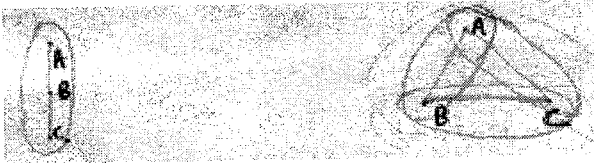


fig. 25

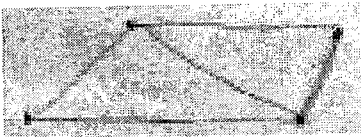


fig. 26

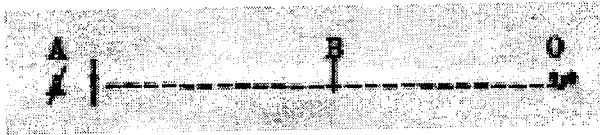


fig. 27