Charles Hartshorne's Handwritten Notes on A. N. Whitehead's Harvard Lectures 1925-1926

Edited by Roland Faber

Dimensional Transcription

A **1a [--/1a/]** <1(c2)>
DH {Charles Hartshorne's Notes <1925-1926>}

Whitehead 9/13/25
Laboratory of Phil. = general concepts actually applied to real world.
1. Indiv. Substances - Arist. (he had other ideas)
2. Organic Empiricism - Heracleitos
3. Function-organism - Leibn. (plus 1.)

Whitehead = 2+3.

Occasion emerges from synth. of all occasions as components of itself.
Some entities nec'ly in every occasion. This = source of pure math.
"Harmony" = emotional word. Plato felt beauty of math. ideas, & of world as embodying these. This beauty transferred illegitematley to general ideas apart from world. Beauty attaches to abstract only as harmony of the concrete. No ~~use~~ "all possible worlds" - can only appeal to actual. But is an appeal to alternatives within gen. Framework of actual. Alternative glimpses of harmony within general ~~harmony~~ aspects of actual.
Sheer contingency - chair just such a chair.
Bits of matter - forces - cause.
Function requires depth in time - not morphology. Beginning not comprehensible without end = final cause. Fusion of efficient & final cause.

A 1b [--/1b/] <(1c)2>

Community of entities
Past & present adventures of ones substance have community. Occasions secondary, subj. primary.
But - community of subjects?
Occasion as function has depth in
time - but as member of actualized total of occasions, is divisible.

Time = composite notion, between 4 dimensionality of extension, & "realization." Impress of actuality - pure succession. As pure extensiveness time not distinguishable from space. Time as such in how of realization, not in extensiveness or continuum.
Time - minimum to function.
An air & its notes e.g. Sheep its time.
Time = sheer succession of impresses of actuality of realization of functioning. Time as an epoch, & as divisible. One aspect of time divisible, one aspect divisible. Even in Desc. time in one aspect is not measurable. Never an instant before you, but a process, specious present (1/10 of sec. perhaps). Might be a whole era (Royce) 1000 yrs. to see joke?
Time deeper than extension. English empir. School superficial in acct. of time. Hume a ghost of this idea? seams so. flux of impressions.
Kant - form of intuition. Unity of function in life - history of ~their own~ Self.

A **2a [--/2a/]** <3(c4)>

One type of limitation throws light on another.
[Ratzel's rhythms, in part]
Workshop of metaph. = immediate, concrete, real exper. Pragmatists have done a service here. Metaph. a learned science, concepts landed down growing more & more abstract [Heidegger]

Dualism - (not absolute) in W's theory.
Two generically diff. types of occ. Experien\~~eed~~\t occs. & imaginal occs.
Theory of knowl. Discard permanent knowing self - like James. Imaginal occ. = fundamental fact for theory of knowl.
Cogitation is without ~~it~~ experient occ. A matter of fact not including its own cognition. Imaginal occ. always derivative from some experient occ.; is also an achievement, ~~but~~ also synthesis of whole community - but a synth. via its basic experient occ., realizing type of value possible because of exper. occ. Vs. Kant here - because for Kant given chaotic apart knowing of it. Kant ~~failed~~
How is knowl. possible? (1) How is exper. occ. possible. False idea that to describe anything = describe knowing of it (2) How is imagin. occ. possible. This comes second. Most concrete fact - exper. occ. with its imag. occ.

A 2b [--/2b/] <(3c)4>

As value one or other may be negligent
Both always there.
Exper. occ. takes acct. of imaginal occ. -
not cognitively. Hence exper. occ. not com-
pletely described until imag. occ. descr.
Emotion arise from synth. of imag. into exper.
occ. Exper. occ. prehends imag.
What synthesized, what excluded?
To answer must classify entities. Already
have classified occs. & "other occ." & com-
munity of occs.
One occ. does not synth. others simplici-
ter, but excludes someth. Otherw. all occ.
were the same. Other occs. included & excluded.
"Modal synth." Arises from interplay
of "other entities" & occs. synthesized.
These "other entities" also not included sim-
pliciter.
Eternal Objs.
Each unity of occ. = mode of achieving ac-
tuality for whole comm. of occs. & whole world
of eternal objs. Being something for itself.
Describability of occs. depends on identity.
CH<identity. Platonism?>
Components of one identical with some of another.
This = foundation of all knowl.
Enduring identity. Same ~acct.~ not
merely exact replica - question of continuity
of occs. Identity of pattern through continuity
of occ.
"This the same green", however,
involves no question of continuity. of occ.

A {"3" is lacked out; overwritten}**3a [--/4a/]** <6(c5!)>

Desc."perceptible under these forms." "A certain extended thing" alone there. ~~Th~~ ~~Extension~~ Flexibility not mere product of imagination, extension also. For flexibility = an infinity of possible changes. Imagination insuff. to infinity. Sheer presentation of datum does not give wax {= Descartes' wax}, but "inspection of mind."

Broad vs. Russel's {sic! "Russell's"} class theory of ~~??~~ thing. Desc. rejects this. for class = an infinity of forms, not perceived as such at all. ~~Class~~ Unity of class, intention of class given by notion of entity acc. to Desc. This notion got by inspection (very "hot," says Wh.) Russel {sic!} müsste sagen how data are classified much more definitely than he does.

Substances:	\	Bits of Matter	\Minds
Attribute	/	extension	/cogitation
Existence	\	endurance	\endurance
	/unknown qualities causing:		/Secondary qualities
	\		\ (cogitatia)
	/	Matter formaliter * in->	/Matter objective
	\	* spectio\	
	/	{* = square around "inspectio"}	

But: substance - quality? Cogitation, endurance, secondary qualities, all qualities of mind?? How then is world known, if world is non-mental?

However: as map of scientific work for 2 or 3 Centuries, couldn't have been better. Science took care of left hand part, phil. of rt. hand part. Science meant physics (biology less than 100 yrs. old)

A {"3" is lacked out}**3b [--/4b/]** (6c!)5>

Balance has been upset from side of sc. by rise of physiology & psychology. Come back to Galilei's sensitive body (= exper. occ.)

| W. drops substance, & gets sensitive occ. as | ultimate entities.

Locke & Newton in London together. Locke full of Newtonian ideas. Newton saw extension was insuff. The ~~??~~ need mass, wh. = quantity of matter (with ~~??~~ extension, 2 measurable attributes) Mass = inertia, external to *its* motion. Matter occupies space (Desc. space = matter)

/ Mass as ~pushiness~ of things, not seperable from their sight etc.)

Hume: spatial rels. {= "relations"} merely manners of display of secondary qualities.

Hume: "a few superficial qualities of objs." only shown us by nature, who keeps her secrets well hidden from us. "Influences & powers" unknown. Why bread nourishes, e.g.

"Wonderfull power" = satiric of Newton [?].

Cause = essence of subst. for Hume in compar. to Desc.

Sensible qualities in unknown rel. to secret causes.

<|| > Hume presumes we know past exp. But <|| >

<|| > memory on his scheme = merely present exper. <|| >

<|| > Future no more a puzzle than past.

Like sensible qualities always with like secret powers.

A {"5" is lacked out; overwritten: "6a next"}
--/**5/ [--/6a/ (7 next)]**<(7"follows")6a>

Time as epochal = an impress onspatio-
temporal continuum, involves achievement.
Desc. sees time both measurable & not m.

Perceptual obj. Desc. Medit.2.
If subj. is stressed instead of event, result a
muddle.
Datum in one way includes other events, ~~fr~~
in another, the eternal objs.
1. ~~Occ. E~~ Internal rels. How other occs.
modify occ. E is question
2. E ~of//&~ eternal objs. Latter express how
other occs., X, modify E.

1. \~~Two~~*Three* main types of int. {= "internal"} rels.
⌈a) Presentational – present.
⌊b) Inspectional / Desc. inspectio & lump of
wa|x, mere dta don't give us identity of wax in 2
sta|tes, but we kn. it by a certain inspectio.
|c) Relative status: perspective ⌠ rels.
extensive ⌡
y
\ X { "\" = line}
\Green/ { "</" = line with arrow}
a) E . < / Green= presentational rel. modifying
mere status rels. X ~~=~~ is green for E.
(E is here exper. occ., cognition aside)
E is what it is because of its green rel. to
X Immediate present essential here.

{backpage of **5** empty}

A {"4" is lacked out} **4a [--/5a/]**<8(c9)>

But
The green here internal to E, external to X.

"Bifurcation of nature" leads to sceptical {sic} ruin (merit of Hume) Above ?? rel. is a public fact, apart from private cognition.

b) Inspectional rel. hold only when a time laspe lapse (perhaps too simple, in imaginal occs. may be diff.) Internal at both ends. What y is in itself enters into itself rel. to E, & so into E.
"Prehension" not synth. because not a mere putting tog. {= "together"}, but under a mode, a limitation. Hence ---> {under/between "Hence" and "how"} how what y is in itself enters into E. no mere synth. of y into E, synth. simpliciter an ~unthing~. How = how not!
Causality an inspectional rel.

RyE includes presentational rels. of y. Hence \RyE*inspectational rels.* a synth. of pres. rels.
Our own past add vividness of our present. Memory in E of antecedent pres. rels. in y. Memory an inspec'l {= "inspectional"} rel.
Physical inspec'l rels. Contemporary occs. are those without inspectional rels.

A {"4" is lacked out} **4b [--/5b/]**<(8c)9>

Only pres'l & status rels. This = independence of contem. events.

Grades of vividness of actuality. Intensives bring value in. Togetherness of things for its own sake = an occ.

Conditions for rel to y promoting depth of actuality in E. This = historical rost (defined by rel. status *[1] eventually) Depth or vividness ~~alone~~ ~~render~~ ex- *[2] {"--->" = arrow from *[1] down o *[5]} plainable only by rel. to historical roots. *[3] Hist. root = root of *[5] contiguous occs. *[4]

If successive states form a unity, [express some theme] - melody! - "S endures" = mere identit. "Important" when endurence depends on S & not primarily on external environment. Then structure really inherited from previous S. not merely reproduced by milieu.

Historical group with enduring structure =is an "important" entity.

~~++++++++++~~

We have lost our own merits through Germans without gaining the German merits. No longer write as in 18th cent. or 17th c. - neither in Engl. nor in France.

Galileo - colors etc. "in sensitive bod\~~ies\~~y" this less bifurcation than Desc.'s "merely in cogito."

Shape & motion only in ~~body ???~~ external cause of sensation.

A {"6" is lacked out}**6a [--/7a/]** <10(c11)>

Principle of uniqueness of rel. status. underlies time & space. Each occ. determines a scheme having one & unly one niche for every other occ. In knowl. of one occ. may know about some other occ. simpl b some general relationship, not by adjective. When we point, e.g. the "that" without adj.

==========={"-"= is thick line}

Denial of contingency means partial conditions provided by antecednt occs. completely detrmine occ. But: antec. occs. are those wh. provide conditions (past defined - to an extent - by causality - this later)

Know. of antec. occs. will determine some characters of occ. - otherw. no induction. And knowl. of consequ. occs. would provide premiss for kn. of some characters:

Nothing in b for itself alone

Contemporary events - must be independent as such. One not cause of another. Only connected through antecedents.

Holds for contingency - otherw. perhaps no past-present-future.

Has purpose of past occs. tog. {= "together"} with its free responsibility - their own purpose conditioned by purpose of prev. occs. & by their own exper. of displayed rels., enriched by spontaneity. But 2outbursts of spontaneity: (1) own immediate display, (2) in rel. to future.

Contemp. occ. in rel. to future merely exper. purpose of past occ.

A 6b [7b] <(10c)11>

Mutual rels. of cont. events is for b, as displayed - eternal objs. give content. Mode in wh. b, is in b ~~is~~ involves intervention of etern. obj.

Internal & external. Internal to b, external zu b, Apprehension external zu obj. Analysis of b, gives no idea of this rel. Yet this anal. would give kn. of exist. of a b, [via causes?]

Displayed = what is present - priv. psych. field. Yer "privacy"!? Must get publ. world into priv. field.

Field of display

Present events are contemp. but v.v.? Relativity - ~band/bond?~ of events neither past (cause) nor future (effect) is it all present psychologically.

Grounds for bel.{= belief} in contingency.
{"-" = thick line}

(ought to be but one, ought to be obvious)

~~1.~~

1. Total comm. of act. occs. is conting. with resp. to total realm of possibility. Datum for action = total realm of poss. In discerning this datum we discern total actual as contingency. Approval or disaproval ~jm'ts?~

Why must there have been a world

A **7a [3a]** <12(c13)>

in wh. Char. I had his head cut off.
2. Each unity prehends total com'ty, &
thereby exhibits characters of tot. com. - under
lim'ions. Hence shares in spontaneous con-
tingency of com.
Unit contingent because whole is
Whole is " " unity is.
3. Direct exper. of spontan. choice. Unity given
as choosing - under limitation. Of no exper.
of freedom, non of limits (Mongoose)

4. ~~Determination~~
Determinism gratuitous for Pluralists of
empiricists - who hold that indiv. occs. must
be consulted in knowl. Comfortable, tight feel-
ing of the monism plus pleasure of empiricism.
Can't have both - Wonderfully baseless doctrine.
Sheltered himself behind W^m James

Original Occs., occs. og knowing.
Each exper. has its correl. imag. occ. = occ.
of know. that exper. occ. Ultimate concrete =
unity of both - that whole = ultimate occ.
Imag. occ. = knowing whole comm. via its
exper. occ.
Shy of ego. Desc. ~not grund wesen~
Imag. occ. comtemp. with exp. occ. because

A 7b [3b] <(12c)13>

of causal indep. (in measure)
Exper. occ. as datum is in com-
plete indep. of \its/ {"\/" = insertion from above}
imag occ. And imag.
occ. has exp. occ. qua datum, but datum
not cause of knowing. Exp. bears to imag.
occ. simil. rel. as eternal objs. to exper.
occ., i.e. eter. obj. not cause of real world.
Yet theory of causation required in res-
pect to im. occ. Otherw. imag. occ. gave
complete know. or else intrinsically un-
knowable entities (= "nonsense")
Know. er/\rativ {"/\"+"r" = insertion from below}
because imag. occ. con-
ditioned by non-contemp. ult. occ.
Worped from outside.

A **8a [--/8a/]** <14(c15)>

page
100 (arbitrary starting pt.)

A H

B (part of A) K

not true that ⎧A= K → Y
both ⎩H= B → Y

Member of quantity

Emergence $G_1\ G_2\ G_3$

G_1 (+) G_2 (+) G_3 - (+) - G_n {"(+)" = + within a circle}

if $G_1 = G2 = G_3 = G_4 = G_n$ → Y

and

C is predicate of G
C' " " " a_1, a_2 -G_n
C = n [c']
C' = 1/n [c] {"[c)" in the text}

Two axioms needed:

a) axioms of divisibility. any length composed of lengths.

b) " " _____ If *B {* = a C around the "B"} = any stretch, confined a sequence

~~Then~~
~~of c's on any other line {?} B confined~~

(e.g. however for away a star is, light from it will reach us - e.g. n times any magnitude than is greater any other magnitude) Called Archimedes' Principle.

8b [--/8b/] <(14c)15>

Not true that:
~~Also~~ given any two lengths can always find a common unit of measurement (?) & thus a realtion of one to another. E. G. ~~diagonal~~ square of circle.

A **9a [--/9a/]** <16(c17)>

Equality = an:
~~G~~ a R b

(I) Symmetried If a R b, then b R a.
(II) Transitive If a R b, and b R a {"a" has a "c" around}, then a R c'

Deduce: (I) If a R b, then d R b and b R a {"__" is a thick line}
by (II) then a R a

Why does truth of consequences violate premises? (ancients didn't know really)
Formally, there might always be others.
Non-congruence of premisses {sic!} essential to induction.

"Matching". In respect to being colored no things are instances of same color. (G determinble - "color" - Johnson's term)
~~blue~~ color
P = Q → Y (c_1) (→ means "with respect to")
Q = R → Y (c'/)
Double use of instance, particular thing of particular color.
Almost because 2 colors have much in common. They are contraries (~~e.g.~~ i.e. "reversions")
Preservation of type through contrariety.

9b [--/9b/] <(16c)17>

Every entity is social. Neither in world of existence nor of abstractions, a "substance" i.e. "someth. on its own." Would be utterly unknowable.
Radically social character.

Quantity.
Can be without being measured.

⌈ γ (c_1 c_1) = class ~~at~~ of attributes e.g. color or magni-
{ tude
⌊ K → (P, Q, R) = class of instances of γ.
~Inight~ = be stretches in space or
instances of {yard} or γ'.

"Whole - part."

P Q
P (+) Q ——————————— {"(+)" = + within a circle}
R
≡ R (the whole)

Bare diversity trivial unless within a common determinable (γ) "Contrast in instances of general sameness in a synthesis" = key of univ.
Three ideas wh. come in everywh.

"Addition" {"(+)" = + within a circle}
Euclid: (I) A = B → γ A (+) P Then A (+)= P
(didn't use the P = Q → γ B + Q = B + P → γ
symbols)

(Subtraction shows same rule)

"Whole greater than part:"
means: P (+) Q implies ~~P + Q~~ P ≠ P (+) Q → γ
{"(+)" = + within a circle}

{"10" overwritten with pencil; not lacked out}
10a (11a) [--/10 and-11a/] <72(c--)>

Immediate occ. is the sythesis of other occs. prescribed by definite order of other occs. as from the standpt. of this occ.
If what you see is your own private property.

Immediate occ. = cause of itself. You discern a prehension of what is otherwise isolated into a unity wh. is someth. for itself. This is the aboriginal germ of value, value as in form, because it has abolished, isolated, & synthesized into someth. worth while.
As efficient cause, prehension. as final cause - value.
Each entity poses itself wh. in being itself is to that extent separated from others, & get in being itself includes the unity of the others.

10b (11b {"11" coerced to "10"}**) [--/10 and-11b/]** <6a(c7)>

Okt. 17, inserted:
Concrete occasion: a prehension.
Describe before theorizing [Husserl]
Mankind hamstrung by abstractions. Univer-
/ sals hinder analysis.
*s \ First task of phil: criticism of universals
{* = circle around "s"; not in <copy>}
[Husserl begins so, but criticism too naive & hasty,
does apply it to universals he is using enough]
First problem of metaph: : [sic] how is description
of immediate cognitum possible? What are
evident universals presupposed in any
description - especially, description of cognition.
External occs. first. Immediate act
of cognition is not among the immediate com-
onents of the immediate occasion itself [Husserl].
(Cf. Desc.)
Kant's chaotic datum false.
Many & one are disclosed as involving here
& now for the one, there & then for the many.
Here & now, there & then, refer to an impartial
community. Both actual in same sense, in
immediate occasion.
Correlation of occs. means that the components
of occasions enter not simpliciter but as limi-
ted by there common rels. to this particular experienced
occasion.

A **11a [13a]**<22(c23)>

Form of intuition itself indivisible. Given chaotic - this wrong. Given its inherent rels.
qua merely given., = rel of possibility. Formation not all in impress, but ~~in given~~ preformed in given.

Cognition
Allways a multiplicity of cognita
a) Colors, sounds, shapes - internal objects.
b) Persona, chairs - subjects.
c) Occasions, events.

Community of things real, achieved, are for themselves = real world.
What type of unity in multiplicity is most complete exemplification of being-for-self.
Ethics (Socrates) has ruined metaphysics. As man of science feels so. spoiled things.
Art vs. ethics. Art for the immediate good Ethics looks beyond given. Solution in concept of God.
Art prior to ethics in width of its categs.
Aristotelian tradition says - look beyond immediate & enduring entity System in logic & ethics spoiled his metaph. Desc.'s many bodies & minds carries this on. God comes in in infortunate manner - to rise superior to metaph. difficulties in wh. we have involved ourselves [= def. of deus ex machina]
Subj. has subsumed many subjs. & their community.

A 11b [13b] <(18c)19>

"Here and now", occasion fully indiv.
But Aristoteles obscures this: that no actual world
apart from multiplicity of occasions, & no
occs. apart from community of occs. Isolated
occ. meaningless.
Enduring objs., & ethics secundary.
World = primär [sic] community of occs.
To describe occ. must introduce actual
world - a concretion of diverse occs.
Upper & lower community - lower = organ-
ism, concretion of all others. Upper = actual
world, impartial community of total multiplicity.
Organic empiricism [(Gestalttheorie)]
{"(" & ")" corr. by "[" & "]"}
Matter = an aggregate of organisms.
Statistical survey of their ~~actions, {?}~~ occs.
Each occ. its own indiv. essence, & every other
as synthesized in ~~it~~ "It" has this [?]
Something in it is for It allone.
Desc. "in the mind" & "in the sky" (sun)
(inconsistent with his phil.?) In the occ. vs.
to be for itself (formaliter) This = distinction of
image & real.
Imposition of limitation the means of
making this distinction. Modal limitation (whole
of metaph.) Total environment.
Impartial synthesis of multiplicity of occs.
"Members one of another".
1. Modal limitation of being just that alone
2. Entering into all events

1. Might be otherwiese but is n't. But if were
otherwise, others would be otherwise. Hold

A **12a** **[--/12a/]** <20(c21)>

up obvious by scruff of its neck
To say what event is = extrude alternatives.
Concretion or sythesis, & extrusion (modal)
Plato? W. Believes Plato errs here - whole
ideal world inseperable from occs.
describe event = describe it as exclusion of
what it does exclude.
Say what it is or what it is not - both equally
good, sometimes one better, sometimes another.
"Being blown up" = to be told what one is not.
Essential to actual = confrontation with ideal,
& to ideal its confrontation w. actual.
"Multiplicity" seams there are entities wh.
can be conceived in some sense apart.
Must start with a one, being finite minds.
Desc. starts with Ego. Something for itself, an
achievement in itself. An occ. is an end in itself.
= a value. No such thing as undifferentiated value.
Individuality, for-itself-ness, means value is al-
ways definite ~poterv~——value. Value-in-itself ~~def~~
Achievement of Value involves exclusion of neu-
tralising elements, keeping them at bay.
Incompatibility: if event is this, it can't be that.
Laws of thought.
Everything definite value = event. But this denies
isolation - for value supposes gradation in value.
How much value. Brings us back to com-
unity of value. Intensive quantity = value in
science. Events as comparable, more or less
vivid entities. Gradations of importance, of
achievement - defends on completeness of ex-
trucion. Art = arrangement of environment
of occ. so that modal sythes.

A 12b [--/12a/] <(20c)21)>

is achieved
Wh. is that occ , with a completeness of
extrusion, thus giving correlative definite-
ness of inclusion. Leaving out condition
of what it is.

Happening of occs.

Art & Ethics.
Prehension vs. apprehension. Latter brings
in ~~??~~ cognition, another story.
"Synthesis" - but just as much extrusion.
Degrees of vividness = intensive quantity.
Art brings in essential metaph. situ-
ation. Community summing up occasions,
by community to be discerned in one occ.
Either Hume or an a priori rationalism,
which knows of itself conditions of all existence.
Ethics: comparison of ~~values~~. occs. occ.
to survival values etc. Art: value
in itself, for its own sake. Ethics presup-
poses art, art requires a ethics, but pro-
druce this out of itself.
Soc. precursor od Desc. as enemy
of true metaph. Greator influence is
Aristotle - enduring entities stressed. But
these derivative. Aristoteles ~inveats~ logic, wh.
hardens idea of subj.

A **13a [14a]** <(22c)23>

Desc. rejects Greek thought, but retains
Cristianity & logic, i.e. thinking minds [or
souls] & bodies. Occasions derivative.
Desc.'s clarity, brevity, straightforward
opposition good methode.
     Grades of induviduality. "So far as it is
something, so far a success." But ethically,
may be an evil - no survival power, can't
pass on its own type of success. Or dimin-
ishes other successes. Or, hinders pro-
gress in grade. Or, ethically evil in that
it might have (freely / made itself better.
     Something always achieved.
        Irrelevancies a hindrance in art. More
gives you less, when you have \/[already] enough.
Chinese art - ~~opp~~ suppresses everything
     but just impression of unity of form & color.
Even in full-blooded art of Italian Renaissance,
     nothing there exept contributes to 'joint-value'.
          To procure that limitation which realizes
[that] value already duiscerned.
          Whole based on relevance to human today (in
architecture) Limits as down emphasizes volume
by its balance with other volumes of building.
Indurance of work of art, its individuality.
Each time you see it, the self-same being.
          One Substance emerges in each emerging
   individuality.

A **13b [14b]**<(25c)24>

Relevance of past in its enrichment of substance as ground of eternal present.
Always def. value. no indefinite general value. Always particulars.
Particular in a community of particulars. - can't get away from this.

Religious art - transition from particular entity to eternal wh. comprehends it.

Gothic architecture - purest example of finite referring to infinite. Upward lift as /\$^{its}$ organic function - ["infinity above me"] everything strains upwards. Horizontal flow also - richness here, in decorated capitals, strength flows upward, richness horizontally & center of religious rites.
Slightest impurity means sinking in value in Gothic.

Limited wh. emphasizes beyond: Gothic art. Religious art in general.
In nature, even more direct embodiment of infinity beyond finite. But some method as in Gothic, as it were. Strict limitations - ocean rigidly bounded. Absence of a multiplicity of intruding details - not anything ~~anything~~. anyhow - Uniformity = type of limitation. Detailed foreground emphasizing ~monotour~ of expanse beyond.

A **14a[15a]** <25(c24)>

Sense data often taken atomistically, no relational tinge (Falacy {sic} of misplaced concreteness - really abstract)

Math. goes after eternal objs. Practical man ~~also~~ after enduring objs. - e.g. Number.

Green vs. greenness.

Green = relational entity. Greenness abstracts from relational side - but cannot be described apart from latter, from Green.

Fundam. Prim. here - one of extreme logical realism. If reject "stuff" must be a log. realist e.g. ~??? ???.~ proclaimed himself log. realists.

Lowest form of abstraction indiv. occ. neglected.

Every occ. involves ev. eter. obj: only question is how. But eter. obj. can be considered, leaving manner of ingretion {sic} (?) indefinite (wholly?)

A difference:

(1) Eternal rels. of objs. to one another.

(2) Rel. of eter. obj. to occs.

Eter. obj. has in its essence an indetermination with resp. to its integretion {sic}. Nothing is this essence to decide this. But pt. gets decided! "Possibility" means ~~then~~ just this. Actuality a def. solution. Can apprehend props. not about everyth. at once, although nothing is substantially indep. of whole.

Concrete occ. cannot be described apart from the possible.

Realism in art - without ~~ar~~ romance cannot see real as it is. B.R. "Freeman's worship." B.R. Indignant at Univ. Univ. inherently refers to what it might be.

A 14b[15b] <(27c)26>

What might have been otherw. Each def. occ. has determinate status with resp. to previous. But merely as "an occ." might have been otherwise.

Our def. occ. defines general char. of comm. of occs. determines:

(1) What any occ. must be.

(2) What any occ. may be. (for any occ. contains all eter. obj.)

other all possibilities)

(3) What each /\ def. partic. occ. with a determinate status to given occ. must be? Limitation additional to (1) imposed on general possibilities of (2) Causation & final causes here.

Most general idea underlying space & time.

art of (1) that any 2 occs. must have def. specif. relative status. • $^{\alpha}$ $^{\beta}$ No other dot can have same rel. to α as β. Rel. which comes from joint particularities of 2 entities. Relative status. Absolute status of α can only be described in terms of its rel. status to all other entities.

~~Shape~~

Internal rels. affirmed.

(1) Impartial conditions ~~of α~~ from standpt. of α.

(2) Impartial possibilities.

(3) Partial (opp. to im partial) conditions of β by virtue of status relative to α. An exclusion of impartial possibilities.

15a[16a?] <27(c26)>

Dec. 10 {thick black line}
Energy-structure is ??? proton plus its field of force.

Vortex theory failed:
(1) In detail becomes so arbitrary complicated Ether becomes so complex.
(2)
(3)

Dramatic reversal:

Atom of action _ quantum. Only one species. Unexpected outcome. First emerges thus:
One finds that in emitting energy (e.g. light.) can only get energy-changes as multiples of a given amount. Integral quantities, same for all atoms.
Rel. of quantity of energy to period. e_g = h(const.)/T
Quantum of Action /Plank's
= h quantum) e_g x T = h.
This h insists on having a time depth.

15b[16b?] <(29c)28>

Physical laws eminate from structure of concrete entities. Laid down by immortality of past = allowing such measure of freedom as may be. Freedom leads to an evolution of physical laws.

Physics cannot explain laws because it abstracts from concrete facts. {red underlined}

16a[17a] <29(c28)>

Dec. 19.
James "C'ness exist?" only open to question insofar as he treats physical things as having stuff while C'ness only has or is a function.

Imaginal Occ.
Mr. Squiers (Nicolas Nicolby) "nature is a ~rum'um~."
Limitation of Knowl. or error.
Imag. occ. analyses exper. occ. into ~clato~ for ~it~ creation, not into actual parts or part-creatures of it as a creation.
(= limitation)
Creature = measure of unification of possibles, not mere selection from it. cf. "Relativity" - (beginning)
"Intensive quantity" as in Kant.
Data for creation - extreme realism in mediaeval sense
Yet —— data not unrelated, not a ~serop. heap {also line 29}~ of unrelated univs.
This ~reall stumpling~ block in realism to nominalist.
Relationship of data as in general possibility of creativity.
Creativity has a character. As abstracted from [all]~~any~~ partic. occs., & all predicates relational. ~Ge[58]~ Moore & Russell obsessed by ghost of Cartesian substantialism.
Ingression. This word aims at rel'al charact. of ~uni~ Et. obj. is how other exper. occ. enter into exper. occ. wh. is ego.
Aristoteles's Logic seems to have distracted attention from rel'l. side - though chiefly in later Aristotelians.
Eter. Obj. not idea or thought. extreme realism ~heres~ (Lewis?)
In Mid. Age. Predicates ~~disl~~ a ~serap heap {also line 18}~.

16b[17b] <(31c)30>

Relationship in ideal world, i.e. apart from unification into an experiencing creature. Rel'ship thus with isolation (of eter. objs.) (Finite truths thus possible)
I~~n actuality~~
Sound of trumpet relevant to color red etc.
Analyzable & yet tone = for its own sake Picture .
Creature = whole under limitation - all of possibliliy is in it in its allotted measure. Aristoteles's „unmusical man."
Im. occ. = fusion of creativ. as general with it as issuing in partic. i.e. exper. occ. as such fusion = a new actuality.
Confrontation of creatures as what with creativ. as how gives a new creature = imag. occ.
What of creatures produces a new how of creativ. hence com'ty is unfinished.
Rel'l char. of eter. objs. can be analyzed into multiplicity of finite relations. Objective Idealists, Br. & Bos., who deny finite truths, see things as in the actual world only, ignore possibility. Patience of ideal world for actuality. Measure or limitation
Thought is in im. occ. = projection of finite rels. as in possib. upon actual fact with its variety of measure of relations of those possible finite rels.
Freedom lies in gap between general possibiliy & particular actual occ.
Thought has one side of absolute generality. Here freedom becomes really effective.

17a[18a] <31(c30)>

Read Russell's Home Univ. Libr. „Int. to Math. Log."
Abstracting is easy when dictated by some interest. Tram-car man. Language gets more abstract. Instead of inflections, separate words for grammatical ideas. „Dialectic degeneration" of language. Curious subtlety & curious lapse into stone-blindness of language.
To built ph. out of results of sc. = to neglect data not get sytematized by sc. (No God-like intellects, „every man as stupid as anyth. somewh.") But to neglect sc. = ~~to~~ not to get beyond ordinary language.
Literary tradition vs. sc. in ph. Since 17th C. ph'ers have divided rather heavily into two classes on this pt. Even Berkeley more all-round than mot ph'ers today.
„Here is a contradiction in ordinary language." Impatience of people of literary training with contradictions, not seeing that a more subtle analysis than ordinary language removes the contrad. In math. even we become more & more subtle: e.g. infinity & continuity. If you'll only take the trouble, thing can be unraveled. E.g. Time & space, nothing to be done here witho. careful consideration of all the distinctions.
Royal soc. of Edi/\nburgh. Robertson Smith. c. 1880. on Hegel~~s~~ on Differential Calculus.

17b[18b] <(33c)32>

Space & Time as abstractions.
Greeks began to make statements about them.
E.G. Points & ordering rels. betw. them. Euclid:
point = wh. has no parts. (not „no magnitude [sic:"],
that = derived notion) but position, but that =
merely a relatum in reg. to space ordering rela-
tion. Space rels. have pts. as relata. Simplici~~u~~
ty of pt. = no parts wh. are themselves relata
of space rels. ~~P~~ Pts. = abstract relata of
abstract rels. of space. Our language
has presupposed geometry for 2500 yrs. Thus
table said to occupy space as already
there, concrete occupying an abstract:
On other side, thing as substance on its own.
& ~~th~~ then in space. (Newton) Desc. however,
~?~ made spatiality the substance.
Line not a mere class in extension, but an
ordered collection of pts.
Try to view things unobvious lines
& you get into troubles, try to be consistent
& you reacvh very unobvious ideas.

18a[19a] <(32c)33>

Jan. 5. 26.

Knowledge.
What is duality, we want to avoid.
Must not construct world from abstractions.
Metaphys. describes, rather than constructs.
Detached facts not ultimate - they exhibit patience for rest of the universe.
Desc.'s bodies & minds, neither completes the other. Each perfectly happy without the other, or rather happier!
Nature at an instant. the same lack of patience. mere eccident, that other instants are brought in?
Metaph. concerns internal rels. Otherwise no gneralization beyond the datum. If no internal rels., no metaph. Thus Hume & Russell.
And if no metaph. then no knowl. beyond immediacy! Hume & Kant's appeal to prectice = to ~~an~~ unanalyzed ~~rels~~ internal rels.
Why fact is dipolar - knowing & experient. Each must render other intelligible.
Sameness & diversity - [two threads running inseperately throu{sic} evrything]
1) Natura naturata. Actual entities & their otherness.
Subj - Obj: only a spec. case of polarity or otherness.
Immortality. ~~Ed~~ Each occ. is immortal in each other.
„Otherness" involves presence of the other. Is a contrast effect.
2) Natura naturata. Data of actuality = eternal objs.
*<Sameness> Sameness of eternal objs. vs. diversity of creations.
Aristotle seems to have muddled up notion with time as creative.

{* only in <33> added by **DH**}

18b[19b] <34 (c35)>

Can always explain simple by complex & complex by simple.
Neither method sole one. E.G. Man by jelly-fish, & jelly fish {sic!} by man. No revelation to effect that only first way is valid (as 19th C. thought)
Experient occs.
Eh. has been starting with the simple here, & so muddled things up.
Degrees of actuality. Without bodies & minds, mere empty space—which seems trivial.
~~??~~ Each microcosm viewed as the Individ. Identity comes via historical root. New epoch there must conform to old ~~roo~~epoch, because there is creative identity, but must diff - from old epoch bec. there is creat. diversity. Any entity is always passing on, yet by continuity with root remains one. Not mere otherness in some part—but through & through different, yet through & through remains the old. Hence time not a line of successive epochs. This would leave out retention.

∫ 1 3 5 ___ ___⌋ 2nd event thus includes 1st & 3rd

⌊ 2* 4* ∫ in part.

{* These lines are of blue color}

{"35" added with pencil because page cut off afer "3"}
19a[20a] <(34c)35>

Jan. 7.
Not a graduality of becoming – but of achievement, ~~of~~
Becoming of graduality, not graduality of becoming.
Microscopic & macroscopic ~eguatious~ (Lorenz)
Pressuposed unchanging rel. ofrest of world
(isolated systems)
1) Essential change into otherness.
2) Historical root simulates whole com. more
than a given epoch does.
3) Creative identity - conformation of events to
preceeding, though always creative, through &
thr. diversity. Molecule in granite, the same
since millions of years.
Hegel always exalting power of negative,
Every creature must be embody its own negative.
Essential extensiveness of creature in time solves
how cr. is both itself & not itself. For, (union of
being & not-being –Aristoteles) every occ. has to
exhibit contrariety (principle of reversion)
has to exhibit its own type the other way on.
Actuality = Fusion of contrasting factors.
occasion (upward motion = positive, downward =
negative.

* _____|_____|_____

Space-time continuum = abstract general
statement of hoe things are to each other.
** overlapping of things = ~ist~ character
** of extansion.

* wave (between to marks negative)
** two circles overlap; the overlapping zone is blackend

{"36" added with pencil; page cut of after "3"}**19b[20b]** <36(c37)>

Every part plays a double role, e.g. both ground & consequent. Fusion of already actual ground with hitherto unactualized consequent.

This shows more general principle that what is actual in the past is with the creature in the present.

(ground & consequent)

ev. 1

* gr. | con. | ev. 3 |

gr. 2 con 2. | con. 3.

ev. 2 gr. 3 gr. 4. („absurdly oversimplified'

Epoch gives the minimum reversion.

Fusion of already actual with its reversion = epoch. Doing & Undoing.

Human body es ex.

Cells = organisms

molecules = ''

~~Ulti~~ Whether infinite regress or not we don't know.

Our long past.

Coördination of organisms.

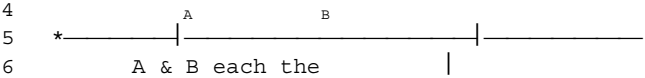
Parts & whole mutually adoptive.

* Wave with positive development first to „ev. 1" and negative development to „ev. 3".

20a[21a {"1" corrected to "0"**]** <(36c)37>

Jan. 9.
Every epoch occ. = synth. (of opposites) of doing with undoing, grow with consequent. (= reversion)

~~?~~ Every epoch. occ. exhibits Protean character of creativity (Protons always turned into something else) From this extensive characters, a ~~??~~ potential simplicity of subordinate occs.
Formal log. contrad. not meant by union of opposites. Differences are within ~~such~~ an identity of type. Negative is not abstract - concrete of opposition. Type not a bare identity without contrasts. Continuity of curves gives you identity form of otherness.



Below the line gives an opposite to above the line. After a deeper contrast gives a more definite law or ~~unity~~. identity.
Above = characteristic picture of a world-line of a particle. ~~?~~
Nothing about space-time trivial = plan of fundamental adjustments between epochal occasions.

Creative synthesis involves creative analysis.
Not one serial line of time. This idea has gone to pieces in physics. Past isn't just dropped to non-entity – philos. has always suspected this. Confused their insight to mean time is an illusion. 2 kinds of confusion: knowing

{* curve up to the first line, down to the second, up to the third and down again to an imagined forth line.}

20b[--/21b/] <38(c39)>

Doing & undoing of creative sythesis. Knowl. of exemplification & of non-exemplification.
Thought = another dimension of being. Thought out of time, yet embodies time of exper. world.
Creative successiveness not in itself measurable as to time. * A dimension of being by itself gives no measureability. **X (Haldane gently slammed)
In a „brown study", time seems suspended becomes other dimensions are almost suppressed.
Mysteries.
Dimensionality comes from veriety of types of
(ground & consequent)
creative derivativeness—yet how explain 3 dimensions of space.
~~In~~ A dimension need not be measurable. ***X

{* red line}
{** red X}
{*** red X}

21a[22a] <(38c)39>

Jan. 12.
How mentality comes into scheme of things: -
2 Gen. prineiples.
Compare abstraction & concretion („growing together")
Primary datum wh. comes tog. = realm of eter. objs. *X
Secondary „ „ „ „ determinate act. occs.
Community of ~~modes~~ exper. occs. = physical world.
Depth of actuality, of intensiveness. Endurance of self-identical entity important if diversity is marked. Definiteness of type, & of contrast within type (reversion) ~Enschrines~ ground & consequent. Gr. = datum already actual, consequent = novelty now actual by its sythesis with the gr.
Concretion vs. synthesis. 2nd = result primarily, the creature.
1st = the creature as one with its creativity.
Dimension (Montague's generalized sense) A root of derivation of act. occs. in wh. each act. occ. furnishes dominant ground for its successor. A succeeded by B, ground for B already in A = A as patient to a certain type of anlysis.
B involves A as providing such & such ground of contrast. Ground = a pontentially epochal occ. wh. is part of A (last half) Consequent = potentially epochal occ. wh. is novel part of B. **If B is to have depth of actuality, consequent must be reversion of ground. Exclusiveness of con-cretion.
Imag. occ. involves all these aspects, but differently. Ground is A as concretion of eternal objs., & consequent = **complex of eternal obj. (itself a complex etern. obj.) ***X Consequent is actual, but not in way of exper. occ. but as thought, as image, & is synthesized with ground.

{* red cross}
{** red line}
{*** red cross}

21b[22b] <40(c41)>

Concrete occ. = cognizant perception of A as exemplifying or not exemplifying elements of the complex. Is this perception? „ I am not /\well read in perception: But A seen as excluding something as well as as {sic} including something. If we could only perceive positive exemplification, no negative perceptions. Bad ~ert~ suggest definiteness but doesn't echieve it. Doesn't exemplify wh. it suggests.

Mentality gives most thoroughgoing reversion, for consequent hat not got same entry into activity as ground. Dimension of mentality – idea of idea od ect. This not a time-succession. Each mental occ. has a time aspect inside it, but from pt. of v. of exper. world, simultaneous. Both in & out of time. In this dimension, importance rapidly decreases (idea, idea of idea ----)

As one goes toward plants, then stons, mentality seems to fade away. But this does not mean it ceases altogether. Always a completion of creativity, but not always intensive importance. ~~A?~~ Most complete fact, then, root for exper. occs. plus root of mental occs.

Nature closed to mind. Exper. occs. exhibit finite truths wh. to be very large extent can be expressed without ref. to our mentality. Only to a very large extent: – inheritance not merely of exper. occs. from exper. occs. but also exper. occs. from imag. & v.v.

1) Whatever is, is thereby attribute of creativity (Spinoza)

{put together with "23"} **24 [25** {lacked out: "follows 24 next 26"; with pencil: "23"**]** <(44c)45>

Whatever is creature, then is such an attribute.
2) Whatever is attribute of creativity, emerges into creature (only so is knowable)
:. {= therefore:} Whatever is already determinate creature emerges into new creative.
3) Hence exper. occs. inherit from mentality of foregoing occs. But this mentality = an undoing of exper. occ., e.g. disentangling of what went to making of exp. occ. Evaluation & active purpose of creativity thus inherited, hence feeling, {{em}stion, blind {conation}. Dog is jealous, but doesn't know this.
Freedom. Predominantly attrib. of mental sphere. Consequents in mentality are derivative from the non.actual. Mere creativity plus eternal objs. gives complete liberty. Only actual world binds.
Feelings = mentality as experient, as {interited}, as past, & now inserted in an exper. occ.

{backpage of **24** empty}

22a[23a] <(40c)41>

Jan. 14.
We discern immed. occ. As a becoming of itself. Creativity & creature – creativity for the creature becomes creativity with the creature. Causation – Hume. Where do ~I~ find the past as determining the present. Hume ~~did~~ assumes what he says he cant find. Our very notion of time contains it. Hume means that past is here now & the present is always present with the past. Time as an ordering of events-
A rel: may be reflexive, self-relating, either contiongently or necessarily. As time rel. potentially reflexive? {~~?~~} If not, ~~then~~ still this doesn't follow from mere idea of time as a relation.
Can the same occasion occur twice.
Eternal recurrence. Later occ. Repeats the earlier, that fact alone makes it different. Earlier does not repeat the later. Anticipation & repetition are contrary rels. When you repeat, in some sense the Earlier case is still with you – for non-entity is unrepeatable. Only an immortal past can be repeated, past only ~~immortal~~ irrevocable bec. Immortal (& v.v.)
An electron for sc. = merely a bundle of its rels. to other electrons. A taking acc.'t. of, ablind perceptivity
Knowledge not the perception. Desc{? a} error.
Jan.16.
Casual specif. nature of creat?ed data.
systematic " " " " "
Total opportunity as distinguished from
special history. root.

22b[23b] <42(c43)>

*<"Causal" instead of "casual"; changed by **DH**>
1 * Casual data & actual facts of past.
2 Presentational: Inspectional
3 First relates occs. wh. are present to it.
4 Know. = of self as /\[an] element in a ~~emdr~~ world of kindred elem'ts
5 Presentation = reverse of causality.
6
7 Percipient occ. has an analogy with ~ I.~ occ.
8 ~I.~ occ. confronts ~~forms~~ characters given in formes {sic}
9 with ~~??~~ their concepts. Non-exemplification also.
10 Bifurcation. Redness a fact in nature.
11 Galileo showed what we see has its real in owr own
12 body, grows there as it were. But – {sumsit} put
13 the perceptivity into the cognition. For A as axper.
14 occ. is the phys. world & not the mental world.
15 Presentational rels. = those that determine tropism~s~
16 Mechanics = science of tropisms
17 How molecules' presentational rels. to each
18 other determine Their spatio-temporal rels.
19
20 P /→
21 / | Presentational
22 / → |<---- rel. of molecule A
23 Insp'l rel. ----------→
24 α A A world not survive unless its
25 presentational rels. were correlated with the
26 grounds received from P. Otherwise tropism
27 ~i.e. next~ movement, will be unfortunate, will
28 destroy ~~??~~ preservation of root, e.g.
29 jelly-fish.

23 [24 n. 25] <(42c)43>

Jan. 19.
The negligible mentality of the lowest organisms, their simple tropisms, gives laws of mechanics.

{backpage of **23** empty}

25a[26a f. 25] <44(c45)>

How is (Measurement) possible?
|Accuracy|
1) Determinateness. "it" ⎫ one &
2) Synthesis – "and" ⎭ many
3) Comparison – "matching".
4) Measur – how much a) no b) quantity (= not)
~~5)~~ Space-time units. Point, instant.
5. Gradation & intensiveness
6. Order.
7. Order of concreteness & abstractness.
What is actuality?
8. Confusion & harmony – things extruding each others, & things intensifying each other. Order & God as principle of order. Progress & an end.

Accuracy = an ideal we import into nature & seem to find there – without this ideal, nothing is determinately anything. Hence God finally.
Mathematician always thinks platonically.
Kant – ought to have come to Platonic realism. if he had thought "blind intention" out.

1) "It" = an abstraction. Always a whatness – It endorses everyth. specif. in a watch.
(Aristotle rich, not wholly unified. Tickles down to a beautyfull simplicity in Descartes)
"It" is subj. of predicates, result ~~a~~ of triumph of grammer. Absolute subject, or matter, absolute predicate or form, relation betw. perfectly definite. Then

25b[26 b] <46(c47)>

relation as a definite idea, distinct from an "it".
Of any entity, can ask what? & how? ~~"Love~~"
~~happening to be word~~ All a sentence can do is put words
in a temporal synthesis. A more abstract idea is
"and" as merely enumerative (never is so in
actuality) Relation = a unity into wh. three in-
grediants enter.
An "it" = is always a specific determination
within a community (real or ideal – world or realm
of eternal objs.) "It" = abstraction fr. specific
ground of determinateness, from what in itself &
how among others. Every entity has an indiv.
& a relational essence, It has a "patience" for
other things. It not an entity supporting qualities.
How & what no meaning apart from synthesis
viewed as one, as an entity. No entities apart from
their entering into syntheses of other members.
One & many each referent to one another.
Relation = is a definite entity in its reference to
many things. "Loving" e.g. Subj. = is a definite
entity in respect to many things referent to it.
Eternal objs. no what for themselves.
What for itself = what quā exper. = a value, = exper. quā
graded. Eternal objs. are contributory to value of
unit exper., of an epochal occ.

26a[27 a] <(46c)47>

Accuracy cont.
Integral no., 5,7. ---10. Definite relation.
Human mind doesn't kn. at first how ob-
struct such ideas are. They are discovered
because important*/ Taking abstractions up to {* = arrow down four lines
the scruff of the n/eck & looking at them, ~=~
greatness of Gree/ks. Didn't like vagueness.
/
(<-- one fish a day for seven days, need 7 fish.)
Arist's categs. wh. separate rel. & quality &
| subst. so completely = a muddle, because of
| separateness.
Math. originates w. practical man, in
Egypt. Wedding of thought & practice & art of
civilize of life.
Pythagoreans discovered {lt.} as distinct
ideas – couldn't quite define, appealed to intuition
of accurate geometrical boundaries. Got ex-
cited over question of /\$^{\text{mutual}}$ commensurability of
things. Some of difficulties in these problems
only solved to-day, after [2^{1}3]centuries.
Americans in a hurry.
Length of a string & the note – another
great discovery. Thus whole aestetic side
is only no. rel. turned inside out, as it
were. Rhythm {sic} everywh. Parthenon mathematical
by constructed
Incommensurables – diagonal & side of squs {= squares?}
This upset whole theory of whole nos. as secret of

27b[--/27b/{backpage of 26a}**]<**48(c49)>

of univ. As men alw. do, they try to hush
it up. "We must face these difficulties
fairly & squarely & then pass on " (lecturer on
theology) Made a little twiddle ¬/ & said
"$\neg/^2$". That solves nothing What is the
root of 2. Not a no. Then number-inter-
pretation of things not suffic. Number ?= corre-
lation. Then phil. stepped in & said "mind
creates such entities". Then what has my
$\neg/^2$ to do w. yours?
* What is a no? Frege (& Russell redis-
copvers him) first to answer w. full clearness.
Cartesian geometry. World as no.
again.
Pythag.
1) All rels. can be desired by nos.
2) " " are "

* Mathem. beauty = generality & simplicity.
(later shining through a complexity.
Method of sc.. "Just observe facts" - they
converge to a law themselves. * On contrary,
man says, what is most beatyful law that might
apply here.
Simplicity is key to univ. but not so
easy a matter as Greeks thought.

{* = red line}

27a[28a {"28b" is backpage}**]**<(48c)49>

*1 Phil. based on our total concrete exper.
2 as we sit here, not on this sc. or that.
3 Theoretically we ought to be able to see
4 everyth. thus (cf. Huss.) but practically
5 must recur to physics etc. We haven't
6 alalyt. power to note these things without
7 inbstruction fr. specialists. But also the
8 hist. of phil. must come in – for here again
9 specialists have worked over things. But
10 here again someth. left out – common sense
11 & direct intuitions. Also great literature.
12 No one rout (no one man either) to phil.
13 Must try each to pic of interest in rel. to every
14 other.
15 In so far sa you are merely accurate
16 you leave out some mayor things, in so far as
17 you are not, likewise. Wisdom needed here.
18
19 Points in a serial order on a line.
20 Never any one order of things – E.G. card. nos.
21 have order of gradual increase in multiplicity.
22 But also 2 1 4 3 6 5 - - - Telegr. poles in order
23 along road, also in order of age.
24 Types of order. Must general def. of
25 order? ~~?!~~ $\neg/^2$ a real entity occ. to Wh. doesn't
26 need hum-
27 an mind
28 Strict habeas corpus act of rationalism.
29 No one can invent ~myth/anyth?~.

{* page is written with a pencil.}

28b[--/28b/{backpage of 27a}]<50(c empty)>

*1 Can't measure until you have classified.
2 For only measurements of things of same class
3 are illuminating. Middle Ages dropped
4 measurement & stuck to classification.
5 All the great ideas needed, & in subtler
6 view of them.
7 ~Trenchent~ man makes one view wh. has
8 its place, drop~~t~~ out of sight. Real moral in
*9 hist. of cult. = infinite patience.
10
**11 Definite Truths. Got by simplifying. Accur-
***12 acy = simplicity. By adding simple ideas to simple
13 ideas we gradually learn someth. of the complexity
14 of things.
15 Psych. simplicity – strikes me as simple.
16 Actual " Most-indiv. fact.
17 Logical " . Things simple in themselves
18 out in concrete rels. complex. Exact statements
19 are logically simple, but to find their actual
20 relevance to real world a deuce of a bother.
21 E.G. Points in space. Simple scheme.
22 ~Thence~ geometry. But, in what sense are pts.
23 real??
24 Apparent contradictions result from muddle
25 Unis. through & through rational. Even in math. a
26 muddle has lasted 2000 yrs. – then solved.

{* red line}
{** Till the end of the page written with a pencil}
{***vertical red line}

A **30a[29]**<53(c empty)>

very stuffing (not stuff) of eternal obj. Eternal relationship of the occs.

Perceptiveness:

1) Representational
2) Inspectional

inspectional * * * *

Rel. E.h. = /\ factor * K = any other antecedent *

in E under * • K occ. *

*

* 4 • E *

* *

In principle, what * * * *

K is in itself is in E, under mode of remoteness, just as truly as S is in E. ???????? Contribution may reproduce itself.

S tends too reproduce itself. Whole inspection of root, tends to reproduce itself.

In Knowledge, inspectional rels. are primarily ~~our~~ of ourselves to our own antecedent occs. as given in memory.

* * * *

* ~~I~~ {l l l l}~ *

* past ∫ - - - - - - - present exper. *

* exper.⌊ ↑ ↑ ↑ (memory) *

* * * * *

Images & perceptions not intrinsically so different – but otherwise determeined.

Gap between presentational & inspectional rels. = possibility of illusion & ignorance.

Aristotle. Perceive indiv. beings but true obj. of perception = universals.

{* = lines within the * are circled}

A 30b[--/30b/]<54(c empty)>

1 Wh.: indiv. being = a single occasion.
2 But we also perceive (2) historical root of
3 occ. (= Aristotle's indiv.)
4 Wh. true obj. of perception is indeed eternal
5 obj., common ? anduring structure.
6
*7 Future = "nothing at all"? (Broad says it is)
8 Entirely arbitrary addition to present, as
9 Hume thought.
10 How do we know that there is a future, & a
11 past. "Will be", & "was" refer to something.
12 Can't trail off into nothing - definite relationship.
13 "Is" so many meanings. Is now, will be,
14 was = rels. to an immed. actual occ.
15 These rels. must have terms at other end.
16 Immediate know. of these rels. Present
17 made up of its rels. - including was & will be.
18 General scheme of rels. to wh. details are
19 irrelevant. This scheme = "relative status".
20 (a little les general) Kant agrees so far.
21 But: this scheme inherent in act of cogni-
22 tion? No, in exper. occ. of wh. ~~there~~ is cog-
23 nition.
24 1) Related to this occ. via the "scheme".
25 2) Immed. occ. via the scheme de-

{* beginning with line 7 page written with pencil}
{in <copy> lines 7-25 crossed out; "54a" added}

****MS of 30b(+ 29b+31b)** **54a** "between 54 + 55"
{** MS is machine-written pages added to handwritten original text}

{Differences from handwriting:
7 no ""
8 no _____
9 "?" instead of "."
10-11 no _____; "Or" instead of "&", 2 "?"
11 no ""
13 Is instead of "Is"; additional "has"; no other ____
14 "are" instead of =
17 additional _____
18 no _____
25 not there; jumps from 23 to 1 of next page, that is: **29b}**

A 29b[--/29b/]<52(c empty)>

*1 termines a set of interrelated occs.
2 "Our real world" as analyzed (not made)
3 by our knowing, refers to this community
4 or scheme as so determined.
5 Space-time not purely contingent. ~~???????~~
6 General "scheme" not sole type of rels.
7 Also ~~no~~ non space-time rels. may
8 be evolved, with new types of occ.
9 Thus spatio-temporal rels. may have
10 but slight importance for some occs.
11 Little time depth e.g. ~~????~~
12 Imaginal occs. (wh. bring in knowl.)
13 may have a mutual relevance, ~~?~~ & to them
14 rel. to exper. occ. or space rels. may
15 cease to dominate them.
16 Our Cosmology founded on Space.
17 Time actual community does not ex-
18 clude a deeper cosmos.
19 Contrast of general facts of act.
20 world & details. Plato & Aristotle over-
21 emphasized the one one aspect, the other, the
22 other. Plato mathematician,. really not inter-
23 ested in observation. (yet closer to modern
24 sc. perhaps than anyone) Discouraged re-
25 course to immed. detail. ~~Aris~~
26 (Importance of getting poets to think for one)
27 Arist: : {sic} fact-seeker.
{* the page is written with a pencil.}

MS of (30b) + 29b+(31b) **54a** "between 54 + 55"

{Differences from handwriting:
1 ends with ":"
2 "our" not capitalized; without ""; no underlining
6 no ""
7 "not" instead of "non"
8 no ","
9 "sp.time" instead of "spatio-temoral"
10 "knowledge" instead of "knowl."
13 not there
14 "to exper. or" not there
16-17 "sp." instead of "Space";"time" instead of "Time";
"com'ty" instead of "community"
20 no _____; "Pl." instead of "Plato"; "& Aristotle" not there
21 only 1 "one"; only one "other
22 no _____; "Pl." instead of "Plato"; "math'n" instead of
"mathematician"
22-23 no _____; no
23-24 no "( )"; "than enyone to modern sci." instead
of "to modern sc. than enione"
25 "however" after "detail" added
26 no "( )"
27 no ": :"}

A 29a[28a]<51(c empty)>

*1 Arist.'s Logic - genera & species.
2 General scheme leads to math. Details
3 lead to classification acc. to genus & species
4 Modern sc. sythetisized both.
5 Neo-Platonists farthest from science.
6 ~~Arist.~~ ——Plato saw earth not as
7 Center of univ. An ideal center, mathe-
8 matically conceived.
9 Arist., common sense man,
10 put back. 2000 years!
11 ~~One~~[The] general com'ty also a one thing,
12 an indiv. But, an occ. ~~has thought /\~~[??] is what
13 it is ~~in~~, in & for itself, but com'ty not
14 finished or actual or wholly determinate.
15 Includes actual occs. but /\[is] never itself
16 actual. A "union of being & not-being"
17 (Aristotle) Always beyond the actual,
18 always referring to a definite how the
19 possible is limited by completion of actual.
20 Limits entry of eternal objs. into com'ty.
21 Indicates future ~~???~~ as entity with a
22 definite content, e.g. how its possibility is
23 limited. Actual occs. definite in rel.
24 to eternal objs. non-actual in an only
25 partly def. rel. to etern. objs. This = but a
26 transcript of common language. Each occ.
27 also includes not-being, a future, a to be de-
28 termined. Creative determination.
{* the page is written with a pencil}

****MS of** 29a **64**

{Differences from handwriting:
1 "and" instead of "&"
2 ", details" instead of "Details"
3 "as" instead of "acc."; "gen. and sp"
4 "sci."; "sythesizes"
5 "Neoplatonists"; "sci."
8 "math.'ly"
9 no _____; "yrs."
11 "community"
25 "is" instead of "="}
{** MS text glued on an empty page}

A 31b[--/31b/]<56(c empty)>

```
*1        Background of normality. In sc. =
2    inertia or mass. Expresses endurance
?3   {?????} a favorable {environ}ment.
?4   Indurances mutually favor{ing}
5    each other                    favorable
6         Environment embodies /\ systemat-
7    ic type of inheritance. But en-
8    vironment is in flux - theref. its
9    variations must be irrelevant to the
?10  endurance. {comas  in.} Roots of indur-
11   ance = "world-lines" for cs.
**12
13        Time in some sense relationship among actual
14   things. Immediate actuality is epochal, but
15   world as actualized is continuous. Time as immed-
16   iate becoming, & time as /\an extensionality of things
17   which have become.
18        Time as measurable & as durèe haunts all
19   phil.  Desc. slips this in unc'ly. He holds be-
20   comingness is gradual, but implies an
21   epochal becomingness.
22        1) To be actual = to be an indiv. substance.
23   actual occ. = a system of substances.
24        2) To be actual = to endure thru {sic} time.
25        3) To have a real subst. present = to have it as
26   enduring. - subst.as in an epoch of its life history.
27   Epochality = actuality.
```

{* until ** written with pencil; in <cop<> lines 1-12 crossed out}

A 31a[30]<55(c empty)>

4) (Here slipped in naively) Common epoch = correlation of indiv. epochs.
Substance = element of natura naturata, what has become, not of natura naturans.
α) Definition of instants. (Kant: a limit)
β) correl. of instants. Each subst. its own instant.
t. = correlation of instants (private to each subst.)
Really an epoch-view here, only lack of natural epochs provides no ground for refuting Zeno. Zeno should not have asked how arrow gets from one position to another, but how does arrow in its quiver get from one occ. to another.
If production is gradual, & the produced is actual, how is process possible?

Scholastics upset balance of substance & process in Arist. by overweighting {sic} former Desc. carries this to end.
Desc.'s subst. revived by Broad & Russell in form of sense data. Process still in background.
‖ Functional point of view provides for natural epochs. Functioning thru time = the thing itself. Completion of function is required for entity wh. is actual. Physical experience = essentially vibratory (to speak in terms of

A **32a[31a]**<57(c empty)>

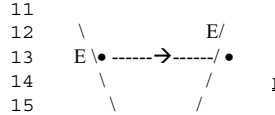
*1 A Desc. "The sun itself objectivè" ??????
2 is in my mind. Yet in general, his
3 theory seems a representation one.
4 Everything hangs on the "itself", also
5 most be some qualificatipon. Other-
6 wise only one exper. occ. of sun
7 possible. How "itself" interns into
8 synthesis or prehension. the objectivè.
9 The how ??? constitutes Individuali-
10 ty of occ.
11 Perceptum = other actual entities
12 taken account of.
13 Percipient field qua unity is in
14 community with percepta. It includes
15 itself as one in a perceived community.
16 of entities. Percipient unity completes
17 perceived unity – you are in picture also.
18 In a sense you are the picture.
19 ⌠1) Presentational rels. – objectivè.
20 ⌡2) Inspectational rels. – i.e. Percepta
21 enter not merely objectivè, but also
**22 formaliter, themselves.
23 No ~~idea~~[word] simply wrong or simply right.
24 "Perceptiveness" good, but dangerous. For not =
25 "C'ness." C'ness must be limited. ~C'ous~ of
26 perceptions, but perception itself not c'ness.

{* until ** written with pencil; in <copy> crossed out}

MS of 32a (only between * and **) **57 "atop"**
{Differences from handwriting:
1 no """ surrounding quote
2 no ","; "D.'s" instead of "his"
3 no _____; no "also"
6 "exp." instead of "exper."
7 "---" instead of "____"
8 "synth." instead of "synthesis"
9 "objectivè" underlined
11 "perception" instead of "perceptum"; "is" instead of "="; "act."
instead of "actual"
15 "com'ty"
20 no _____}

A **32b[31b]**<58(c empty)>

*b C'ness = Imaginative Occ. Perception = experient occ.
Perceptiveness = taking ~~out~~. acct. of other things. is datum for C'ness. C'ness = sort of analysis of perception.
Every actual thing = process of taking acct. of everything else. (Bacon)
Modern physics talks entirely in terms of perceptiveness. High abstractions but perceptive all the same in their kind & degree. e..g. Electricity.



Two roots of occs. in relation of mutual perceptiveness.
Stuff explained through forces i.e. perceptive rels. Electron = identity of structure in a series of occs.
C'ness of an actual ??$^{occs.}$ & perceptual obj.
~~C'ne~~ C'ness of an actual occas. = c'ness of ??? perceptiveness of exper. occas. – of what it prehends.
~~P E~~
Exper. occ. has mutual determination
Vs. Kant. not via c'ness, but via perceptiveness of exper. occ. = way of eternal objs. has a relational character. They always relate different occs. to each other, in a certain manner or mode. This mode constitutes

{* "b" written with pencil}

A {two <copies> of page: one adds "34a"} **34a[?2]**<62(c empty)>

*1 Life a doing, not abeing at ~~??????~~ successive
2 instances. Looking back and forward.
3 Both past & future in present for <u>their</u>
4 <u>own</u> <u>sakes</u>. In a community on
5 same level as yourself.
6 Morphol. omits all this – ~~???~~ from
7 immediate exper. No ~~???~~ wonder if
8 couldn't give a metaph.
9 Cartesian view not wrong, but abstract.
10 What is abstracted from, e.g. ~??~ "enduring sub-
11 stance," "simple location", high abstractions.
12 Enable clear simple deductions, logical rels.
13 Modern sc. – wants to express boil. facts.
14 Time-depth here. Biologists claim to be
15 mechanists. But cant ~~??~~ express func-
16 tion in terms of morphology.
17 Substance refined to ether – <u>at an instant</u>!
18 energy derived from notions of masses, But
19 mass~~energy~~ now name for quantity of energy.
20 Zeno very acute here – No motion ~it~
21 an instant. A world of wh. most most concrete
22 aspect is function, not to be construed as a
23 world in wh. most concrete aspect is ~~??~~
24 stuff at an instant.
25 <u>Metaph. only an endeavor to talk concretely</u>
26 different bundles of abstraction bound together in
27 one by most ~~???~~ embracing univs.
28 Green = that wh. relates {my} exper. occ.
29 with another occ., shows ~~??~~ how latter modifies
30 former. Apart frome these relations, much
31 more abstract = greenness. Empiricists
{* page written with pencil}

MS of 34a (& 34b & 33b[/1])**60**
{Differences from handwriting:
3-4 no _____
10 begins with "enduring. . ."
12 "They enable" instead of "Enable"
17 no _____
20 "ata" instead of "{it}
25 no _____
28 "Green" underlined}

A 34b[33b]<61(c empty)>

like Hume, talk about these abstract
universals under name of "sense data".
Descartes showed value of morphology.
Hume its impossibility as acct. of con-
crete ~~???~~ exper.
Broad muddles morphol. &
functionology.

Rels. no place in morphol. view.
Zeno reincarnate in Hume.
Matter mere recipienmts of shapes
at an instant. But what makes actu-
ality of rels.? The same matter now
as then – the bare word "same" or "matter."
1) Time depth within the entities.
2) Shape for a second no solution, just as
shape at an instant is not.
∫ activity in matter.
1)⌊ Synthesis, prehension
2) Product – pattern – value, shape,
finite value-achievement,
there for itself.
These 2 are abstractions from

{* page written with pencil}

MS of (34a) & 34b (& 33b[/1])**60**
{Differences to handwriting:
no "
"acc.t~~y~~" instead of "{acct.}"
no ~~bare~~
"bare" instead of "the bare"
no "{"
"Product – pattern-value"}

A **33b[32b]**<60(c empty)>

*1 one|concrete situation.
2 Ultimate fact: 2 aspects: –
3 1) Parts are by rel. to whole.
4 2) Whole is " " " parts.
5
6 17th Cent. great because it over-
7 simplifies & rather superficially ???
8 eliminates difficulties & complexities.
9
10 Aboriginal Situation.
11 1) Knowing -→ (cogitum)
12 Desc.:- ∫
13 2) Knowing -→ |Knowing -→ cogitum
14 /
15 </
16 occ. of Knowing
17 (ego)
18
18 Whiteh. O.K. ?? But cogitum
21 is fundamental, not secondary.
22
23 Appeal to action good because = appeal
24 to given in unreflective moment. Not my
25 Knowing self, but ~~a~~ a situation is "before me,"
26 Primary rendering of matter of fact:
27 Many entities synthesized into one occ.

{* page written with pencil}

MS of (34a & 34b) & 33b[/1] [regarding **lines 1-8**]
60
{Differences from handwriting:
1 no _____
2 ~~~~~ instead of _____ under the whole line
7 "(rather superficially)"}

MS of 33b[/2] [regarding **lines 10-27**] {glued on a <copy> at the position text appears in the original} **61**
{Differences from handwriting:
12 no "–"
18 "Wh." instead of "Whiteh."; "but cogitum"
23 no _____; no "="; adding "(pragmatism)" after "action"
25 "before" not underlined
27 no underlining}

A 33a[32a]<59(c empty)>

*1 Esse est percipi.
2 (you are that experiencing fact
3 \-> ~~??~~ Opposite to Desc. Many are in the
4 one, in the unity, & through it. Percep-
5 tion, not knowl. as in Desc. Berkeley
6 better here. No Real reciprocity betw. know-
7 ing & perceived there is such.
8 ⎰ esse es percipere. ⎱ reciprocity
9 ⎱ esse est percipere ⎰
**10 together = exper.
11
12
13 1. K = class'
14 2. (x,x,x) = cls 1 (reciprical) (class)
15 3. (x), (x,x,) (x,x,x) = $cls.^{2}$ (class of clases) (discriminational)
16 4. K_3^{dis} = $cls.^{3}$ (class of classes of classes)
17 5. K_3^{cod} = $cls.^{4}$ (class of classes of classes of classes)
18 6. $cls.^{5}$

{* page until **written with pencil}

MS of 33a [regarding **lines 1-10**] {glued on a <copy> at the position text appears in the original} **59**

{Differences from handwriting:
1 "—" instead of "."
2 no "()"
3-4 no ____
9 "percipi" instead of "percipere"
13-18 original on <copy> }

A **35a[34a]**<63(c empty)>

Hume jumps question of what "object" is, here.
"No immediate intercorse? (Desc. inspectio)
between mind& obj." (Hume says)
"energy of mind itself." "Cause unknown to us."
Mind experiences no connection of mind with
objects, & therefore cannot reason to justify such
connection.

Two competing concepts of nature: morphological,
functional. What is at an instant, plus what is
at other instant etc. [Suggestion of forms more
than forms of passage]
Morphological view inherent in Desc. & Hume &
sc. of 17th Cent. on. Main difficulties ~~v~~ in Phil.
since then rise thence. One tries to overcome
{*} morpholog. view – but * with tools furnished by
latter. Hence revolt of James & Bergson.
Transition from matter & mass to energy,
which is functional through & through. And, ir-
ruption of biology – where morphology alone insuf-
ficient.
"Substance" required in morphol. to hold
succession of instances together. The "same
substance", same atom throughout.

All this & Perception. Mind a substance
at an instante. {sic: changed "c" "t"} What is
perceived of a table, as a
substance? Not substances, but sense data.
These can subsist without table – e.g. /\in mirror, no
table before me but behind m {sic!}
Time difficult, realism.

{* written with pencil from this point on}

MS of 35a &(35b) [beginning with line **16**]
63
{Differences from handwriting:
"Attempt to" instead of "One tries to"
no "but –"
"Tramsmission" instead of "Transition"; no ","
"thru", "also" instead of "and"
"in wh." instead of "where"
no _____
from the "." on not in the MS
"of a substance, e.g. a table" instead of text
"no" – "before me but" not in MS
"inserts "for" to "realism"}

A 35b[34b]<64(c empty)>

*1 ~Zoueh~ & time difficulty. Even there a time
2 lapse.
3 Brain only waggles. Mind "enjoyed"
4 [ah! – Alexander!! Eureka!]
5 Must start with mind & its impressions
6 Hume morphol. description of impressions.
7 World then mere correlation of impressions –
8 mere construction.
9 ~?~ functioning ~?~ fundament –
10 ~?~ knowl. But ~?~ – world.
11 No real body in merely conceptual world.
12 (~morggone!~) Exper. world on same level
13 of reality as ~???~ knowing only ~??~ morphol.
14 view rejected – if world is functional as
15 well as knowl. is.] Body cannot prevent
16 us from knowing an other than ourselves –
17 in knowing it we kn. such an other.
18 ~Hume's slipin~ in memory!
19 Then in wh. we know now is a connection
20 with someth. beyond. Here Hume
21 abandons morphology. Why then not also
22 in case of inticipation ~?~
23 H. doesn't say an ~imp???s~ is "at an
24 instant", but means it.
25 Immediate rendering [based on
26 madiate ~realisating~] of exper. shows
27 ~**pre~sent & function ~**~ past & future.

{* page written with pencil (almost unreadable/needs control by MS 35b)}
{** page missing at this part.}

MS of (35a &) 35b **63**
{Differences from handwriting:
1 first sentence missed; "touch" instead of "there"
4 no "!'s"
9-12 missed; instead: "Knowledge is functional, known" before "world …"
13 "inserts "if" for the 2. {??}
15 no "well as"; no "]"; inserts "The" before "body"
17 inserts "for" before "in"
18 {} = here "Hume slips"
19 no "Then"; no _____
20 no _____;
23-24 {} = here "impression"; no ___; no ""
25-26 no _____; no "[…]"
27 {} = here "pre"; 2. {**} = here "at" (inserted handwritten in MS!)}

* {two <copies> added to the manuscript} **36/37 (c empty) [?35a]**<65(c empty)>

Accuracy is exemplification by an entity of nexus a perfectly definite ~conc.~ wh. refers to {remainder} of things in resp. to /\their general rels. to entity.

Who started idea of accuracy? Greaks not first poets, or metaphysicians, artists, etc. but first accurate people. This over-

looked in 19th C. Euclid. Accurate idea of the someth. else. "Equality" defined. but this ia a muddle in ~him~. Confused different layers of generality.

⎡ Things = to same thing ect.
⎨ Equals added & substracted for equals.
⎣ Whole greater than part.

There are more general ideas at work here. A specific spatial rel. of congruence muddled up with a more general ideal (determinate in Johnson's language) General idea of ~isos~, or equality. An ~isoid~ relation must have 3 characters:

1) Transitive.
2) Sym/\metrical.
3) Refelxive

{* paper is lined}

{backpage of **36/37**; handwritten text; crossed out; it says: "Do not copy"}

* **37 fo{llows}36 (c empty)[?36]**<66(c empty)>

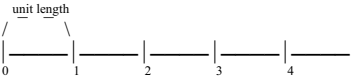
Finite Truth /\[im]possibile, if ~~??~~ nothing can be deserted without bringing in everythi. else.
Alw. a "how it is" in rel. to each & every other occ. & a "what it is." What & how can't be taken except in rel. to each other. A rel. requires relata – the how the what.
Each fact~~s~~ refers to every others, but in a systematic way such that detail is cloaked under general concs. {= concepts} like "all" or "any". Most general systematic way = sheer rel. of diversity:-
1) "It" refers to all other things as diverse. "It" not a substratum, but outcome of the complex wh. is the entity. "It" does not underly {sic} how & what but emerges from them. "Overlying substance."
Sense-data. Colot & colors e.g. blue. The higher abstractions are modes by wh. you refer to other things as having rels. to the thing without specifying wholly what rels.
Refer to whole univ., but in definite layers of generality.
1) Other things
2) Things elsewhere & when.
3) Things of other shape. (definite shape among shaped things. def. color am. colored things)
**
Logical contraries are ways of expressing that depth of individuality defends on limitation.
A general background.

{* page is lined}
{** handwritten note, although 180° round "B M ~Javan/Jairan?~"; lacked out in <66>}

{backpage of **37 from** 36; handwritten text, crossed out; it says: "Do not copy"}

* **38 follows 37 (c empty)[37 follows 36]**<67(c empty)>

Mar.2.
Measurement involves appeal to structure, i.e.
having analogous functions in diff. parts of the
{**}Structural. **Also where 2 things (e.g. length)
combined to make a third thing of same type, i.e.,
quantity, = an appeal to structure.
Types of order ~~of~~ repres. by whole nos.
corresp. ~to~ types of order in univ. Hence
mathematical reasoning applies to univ.
Family of Primus, Secundus ect. Mere
name as indicating math'l order tells someth.
but leaves out vast amount of information.
Nice or nasty children?
***- -



Here an order like order of no. syst.
Thus 3 – 1 = 2.
When measurements once made, & arithmetical
names applied, then interrelations deducible from
latter. Fractions, imaginary nos. etc. merely
/\very complicated ways of stating rels. between whole
nos.
Descartes invented some of this (in bed)
Euclid: merely rels. of stretches without math. names.
Latter = Desc's idea , e.g. naming terminal pts. called
coördinates.

{* pages is square-lined}
{** written with pencil from this point on}
{*** page broken here}

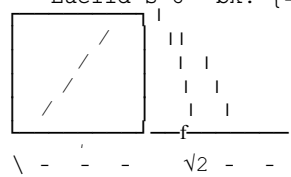
MS of 38 follows 37 {glued on an empty page} **65**

{Differences from handwriting:
"i.e.,"
"structural (sic)"; no "also"; "i.e.,"
"i/e{one letter over the other}.w." instead of "i.e."
"there is" instead of "="
"represented"
"" around "children"
"minus", "equals"
"are deducible …"
"fr. the names" instead of "from latter"
no "="; "e.g.,"; "coordinates"}

{backpage of **38 follows 37** empty}

39 follows 38 [38 follows 37 {put together with **40** but not copied}**]**<68(c empty)>

Mar.4.
In applying order-types to world, you abstract fr. value. But ger near to values e.g. colors in spectrum are immediately correl.
Or, musical rels. (Pythagoreans)
to value /\ But value itself alw. left out
From the relative standpt. can deduce knowl. wh. is abol.! (for it would appear ~~??~~[from] every standpt.)
Euclid's 6th bk. {= book} on proportion masterly.



\ - - - √2 - - - - -b
Shows that series of all fractions, though dense, doesn't hit all pts. on a line. Pythagoreans hit~~?~~ on this difficulty (400-500 B.C.) Explanation in 1880 A.D. Bad notation one hindrance to Greeks.
-----2/3 1/1 √2 3/2
\——f_1————/ \——f_2————/
$(f_1)^2$ is less than ~~f_2~~ 2, & $(f_2)^2$ is greater than 2. Thus segments on each side of √2 are defined by whole nos. f_1 & f_2 approach each other without limit. ~~ass~~. $f_2-f_1<1/10^n$
A quasi-gap, no finite gap. Dedekind worked this out.

39b [38b]<69(c empty)>

Any math. theorem employs "any" "some",
"none", "diversity." Entitie"s" "such that", some or
non entities s. that. Pure math. = investigation
of ways to most general math. of refer.
ence to total universe, as a general
background for each entity.

*8 S_0 - - - $S_{1/10^5}$ - - - $S\sqrt{2}$ - - - $S\pi$.

S_l is a lower segment if (I) it is a set of facts.
(II) it does not incl. all "
(III) if f is any number of S_l,
Then any fact. f' such that f' < f.
also is a member of S_d.
IV If f be any member of S_l,
then there is a fract. f' such that
f' is a member of S_l & f' > f.

Poetry & logic.
Poet says " an uinfin.
not "logician" at
least one."

Every ~~upper~~ lower S_l has an upper
$(S_l, \hat{S}_l) \rightarrow$ such that one or no ract. betw. Infinitely
more likely no fract.

One Segm. greater than if ~~one~~ it ~~is love~~ includes the
other.

**25 Addition $S_l + S_l'$
is the west of fracts. found by adding ~~all pairs~~
~~the of~~ fracts. of ~~all~~ each pair~~s~~ found by taking a member fr.
S_l & a member fr. S_l'

{* from here on written with pencil}
{** "+" is circled}

40 [39]<70(c empty)>

Intellectualism.

sole rithtful ~~right~~
Intellect the /\ arbiter of ~~intelligent~~ belief, or organ of truth.

What is intellect? Connecting of defined conclusions to defined premises- Weighting of evidence.

Process is intellectual in proportion as canons of intellect can be strictly applied to it.

1) Clusters of given data – concretely associated.

2) Abstract analysis – i.e. most general characters of experience studied in a more or less a particular field or cluster.

of ~~????????????~~
analysis

Terms precise if

1)

{backpage of **40** empty}

43 [1?a]<71(c empty)>

Mar.9.
"Segmental nos." = segm'ts of fractions. (√2 e.g.)
Creative power of mind consists in pointing out rels. among things, not in putting them there.

What is a cardinal no.? A certain quality of a class – in 2 or 3 can be seen at a blow, without analysis. How do we compare 2 fingers & 2 apples? All comparison involves a standard. Matching colors – direct intention. That in wh. 2 yellow colors are identical = yellowness. All communicables are mathematical abstractions & rels. One-to-one correlation, e.g. exhausting both classes = same multiplicity. This in terms of some, any, none (wh. define the "one" in "one-to-one") such ~~m~~ general math. notions. Class of
But what is this definite multiplicuity? /\ All the classes in one-to-one corresp. to given class.
Nos. & counting. Counting defends on order.. In finite nos. order can be used. But in def. of no as class of doublkes, triples, etc. ~~ordering~~ ordering or social rel. not mentioned. Convenient but not nec. way of finding /\$^{\text{one-to-one}}$ correlata

* **41 follows 40[40 follows 39]**<73(c empty)>

1 May.4.
2 Physical side derivative from mental occ. to ideal-
3 ism. Not so for W.
4 Mental side removes "blindness" of phys. occ.
5 Nothing is settled in nat. exc. from a def. standpt.
6 Passage into new occ. under a perspective limitation, provided
7 by eternal forms & ~~??~~ previous actuality.
8 In mental occ. a new mode of ingression of forms
9 into an actual {occas.} In phys. occ. forms enter only
10 as limited to that partic. ingression. Redness only as
11 for this occ. given. But in mental occ. forms
12 enter as concepts, i.e. on its other side, as retaining
13 its universality. Universal potentiality of form
14 becomes relevant, becomes ingreded [through potentiality
15 or creativity of subject as as representative of & involving the ultimate
16 creativity] How is whole community in my mental

{* paper lined and not complete (about half a paper)}

41b[40b]<74(c empty)>

occ. P via analysis of my assoc. phys. occ.
How the phys. occ. exemplifies the concr. Each occ. does it somehow with respect to every form. But it may exemplify by reducing to irrelevance, i.e. negligibility. Concept is analytic of whole world as synthesized in immed. occ. Mental occ. is reorganization of primary organization as in phys. occ. Partic-fact not compatibly a fact until fused with univ. potentiality. Can't treat phys. occ. alone as a croncete fact. Always main pt. that it isn't someth. else. Sin = might have been otherwise. Sheer realism in art i.e. bare fact an abstraction. Fact in itself = feeling = someth. for its own sake. Toothache an express of my individ. uality wh. is tooth-acky. What a thing is for itself = ~~also~~ a charact. of creativity. Passing by. itself. Value = how of determination. Knowing alw. fr. standpt. of phys. occ. How get kn. fr. univ. standpt.? Can get rid of standpt. of partic. occ. but not of com-munity of occ.

{* backpage: paper lined and not complete (about half a paper)}

fine