

Whenever there is daylight round about, the visual current comes forth, like to like, and coalesces with it and is formed into a single homogeneous body in a direct line with the eyes, in whatever quality the stream issuing from within strikes upon any object it encounters outside.

Plato: Timaeus, 45c (trans. Cornford)

What we see, that we gaze at; & what we gaze at, that we are.

Ruysbroeck: The Sparkling Stone, Cap IX

An object, if it were before  
My eye, was by Dame Nature's law,  
Within my soul. Her store  
Was all at once within me; ~~all her treasures~~ .....

The sun ten thousands leagues off, was nigh:  
The utmost star,  
Though seen from far,  
Was present in the apple of my eye.

Thomas Traherne: My Spirit.

If I see the sun & it makes me blink, what I see is not 93,000,000 miles and eight minutes away, but is causally (& therefore spatial-temporally) intermediate between the light-waves striking the eye and the consequent blinking.

Bertrand Russell: Philosophy & Experience p. 21

'And does ~~not~~ it (the eye) <sup>not</sup> possess the power which it has, by its own's disposition, as an affluence from it?'

'Certainly.'

'Then the sun is not nigh, is it; but, being the cause of sight, it is seen by the same?'

Plato: Republic, VI, 507. (trans. Lindsay)

But of vision alone is a separate science formed among philosophers, namely perspective, ~~not of any other science~~ ..... this most beautiful science. To be sure some other science may be more useful, but no other science has such delightfulness & beauty of utility. And therefore it is the flower of all philosophy ...

Roger Bacon: Opus Majus: On the Science of Perspective, Ch. I.

Light is something holy & is the universal bond.

Victor Hugo: Intellectual Biography (Portrait d'un homme de bien):  
'Things of the Infinite.'



## CHAPTER II

### The Scientist's Story Examined LOOKING AT MYSELF LOOKING

#### 1. The Scientist is called in.

What am I? In the last chapter I tried to answer this question by direct inspection, using ~~head~~ <sup>hand</sup> as little as possible. The result was ~~nothing, and self-contradictory~~ somewhat odd.

A reason for this, and a remedy, suggest themselves. The reason is that I left the firm ground of common sense for the airy and boundless speculations of philosophy; the remedy is that I go back to common sense, & to science, which is only common sense developed. <sup>for example,</sup> Science gives a careful and detailed account of the way I see things, and it is an account that is always being proved in practice.

How am I then, at my desk, writing. What has the Scientist to say about the way I come to <sup>see</sup> ~~be aware of~~ this hand that holds the pen? Here it is, so ~~present~~ <sup>conspicuous</sup>, so vivid, so obvious, so ~~utterly~~ <sup>indubitable</sup> — & yet there is a <sup>complete</sup> mechanism by which this perfect simplicity is achieved. I ~~see~~ <sup>see</sup> but how do I ~~see~~ have knowledge of the external world, but how, according to science, do I get that knowledge?

#### 2. The Scientist's Story of how I see my Hand. (a): LIGHT

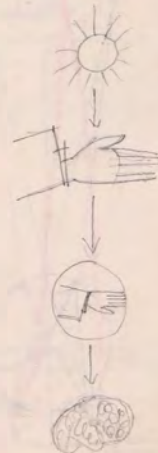
Light travels from my hand to my eye, where it makes a little inverted picture of my hand. The picture gives rise to impulses which pass along certain nerves to my brain. Result: I see my hand. It is a familiar story, <sup>which</sup> I have no difficulty in understanding — until I go into the details, really examine it.

Actually the story does not start here and now, ~~at all~~, but 93 million miles away and eight minutes ago in the Sun, when a part of that body ~~that~~ <sup>that body</sup> detached itself and set off on its journey to my hand. Seeing my hand is an item in the expansion (at 700 million miles an hour) of a star, but ~~my~~ <sup>our</sup> tendency to marvel at this circumstance is ~~expelled~~ <sup>dispelled</sup> by using the magic word "light", or (better still, because more 'scientific') "photons". Light is more than a mystery: it comes near to being the mystery. <sup>the</sup> ~~the~~ <sup>as to</sup> ~~the~~ <sup>the</sup> contemporary puzzle ~~about~~ <sup>as to</sup> how light can behave both as

X Actually the philosopher, ~~who~~ <sup>who</sup> starting with the experience of ~~a~~ <sup>a</sup> subject, is more empirical than the scientist who treats the object as though it were independent of the experiencing subject & the data is not just given — it is given to ~~the~~ <sup>the</sup> ~~subject~~ <sup>subject</sup>, at first. As Eddington says: "Men who in the search for truth start from consciousness as a seat of self-knowledge with interests & responsibilities not confined to the material plane, are just as much facing the hard facts of experience as those who start from consciousness as a device for reading the indications of spectroscopes & microscopes" (See The Nature of the Physical World, pp 288, 289)

"The physical world," says Bradley, "whether it exists independently or not, is, for each of us, an abstraction from the nature reality" Appearance & Reality, p. 261.

X Actually, the truly empirical approach, taking as little as possible for granted, is that which begins with the like Ch. I path: experience rather than with carefully



the light source

not in the way one set of these waves or particles is unaffected by innumerable others also traversing the same space, waves and as particles, ~~that is so baffling~~ <sup>now is it</sup> the paradox that ~~my~~ <sup>the</sup> speed of light is the same ~~whether the source is approaching or receding from the observer.~~ <sup>whether the source is approaching or receding from the observer.</sup> ~~Speed does not add to or subtract from the speed of the light.~~

The deeper problem is suggested by such questions as: is sunlight the Sun itself? If not, how do I see the Sun? If <sup>not</sup>, what exactly is this solar omnipresence, & how does my hand come to be involved in it?

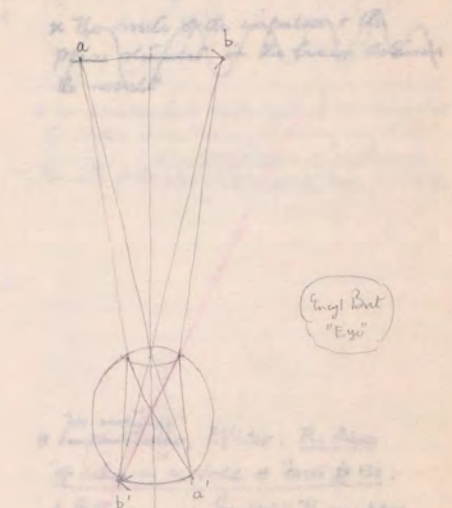
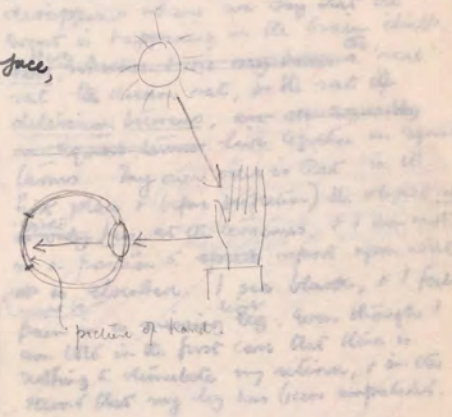
(after filtration by the Earth's atmosphere)  
Anyhow, whatever <sup>am</sup> light really is, the scientist says that some of it, ~~is reflected~~ <sup>is reflected</sup> by my hand & some of it ~~travels off~~ <sup>travels off</sup>. And a part of what ~~travels off~~ <sup>is reflected</sup> travels to my eye, passes through its lens, & makes a small inverted picture of my hand on the ~~retina~~ <sup>retina</sup>. ~~at the~~ <sup>at the</sup> ~~back~~. I see, in short, because I am a camera.

There is a further difficulty here - a ~~whole~~ <sup>whole</sup> crop of difficulties. ~~First,~~ <sup>First,</sup> ~~I cannot see my hand because,~~ <sup>First, since light takes time to get across to my eye, I see the hand I once had, & not the ~~hand~~ <sup>hand</sup> I have now. Second, I say unthinkingly that I see my <sup>hand</sup>, whereas light <sup>reveals only the surface,</sup> ~~like~~ <sup>like</sup> a taxidermist for whom only the skin counts). ~~Third,~~ <sup>Third,</sup> if my hand's light is borrowed sunlight, do I see the sun, or what my hand does to the sun, or what the sun does to my hand? The scientist's tale is that it is the light which my hand reflects that comes on to my eyes; what it accepts goes no further. That is to say my hand is pink because it reflects pink light, & my tie is green because green is the one colour which my tie will have none of. Is the information passed on to ~~my~~ <sup>me</sup> ~~eye~~ <sup>eye</sup> then always a lie?</sup>

But to continue ~~with~~ <sup>the</sup> story: there is my hand, & there, a foot or so away, ~~is~~ <sup>is</sup> the picture of it on my retina. Something must be going on in that ~~space~~ <sup>space</sup> twelve inches ~~of space~~. Apparently neither my hand in its normal condition (whatever that may be), nor a smaller replica of it, nor ~~any~~ <sup>a flock of</sup> such replicas, ~~fly~~ <sup>fly</sup> through ~~the space~~ <sup>the space</sup> <sup>to my eye</sup>. But if what does make the journey is quite different from ~~what~~ <sup>that which</sup> lies at either end, many bewildering questions ~~are~~ <sup>arise</sup>. It is as if my hand had to be de-materialized, or turned into code, or somehow made portable for the journey, & then <sup>re-</sup>materialized, or decoded, or unpacked, on arrival. How anything resembling this is possible, & how accidents & mistakes are avoided, are puzzles ~~that~~ <sup>not</sup> easily solved. I do not say my questions are unanswerable, but only that the answers I have <sup>so far</sup> been given raise equally ~~difficult~~ <sup>new</sup> questions no less formidable than the old ones.



The eyelid (not shown), iris, lens and retina correspond to the shutter, stop, lens & film of a camera.



Diagrams like this are very useful, but they falsely imply that we know what is going on.



*[Faint, mostly illegible handwriting]*

1. The first part of the paper is a general statement of the facts of the case. It is a statement of the facts of the case, and is not a statement of the law. It is a statement of the facts of the case, and is not a statement of the law. It is a statement of the facts of the case, and is not a statement of the law.

the route of the canal & the  
place situated in the distance

[illegible]

Above all, the ~~intentional~~ process I have described is  
 really only half the story. The outgoing or efferent  
 action is just as important as the <sup>incoming or</sup> afferent. For  
 'seeing' is, like all the other senses, a mode of reaching \*  
 I behave towards the object, & this center ~~the~~ centrifugal  
 movement, ~~cannot be divorced from~~ <sup>strongly with</sup> the contemplative  
 movement which precedes it, together comprising  
 what is called ~~vision~~ <sup>vision</sup> ~~sense~~ <sup>sense</sup> vision. Vision is  
~~a species of~~ <sup>a species of</sup> reaction; or ~~rather it is action-~~ <sup>rather, it is</sup> action-  
 reaction. (Russell O.O.P. 24) Bergson is probably  
 right when he ~~states~~ <sup>states</sup> ~~the~~ <sup>of</sup> ~~brain~~ <sup>of</sup> the sketched-out  
 movements, the beginning of my active response

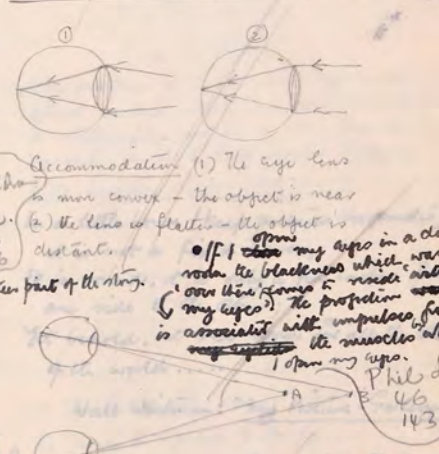
\* The behaviorists, & particularly Dr. J.B. Watson, have rightly thrust this aspect, which is certainly fruitful for experimental psychology.



July 46, 46  
(co-ordinal) (co-ordinal)  
Somatic & non-somatic non-data are inextricably mixed.

Actually, I have <sup>abstract</sup> ~~simplified~~ the <sup>strong</sup> ~~scientist's~~ account. Vision involves far more than <sup>of no basis</sup> the retinal optic nerves & visual cortex. ~~As for~~ the eye movements as I trace my hand's outlines, the accommodation of eye-lenses as they keep my hand in focus, the convergence of my eyes upon <sup>these objects</sup> ~~my hand~~, the <sup>movements</sup> ~~position~~ of my head & neck — all these ~~are~~ <sup>activities are linked with sent</sup> nerve impulses ~~which pass~~ from the muscles involved to various parts of my brain & influence my seeing. <sup>Even my ears make their contribution: impulses from the labyrinth to the brain & influence my seeing.</sup> Again, though certain regions of ~~the~~ brain are specially concerned with vision, it is generally agreed that <sup>in some sense</sup> ~~the~~ brain functions as a whole: anything that happens in it is coordinatist with <sup>itself</sup> ~~the~~ else that is happening in it. \*

Another important point is that even in the matter of vision, my brain ~~is~~ <sup>helpless</sup> ~~no passive receiver~~ <sup>of impressions</sup> of all the material that clamours for <sup>admittance</sup> ~~attention~~ only a selection <sup>is let in —</sup> ~~gets it~~ <sup>passed.</sup> ~~the rest is inhibited.~~ <sup>a new fragment, abstractly chosen.</sup> ~~Short, the scientific story I have outlined is an abstraction.~~



Convergence. The nearer the object  
A, B, the more the eyes are pulled  
out of parallel. As to convergence  
upon the object.

---

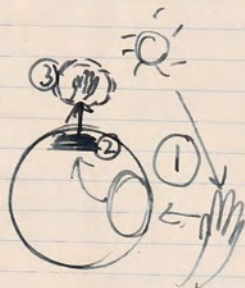
\* For an ~~extension~~ statement of the view of  
the cortex functioning as a whole, see K.S.  
Lashley: Brain Mechanisms & Intelligence  
See also McDougall: Emotion & Memory p. 310

Science deals in abstractions. The only question is what particular  
set of abstractions meets <sup>the one's</sup> purpose <sup>in hand.</sup> A useful incoming  
of events that connects the outside world, my receptor organs,  
with its counterpart outgoing participant — ~~to~~ my brain, my effector organs, & the outside world.  
This selection from the facts <sup>is important</sup> in practice. Thus, if the route  
<sup>between the man & my hand,</sup> or between my hand and the distant  
area of my cortex, is cut anywhere in its length (as when the man  
is darkened, or my hand is in my pocket, or my eyes are shut, or  
the lenses of my eyes have become opaque, or my optic nerves are injured,  
or the visual area of my cortex is diseased), then I do not see my hand.  
The essential thing is that the train of events should get through to its  
terminus <sup>+ back again to the object.</sup> It is only then that I "see my hand."

→ I would say that everything depends upon the level of the activity under consideration. When my brain is relevant to my behaviour as an animal, the when I behave as an animal my 'brain' does not is located in the body; when I behave humanly my 'brain' includes those of other men; when cellular behaviour is in question, neurones are the relevant unit. My 'brain' expands & contracts along with its object.

\* The ~~indicate~~ meditates here, as I shall show, is the attempt to preserve some equivalence between the two ends of the beam of arms. They are incommensurable.

o O of P. p 72.



5a



outline of Philosophy p. 72.

As a matter of fact, science <sup>tries to</sup> compromise. It suggests that the vivid meaningful world I experience is the flimsy construction of my 'mind', (~~relation that may be~~) <sup>based</sup> on the foundation of a 'real' world which is a silent, colourless, tasteless, scentless, purposeless, Energy system.\* Of this 'nat' but dreary sphere of things the scientist claims to have true knowledge.

But this compromise will not do. If the colour of my hand is illusory, its shape and mass and motion may be equally illusory. The lines of my hand are not less doubtful than its pinkness, ~~for it is~~ ~~always than its fingerless~~ ~~problematical than its cells.~~ ~~and nothing without the world, and I must take the world on~~ ~~trust.~~ Let it then be a world worth taking.

\* Thus Newton says: "For  
the Rays to speak properly are  
not colours. In them there  
is nothing else than a certain  
Power or Disposition to stir  
up a Sensation of this or that  
Colour." <sup>Book II. Part II.</sup>  
~~See~~ L. S. Sillibing:  
Philosophy & the Physicists pp 52 ff.,  
& A. S. Eddington: New Pathways  
in Science p. 4.

Galileo: "I think that these tastes, odours, colours, etc., on the side of the object in which they seem to exist, are nothing else than mere names, but hold their residence solely in the sensitive being; so that if the animal were removed, every such quality would be absolutely annihilated." Yet Galileo (whose words these are) believed that he knew what object the object is apart from its appearance to the animal.

o cf J. B. Baillie: Contemporary British Philosophy (Editor J. H. Muirhead) p 39.

5. Can the other senses reveal the outside world?

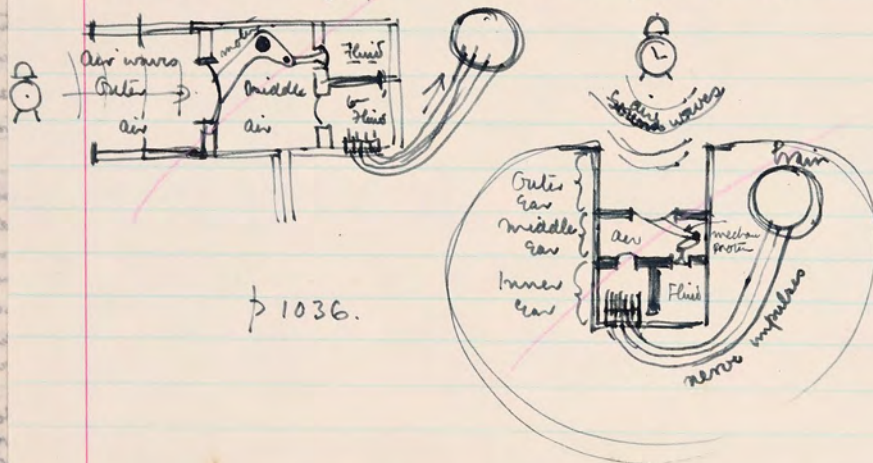
Common sense inquires at this point whether some of my difficulties are not due to the fact that I have limited myself to one sense, ~~viz~~ namely vision. It is <sup>which</sup> touch <sup>convinces</sup> ~~and to an untypical one at that~~ <sup>namely of the outside world is touched for not by one</sup> ~~but by their combined evidence.~~ <sup>the persuasiveness of all the senses seems to find mutual support.</sup> In spite of these incommensurable interests ~~it~~ appears to tell a consistent tale, & when witnesses so independent agree, is not their evidence presumed true?

No hands we forget that

The relations of ether, space-time & wave-motions, & the entire <sup>superstructure of</sup> ~~universe~~ of physics, are inferred from & rest upon the world of ~~our~~ sense-experience; they are secondary constructions, & they stand or fall ~~as~~ <sup>with</sup> their foundations. The physicist must start by taking the apparent world ~~off~~ on trust, & he can never undermine that world without bringing down his own world.

7a

The striking of metal on metal in the clock sets up air waves, which cross the room to my ear & beat on my eardrum, causing it to vibrate. Behind the drum is a ~~very~~ complex series of chambers full of first of all the middle ear, & then a series of complicated chambers full of fluid & <sup>containing</sup> the actual sensory cells, <sup>with their interconnecting</sup> ~~which have hair like~~ <sup>projections.</sup> An arrangement of bony levers in the middle ear passes the vibrations of the ~~eardrum~~ <sup>eardrum</sup> on to the liquid contents of the inner ear, ~~so~~ <sup>without</sup> disturbing the ~~hair~~ <sup>sensory</sup> cells. These are linked with nerve fibres which lead ~~(in a bundle known as the auditory nerve)~~ to the parts of the brain ~~concerned with hearing~~ <sup>responsible</sup>. The stimulation of the ~~hair cells~~ gives rise to neural impulses (of the same kind as are involved in vision) which are passed on to the cortical centres, but the frequency & nature of these impulses are quite different from the frequency & nature of the vibrations of the eardrum, or of the sound waves outside. What determines for me the quality & intensity of the sounds I hear is which of the many <sup>nerve</sup> fibres are conducting impulses, & their routes.



To begin with, let me consider hearing. I attend for a moment to the ticking of the clock on the mantelpiece of this room. The sound is, as given, as much beyond argument, as anything I can ever experience. But what is the scientific story?

The striking of metal on metal in the clock sets up air waves, which ~~travel~~ cross the room to my ear, and beat on my eardrum, causing it to vibrate.

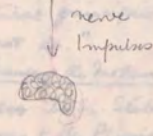
Behind the drum is a ~~small~~ <sup>the cochlea is a spiral</sup> fluid-filled ~~space~~ <sup>fluid, containing some 35,000 cilia</sup> ~~containing~~ <sup>cells</sup> hair cells, ~~which are~~ <sup>with hair-like projections</sup> ~~thousands of varying length, like the hairs in a piano~~. A lever

~~arrangement magnifies~~ <sup>passes</sup> the vibrations of my eardrum & passes them on to ~~the liquid contents of~~ <sup>the liquid contents of</sup> the ~~fluid~~ <sup>fluid</sup>, which becomes agitated, & in turn causes some of the threads to vibrate in sympathy. Each thread



The Middle & Inner Ear.  
(1) ear drum (2) auditory ossicles which transmit vibrations of the drum to (3), the membranous window. The liquid ~~chamber~~ <sup>chamber</sup> ~~surrounds~~ <sup>surrounds</sup> (4) the spiral cochlea, which is the organ of hearing. It contains the 10,000 threads.

\*The frequency of nerve impulses, though it is quite different from the frequency of the sound-vibrations in the air, is constant for a given sound. Phil April 46



SOUND

describes W.R. Brain (Op. cit) says that the brain is ~~not~~ <sup>not</sup> a deaf housemaid sitting in the kitchen watching bell-indicators. Phil July 46

also of Adam

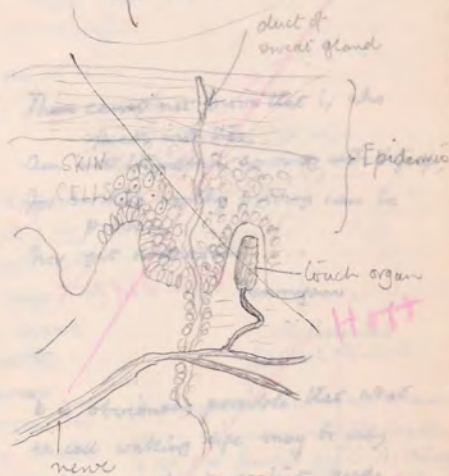
connected with nerve fibres which ~~lead~~ <sup>lead</sup> in a bundle (in the form of a bundle) ~~the auditory nerve~~ <sup>the auditory nerve</sup> ~~to the brain~~ <sup>to the brain</sup>. The ~~stimulation~~ <sup>stimulation</sup> of the hair cells gives rise to electrical impulses (of exactly the same sort as are involved in vision) ~~that pass~~ <sup>that pass</sup> along some of these nerve fibres to the ~~brain~~ <sup>brain</sup>. What determines for me the quality & intensity of the sounds I hear is which of the fibres are being stimulated. ~~own frequency~~ <sup>own frequency</sup> is quite different from the frequency of the vibrations in the cochlea, \* or in the outside world.

It is the story of ~~the way in which~~ <sup>the way in which</sup> I see my hand, ~~not~~ <sup>not</sup> again. When is the tick-tock, tick-tock that is now so real & distinct for me? Not, for science, in the clock, not in the air of the room, not in my ear or my eardrum: so far there are only silent waves, mere matter in motion. ~~And it is manifestly impossible for the tightly-packed materials of my inner ear, & nerve fibres, & brain, to be moving with the metallic ticking of the clock on the mantelpiece.~~ <sup>he scientist assumes me that</sup> ~~But I cannot hear a sound till the nerve impulses reach the auditory area of the cortex. What happens there in or among the atoms? How does a world of sound arise from their silent motions? What and when, for instance, is the symphony I hear when I switch on my radio? Above all, in what sense is that which I hear true of the outside world?~~

But ~~touch~~ <sup>touch</sup> is the sense for which common sense claims a special validity. How does this claim stand?

Actually there is not one sense of touch but a number of allied senses. Throughout the area of my skin are distributed nerve endings

sensitive to pain only, others sensitive to cold only, others sensitive to heat only, others sensitive to contact only. (Thus I do not feel an object <sup>touching</sup> against my eye <sup>ball</sup> till it begins to hurt; this is because the eye has pain receptors but is <sup>not</sup> contact receptors. Conversely, parts of my cheek are well supplied with contact receptors but are short of pain receptors - I can <sup>prick</sup> ~~check~~ <sup>prick</sup> my cheek without feeling pain.) These different senses all have the same sort of bodily apparatus: there are always the receptor organs <sup>near</sup> on the skin's surface, & nerve fibres which connect these with the central nervous system, leading eventually to the part of the brain concerned. And in each instance, if the nerve is cut at any point on its way to the brain, there is no sensation. In fact, a desperate but regularly-used method of killing local pain is to cut some of the nerve fibres that lead from the painful area to the brain.



→ Tic doloceux

It sometimes happens that a man with a wooden leg feels a pain in the leg he lost years ago. Apparently I am <sup>no less</sup> ~~just as~~ <sup>misled</sup> mistaken when I suppose my hands are warm, & my feet are cold, & my back itches, & my neck chafes. All happens at the terminus. I can only, so to speak, have cold feet in my head, & all aches & headaches. If I have true knowledge of anything it can, only be <sup>reminds</sup> of certain parts of my brain; (~~I do not know what the physiological~~ <sup>reminds</sup> ~~of this place~~ <sup>about my hands & what</sup> ~~are not parts of my brain to me, but smells quite different~~ <sup>they are touching I know nothing. The "feel" of things out there</sup> tells me no more than what I call the look & the sound of them. It does not even guarantee their existence.

The <sup>remains</sup> ~~other~~ senses ~~there is a surprising number of them~~ are no better off. As for their combined deliverance, it can be no more valid than the separate stories. A consistent tale told by many is no more likely than the unsupported statement of one, if all are ignorant or liar by nature & have had years together in which to cook up their story. ~~Or put it like this:~~ <sup>To run up: then</sup> my seeing & hearing & touching & tasting & smelling are true insight into what the world is - into what the world is at one particular spot, ~~at that spot~~ <sup>in that spot</sup>. The ~~not of the world~~ <sup>other</sup> ~~is actually my body as body & my brain as brain,~~ <sup>may be no more than</sup> ~~is a sort of representation.~~ <sup>At the very least</sup> as Whitehead has said, "the problem is not to fit my perceptions to the world (if any), but the world to my perceptions."

SHIFT

Science & life  
I 72  
True & false  
organs

The mistake is often made of assuming that ~~there is~~ better evidence for the existence of the things inside my head than for the existence of the things outside. The ~~more is true~~ <sup>more is true</sup>. A.N. Whitehead writes: "Some people express themselves as though bodies, brains, & nerves were the only real things in an entirely imaginary world. In other words, they treat these bodies or objective principles, & the rest of the world on subjective principles. This will not do."

Science & the Modern World, p. 113.  
See also L.S. Stebbing:  
Philosophy & the Physical World p. 100.

Aims of Education  
Scholpp 507.



10a

"The plan of the universe as we see it is the plan of the persistent records in our nervous centres," says ~~one~~ <sup>one</sup> ~~writer~~ <sup>writer</sup>.

In other matters there is not the same agreement. For example, whereas Chapter I says that I have been on my shoulders either a head (as other reports) or a world (as I report), the scientist of this chapter implies that I have both at once. He overcomes the spot I call here, forgetting that there is (so to say) not enough room on my shoulders for ~~both~~ my world & my head at the same moment. Robert Hooke, the 'experimental philosopher', believed that there was a material storage of ideas in the brain, ~~and claimed that~~ <sup>and claimed that</sup> ~~the brain was~~ <sup>the brain was</sup> ~~replete~~ <sup>replete</sup> ~~with~~ <sup>with</sup> ~~ideas~~ <sup>ideas</sup> ~~of~~ <sup>of</sup> ~~the~~ <sup>the</sup> ~~mind~~ <sup>mind</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~microscope~~ <sup>microscope</sup> ~~showed~~ <sup>showed</sup> ~~that~~ <sup>that</sup> ~~there~~ <sup>there</sup> ~~was~~ <sup>was</sup> ~~ample~~ <sup>ample</sup> ~~room~~ <sup>room</sup> ~~in~~ <sup>in</sup> ~~the~~ <sup>the</sup> ~~brain~~ <sup>brain</sup> ~~for~~ <sup>for</sup> ~~the~~ <sup>the</sup> ~~two~~ <sup>two</sup> ~~million~~ <sup>million</sup> ~~or~~ <sup>or</sup> ~~so~~ <sup>so</sup> ~~of~~ <sup>of</sup> ~~them~~ <sup>them</sup> ~~which~~ <sup>which</sup> ~~(by~~ <sup>(by</sup> ~~his~~ <sup>his</sup> ~~reckoning)~~ <sup>reckoning)</sup> ~~a~~ <sup>a</sup> ~~man~~ <sup>man</sup> ~~acquires~~ <sup>acquires</sup> ~~in~~ <sup>in</sup> ~~a~~ <sup>a</sup> ~~lifetime~~ <sup>lifetime</sup>. The abundance is one of which we continue to be We are guilty of the same abundance when we ~~confuse~~ <sup>confuse</sup> ~~brain~~ <sup>brain</sup> ~~events~~ <sup>events</sup> ~~&~~ <sup>&</sup> ~~experience~~ <sup>experience</sup>. James Ward ~~wrote~~ <sup>wrote</sup> "Corresponding to the brain — physiologist." But confusion arises whenever the physiologist ~~or~~ <sup>or</sup> ~~the~~ <sup>the</sup> ~~psychologist~~ <sup>psychologist</sup> ~~instead~~ <sup>instead</sup> ~~of~~ <sup>of</sup> ~~checking~~ <sup>checking</sup> ~~to~~ <sup>to</sup> ~~his~~ <sup>his</sup> ~~last~~ <sup>last</sup> ~~tries~~ <sup>tries</sup> ~~to~~ <sup>to</sup> ~~combine~~ <sup>combine</sup> ~~his~~ <sup>his</sup> ~~task~~ <sup>task</sup> ~~with~~ <sup>with</sup> ~~the~~ <sup>the</sup> ~~consequence~~ <sup>consequence</sup> ~~that~~ <sup>that</sup> ~~both~~ <sup>both</sup> ~~are~~ <sup>are</sup> ~~undone~~ <sup>undone</sup>. Science tends to mix. The ~~physiologist~~ <sup>physiologist</sup> (I mean the ~~physiologist~~ <sup>physiologist</sup> who ~~commits~~ <sup>commits</sup> ~~this~~ <sup>this</sup> ~~error~~ <sup>error</sup>) ~~mixes~~ <sup>mixes</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~myself~~ <sup>myself</sup> ~~upon~~ <sup>upon</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~myself~~ <sup>myself</sup> ~~upon~~ <sup>upon</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~myself~~ <sup>myself</sup> ~~upon~~ <sup>upon</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~myself~~ <sup>myself</sup> ~~upon~~ <sup>upon</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~myself~~ <sup>myself</sup> ~~upon~~ <sup>upon</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~myself~~ <sup>myself</sup> ~~upon~~ <sup>upon</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~myself~~ <sup>myself</sup> ~~upon~~ <sup>upon</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~myself~~ <sup>myself</sup> ~~upon~~ <sup>upon</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~myself~~ <sup>myself</sup> ~~upon~~ <sup>upon</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~myself~~ <sup>myself</sup> ~~upon~~ <sup>upon</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~myself~~ <sup>myself</sup> ~~upon~~ <sup>upon</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~myself~~ <sup>myself</sup> ~~upon~~ <sup>upon</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup> ~~am~~ <sup>am</sup> ~~to~~ <sup>to</sup> ~~him~~ <sup>him</sup> ~~with~~ <sup>with</sup> ~~and~~ <sup>and</sup> ~~the~~ <sup>the</sup> ~~picture~~ <sup>picture</sup> ~~of~~ <sup>of</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~I~~ <sup>I</sup>

Even if science ~~is~~ <sup>were simply</sup> the weaving of a ~~subjective~~ <sup>subjective</sup> pattern, the pattern is wonderfully close knit, consistent, & ~~worthy of~~ <sup>worthy of</sup> attention ~~as it is~~ <sup>as it is</sup> ~~less important than the~~ <sup>less important than the</sup> other subjective pattern which I weave. ~~It can~~ <sup>It can</sup> ~~not~~ <sup>not</sup> ~~be~~ <sup>be</sup> ~~like this~~ <sup>like this</sup>. I need all the help I can get in this inquiry; & I can afford to ignore no source that ~~seems~~ <sup>seems</sup> promising. I shall take the scientific story of perception seriously, in the belief that ~~but I am~~ <sup>but I am</sup> ~~encouraged to do this by the belief that any philosophy which does not do~~ <sup>encouraged to do this by the belief that any philosophy which does not do</sup> ~~no is~~ <sup>no is</sup> ~~violated from the start, & with itself, in the art of science, not to be taken seriously.~~ <sup>violated from the start, & with itself, in the art of science, not to be taken seriously.</sup> ~~help I can get.~~ <sup>help I can get.</sup> Besides, while science lacking roots in metaphysics grows rank, metaphysics unfertilized by science withers. The thinker (& the artist & saint no less) who neglects the scientific knowledge of his time neglects inspiration.

+ J.B.S. Haldane has put this forcibly in his Daedalus, p.28.

My problem, ~~then~~ <sup>accordingly</sup>, is twofold: first to ~~reconcile~~ <sup>attempt to</sup> the scientific story of this chapter with itself, & then to ~~reconcile~~ <sup>second attempt to</sup> it with the conclusions of the previous chapters. It goes without saying that I cannot expect to be altogether successful.

## 8. The confusion in the Scientist's story.

Consider once more the way I see my hand. According to the Scientist, the story starts with the sun & goes on to my hand, my eyes, & my optic nerves, but until the end is reached I see nothing. What I am aware of is the state of affairs in my head here, & not the state of affairs in the world out there. My hand, my world, are ~~in~~ <sup>in</sup> my head?

Let me recall a rather startling fact, & one that promises well for this inquiry, emerges: this conclusion to which Science points is essentially the conclusion of Chapter I. There, too, it was found that my hand & my world are ~~in~~ <sup>in</sup> my head, or rather when I imagined I had a head, and not over there in the distance when I thought they were. I see the sun because I am in the place where ~~it~~ <sup>it</sup> (whatever ~~it~~ <sup>it</sup> may be) is a sun. I see my hand because I am in the place where ~~it~~ <sup>it</sup> is a hand.

(10a)

In other matters there is not the same agreement. For example, whereas Chapter I says I have here on my shoulder a head (as others see me) or a world (as I see myself), the Scientist of this Chapter ~~implies~~ <sup>implies</sup> I have both ~~at once~~ <sup>at once</sup>. He overcomes my ~~head~~ <sup>head</sup>, ~~there is~~ <sup>there is</sup>, to speak metaphorically, not enough on my shoulder for both my head and my world at the same time. ~~In other words, he makes the picture of me as I am to myself. But his story & mine~~ <sup>In other words, he makes the picture of me as I am to myself. But his story & mine</sup> ~~are incompatible. Vision is not a question of an organ & an object related.~~ <sup>are incompatible. Vision is not a question of an organ & an object related.</sup> ~~He will not mix. Then I have no head, no eyes, no optic nerves, no brain, & I keep~~ <sup>He will not mix. Then I have no head, no eyes, no optic nerves, no brain, & I keep</sup> ~~out there for the region of investigation. Here~~ <sup>out there for the region of investigation. Here</sup> ~~I have this hand, this page, this world. What he overlooks is that~~ <sup>I have this hand, this page, this world. What he overlooks is that</sup> ~~the brain that~~ <sup>the brain that</sup> ~~is on my shoulder but what is on his own,~~ <sup>is on my shoulder but what is on his own,</sup> ~~and the mystery about how it can contain the world simply does not arise.~~ <sup>and the mystery about how it can contain the world simply does not arise.</sup> ~~My world and my brain belong in entirely different places. That~~ <sup>My world and my brain belong in entirely different places. That</sup> ~~is why I am in~~ <sup>is why I am in</sup> ~~trouble when he says that "the atoms of a human body have the~~ <sup>trouble when he says that "the atoms of a human body have the</sup> ~~special capacity of conveying impressions through our senses to our minds. These atoms~~ <sup>special capacity of conveying impressions through our senses to our minds. These atoms</sup> ~~affect our consciousness directly, while all the other atoms of the universe can only affect it~~ <sup>affect our consciousness directly, while all the other atoms of the universe can only affect it</sup> ~~indirectly, through the intermediary of these atoms."~~ <sup>indirectly, through the intermediary of these atoms."</sup> ~~Even if the atoms of my brain & the objects which I perceive could somehow be found some modern words here,~~ <sup>Even if the atoms of my brain & the objects which I perceive could somehow be found some modern words here,</sup> ~~it is quite impossible to conceive how these could serve as the vehicles of the latter.~~ <sup>it is quite impossible to conceive how these could serve as the vehicles of the latter.</sup> ~~Could accommodate my world.~~ <sup>Could accommodate my world.</sup>

Wm. Brewster  
M. & P. 152

The American  
Critical Realist

• The theory of perception which I am advancing here has much in common with the double aspect theory as put forward by C.A. Strong in Why the Mind has a Body (1903), & The Origin of Consciousness (1918). Strong ~~clearly~~ <sup>clearly</sup> ~~states~~ <sup>states</sup> ~~that~~ <sup>that</sup> ~~realists~~ <sup>realists</sup> ~~what~~ <sup>what</sup> ~~so many~~ <sup>so many</sup> ~~fail~~ <sup>fail</sup> ~~to~~ <sup>to</sup> ~~realize~~ <sup>realize</sup> ~~(in spite of its obviousness) that~~ <sup>(in spite of its obviousness) that</sup> ~~I can~~ <sup>I can</sup> ~~never~~ <sup>never</sup> ~~be~~ <sup>be</sup> ~~aware~~ <sup>aware</sup> ~~of~~ <sup>of</sup> ~~the~~ <sup>the</sup> ~~changes~~ <sup>changes</sup> ~~in~~ <sup>in</sup> ~~the~~ <sup>the</sup> ~~mind~~ <sup>mind</sup> ~~until~~ <sup>until</sup> ~~it~~ <sup>it</sup> ~~changes~~ <sup>changes</sup> ~~are~~ <sup>are</sup> ~~events~~ <sup>events</sup> ~~for~~ <sup>for</sup> ~~my~~ <sup>my</sup> ~~observer~~ <sup>observer</sup> ~~(e.g. a surgeon operating~~ <sup>(e.g. a surgeon operating</sup> ~~on my brain.)~~ <sup>on my brain.)</sup>



• On this see H.F. Haller: "The Essential Nature of Knowledge" in Philosophy, Nov. 1945. It is no accident that the eye cannot see itself, but essential to perception. Otherwise we get Russell's view (Analysis of Matter, p.320) that the relation of a human brain to a mental state is a relation of a mental state to a mental state - a mere accident I believe to be utterly mistaken.

\* The Scientist in this chapter is by no means typical of actual scientists, ~~as~~ <sup>as</sup>.



"What the Physiologist sees" Eddington  
when he examines a brain is <sup>N.P.W.</sup>  
in the Physiologist, not in the brain he is examining.  
Bertrand Russell: Analysis of Matter, p.320.  
+ Modern Physics, p.144 (P).

(Second Dialogue between Hylas & Philonous, beginning)

0 The theory of perception outlined here ~~was~~ is in some respects like Aristotle's: in vision, the eye receives the 'form', without the 'matter' of the object - if the object is red, then the eye is somehow reddened, & this redness has in it the variable species by which I perceive <sup>the redness of the object.</sup> ~~the nature of the object.~~ ~~by matter~~ <sup>might be affected</sup> ~~the nature of my object upon its matter,~~ & so universal manifest <sup>phenomena as its 'form',</sup> Again, Aristotle insists that a medium is needed, which must itself be featureless, between the object through which movements are propagated from the object to the heart or central sensorium, which is the perceiving subject. (ART. 113)

④ विशेष विवरण

+ in Matt's & Memory: pp 3 & 4 especially.

② MM Dig.

• And it is part of the essence of ~~an~~ a Chapman philosophy that, at the very center, there shall be a hiatus, nothing, where the world goes in making.

• How can he find the right conditions. How can problems occur in a dark place? F.H. Bradley would not believe that when he smelt a smell he was aware of the thinking state of his nervous system.

See H. H. Price, *Perception*, p. 137.  
~~Transcendental~~ Whitehead speaks of the 'our psychical  
 fields, as it stands for our cognition, as 'the self-  
 knowledge of our bodily world' ~~as a whole~~ - a self-  
 knowledge which discloses 'a prehensive unification  
 of modal processes of entities beyond itself.'  
 (*Science & the Modern World*, p. 91, my italics.)  
 To say the least of it, this is using the words  
 'bodily' in an unusual ~~sense~~ I think (or *perhaps*)  
 just.



The brain is an "instrument of analysis in regard to the movement received, & an instrument of selection in regard to the movement executed." (MM p. 20) The analysis & selection (add) culminates in a point, on the dimension, in nothing.

... regarding the movement  
statement of selection in regard to the  
at." NAM p.20) The analysis & selec-  
culminate in a point, on the divine  
thing.

T H E S

B

② ABC of Psychology,  
(Pelican Ed.) p 39.

Q ABC 7 Pay  
(Pelican Ed.) P 3

+ ~~4~~ L. Susan Stabbing points out,  
(*Philosophy & the Physicists*, Pelican Ed., p 50 ff.),  
Berkeley, convinced that the possible world  
was primarily a conceivable world, criticised  
Descartes & Newton for neglecting this  
foundation, & so duplicating the world.  
"He saw that the question - How is perception  
possible? - is devoid of sense; he saw that  
it is no less absurd to look to physics  
for an answer to the question."

OVER

\* The significance of light for matter-  
physics is a new discovery.  
Grosseteste, in his work On Light, or the  
Commencement of Forms, makes light  
the forms of corporeal things. <sup>giving it a point,</sup> ~~light~~ It  
spreads spherically <sup>from</sup> about a point to its  
is the firmament; from <sup>this</sup> ~~where~~ it is reflected  
back to the centre, giving rise in the process  
to the nine celestial spheres. ~~The first~~  
Pt II of Roger Bacon's OPUS MAIUS is  
entitled On the Science of Perspective.  
See McKean: Selections from Medieval Phil-  
sophy, Vol. I, p. 261, Vol. II, p. 57.  
\* This is Kant's doctrine: our knowledge of the non-matter  
derives from its sensibility, not vice versa.

- (i) Light from the (1) SOLAR SYSTEM (in particular from the sun)  
(ii) reaches the (2) EARTH (in particular its atmosphere) and  
(iii) eventually my (3) BODY (in particular my hand) from which  
(iv) it is reflected to my (4) HEAD ~~(in particular my head)~~  
(v) some of whose CELLS <sup>specifically</sup> are affected. limits of transfection with

There is no thing-in-itself, but only a thing-in-others. The 'real' thing is the totality of what it comes to in other things. Thus the object is not the cause of my perception, but my perceiving ~~the object~~ itself, together with all other perceptions of it at every angle. Or, if it be argued that the object's observers, grouped ~~in response~~ <sup>in response</sup> about a center, make something of that center, just as the circumference of a circle makes the center. There is no primitive matter of experience, which the understanding fashions into shape; there is only the numerous concrete hierarchy of <sup>graduated</sup> experience, projected upon the Center which has nothing of its own. And that experience is basic, valid, the unquestionable

Note, first, that this ~~basic~~ sequence corresponds, in general, to the experience of the approaching observer in Chapter I. In fact, the scientist who sets out to describe my vision is such an observer. ~~He~~ In describing the way I see anything he describes me as a ~~(regional) system~~, ~~and~~ through which he travels, & the regions are those which all who approach me must recognize. In other words, to describe my vision is to describe my ~~vision~~ is more than a faculty or a sense, & light is more than a volley of particles or a series of waves. My light is ~~the chief mode of~~ my presence in others; my vision is ~~the chief mode of~~ their presence in me. \* Grosseteste.

- (VI) Since these cells consist of MOLECULES \*  
 (VII) which in turn consist of ATOMS \*  
 (VIII) which in turn consist of ELECTRONS, it is to their behaviour that the effects in me can be reduced. My seeing is the 'inside story' of what is going on amongst the ~~ultimate particles~~ in my head.

\* Throughout this book I mean by molecules an organization of atoms, & atoms, a single atom. ~~For the sake of clarity I~~ ~~the definition of molecules~~ (as the smallest portion into which a substance can be divided without losing chemical identity), is one which, for the sake of clarity, I do not employ the term in its strict sense,

Note, ~~next~~, that there are ~~three~~ aspects in which the observer's account above account is inadequate: the observer has overlooked first the unity of his object, secondly his own behaviour, thirdly half the view.

(1) He has overlooked the unity of ~~his object~~: his picture ~~shows~~ things in a row, with light bouncing like a ball from one to another. It is a false picture, because in fact each object contains the next: at each stage the observer passes from a consideration of a whole to a consideration of its part. The process he is investigating is an aspect of the internal ~~processes~~ of that developed ~~plan~~ called the Solar System, & consists of ~~an~~ ~~influenced~~ proceeding inwards. (through a hierarchy that includes the Earth & my body, & my cells) ~~to its ultimate constituents~~. The story is ~~not linear so much as analytical~~.



it is the making down of a unit ~~into smaller units~~ ~~stage by stage~~. ~~Ordering or analysis, but, as with such progress, it is the story of order of a whole.~~ ~~an analysis which is essential to the unity of that which is analysed.~~

not of a linear progress but of a series of diminishing concentric spheres

(2) The observer has overlooked his own behaviour, in his anxiety to record that of his object. He is innocent of deliberately suppressing any evidence, yet the truth is that he has left out ~~exactly~~ half the story. ~~his own half~~. When his attention passes, for instance, from the Earth to my body that part of the Earth which is my body, and from my body as a whole to that part of it which is my head, ~~we are~~ ~~shifting our position~~ ~~relative to one another~~. He was, in fact, doing ~~exactly~~ the reverse of what the observer in Chapter I did: He was approaching me rapidly, & what he noted was therefore a planet becoming a man, a man becoming a head, a head becoming cells, and so on. No doubt it was only by travelling so fast & so far in my 'Regions' that he was able to collect the material for his story, & no doubt the ~~story~~ ~~is~~ ~~largely~~ a true one: the fault lies in his unconsciousness of ~~his own part in it~~ ~~the fact that it is his methods~~.



(3) The observer has overlooked half the view. His unawareness of ~~his own~~ ~~relative~~ ~~motion~~ would have been excusable, or even of no consequence,

"He changes of Bodies into Light," says IV in his Opticks, " & Light into Bodies is very conformable to the Course of Nature which seems designed unto such transmutation." No wonder, seeing that the Bodies ~~and their light~~ is the regional transmutation is ~~the~~ of the essence of bodies, & their light is themselves undergoing transmutation. ~~His best~~ ~~ought~~ to be wisest, but we are misled by the abstract ~~light~~ of physics: light does not come to us except as a star, a cloud, a band. Light is for ~~us~~ ~~much~~ things, & any account of it which ignores this fact is ludicrously inadequate.

One observer only looks ahead;  
~~and then a new sort,~~  
like a boat-cow, or the mythical  
bird that flies backwards, ~~and~~ eyes only  
what it has left. The really  
efficient observer does both.

+ It is worth noting here that many of the mystics arrive at practically the same doctrine: thus John Smith the Platonist: "this his being nothing is the only way to be all things; thus his being nothing is the only way to be all things having nothing the truest way of possessing all things." (See W.R. Inge: Christian Mysticism (1899) p. 291.)

~~Light does not come to us except as  
thru, a cloud, a band, a fence. Light  
is for us men things, & any account of  
light which ignores this obvious fact  
is ludicrously inadequate - however  
argue it may be.~~

Cook  
R or C  
113

\* Typical of the 'Scientific' subordination of the mental to the physical, is the work of J.B. Watson & other Behaviourists. The 'philosophical' neglect of Body in favour of Mind is seen in Hegel & his followers. W.E. Hocking writes: "Nature as perceived cannot be identical with nature in the totality of the experience of perception. We must count two, & separate the two in quality. It is to escape this result, perception is made direct & unconditional, the physical context is subordinated as part of the real." The Philosophy of Alfred North Whitehead (Editor Paul Schilpp) p. 397

$\div \div$  "The changes of Bodies into Light," says Newton in his Opticks, " & Light into Bodies is very conformable to the Course of Nature which seems delighted with Transmutation." The transmutation I am suggesting here is more profound than that which Newton had in mind.

10. The main issue : events in any nervous system.

The need for taking  
 (2) the impossibility of leaving out the 'external'  
 situation as a whole is evident once we consider  
 examples. The suicide's behaviour is unexplainable  
 till ~~his~~ (say) his overdraft <sup>rate has risen</sup> has taken into account;  
 the ~~suicide's~~ martyr's last ~~process~~ <sup>step</sup> from a still  
 larger offer. ~~But~~ <sup>the</sup> ~~suicide's~~ <sup>suicide's</sup> latent heat. An  
 incoming stimulus of intense heat will normally  
 evoke impulses in ~~the~~ motor neurones stimulating  
 the leg muscles, in such a way that ~~the~~ he  
~~then~~ retreats from the source of heat. When  
 however, that stimulus is combined with  
 (say) certain auditory stimuli (e.g. cries  
 for help), ~~then~~ it may have  
 just the opposite effect, & the man may  
 rush towards the fire. Always it is the  
 total situation which evokes a total  
 response. (e.g. d.m. ABC. 25) in the general  
 interest.

~~2nd~~ My nervous system is nothing more than a network of paths, by which the <sup>original impulses of</sup> influences goes on working inwards to the centre. \* 16  
Central processes link up with those of the world outside and are not.

"The world", in W. Macneile Dixon's words "by our bodies is scaled down to the measure  
of our powers." Our bodies are further scaled down by our nervous system. ~~As~~ <sup>Bergson wrote:</sup>  
"As the impressions received at the periphery of this body come to him (the psychologist) sufficient for the  
reconstruction of the entire material universe, to his body he at first reduces the universe." He goes  
further & reduces the body to the nervous system, & the nervous system to the ~~brain~~ <sup>central cord & brain,</sup>  
~~practical~~ <sup>practical</sup> & thus to the forebrain, & thus to the cortex & ~~at last~~ <sup>and</sup> ~~it is only~~ <sup>it is only</sup> ~~in a~~ <sup>in a</sup> ~~single point.~~

radically different. Just as the observer noted how conditions in outer regions control conditions in regions less remote, so now he notes how the latter <sup>control</sup> ~~some in~~ conditions in the central region of my human body.

The process has been well put by W. Macneil Dixon: "The world .... by our bodies is scaled down or reduced to the measure of our powers." *The Human Situation* p369

SENSE ORGAN  
↓  
nervous system

\* Animals see the situation as a whole & even amongst humans the perception of separate objects has to be learned. See H. Munro Fox: The Personality of Animals p 8 ff.

WORLD  
demining

Emerges

Observer's world  
diminishing

My world growing

...the impressions received  
...only occur to him (the p  
...stitution of the and  
...dy be at first reduc  
...B. ...

the World's Ache  
on me

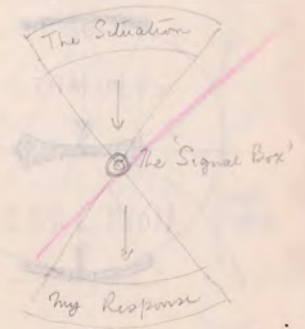
My Action on

H. Wilson Carr, form  
change, pp. 45 ft.) "con

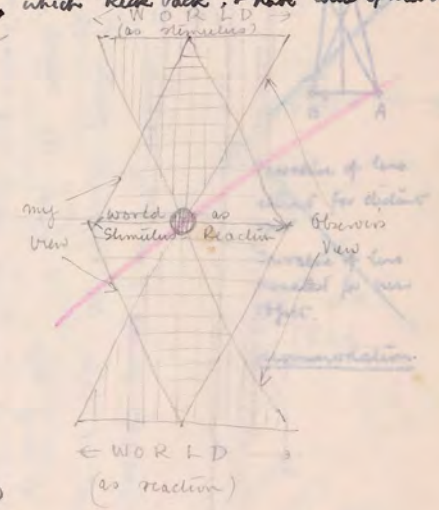
but does not accomplish suddenly in

live in me, who "live"

Many writers have thrown the active side of vision, from Plato & Euclid onwards. Plato speaks of a visual current which issues from the eyes & goes out to meet its object. See Plato's *Timaeus*, 45, B, C; Euclid's *Optics*, & Heath: *Greek Mathematics*, I, 441. See also Bergson: *Creative Evolution* p. 240, 249. *Mind & Memory* p. 74. The Schoolmen talked of the LUMEN COMPLANATUM, the light which the eye gives forth as it sees.



\* This expansion is not merely a possible way of viewing my action, but a note that one half of the story is the object's activity, & the other half is the subject. Dr. Johnson kicking the stone (as to demonstrate that the stone does something to him) tells the first half. Berkeley's perceiving tells the second. As H.F. Hallett says (*Philosophy*, Nov. 1945, pp 231ff) Knowledge is a relation not of objects but of agents, which 'kick back', & have 'wills of their own'.



Galileo's doctrine that the eye sends out rays to the object, as well as receives them, persisted right up to the time of Leonardo da Vinci, who believed that "the eye transmits its own image through the air to all objects which are in front of it, & receives them into itself."

the ~~unfaint~~ look with me instead of at me,

But the observer, cannot observe my knowledge. For him, my brain can only be nothing but a signal-box whose business it is to make & break connections between the in-coming & out-going traffic. <sup>impossible for him</sup> That it is as <sup>impossible</sup> for him to look into my head as to look into the railway system into the signal-box. Having reduced the world practically to a point, he now witnesses the process in motion. My action spreads (via efferent nerves) from my brain to my muscles & to my body as a whole; what I do as a man plays its part in my town's impact on its Country, & in my Country's impact upon the Nations. And so, spreading ~~detaching~~ without limit, the consequences of a connection made here between an incoming (afferent) and an outgoing (efferent) nerve fibre are <sup>eventually</sup> felt in my remotest regions. Hence home these effects are not more real; they are only more obvious. The paper there on my desk impresses its nature upon me by breaking me down to the centre here; I impress my nature upon it by rebuilding it <sup>with these words upon it</sup> ~~it~~ <sup>it</sup> ~~approach~~ from the centre, a changed object. As my observer puts the matter: there is on one side Stimulus and on the other Reaction, like the symmetrical chambers of an infinite hour-glass, & the first is nothing without the second. As I put the matter: one world is present to me, under two aspects — the Situation, & what the situation calls for from me.

Note the difference between the observer's account and mine: — The latter ~~describes the fixed~~ <sup>is fixed</sup> in effect: —

WORLD → 'NOTHING' → WORLD, whereas mine are 'NOTHING' → WORLD → NOTHING.

More accurately, his are: WORLD AS STIMULUS → BRAIN → WORLD AS REACTION, ? → WORLD AS STIMULUS-REACTION → ?

mine are: His story is precisely the opposite of mine, & the reason, as I have already said, is that we are <sup>looking in</sup> ~~seeing~~ opposite directions. The complete story is the combined story.

Unfortunatly <sup>in practice</sup> for each of us is too sophisticated out of defence to me <sup>as an opponent</sup> to forget the other's point of view. My observer <sup>puts himself</sup> into a <sup>position</sup> ~~mindset~~ by trying to bring in a mysterious "consciousness", or "world of ideas" along with the brain as his middle term. And out of defence <sup>to him</sup> ~~he~~ <sup>he</sup> ~~confirms~~ <sup>confirms</sup> the <sup>view</sup> ~~view~~ by postulating a heart <sup>along with</sup> (or a brain) as my middle term. In fact I come very near to <sup>adopting</sup> ~~adopting~~ his view & he comes very near to adopting mine. — ~~So~~ <sup>Neither</sup> of us is content

not to attend to what is given. We are both too clever, when, on the other hand, ~~the full breadth & depth of the contradiction~~ is admitted, ~~where~~ <sup>the full breadth & depth</sup> ~~absolutely~~ <sup>absolutely</sup> ~~of the contradiction between them is admitted,~~ <sup>it is</sup> ~~acknowledged to be contradictory,~~ <sup>may be</sup> a synthesis (which is also a real step towards explanation) is possible. <sup>Obscure View</sup> <sup>May View</sup> And the synthesis may be expressed

And the synthesis may be expressed in these words:—

Proximally, <sup>and</sup> the synthesis may be put there is simply this:

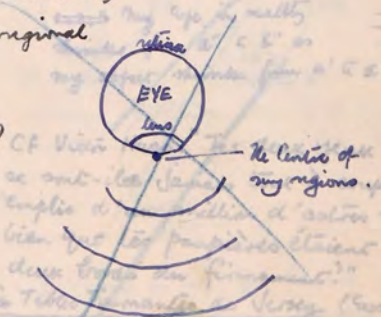
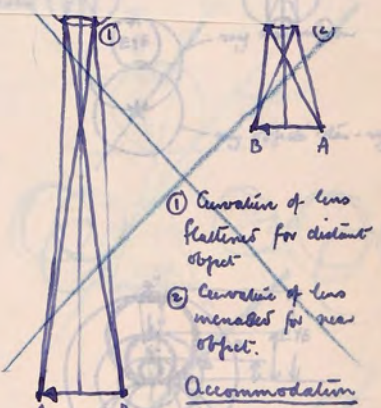
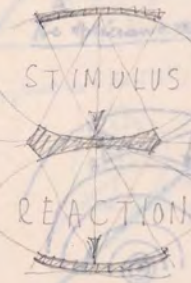
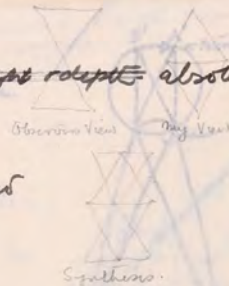
(1) STIMULUS - The stimulus is at once proceeding through my region & at once the breaking down of my outer region to my center is the building up of my object, which is centered in that region, to full status here in me, & my own reaction to nothing.

(ii) REACTION: the building up of my outer region from my centre here is the breaking down of my object to its centre in that region.

Finally, let me say that while, in this fourfold process, ~~both~~ while 'light' and 'nervous impulses' are important modes, there are many others. In due course it will appear that all types of groups - on whatever (ranging from the speed of 'light' to the speed of 'evolution', and from the scale of galactic catastrophe to the flow of ink from this pen) are aspects of the same fourfold metabolism by which this Body with its system of Regions is sustained.

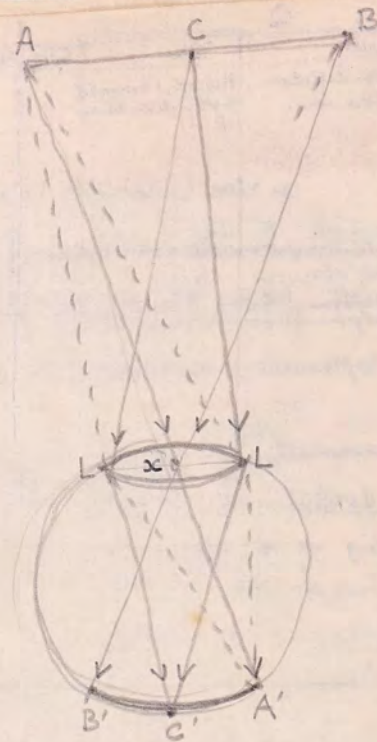
parallel of light from A, ~~when~~ <sup>point</sup> falling on the inner of my eye, is ~~reflected to fall~~ <sup>projected to fall</sup> point  
so as to fall onto ~~spot~~ <sup>point</sup> A' of my retina; ~~the~~ the light from B is directed on to spot B'; ~~in the same way,~~  
light from every part of AB falls ~~to its~~ <sup>goes</sup> to its proper place in the inverted image B'A'.  
~~What happens~~ When AB retires from me ~~is that~~ <sup>on my retina</sup> the lens flattens, & when AB approaches  
the lens thickens — thus the image of the man <sup>is</sup> always kept sharp. About these  
facts there is no question. What I want to know is: why <sup>is</sup> this extraordinarily complicated  
mechanism <sup>needed</sup> if all I have to do is make room for what is here? <sup>and,</sup> If the  
eye is <sup>necessary</sup> ~~an instrument~~ for <sup>or reveals</sup> bringing out the man AB (or B'A') who is in this place, how  
is this accomplished? ~~the space between my eye & the glass, through which~~

P. It is essential to remember <sup>belongs in</sup> the <sup>primarily a peripheral or</sup> ~~fact~~ <sup>horizontal</sup> ~~that~~ <sup>process, & not</sup> ~~the~~ <sup>vertical</sup> ~~fact~~ <sup>process</sup> that ~~the~~ <sup>But</sup> ~~the~~ <sup>through</sup> ~~the~~ <sup>his</sup> ~~fact~~ <sup>regions.</sup> ~~that~~ <sup>At the same time</sup> ~~the~~ <sup>the</sup> ~~fact~~ <sup>observer (or should be)</sup> ~~that~~ <sup>is aware, too,</sup> ~~the~~ <sup>that</sup> ~~the~~ <sup>that</sup> ~~the~~ <sup>is</sup> ~~fact~~ <sup>regional</sup> ~~for him~~ <sup>is</sup> ~~the~~ <sup>for me</sup> ~~the~~ <sup>the</sup> ~~fact~~ <sup>Centre of all regions.</sup> ~~that~~ <sup>Such a Centre he is capable of</sup> ~~the~~ <sup>making his own, by a species of imaginative sympathy,</sup> ~~the~~ <sup>Now the question is:</sup> ~~the~~ <sup>when in his diagram</sup> ~~the~~ <sup>where</sup> ~~the~~ <sup>an investigator</sup> ~~the~~ <sup>locate my</sup> ~~the~~ <sup>Centre?</sup> ~~the~~ <sup>the</sup> ~~the~~ <sup>point I call</sup> ~~the~~ <sup>here?</sup> ~~the~~ <sup>for the</sup> ~~the~~ <sup>lens of my eye, in the retina, or in some third place?</sup> ~~the~~ <sup>The answer is: in</sup> ~~the~~ <sup>the</sup> ~~the~~ <sup>first of them,</sup> ~~the~~ <sup>because it is there that</sup> ~~the~~ <sup>the</sup> ~~the~~ <sup>approaching object AB would,</sup>

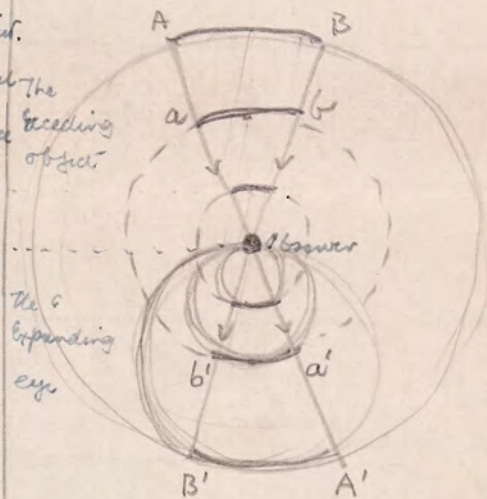




And if, instead of going from the retina to the brain in search of the visual object, I take the opposite path & set up my observation-post in the pupil of my eye, I find the same <sup>double</sup> ambiguity. Once more I become a mere hole, filled with my object — a condition which (both the Latin word pupille and the Greek word Ro $\tau$ e (meaning at once 'the pupil of the eye', an 'a little girl'; a nothing, and the visual object) may perhaps seem to celebrate. The modern observer has another way of putting the matter. He draws a diagram containing two contrary elements: (1) the <sup>double</sup> cone of light <sup>rays</sup> based on the object AB narrows to a point (x) here at the eye-lens LL, & then expands again on the other side till it forms the retinal image B'A'; (2) a reversed double cone of light-rays, proceeding from A to A', from B to B', from C to C', & so on, has its base here at the <sup>centre</sup> LL & its <sup>apices</sup> in the object & the retina. ~~That is to say,~~ His optical diagram is, indeed, only a special case of the schema which is the topic of this chapter — the <sup>aspect (AB)</sup> object is ~~again~~ bifurcated into an incoming & an outgoing aspect, <sup>(B'A')</sup> here again it is a mere point in itself (C), ~~to do so is completed on~~ me (LL), provided I return to its state (B'A') and it is <sup>again</sup> (at x) & again the condition of this process is that I ~~who~~ am here <sup>disembodied</sup>.



It is true that, for the outside observer, the symmetry of this original pattern is imperfect, & there is a great difference between the distance of the object from the lens & the distance of the retinal image; but ~~the lens~~ from any point of view at the centre there is nothing to choose between the depth of the outer cone CLL, & that of the inner cone LL C'. My eyeball is, in effect, as commodious as the universe: the adjustment of the curvatures of its lens ~~so as to focus the object clearly~~ <sup>is, according to</sup> ~~effect~~ an adjustment of the eye's depth, so that the retinal image <sup>always there</sup> belongs to the same region of the object. Now is this, in principle, anything new. Aristotle <sup>many other ancient thinkers</sup> realized that the eye must somehow conform to the thing which is seen, & indeed Empedocles discerned in the eyeball something like a system of conical regions — a concentric arrangement of fire, earth, & water-vapour.\* Victor Hugo may well exclaim:



"Tes deux yeux ne se sont-ils jamais tout à coup remplis d'un million d'astres si bien que tes paupières étaient les deux bords du firmament?"

\* But indeed these same creatures push their lenses back to focus for distance, while others push them forward to see near objects clearly. Mann & Pyle  
\* Burnet: Early Greek Philosophy, pp. 231, 236.  
o Les Tables Tournoyantes de Jersey.  
Saurat G.P. 32 St. Ralphe: <sup>inner</sup> ~~water-space~~ "One space spreads through all creation equally — inner-world-space. Birds quietly flying go flying through us. O, I that want to grow, the tree I look outside at's growing in me!"  
Hater Poems (trans J. B. Leishman). p. 128.

## Appendix to Chapter II

~~12 Common Sense objection (ii) (1)~~

12. <sup>(1)</sup> The world within my eye: # He lens as the Centre

C. ~~Can~~ <sup>Can</sup> There is one question which has not been discussed: ~~do the~~ <sup>do the</sup> ~~of my~~ <sup>of my</sup> ~~own~~ <sup>own</sup> ~~the~~ <sup>the</sup> ~~story?~~ <sup>story?</sup> The problem ~~is not~~ <sup>is not</sup> ~~can~~ <sup>can</sup> ~~be~~ <sup>be</sup> ~~settled~~ <sup>settled</sup> ~~by~~ <sup>by</sup> ~~denying~~ <sup>denying</sup> the evidence of my eye. ~~for me~~ <sup>for me</sup>. It is not enough for the physician, who takes into account <sup>both</sup> my eye & the object I see, ~~not~~ <sup>not</sup> as two incompatible aspects of my vision, ~~not~~ <sup>not</sup> as two phenomena that cannot be investigated at one time by one observer, but as contemporaneous parts of a single pattern. He draws a diagram of events starting with the object & ending <sup>with</sup> my retina. ~~And~~ <sup>(common sense adds)</sup> his story passes the pragmatic test - his predictions enable me to read. ~~Mistakes~~ <sup>Mistakes</sup> ~~is~~ <sup>is</sup> ~~useful~~ <sup>useful</sup> ~~cannot~~ <sup>cannot</sup> ~~really~~ <sup>really</sup> ~~be~~ <sup>be</sup> ~~mistaken~~ <sup>mistaken</sup>.

But its method determines its results:

P. 25. Certainly the physician's account is a true one. <sup>what you have forgotten, however, is that</sup>  
~~bringing in~~ <sup>is brought in, an observer</sup> A third party <sup>and</sup> to observe me observing <sup>something else.</sup> entirely alters the case. Before,  
 there were only subject & object - the first being nothing but accommodation for the second.

Now there are (for my Ophthalmic-Stomach who is the new body-less & eye-less Subject) <sup>two</sup> ~~two~~ linked Objects - myself the man, complete with head & eyes, & what I am looking at. It is

because the subject-object relationship has become an object-object relationship that  
the physician's account of it is possible at all - let alone true. But the point is:  
~~the bottom right~~ <sup>how</sup> ~~in the schema~~ <sup>his account</sup> where does ~~it~~ fit into the Schema of signs? First, let  
~~me know~~ <sup>what</sup> is it that has to be fitted in?

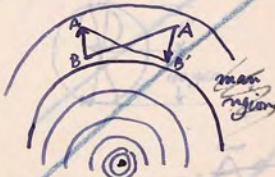
briefs  
account is as follows.

C. ~~So~~ I can answer that. The opinion's ~~point~~ <sup>account is not</sup> that I am looking at a man AB. ~~all the~~ A pencil of light from A, ~~which falls~~ <sup>which</sup> on the lens of my eye, is, by the refraction of that lens, directed ~~refracted~~ so as to fall <sup>point</sup> ~~on~~ <sup>on</sup> ~~at~~ <sup>on</sup> ~~the~~ <sup>on</sup> ~~spot~~ <sup>point</sup> A' of my retina; ~~the~~ the light from B is directed <sup>refracted to fall</sup> ~~on~~ <sup>on</sup> ~~at~~ <sup>on</sup> ~~the~~ <sup>on</sup> ~~spot~~ <sup>point</sup> B'; ~~in the same way,~~ light from every part of AB ~~finds its way~~ <sup>goes</sup> to its proper place in the inverted "image" B'A'. ~~What happens~~ When AB retires from me ~~is that~~ the lens flattens, & when AB approaches the lens thickens — thus the image of the man <sup>on my retina</sup> is always kept sharp. About these facts there is no question. What I want to know is: why <sup>is</sup> this <sup>so</sup> extraordinarily complicated mechanism <sup>needed</sup> of all I have to do is make room for what is here? <sup>if</sup> the eye is <sup>needed</sup> ~~an instrument~~ <sup>or reveals</sup> for <sup>bringing out</sup> the man AB (or B'A') who is in this place, how is this accomplished?

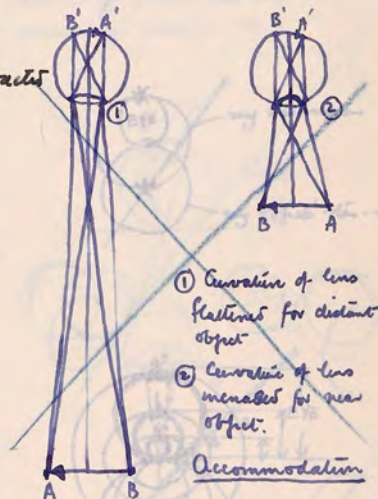
P. It is essential to remember <sup>belongs in</sup> ~~the first set~~ <sup>that</sup> the train of events forms  $AB \leftrightarrow BA'$  <sup>in the</sup> a single <sup>primarily a physical or</sup> ~~region~~ <sup>vertical or</sup> of my opinion-observer: it is for him <sup>primarily a physical or</sup> ~~horizontal~~ process, ~~not~~ <sup>vertical</sup> a vertical process that ~~Buts~~ <sup>the</sup> through his regions. At the same time <sup>He is aware, too,</sup> ~~of~~ <sup>the</sup> observer (or should be) is aware that what is horizontal for him is vertical for me, & that a point ~~is~~ <sup>that</sup> is regional for him ~~is~~ <sup>is</sup> for me the Center of all regions. Such a Center he is capable of making his own, by a species of imaginative sympathy, <sup>but it is in the first instance mine.</sup> Now the question is: <sup>at point I call here?</sup> where in his diagram <sup>should he</sup> ~~would~~ <sup>an investigator</sup> locate my Center? In the lens of my eye, in the retina, or in some third place? The answer is: in the first <sup>less</sup> ~~of them~~, because it is there that <sup>the</sup> ~~my~~ approaching object AB would,



### The physician's diagnosis

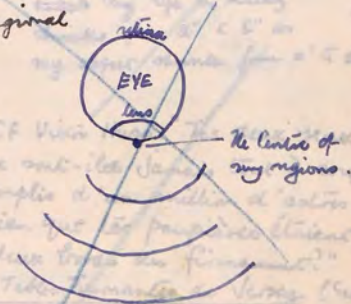


## The Opicean's Regions.



- ① Curvature of lens flattens for distant object
- ② Curvature of lens increases for near object.

Accommodation



A diagram of a human eye illustrating the concept of myopia. The eye is represented by a circle with a dashed line for the back surface. A solid line represents the front surface. A point 'A' is marked on the front surface, and a point 'B' is marked on the back surface. A line labeled 'myopia' points to the front surface. A line labeled 'myopia' points to the back surface. The text 'myopia' is written twice, once near each point.

The lens, in bending light rays C + D so that they converge at A instead of A', shortens  $a'$  to  $a$ .

[illegible]

$\longleftrightarrow$  my eye in reality  
shrinks from  $a'$  to  $b'$  as  
my object shrinks from  $a'$  to  $b'$ .

+ Cf. Victor Hugo: "Tes deux yeux ne  
se sont-ils jamais tout à coup  
emplis d'un million d'astres si  
bien que tes paupières étaient les  
deux bords du firmament?"  
Les Tables Tourmentées du Verger (Custave  
Simon, 1923) p. 313.

Saurat 82

I have a power over depth that I have not over height & breadth, & it is a power that I exercise lightly, as the behavior of ~~the~~ systems ~~after its creation~~ witnesses.

CS Based on my Centre, then, are two versions of the Star, each in my star-region but on opposite sides. Why two versions? Does not this contradict the principle ~~of~~ that I see the actual thing & not a copy of it?



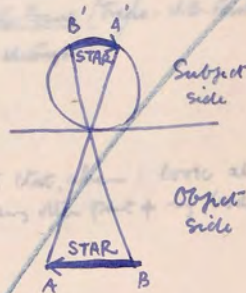
US Not at all. The real Star is the effect worked in observers who occupy its Star-region, of which observers I am one. The real Star is here at my Centre, & when I depart it in two directions I do not <sup>really</sup> duplicate it. Neither am I observer travelling from the lens to the retina of my eye, nor one travelling from my eye towards the Star itself, would find a Star at the end of his journey. The reason is ~~obvious~~ <sup>plain</sup> — the real Star is here in the lens, from which point it is referred to the retina as well as to some spot in the heavens.



CS I cannot help feeling this is all rather far-fetched.

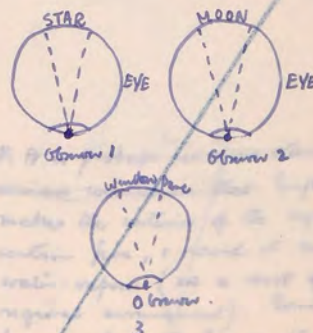
It might well be said that <sup>already</sup> the fact of vision is ~~not~~ <sup>quite in keeping</sup> so fantastic that <sup>Saturnian</sup> explanations of it ~~that is not~~ <sup>are</sup> ~~also somewhat fantastic~~ <sup>is</sup> ~~to be~~ <sup>quite in keeping</sup> ~~with the~~ <sup>as Aristotle realised,</sup> the eye must be assimilated to what it apprehends: I cannot see a red thing unless there is in my eye a kind of redness. There is a sense in which all knowledge is self-knowledge, & it has been held by many philosophers that, in the last resort, subject & object are identical. I say that, at any rate, we have in the Optician's account of vision a further demonstration of the law of equality. His diagrams are really partial representations of the schema of regions, in which subject & object (or, he would say, image & object) arrive at equal status. For him, when I see a Star I am a Star, & when I see a man I am a man: my seeing is always symmetrical. Why are we so reluctant to take his <sup>graphic description — the description that makes</sup> ~~theory~~ seriously? To common sense it is impossible that I should be a Star. But if knowledge involves no sharing, no identification, how is it possible, & what can the result be but utter scepticism?

for Aristotle  
+ nevertheless the redness in my eye (the 'visible species') is not what I see, but only the means by which I see.



US <sup>Can it be</sup> ~~to you mean~~ that my retina really is a Star?

US From the viewpoint of the lens as Centre, yes. In itself, obviously not. How often must I repeat that an object is nothing in itself, & <sup>a great</sup> ~~an~~ <sup>in effect</sup> ~~in itself~~ variety of things <sup>on</sup> ~~other~~? My retina is what its observer makes of it. The observer situated at my eye-lens makes it out to be a Star. Suppose now he takes a closer view. So do this he need not shift — all he has to do is to <sup>go on</sup> observing the retina, while the lens increases its curvature, so <sup>depth</sup> ~~reducing the internal dimensions of the eye~~ <sup>to affect</sup> the retina 'comes nearer' to the lens. What the observer sees may be first the Star, then the



The space in my eye demands by virtue of the changing curvature of the lens.



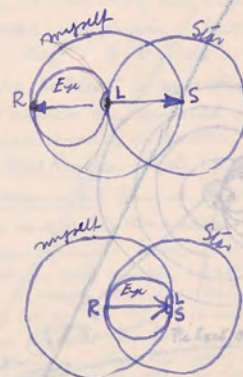
two quite distinct 'fact heres', and what I see is governed by the interval between them. This interval, to the common-sense outlook both constant & insignificant, is in actuality ~~chaotic in the extreme~~ extremely elastic, capable of stretching from the infinitesimal to the cosmic dimensions. Literally & in his own person, man is the measure of all things.

CS How does this telescopic man actually work?

US Suppose I am looking at a star. As based on the Lens-Centre (call it Centre L) I send the Star which is here over to the retina-Centre (call it Centre R) as well as to the Star's own Centre (call it Centre S) — this I have already described in the last Section. As based on Centre R, I send the star which is here over to Centre L, which <sup>for me now</sup> is also the Star's Centre S. In both instances I am where the object is, but I refer it to the other Centre, to my other aspect or self. Whenever I am I am nothing here, yet something there. When I see a star I both deny & assert that I am a star. To see is to be two beings — beings as different as they can possibly be — each of whom attributes to the other his own characteristics. Neither of us is anything in himself. All I am I must find in another — in one who is apparently quite other than myself. There is no question of evading the rule: the structure & functioning of my eye ensure that I shall ~~completely with it~~ comply with it.

CS But this is absurd. How, when I am based on Centre R, can my other Centre <sup>(L)</sup> be coincident with the Star's centre? (S)

US The object I contemplate is obviously not a lens, but a star. It belongs in my Star region. From the point of view of Centre R, this object I hold out in front of my body is nothing less than <sup>the</sup> Star: Centres L & S ~~are~~ coincide. Now if I go to L with ~~the~~ <sup>the</sup> intention of checking this appearance, of course I find that the Star 'nally' is at R. I am like a dog chasing its own tail. But the explanation is that (again like the dog) I am bi-polar, & one of my poles is the object pole, the not-me pole. The Star & I need one another in order to achieve jointly what we are utterly incapable of achieving separately — our star-hood, & we do this by <sup>when each finds one</sup> basing one of <sup>his</sup> Centres on the other. There cannot be one star in the universe, or one man, or one individual of any grade (that of the whole), because existence itself is essentially social. I can only realise my manhood when I am a man, & that is in other men; I can only realise my star-hood when I am a star, & that is in other stars. I must be then other men, these other stars, to be this man, this star. In myself I am Nothing, but that Nothing is a perfectly



to rather, when something is potentially. As Bergson says, "what you have to explain is not how perception occurs, but how it is limited, what it should be the image of the whole, & how it is reduced to the image of that which interests you" *Philosophy of Mind*, p. 24.

On connection:

Which organ encloses the cell of the union of the soul with the body. He believes that he is not a spirit but a soul made of other parts. (See *Passions de l'âme*).





• Or rather, where everything is potential  
As Bergson says, "what you have to suffer  
... it's not how perception aims, but how  
it is limited, and it should be the image  
of the whole, & is in fact reduced to the  
image of that which interests you"  
Matter & Memory, p. 34.

\* Or conation,  
\* Which organ Descartes made the  
site of the union of the soul with  
the body. He believed that here the  
vital spirits met & crossed each  
others' paths. (Les Passions de l'Âme i, 30)

\* Or conation,  
\* Which organ Descartes made the  
side of the union of the soul with  
the body. He believed that here the  
vital spirits meet & cross each  
others' paths. (Les Passions de l'Am

+ The whole matter <sup>was</sup> ~~has~~ been put  
incomparably by St Paul in  
1 Corinthians 12, which might be  
called a statement

7  
The omnipresence of the Centre on the body is, in effect, the burden of 1 Corinthians 12. "God hath tempered the body together.... that there should be no ~~there~~ schism in the body; but that all members should have the same care one for another. And whether one member suffer, all the members suffer with it; as one member be honoured, all the members rejoice with it."

Objet, central & regional.

What a man also depends ~~very~~ <sup>upon</sup> the ~~drop~~ <sup>drop</sup> he takes.  
Is there then no correlation between mental events + brain events, or between what goes on in the mind + what goes on in the body?

What is called my attack of jaundice is really a ~~condition~~ <sup>condition</sup> complained from which all my objects suffer ~~around~~ <sup>around</sup> me

Certainly there is, & the correlation is perfect. But it is ~~a~~ <sup>of</sup> correlation (between events in my mind & <sup>events</sup> in your body (or vice versa), not ~~between~~ <sup>between</sup> events in my mind & <sup>events</sup> in my body, or between events in your mind & events in your body. However it is not correlation but identity. Events in your body ~~are~~ <sup>are</sup> events in my mind & other minds. ~~For~~ <sup>For</sup> my mind is <sup>present</sup> at the centre, & my body is (primarily) over ~~these~~ <sup>these</sup> ~~fitting~~ <sup>fitting</sup> every region of space, & it is of this essence that an interval of space & time (not an ~~interval~~ <sup>interval</sup>, but ~~a~~ <sup>a</sup> ~~one~~ <sup>one</sup> occupied by a creative <sup>process</sup>) should separate them. And every observation post in my region is at once the locus of my body & my observer's mind. Not only ~~of~~ <sup>of</sup> my region, but of my brain, but of my body as a whole. It is with my behavior as a man that men are concerned, & my brain & nervous system are for them ~~essentials~~ <sup>essentials</sup> & artificial abstractions. Only if one of them is a surgeon operating on my brain will some events in that brain be events in his mind. Normally, the physical basis of the human mind is <sup>as well</sup> at the very <sup>Hobbes</sup> ~~meniscus~~ <sup>meniscus</sup>, the entire human body. And as a rule it is much more true: thus: we take into account each other's sphere of influence, friends, family, fortune, ~~condition~~ <sup>condition</sup> in society — all this & more is the physical basis of a man, correlated with, or rather identical with, the experience his observers have of him.

In other words, mind & body are ~~simply~~ <sup>simply</sup> two different ways of looking at the same reality. The pink patch which is mind to me & body for you is one pink patch, not two.\*

The behaviorists have protested against the undue attention which psychologists have given to the brain, neglecting the response of other parts of the body & above all of the whole. (Westcott CSP 61.)

\* Cf. the theory of W. K. Clifford (*Lectures & Essays*, 2 vols, 1879) that objects are neither psychological nor physical, but consist of "mind-stuff". E. B. Holt's theory of "neutral entities" is somewhat similar: when these entities are combined in one way they constitute minds, in another, the world of nature. (*The New Realism* (1912), pp 372 ff., & *The Concept of Consciousness*.) Some of Bertrand Russell's books develop the same idea in a different direction. One qualification, however, is important: the body is not simply what one observer makes of it, or many observers, but all observers whatever at all times. In other words, only at the highest level of knowledge is there no non-mental ~~exclusion~~ <sup>exclusion</sup>. Thus the issue between idealism & realism is a question of level.

## 5. Conclusion

What am I? This chapter began by casting in Science to remove the paradoxes of my answer. The first result was that Science overdid its work, removing the entire world & itself into its bargain. The second was that Science drew a portrait as paradoxical as mine but its ~~precise~~ <sup>precise</sup> opposite. ~~But~~ <sup>But</sup> it ~~would be~~ <sup>did not follow</sup> ~~wrong to conclude~~ <sup>that</sup> Science cannot help forward this inquiry: the third result was a synthesis of the pair of contradictory portraits <sup>a synthesis</sup> that will provide ~~an~~ <sup>an</sup> outlines for the chapters that follow. It arises when my view (the 'philosopher's') and my observer's view (the 'scientist's') overlap nowhere, & each is total in its own province. Prematurely joined, Science & philosophy are the death of each other; at the right time they are each other's making.

Even more than in Chapter I I have, in the interests of the broad picture, suppressed all but the most general facts. The resulting gaps will in part be filled later on. Just now the essential thing is that I grasp, as firmly as I know how, what it is to lead this double life — to be my body yet everything but that body, to be



Centre, yet it is excluded: it belongs in my regions.

CS <sup>Is</sup> But the Centre is always, ~~it is~~, confined to my body.

*The centre is by no means always confined*

VS Not at all. When I see myself through another man's eyes I am centred on him. When I feel with or for someone I make his Centre my Centre. I have already discussed the elasticity of my 'I', & how it always keeps pace with my 'them' - even when it is a star.\* This is only another way of saying that the Centre is my body - ~~and~~ a body that grows & shrinks along with my mind.

\* Ch I § 9

CS This is all very well so far as I am concerned, but what of the neurologists' account of the process? When would he locate the Centre of my regions?

VS <sup>may please himself.</sup> He cannot do so precisely, any more than the optician can. No doubt he gets <sup>or particularly</sup> interesting results by looking on my forebrain as the ~~main~~ grand central function, but that is because his particular interests guide his choice. It would be just as correct to choose my heart or my stomach <sup>or even my pineal gland</sup> as the raison d'être of the rest, the Centre upon which the whole world converges. Whatever point he picks he cannot go wrong because <sup>any one of</sup> ~~any~~ organ or cell, <sup>any one</sup> ~~being~~ alone or electron, in me, is as truly myself here, <sup>my body</sup> the Centre of my regions, as any other. I am free to become ~~to~~ <sup>and</sup> what is more, ~~let~~ <sup>let</sup> no Centre in the universe which I cannot ~~add to~~ <sup>add to</sup> direct ~~as~~ <sup>as</sup> to my centre, & exclude from it.

+ Sherrington draws attention to the fact that the principle of convergence of control does not, as we might imagine, culminate in "final supreme convergence on one ultimate pontifical nerve-cell, a cell the climax of the whole system of integration." Instead ~~this~~ the highest brain region is "an enormous expansion into millions of cells" *Man on his Nature* p. 272.

5. 

Common sense objects that

\* (Q18) My mind is ~~more~~ <sup>more</sup> than the view I take of the world. My mental contents do not always ~~take~~ <sup>assume</sup> objective form. For instance I may feel happy or miserable without inference to outside things, or I may be in pain. Such experience is not ~~any~~ <sup>any</sup> registration of some exterior object in whose regions I happen to be moving, but is experience of myself.

Q19 To be happy is to have a happy outlook; to be miserable is to find misery everywhere; to be in pain is to be acutely aware of a painful ~~place~~ <sup>place</sup>. All my experience is here at the center, ~~all of it is~~ <sup>all of it is</sup> regional. ~~no doubt~~ <sup>no doubt</sup> the qualities I register are ~~no~~ <sup>no</sup> distributed & so feeling as to suggest that they belong to ~~myself~~ <sup>myself</sup> rather than to the objective world. But to experience them at all is to objectify them. I make them ~~myself~~ <sup>myself</sup> other than myself.

Q20 What calls for explanation, then, is how I come to have this illusion? By

Q21 That is easy. I go out of myself & look at myself with my observer, seeing myself as cheerful or miserable. But again it is my object, ~~what~~ <sup>what</sup> has these qualities. The subject ~~remains~~ <sup>remains</sup> a mere capacity for qualified objects.

To become aware of a sensation (no matter how 'central' & vague & distributed it is) is to 'objectify' it. ~~It is to~~ <sup>It is to</sup> ~~be~~ <sup>be</sup> ~~against~~ <sup>against</sup> me. When I forget about it, it is no longer there for me, no longer ~~present~~ <sup>present</sup> - a pain I do not feel is ~~not~~ <sup>not</sup> ~~an~~ <sup>an</sup> ~~experience~~ <sup>experience</sup>. "You may take your self as deep-sleeping & inward as you please, & may narrow it to the center; yet these contents may be placed in opposition to your self, & you may divide this illusion."

Q22 What ~~actually~~ <sup>actually</sup> happens whenever as I ~~say~~ <sup>say</sup>, my mind acts on my body?

Q23 ~~Simply~~ <sup>Simply</sup> ~~by~~ <sup>by</sup> ~~an~~ <sup>an</sup> ~~active~~ <sup>active</sup> ~~process~~ <sup>process</sup>, my view of my observer gives place, in the space that separates us, to his view of me. What happens ~~conversely~~ <sup>conversely</sup>, my body acts on my mind. ~~Simply~~ <sup>Simply</sup> ~~by~~ <sup>by</sup> ~~an~~ <sup>an</sup> ~~active~~ <sup>active</sup> ~~process~~ <sup>process</sup>, my observer's view of me gives place, in the space that separates us, to my view of him. My mind & body get at one another, in & through my observer: ~~no doubt~~ <sup>no doubt</sup> many problems remain ~~but they are~~ <sup>but they are</sup> ~~in the process of one view giving way to the other view~~ <sup>in the process of one view giving way to the other view</sup> ~~of how~~ <sup>of how</sup> ~~these~~ <sup>these</sup> ~~pass between them~~ <sup>pass between them</sup> ~~any~~ <sup>any</sup> ~~influence~~ <sup>influence</sup> ~~can be transferred from me to the other~~ <sup>can be transferred from me to the other</sup> ~~consider in later chapters~~ <sup>consider in later chapters</sup> ~~these~~ <sup>these</sup> ~~with~~ <sup>with</sup> ~~only~~ <sup>only</sup> ~~these~~ <sup>these</sup> ~~are~~ <sup>are</sup> ~~problems of inter-~~ <sup>problems of inter-</sup> ~~action in general, & of regional process~~ <sup>action in general, & of regional process</sup> ~~rather than~~ <sup>rather than</sup> ~~specific~~ <sup>specific</sup> ~~problems of mind-body~~ <sup>problems of mind-body</sup>.

Let me put the matter another way. My object's active determination of me (A → B) is my passive reception of aspects of him. I react (B → A') & my active determination of him is his passive reception of aspects of me. ~~For other lessons~~

That is to say, my object ~~actively~~ <sup>actively</sup> 'wills' his 'bodily expression' in me B, & I in turn 'will' my 'bodily expression' in him (B → A'). ~~For other lessons~~ <sup>For other lessons</sup> ~~that~~ <sup>that</sup> ~~can~~ <sup>can</sup> ~~accept~~ <sup>accept</sup> ~~what~~ <sup>what</sup> ~~Schopenhauer~~ <sup>Schopenhauer</sup> ~~says~~ <sup>says</sup> ~~about~~ <sup>about</sup> ~~the~~ <sup>the</sup> ~~body~~ <sup>body</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~material~~ <sup>material</sup> ~~expression~~ <sup>expression</sup> ~~of~~ <sup>of</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup>: "The act of will & the movement of the body are not two different things objectively known, which the bond of causality unites; they do not stand in the relation of cause & effect: ~~they~~ <sup>they</sup> ~~are~~ <sup>are</sup> ~~one~~ <sup>one</sup> ~~&~~ <sup>&</sup> ~~the~~ <sup>the</sup> ~~same~~ <sup>same</sup> ~~act~~ <sup>act</sup> ~~of~~ <sup>of</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~me~~ <sup>me</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~ <sup>will</sup> ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~body's~~ <sup>body's</sup> ~~expression~~ <sup>expression</sup> ~~in~~ <sup>in</sup> ~~him~~ <sup>him</sup> ~~as~~ <sup>as</sup> ~~the~~ <sup>the</sup> ~~will~~

to Mind & body

The stock puzzle of psychology is: how can body (which is material, & <sup>has mass, shape & position</sup> & behaves according to physical laws) affect & be affected by mind (which is <sup>non-material, immaterial, weightless, shapeless, without position</sup> & behaves according to psychological laws)? I think that the doctrine put forward in this chapter ~~settles the matter~~ <sup>settles the matter</sup>.

~~So~~ <sup>the</sup> puzzle is a ~~puzzle~~ <sup>unavoidable</sup> because it is wrongly phrased. The ~~only~~ <sup>distinction</sup> between mind & body is one of ~~direction~~ <sup>direction</sup>, not one of content. My mind is my view out, & my body is my observer's view in: this experience & mine are of precisely the same order. ~~That this is so is made plain~~ <sup>though his is narrower than mine</sup> still by the fact that the view <sup>the same data</sup> which are ~~in~~ <sup>in respect of</sup> me 'physical' - i.e. the view in - are ~~for~~ <sup>in respect of</sup> my observer mental - i.e. a part of the view out from him; whether this content be looked upon as body or mind depends solely on whether ~~it~~ <sup>it</sup> is being considered as mine or his. <sup>As Fichte says in his 'Notion'</sup> ~~the fundamental error in our view is that we think of the world in part of a thing which the body, but never~~ <sup>the body-mind</sup> ~~is the same~~ <sup>it is transformed. It</sup>.

So taken, the puzzle does not vanish, of course: ~~it is transformed~~ <sup>it is transformed</sup> becomes this problem: how does what my observer sees in me (i.e. my 'mind') affect what I am over there in ~~my observer~~ <sup>my observer</sup> (i.e. my 'body') & vice versa? So, more generally, how do ~~the~~ <sup>the</sup> contents of this Centre affect ~~the~~ <sup>the</sup> contents of that Centre? ~~the events to be accounted for are these~~ <sup>the events to be accounted for are these</sup> (i) I change my mind about my observer, which means that he undergoes a bodily change in me; (ii) this gives rise to a bodily change in me, which can only occur when I have a body I have ~~two~~ <sup>one</sup> body here & call it 'mind'; ~~you have~~ <sup>you have</sup> my body there & call it 'mind'. The question is: how do these two ~~centres~~ <sup>pieces of mind</sup> get at one another? And this is the old question I have been considering all along. The fact is that the mind-body problem as such does not exist at all: it is only a particular & very misleading way of putting the more fundamental problem of the relations of observer & observed in the system of regions. Until I realise clearly ~~that~~ <sup>that</sup> where my 'body' is (namely throughout <sup>the whole of</sup> my regions) & where my 'mind' is (namely at their centre), and until I realise clearly ~~that~~ <sup>that</sup> I only have a body in my social character ~~as I have body only in my~~ <sup>as I have body only in my</sup> observer, & mind only (my 'body' is in my observer, & my 'mind' is my observer in me) then is bound to be the utmost confusion. The mind-body problem is not private, but distributed amongst ~~the~~ <sup>truly speaking</sup> mutual observers, & world-wide. ~~Two other worlds~~ <sup>Two other worlds</sup>, I have, neither mind nor body; ~~the mesh of mutual observers as a whole has mind & body, & the two terms are interchangeable.~~ <sup>the mesh of mutual observers as a whole has mind & body, & the two terms are interchangeable.</sup> Between physical & ~~mental~~ <sup>physical</sup> phenomena there is no intrinsic difference: such difference as there is is quantitative rather than qualitative - the view out is of many, the view in of one.

Myself (mental & physical not yet distinguished) A (i) "Pre-Platonic"

Myself (mental) B (ii) "Platonic"

Myself (physical) C (iii) "Copernican"

(ii) myself 'mental' 'Platonic' my observer (iii) 'physical' 'Copernican'

(iii) myself 'physical' 'Copernican' my observer (ii) 'mental' 'Platonic'

myself 'mental' my observer 'physical' myself 'physical' my observer 'mental'

Then these stages 'pre-Platonic', 'Platonic' & 'Copernican' are more fully <sup>explained</sup> ~~explained~~ in later chapters: e.g. Ch. XV, § 14, Ch. XV § 19 & 20.



\* Cf. Whitehead (Science & the Modern World, p. 130) "There is thus an intrinsic & an extrinsic reality of an event, namely, the event as in its own prehension, & the event as in the prehension of other events. The concept of an organism includes, therefore, the concept of the interaction of organisms."

\* This doctrine has much in common with the Neutral Monism of Russell & the American New Realists; according to which the constituents of the universe appear as 'material objects' or as 'thoughts' according to the context or form of arrangement: the constituents themselves are neutral. (See, e.g. Russell: Outline of Philosophy, pp. 218 ff.)

We have to discover  
 somehow or other  
 "the important  
 truth that the ego  
 is not the centre of  
 psychic life; that  
 it revolves round  
 the self, the centre"  
 x

\* Jung: Integral  
of the Personality

P. 38. I take Jung's distinction between 'ego' & 'self' to correspond to the distinction between the 'empirical self' & the 'transcendental self'.

A man cannot

A man cannot  
even call  
tho his soul  
his own

Whitman's (Advent  
ures of Ideas, Q. VII  
(p. 11) a man attains  
to the prevalent  
vice of abstracting  
sense from his  
enormous emotional  
significance."  
Emotion clothes  
each subject -  
other in emotion

 C.S. Then there is w

S. Of course then (is almost unlimited)

See, for example, 93 ff, for a very clear cut of view, which has

Some realists, however, distinguish between the object and the

Hockey T

179. "The most  
is in the mind of

imagine or perceive  
the objects natural all these

relation between nature  
and purely psycholog

W. Lindsay, Memo  
IRA M. A. 253

my world get everything but that world. It is one thing to entertain, <sup>and I can</sup> such notions; quite another to embrace them utterly, so that I can call the world mine as I call my hand mine, yet exclude it to the last drop & the last grain, leaving nothing that is myself. Oddly enough, my difficulty does not lie in the contradiction between the two states I am required to realize — not progress in the realizing the one is progress in realizing the other — it lies rather in an appalling inertia, resistance, or sloth of mind. I am about minded about this human condition, rarely 'all-there', as if I had never really moved in. And yet everything is <sup>being before me</sup> open to the view of the simplest. I <sup>seldom</sup> ~~scarcely~~ bother to look. It would be an instructive exercise to <sup>try to</sup> think out a miracle that would be sufficiently staggering <sup>capable</sup> (after the ~~fact~~ <sup>fact</sup> novelty had worn off) ~~still~~ <sup>me</sup> moving <sup>me</sup> to wonder, seeing that <sup>my</sup> ~~our~~ <sup>our</sup> nature <sup>needs</sup> ~~finds~~ <sup>struggles</sup> to do so.

Extremely stimulating  
Olaf Stapledon, in his ~~important~~ <sup>book</sup> Star Maker, writes: "My own race.... never fully awoke from the primeval sleep of its subhuman. Only a few here & there, now & then, were solaced, gratified, or tortured by moments of true wakefulness." p. 28. Later he refers to "the Englishman in his primeval slumber." He does not mean, of course, that in this the Englishman is peculiar.

He finds on misty mountain-ground  
his own vast shadowy glory-crown'd;  
He sees himself in all he sees.

Tennyson: The Poet, l. 100.

we are made for one another, & each is to be a Supply to his Neighbour.

Whitcomb: Address, 1823.

"What's the use of their having names," the First said, "if they won't answer to them?"

Lewis Carroll: Through the Looking-glass, III.

This world of Imagination is the world of Eternity.

Blake: Vision of the Last Judgment.

And we are learning very slowly that there is nothing in Nature fundamentally different from what we construct in the pictures in fancy.

Douglas Barlett: Laurel Marquess, p. 20.