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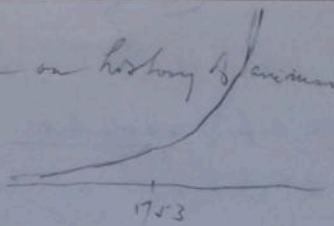
About the Institute
The Hunt Institute for Botanical Documentation, a research division of Carnegie Mellon University, specializes in the history of botany and all aspects of plant science and serves the international scientific community through research and documentation. To this end, the Institute acquires and maintains authoritative collections of books, plant images, manuscripts, portraits and data files, and provides publications and other modes of information service. The Institute meets the reference needs of botanists, biologists, historians, conservationists, librarians, bibliographers and the public at large, especially those concerned with any aspect of the North American flora.

Hunt Institute was dedicated in 1961 as the Rachel McMasters Miller Hunt Botanical Library, an international center for bibliographical research and service in the interests of botany and horticulture, as well as a center for the study of all aspects of the history of the plant sciences. By 1971 the Library's activities had so diversified that the name was changed to Hunt Institute for Botanical Documentation. Growth in collections and research projects led to the establishment of four programmatic departments: Archives, Art, Bibliography and the Library.

[a Diary of Sorts –
from a loose leaf binder]

Write J + R about an article on history of taxonomy
among taxonomists
great upsurge after 1753



1) Taxonomy an art, not
a science – always personal – in fact no true tax.
probably ever agree on any taxon

2) Linnaeus introduced a kind of abbreviation or system

3) Taxa are always connected with a personal name –
because they are personal – and

4) Especially animal taxa (cases) Greeum. the

In the life of mankind, past (and hopefully future) the span of any one generation is a very small fraction. What evidence is there, if any, that during a hundred generations there is any significant change in the species — in average intelligence, in the extremes of intelligence in capacity to adapt, etc? There will be wide fluctuation in the relative frequencies over these, but little change in kind. There will be many changes in the phenotype as environment permits gene expression or suppresses it. Hence the

17/6/70

Gramineae vs Cyperaceae

" Anderson's remark

" grasses hybridize Cyperaceae seldom

" have many races " few (?)

" exhibit ecologic rep " fact would favor instead of disabling

May all of this reflect in the grasses a certain reactivity of mutation, a plasticity of germ plasm - - -
and
in the sedges a rejection of mutation, a rigidity of response

Clausen, Keck, Heisey should be read carefully for clues

12/19/70

I have often said "The difference between the human brain & a computer is that the brain must (in general) come up with the right answer without all the data, while the computer cannot be asked for the right answer until it has been given all the data" I used to think I knew what this meant, but I'm not sure today that I do. Does relativism it means have anything to do with von Neumann's probabilistic logics (cf also Self-repair automata p. 57-58)

12/24/70

Muddling or Muddling Through

4/22/71

14/x/70

Please send me the literature marked:

- ☐ ***Photon 713 Textmaster*** - Unprecedented 35 line a minute speed, combined with 64 type font instant mixing power plus compatibility with 6, 7, or 8-channel paper tape from all keyboards, computers and wire service (also magnetic tape) make 713 the first photographic typesetter suited for broad purpose use by printers and typesetters, publishers and book manufacturers.
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x = 51,840,000/day.

ref-upload automation p.38.

1/1/71

On listening to Beeth 7 Symph there at breakfast.

Their in spirit is an audible manifestation.
There is no question here of what B means, any more than there can be of what one feels in his breast on the face of an intimate friend, or looking off from the top of a mountain he has climbed, or running free & naked in the sun & wind, or swimming in the sea, or in the orgasm. Now if there admits of the question 'What does this mean?' any more than does a telephone pole admit of such a question. A telephone pole is just as much and no more than the succession of sound which impinges on the eardrum as Bo 7 S is 'heard'. The eye perceives the existence of the telephone pole, i.e. the manifestation of an arrangement of matter and a play of light upon it; the ear perceives the existence of the music, i.e. the manifestation of the spirit of the composer - I mean, not of his thought but of his spirit. Yes, you say, but what of the moan uttered by the wife

just misheard as her husband expiring. Surely this is meaningful. Is it – which does it mean – semantically it might mean many things, perhaps, but in truth I don't attribute any meaning to it – it is an audible manifestation of what the wife is feeling. It might, for example, 'mean' that she is immersed in sorrow (if that happens to be so) or that she is experiencing a sense of great relief that finally her husband's suffering is over, or that finally her suffering is over, or quite a number of other things. It mean is not a semantic element – nor is a subjective, non-imitative musical passage such. The latter is the manifestation of an intolerable feeling in the composer (in so far as the performance represents him) – intolerable not only to all who hear it, but even so to him who first felt it. It is this fact which, I believe, explains the creation of great music, more or less universally considered as happy or joyful, by composers known to have led anything but happy [illegible]

1/8/71

While it may not be true that the truth will make you free, it is certainly true that untruth will not make you free.

(This is Obscenity + Pornography)

1/20/71

Barzun in Science, the foremost entertainment remarks that science "brings men together in an unexampled way on statements to which they agree without the need of persuasion; for as soon as they understand, they concur".

Quoted by Dobzhansky in Biology of Ultimate concern p 6. 1967.

But — exactly! In such 'understanding' when each possesses it, each must know the same thing or cumulex of things in all shades and depths of meaning — in short, exactly in the sense that they concur (they run with each other)

Barzun has no right to be surprised — rather he shows himself ignorant of the type of experience which is scientific agreement.

As of 1971 scientists concur perhaps less than ever, but it is not over science (that is knowledge) but over the uses of knowledge which cannot be totally [illegible] [illegible].

1/21/71

Chardin on p. 8 speaks of the math solution to massive population by building all structures of same height and connecting with above ground roads. This would solve the storage problem. Both of course, not the pollution problem, etc. One thing it would not solve even if pollution etc were taken care of would be the very phenomenon of massive population - so massive as to be incapable of intercommunication - no human brain could survey even a small percentage of the activities of 100 billion people - unless, perhaps, they were as standardized as those of ants in an enormous anthill. Imagine the earth to be as large as Saturn with an area about 120 times that of the earth. If here in America most of us have no personal experience of our antipodes and their inhabitants there, what could we expect on Saturn? What of our Vishnans on such a sphere. Man's brain is enormously fertile and an inconceivable computer, but one must wonder if it could function effectively on such a planet with 100 or 1000 billion people.

1-22-71

George Wald lecture at Wheaton.

Summary note of lecture, beginning Science vs technology; not science, often bad with making MAN and his problems, then a condensed account of cosmic evolution, primary cons, secondary cons. N the CON to reappearing elements ... LIFE and its QUALITY not quantity. The three threats Population, pollution & thermonuclear warfare — no such crisis (crises) ever before on Earth — the old uptrain we've been through it before is complete nonsense — shows only ignorance. A man is an atom's way of understanding an atom. Remarks on Vietnam, IBM 15 tons TNT per human in 1968, now planned for 75 " TNT by 1975. Then just a few examples Russians. Emphasis on democracy + diversity, everything to be tried — only that which is better to be used, all that which is less good to be rejected. All great religions [illegible] in commandments 5 - X as necessary for our [earth] type of society. Life his religion — quotation from Bible... choose then Life

1-22-71

Scratched on Back – Moog.

If anyone believes that by any combination of electronic circuits plus or minus mechanical devices he can produce a sound even remotely that of an Oistrakh playing on his Stradivarius, he is entirely out of his mind. Just as much as would be any scientist who believed he could make life – the probability of life appearing at any given time even in the optimum conditions once furnished on earth is zero, although it may be close to one for its appearing within the life of the planet (Cf Life: Time, Nov 24, 1958: 'Life is not a miracle. It is a natural phenomenon, and can be expected to appear wherever there is a planet whose conditions duplicate those of the earth.' Very possibly true, but the experiments going on in nature at that moment are of astronomical magnitude – not anything any scientist or group of scientists will ever have at hand.

1-30-71

What does Etter mean when he says 'I don't put too much stock in mutations as the basis & an explanation for (? the development of mankind — I'm not sure what he said*)

Why does he object to considering man as vastly more wonderful than other life? True, we are only a part of life, nor can we afford to lose any of the other part, but our organization is certainly more fearful & wonderful than that of any other species. Is it?

For one thing I believe he must admit the greater complexity of our organization, but would certainly maintain that this complexity has not made us a successful species in the sense of our having achieved a balance with nature which promises us an indefinitely long future — in fact it seems to me we are with a definitely short future.

* The remark was made in answer to my remark that perhaps every [successful?] mutation in man has been one more step to his self-destruction. Unconsciously I suppose I meant mutation = a gene-change — I could have meant any change which [illegible] in our evolution.

He has frequently asked me the query "How is man to determine what is right to do & what wrong respecting his future" the question "How do the animals — how is it that [what man has not them presents?] the animals have known what to do? I must interrupt him, for certainly the animals have not known what to do — most species which have ever existed are already dead — although it is true that some have been extremely long-lived.

1-31-71

Ritter, Wm Emerson – California woodpecker

p. 34. For it is always the part of natural knowledge to discover if possible how far things that present certain obvious qualities in common with other well-known things, possess still other qualities with the same things, that are not obvious.

Re butcher birds impaling animal prey on spikes or thorns: 'The aim is to attack the food to some external object in a fashion that will enable the bird to tear the object to pieces for eating. Storing, strictly speaking, is only an incident in the birds manner of eating, rather than basic in ensuring a future supply of something to eat (Miller, A. Systematic rev. of nat. hist. of the Amer. shrikes. U Cal P. Zool. 38: 216. 1931) But things incidentally done may come to be purposely done, if they happen to be useful.

Question 1. How do shrikes instinctly come to use the spikes or thorns – will a shrike taken from the nest early learn this technique (sic!)?

Question 2. To what extent, if any, does the shrike possess science here – e.g. knowledge that the shrike can pierce the animal's flesh – do shrikes

can try to impale animal flesh on it inanimate spike-like things (short upward pointing twigs which break off, a dried bare reed) Do shrikes differentiate between good shrikes + bad ones visually before using them (Of course, other forms of reinforce)

Question 3. Even if shrikes are 'taught' (whatever that means) to impale flesh on spikes, to what extent do they consciously (whatever that means) seek (w.t.m.) shrikes thereafter, or do they take flesh, fly off with it and upon a spike coming into view react toward it by impaling the flesh without conscious intention (w.t.m.)

Question 4. The last sentence quoted about 'But things inadvertently done ...' is certainly true of most humans, probably true of most Simiidae, and many other mammals, etc on down — HOW FAR DOWN? Fishes (the SE Asian fish that squirts water on insect prey so that it falls into the water?) Certainly copulation is not involved here, but much masturbation is learned this way by humans and some lower animals.

2-7-71

Alfred Brendel recital, Orch Hall

#1 in my concert experience (from – this with Tarkett Van Kiel)

Seat 10 rows from stage 7 seats to right – exact position to see pedal work entire, face almost entire and other bodily movements.

Some might say they had never seen a pianist so delighted with his own playing – while the truth is rather when does one hear a pianist whose playing is so completely marked by his delight in the art (all aspects)

Pedaling fascinating – almost constant use of 'loud' pedal, sometimes applying it as rapidly as 120 times/min.

Much use of una corda – what is the effect here?

Tender play enormously interesting – as well as body-play in general – readjusting glasses often much head-throwing – sometimes actually jumping 4"-6" off the stool. Final note often touched off the keyboard.

But most on hit of this is shouting – it all has an integral purpose with expanded basis the great clarity of all notes and all lines, no

matter how individually.

In what does his contour consist?

Please focus on fact that no pianist can play a single note differently from a machine. Both a machine & a man can probably play any note in a million ways, but only the man can choose the way he will use. So far (and forever) the only way to predict just what way will be used from instant to instant is to train good pianists.

A piano is a piano's way of being played with beautiful sequences & combinations — no machine can be programmed to do this.

Jean mentioned that it takes a 10% change in energy for a sound to noticeably louder than another. But the pianist whose control is so perfect that this distinction is minimized is pretty sure to produce "finer quality of tone" or it is called, that is, greater adherence to the standard template.

It is no depreciation to say a machine can produce each of the sounds made — rather it is an appreciation that a man can — just as life is greater than food.

2-18-71

What is natural?
Is man wholly natural?
If he is does have free-will?
Or does he only appear to have free will?
Exist there here a high level type of
indeterminacy?

Answers to these impel one to think that
after all we couldn't help becoming human
(in the biological analogy of the computer
which trains itself (Cf. Fisch)). We can't
say 'Wouldn't it have been better to be a
live monkey than a dead man?' We had no
choice.
Huxley + others have said we now can
control our evolution. I say 'Can we?'
Perhaps we can to more control our
cultural evolution than we do control
our biological evolution.
(Waldrop has shown I cannot evolution: the fossils
before and the [illegible] ('Darwin's Black Box'))

I've tried to detect free will in myself, and I just simply don't find it. I don't mean merely that I cannot point (in any instance) to a simple reason why I did X instead of Y — and that's exactly the whole story, there are no simpler reasons. Everything everyone does is done for extremely complex reasons, some of them extending back in time millions or billions of years. You may think you had grapefruit for dessert because there wasn't any other fruit in the house — that is only a proximate pseudo-reason — how did it come about that there wasn't any other fruit in the house, how did it come about that anybody remembered there was, or, if not remembering, looked + saw etc., etc. The reason you had grapefruit for dessert is too complicated to express.

2-21/71

I return to my remarks of several years ago. The difference between the computer and man is simply that the computer cannot be expected to give the right answer without all the facts, whereas man, when he is resourceful in dealing with the world usually has to obtain the right answer with relatively few of the facts involved. (Cf Cinquevalli)
Here imagination helps man – the computer has no imagination (Cf Sullivan Artists of Science sec 2. p. 97 +)

Cf Fink, Computers + the human mind [are there other minds?] on computer learning for distinguishing bridges from dams (first children) After viewing 10 bridges and 10 dams, each through two screens, it can distinguish a new bridge or dam sometimes – it could of course distinguish any one of the previous bridges or dams, but a child would do this after one viewing, and could surely certainly make no mistakes after having had one viewing each of two or three bridges and as many dams. The child can make an abstraction after a few viewings, because of his imagination – the computer can't.

3/3/71

Designing a type face ~ listening carefully one learns to - hierarchy of marks - each mark has its place + rationale - in a type face each letter has its reasons for being. A fine example is Centaur, studied in chant, 14 pt. Is there any f superior (Bembo?) the neck exactly strong enough to allow the head to bend exactly where it is - the flick on the y in BR + reminds one of Brendel finishing a lightly knit phrase at the piano as his hand + arm relax to take up the next one.

3/4/71

The Good Society - what does it mean? It is a euphemism for the condition striven after in former years as the 'final' condition — heaven, if you will, or pie in the sky.

Life is not so limited - in fact life is not directed and even if so for one man might direct life (for a while) the desired condition will not only forever outdistance him — it will definitely degenerate in quality — at the same (we hope future) date.

Cf Simpson Meaning of Evol. p. 302-303

3/13/71

What is all this moaning + groaning about attacks in government support of science? Not infrequently analogies suggest that greatest seems really to be against attack in support of applied science — technology, as opposed to pure science. To what extent he wants to believe this I leave the reader to determine by commenting the plethora of current attacks. If I am wrong in statement I shall regret it, for what I want to consider is the desirability of attack in applied science.

The world environmental + resource crisis has been produced not by pure, disinterested science but by applied science. Sometimes the latter has turned on it — the automobile, the airplane, the plastics — sometimes too late — control of pollution of air + water, population planning, resource re-cycling, etc. But pure science has been quite sufficient to produce the explosion of world resource which engulfs us — it has been woefully insufficient for areas where explosion

wrongly
is not so unmeaningly & profitable to the
industrial owners.

It is the application of science to the natural world which has produced the crisis we live in — without science we should still be living in the Dark Ages, rather than the Darkest Age. Yes, it is a darker age, for even in the light of all our knowledge we cannot see — in fact, is it not this light (or rather, certain bands [of] which blinds us. Certainly no one in the year 1000 A.D. could have conceived of a world in which population density would be universally as great as that of, shall we say, Rome. Even in those dark times every informed person could see the nonsense of such a thought — non-sense literally, to be sure, for none had the knowledge even adequate to conceptualize such a force totally in terms of physical needs & ~~physical~~ resources.

But today one can attend a meeting of national

physicists + chemists and hear the director of a large, powerful + influential government laboratory call for an all-out attack on the problem of the production of more and more and more energy — unlimited energy — or at least enough to provide every citizen of a world population of 2½ billion, with energy equal to that now commanded by the average citizen of the United States.

The problem of the governmental, or any other, support of science cannot be solved until we have more definite goals — reasonable on the one hand and agreed upon on the other. Today we have no goals except to investigate hypotheses and to add to knowledge already won — the first task often regardless of whether the hypothesis is really important or a part of pure science, and the second so frequently just another example of the imperative: If it can be done it must be done.

For one thing, there are not enough Jews to test all the hypotheses, even if they were testable.

For the other there have been far too many Jews ready to make applications — not all applications, thank God, but as many as possible which promised the reward of profit + power.

The small outbreaks of science, fiction & oddities are so minor we must not heed the anguished cries / there no longer free to indulge their private - - - -

I was once taken into a large private laboratory with all of the old fascinating impressionist ~~[illegible]~~ scientific. ~~But had equipment measured in hundreds of thousands to millions dollars.~~ As we I was introduced to the tall scientist, ~~he lady~~ ~~in control~~ of more than a million dollars worth of glass tubing, wiring, lights, switches, etc etc. His reply to my inquiry 'And what do you do here?' was 'Oh, I play around with stuff, mostly investigating heat properties of metals to be used on satellites re-entering the earth's atmosphere. Lots of fun, and you know, they pay me for it'. I don't know who he was or what he's doing now. I only hope

line program has been done away with in favor of ~~took~~, ~~and the~~ ~~Michels~~, I one investigation some critical aspect of earth mass transportation which would decrease our present pollution created by our system of individual transport in over-powered automobiles.

The basic problem is unfortunately not a quantitative one, for if it were we might marshall a sufficiently large group of minds to solve it. It is a human problem in which every one of us has a stake, and, in its solution, a role to play. ~~In the solution~~. Solving such a problem with four billion people is hard enough — what are we going to do when the population is twelve billion? The most obvious answer here as a first approximation is not to let it become a twelve billion population problem.

3/16/71

What is the goal?

The present environmental crisis is deeply involved with science, technology, rebellion in the youth, rapidly changing standards of behavior, etc. But there are only in me very recently, aspects of a loss of goal (if we ever had one) or the realization that we've had a goal, or much goal, for too much of the world.

In a Johnny-come-lately in my own environmental concern, not after a very disturbing age 66, rather panicky because I couldn't discover the explanation for the intensity of my concern, I have now settled on the fact which I believe holds the key: What is the goal?

Several questions arise. What is the nature of a goal? Must it be shared by everybody (or the majority)? How can one evaluate its validity as a good goal? I am not unable to define a goal to which I could devote all my effort — in fact, I'm not sure I haven't for more than half a century been doing exactly that. But quite frankly I can't imagine that my goal would elicit support from more than 90% of the population

of the U.S., let alone of the world.

Why do we call the present a time of crisis — humankind always lived in times of uncertain future, of changing standards, of rebellion. Perhaps we have, but I would, never before in a time of threat of extinction. This threat is frequently cited as the root cause of the disturbance of youth and of its aberrant behavior. I don't want to ignore the enormity of the threat and its certainly disturbing character — but it is a negative threat, lastly because it is not countered by a positive goal.

3-22-71

It is not true that A proves not-B

and

It is true that A doesn't prove B

are not the same prop.

eg It is not true that A proves non-existence of E

and

It is true that A doesn't prove existence of E

are not equivalent

(eg. A some evidence; E = God)

3-31-71

The goal

'His [man's] constant search for a utopia prevents him from seeing that he indeed already inhabits one — or at least the remains of one.'
M A Quarterly 6:33. 1970

5/4/71.

The goal is survival — incidentally the environment will be a utopia.

3-31-71

Agriculture (Monsanto)

An affront to nature, to man, and to economics — purely a device for transferring the wages of the farm-maker to the pockets of the Monsanto Co.

4-2-71

'Four billion, did you say?

'Daddy, how much is a million?' 'Well, son, I don't really know how to tell you. If it's dollars it's quite a lot; not as much as it used to be, of course, but if you had a million, and good luck you'd never have to work again.

'Yes, daddy, but just what is a million. How would I know a million if I saw it' 'Now that's not so easy to answer – I'd guess most people never saw a million and knew it'

He's probably right. and until he becomes wrong can we expect people to deal with problems involving millions, or hundreds of millions, or thousands of millions. A thousand million is a billion, a word we frequently hear now-a-days because it's the unit in which our national budget is expressed in, our defense budget, SST projects, etc., and the population of the world.

4-2-71

UA 141 Chicago-Portland 10 – 12:15 At seat left window last row.

7×4 + 15×6 = 118 3,118 lb 63 coach, no count on how many are afraid!

Scarcely ½ full

First hand an earphone + 8 page program 5×8

listing 6 programs

Then a folded menu 5×6 in 3 color printing

Take off into a rain squall – turbulent winds near ground – after we reached about 15' elevation a drop back to 6', but instantly retrieved

Clouds at once, eventually unbroken to north Dakota then broken

Coffee + cocktails. Coffee in plastic thermos cups + napkins all around.

– mellow of scene of marvelous land

Capt announces our flight to cross S. Dak, then over Casper, Wyo, Butte to Portland, will be clear across the Rockies, clouds again east of the Cascades.

The realm of MA armor peeling away one by one.

The North Platte off to the south – all clear, all cultivated, mile + ½ mile just everywhere

Magnificent overlay of braided streams and intricately meandering ones. Washing the

from the distant alluvial fans to settle here
for a time for more (for all?) - pock-marked
with small irregular water holes shining in
the sun. What an exhibit of the alluvial
structure of these great plains. Surely this
great stream bed to the left is the North
Platte (still partly ice bound, waiting for the
floods - made a mistake not to bring
the airmaps, no snow visible except
very narrow lines. One magnificent
snake about 30'-40' wide with great
contortions from due west delivering
buff colored water. Here the grid is
quite - No - we are only midway across
S. Dak the left ways. Now we are over
the Badlands. Puddles, puddles, puddles,
all shapes & sizes. The first junipers
(a pine) in small canyons and on the
bluff faces. This wonderful snake still
westward. Butte left among the multiply-
ramified short branch channels - like winter
trees / ... still showing

hundred cultivation, magnificent rich rolling
of ridges along streams, occasional small
hayfarm, all that's left since this recent
cut-down came. Few roads — nothing?
identifying on house. Minutely narrow shades
of mood (Tennessee Lewis to talk — walked
the aisle, got two or three miles, but no
inspiration). Low thin clouds coming. Entering
the Black Hills. In the foothills N-S
straight lines of snow — the mark of the
snowplow remaining on a narrow road —
high cloud cover ahead — no more
to be seen for some time. Now over
the Bighorns — bits of snow on them, ridges
only bare — only a rift, now covered again
Endless perfectly horizontal row of white
homogenous clouds. Clouds thinning — now
I think in Beaufort Nets low north of
Lodge — beautiful fish skeleton company,
in brown & white. Bighorn peaks entirely white to
horizontal shadow line down. Snow completely
covering the trees (shrubs?) Thousands of

Capt says we're over Idaho 30 mi N No Id. Falls.
Clouds of fog & we crossed a broad flood
plain with great mountains beyond. We're
at 39 000 ft. Magnificent alluvial fans.
Straths tilted to west. Meanders at. for
almost 10 miles and nearly level. Cirques
Cañons. ... Forested (shrubs?) above
treeline in the range ½ mi through which
a great alluvial flood is evident. The
valley did have a rectangular structure but
nothing visible now but highway. Some
good lines off the rough in another broader
valley. Now over the Salmon River Mts. Wonderful
dendritic pattern of lines of flow.
Now in mts east of Hells Canyon. Still
quite a lot of snow but rain or thaw has yielded
black meanders over some nearly level areas.
Endless change from white on black to
black on white. Must cover land 30 mi south
Now a tongue of this shooting N into the
mountains — a small plain @ 10000 ft (next short

4-2-71

Diversity (Grades in Better Homes + Gardens)

What are the facts about diversity? This word is heard very often today from the mouths of the ecologists as representing an indispensable ingredient for the welfare not only of man, but of all nature. What are they teaching about?

Here comes a river, flowing SW (the brute dammed!) makes it look as if SW became [illegible] shoreline. All of Oregon get to cross Fourth, Fourth, Fourth, Three Sisters 30° to P Head Jefferson 10-15° P Contour skipping below. Mt Adams + Rainier or Stark. Here only 30 miles S of Colum River. Wheat fields stitched into the mountains! Magnificent view of Mt Hood on left. Neat green fields in the valley & streams flowing in every direction from Mt Hood + on plateau. Fantastic canyon cut from Hood headwaters by ice. Beyond Hood old fog below. Crossing the Columbia. Fog creeping up Mt Hood. Complete cotton wool mattress below. We seem to be following the Columbia a mile or two above. Easy down through this stuff! Here we [illegible] Can't see wing!

Out in the clear over the river — can see in all directions.

Portland was beautiful all lined in

5-4-71

Gehlert does not want a world in which it is possible to buy only the best toothpaste (even granting there is such a thing)
Would he find a world in which only the best water was available for drinking undesirable?

What is the role of diversity here? If only the best toothpaste is available the environment toothpaste-wise is optimal (by definition) — no diversity could improve it. True, one would be forced to live in an optimal environment (in the toothpaste-respect, at least) From day to day unless one relocates he always lives in the optimal climate for the place he's in. Would he choose to live in a less optimal climate?

5/9/71

Dear Peter:

I have just read, somewhat hastily and with skipping, your shocking but interesting book The Cradle of Erotica. ~~You end with~~ In your final chapter (p. 335 ff in answer to your query) in paperback hunting), what is perhaps the main lesson to be learned from this study, you will reply: 'Surely it is that sexual freedom alone is not a good remedy for the psycho-sexual or any other problems of the morally Christian West'. There is little in your concluding remarks with which I can (in my limited knowledge) disagree, and I do not quibble in criticism.

My concern is that we must not lose the hard-won sexual freedom we have just gained, for I believe strongly that our society's maximal unhappiness and, in my opinion, its enormous cruelty

5/9/71

society can never be substantially changed until sex can make its full contribution. Freedom is only part; another necessary condition, of which I find no trace in your account although it has turned up in sexual matters since you wrote in your own guise; the word most offensive to me is 'cuddling'. Body contact love between partners may or may not (& often the latter) result in the tenderness in sexual approach and love play without which a sexual experience, however successful in individual orgasmic relief, fails to confer the benefit latent in it. How it seems to me, is taken the line between permissible & non-permissible behaviour must eventually be drawn. It is not an accident that other lines of division

5/9/71

'Love' is the key word, but it must accordingly be informed, and itself, full. The sexual revolution has begun, but it is not over, nor can it and the other revolutions we need be over, until, as humans, we realize that in every act between humans is implicit our human distinctiveness — our awareness that we belong to the ~~human~~ species whose members can consciously and willfully express concern for each other, and who must do so to realize our potential at the peak of evolution.

The thing to emphasize here is the lacking element - there are three general groups of sexual experience.

1) rape (completely self-centered)
2) without real love perhaps, but not without concern for the partner enough to yield results above mere orgasm.
3) with love and the above concern.

5/13/21

Every grasping act is ecologically wrong.

Are there grasping acts in animals of lower rank than Homo?

5/12/71

We are in the terminal crisis — if we fail to resolve it we are doomed — if we resolve it it will be by wisdom so generally accepted that future crises are most unlikely.

5/14/71

AmericanAirlines New 747 LuxuryLiner
The Plane With No Competition

This Is Our New Coach Lounge.

5/14/1,

To fight violence with violence is sometimes just as necessary as fire with fire.

5/1417,

The absolute necessity of divorcing political and ecological (etc) matters, i.e. senatory & congressional etc, etc. must not have the power to influence plans & their execution — only to accept or refuse. There must be publicly responsible planning groups who are politically unassailable, and at the same time as incorruptible as our best courts.

5/14/71

If it can be done it must done.

change to

If it must be done it can be done

Equally irrational.

5/17/71

What is my share?

Not of money, but of energy, of sunlight, of food, of space, of education, etc.

How economics must be in terms of energy units, not in terms of currency units.

5/30/71

My own marvels since childhood

Non-nature → nature is predominant

and " was not earlier abandoned because of lack of understanding — especially lack of secondary educational contribution

Makes me believe knowledge can change understanding — given hairs to begin by teaching)

5/30/71

All problems of our age upon close enough examination eventually lead to two considerations - energy and population. These phenomena must be understood in wide context before the true seriousness of all our problems is realized.

Both are quantity phenomena. As for population we can argue that an upper limit does not exist - over this matter people can only disagree as to the value of the limit.

As for energy the matter is not so simple. All must agree, again, that releasing energy for use by burning fossil fuels or generating nuclear power has an upper limit, but there remains the question of whether energy now reaching the earth can be trapped in sufficient quantity at least to raise that upper limit.

BUT, why try to reach the upper limit. Many of us already feel that the upper limit of endurance has been reached for vast numbers of people. Just last week U. Utah kept saying to

ms. Gorz, the whole world is sick from the sickness of the modern world, i.e. from over population and over-use of energy. Every act from now on has to be directed toward lowering the population and the use of energy.

5/21/71

Bacon, Harrison; T. Bonner, T. Weir

The next hundred years : 1957 repr. 1963 as V. King Press Compass $ 1.35

This is a curious book — so much of what it has to report is extremely pessimistic, in Chap. II. What is a resource, ~~in which~~ the general trend of report is that as time goes on man will be forced to use less and less easily obtained resources, some, such as copper, being almost entirely replaced by other metals (aluminum, etc.) The dabblers with the resources : it is likely that the increase in capital investment and energy consumption per unit of industrial output will be steady and continuing over which will extend far into the future. What is meant by 'far into the future', and do the authors intend to indicate that there will ever be a reversal? There is no clue

Similar curious juxtapositions of pessimistic reports but absence of 'stop!' interjections are all over in Chap. IV + 13: Our energy resources and new knowledge and new energies.

True, the book is only a report on what can be expected, not a polemic for changing the trend.

Again in Chapter 9 New knowledge = new food.

We want a plant which grows over a long season and in which as high a proportion as possible is edible. The commercial sugar beet is in fact a product of genetic improvement by which the original low-sugar plant has been bred for high sugar content and high per-acre yields. We know how to breed crop plants high in other constituents, such as fat and protein. It is not at all impossible that we might be able to alter our sugar-producing plants by genetic means to cause them to accumulate fat, protein, or other dietary necessities in higher yields. Thus, we might breed a meat beet or a fat plant.

6/2/71

Ellule The technological society

A good order of reading is

1) Note to reader — this to orient towards word 'technique'

2) Chap. 6 A look at the future

3) Translator's introd.

4) Author's preface to French ed.

5) Translator's introd

By here the reader is convinced all doom is ahead & we are in. Up to now all has been description. Then read

6) Author's foreword to Am. Ed.

Here he deals with his own philosophical attitude toward this enormously long description. There is a determinism, namely that man is and will be faced with technique — it is inescapable (barring the destruction of a thermonuclear war, etc.) — but man is not determined — he can react — freedom must be won every day. If enough men win freedom every day the tide can be turned.

Elliott technique is the most basic etc, + allows the
de vigueur of behaviour

6-2-71

A good example of Ellul's technique, and its inexorable demands is delineated in the Illinois 'Rules of the Road'. (1970) In 1918 when I began to drive a car the only road signs were a few markers to show direction and distance of towns ahead (perhaps, though I don't recall them, occasional speed limits) and in cities a few red + green lights (Broad St, Newark Oct 1918). There were almost no plain ex- In 1970 there are

Several dozen types of signs, of almost bewildering perplexity. This development controls the technique of driving — without it we could not have kept the accident toll anywhere near absolutely constant (as we have more or less) nor could we have increased the average speed on a hundred forty mile journey from 15 mph to 60 mph (or more)

It is true man developed this technique, if you like in response to need, but the need was created by another technique: faster and cheaper cars the unfortunate

* Left on busy city streets where one could not stop, but there was [illegible]

Man is bound by the determinism of this technique. But he can win freedom with respect to it every day, at least in certain parts of the country. In the suburbs of Chicago, he can network his driving to his own neighborhoods, and go into the city on the suburban railroads. Further he can elect not to drive on weekends or holidays. This would be a restriction, but it would protect him from the over-dominating almost all-pervasive technique now formed in America. It is admitted that only a relatively few individuals can take this restriction without a sense of frustration — and it is not contended that turning aside the inexorable march of technique by the action of a few individuals will take place. But if everyone in metropolitan Chicago should determine not to use his car more than ten miles per week-end for 100 successive weekends the impact on the business economy in the area would launch a very sizeable percentage of tourist trailers from the highways. (But not an appreciable

6-13/7,

The new scholasticism

Angels on pin-heads & human populations

6-10-71

Biological history of sex.

From first conjugation of bacteria to permissiveness of 1970.

Most helpful evolutionary happening — made evolution possible, and may well have reached climax to some of such dimensions as to destroy life.

6-20-71

From a letter to Joe Hester

Fifty years ago today I was graduated from high school. I can't remember whether on that day I took notice of the fact that I might live until today, but I'm sure I took no notice that if I should the world would be today so different an extent, or that I should be so different a person. There seemed to be no reason to expect an early apocalypse, and I certainly had no conception of the idea that I should ever feel threatened by it. How comfortable it would have been to live through the preceding half century, instead — but, I must admit, how dull; and had I (at 67) lain on my deathbed fifty years ago and been granted a vision of the half century to come, how cheated I should have felt. What image of the next half century could today make me feel greatly cheated?

6-20-71

In conversation with Iddin as he leaves for Portland to address American Society of Landscape Architects.

Yes, who knows what to do — surely not the LA But, they have to do, and hence they are important. Make them feel good at first.

Tell them no one should expect them to make a utopian — they already live in the remains of a utopia (Eden) which LIFE created for us — it is for them to preserve what is left, and as fast and by all hands restore what has been destroyed.

No man should have the arrogance to believe that he can build better than LIFE has built — all he can claim is a devotion to making possible for all men the gift of LIFE, which man's ignorance and arrogance has despoiled.

This is obviously only possible if all of us conform to natural laws of environment to the full extent of our knowledge — few of us have enough knowledge to produce innovation [illegible]

How can one draw a line between science and applied science?

applied science = technology ± = know-how

science = know (legal sophomorized)

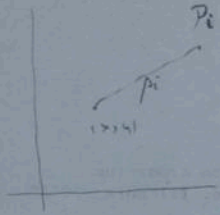
This may seem too simple but I don't think so. Because much technology is known usually required to increase science even by a little bit many people cannot, so to speak, see the science for the technology. And again since most technology is not used to produce more science, but rather to mold man's environment, many people having once equated technology with science because of the confusion noted above, now equate science with the art of molding man's environment, man made. And when this molding detrimental, science is (wrongly) called to account.

A very simple example can illuminate here. The lead-stone of ancient times, a piece of

magnetite, which would attract pieces of iron, was eventually found to have the property that when suspended in air from a string, attached at a suitable place on it, would invariably orient itself with regard to a fixed horizontal direction in exactly the same way. This was a scientific discovery about the lodestone. The only technology used in this discovery involved such things as a string, an adhesive to fasten it to the lodestone, etc. But nobody at that time (a word) would have confused the discovery with the means we in the discovery. Not later when the magnetite was fashioned into a spindle shape with and balanced on the midpoint and found to swing about this point always to the same direction was any new science involved. New technology, perhaps yes - properly

Fashioning the spindle was an art
mastered at first by only a few.
And when

12/13/70 Max-Min of Influence of finite number of discrete points with discrete 'mass'



Consider $\sum_i I(p_i, \mu_i)$

For example, where on an island is to be found the minimum resistance effect of its population on a given individual;

Or similarly, where in the contiguous USA people can one find the extreme of remoteness from people?

There are very complicated questions of which perhaps the simplest in of the type: What point (a,b) of $x^2+y^2 \leq 1$ maximizes the sum of the distances to all points of $x^2+y^2 \leq 1$ — or, even more simply, what point a of $0 \leq x \leq 1$ maximizes the sum of the distances to all points of this interval.

$$S(a) = \lim_{n\to\infty} \sum_{i=1}^{n} |a - x_i| \quad \left[= \infty ! \right]$$

$\left[0 < x_1 < x_2 < \cdots < x_n = 1; \quad x_{i+1} - x_i = \frac{1}{n} \right]$

The question is ridiculous* ! But there is, certainly, a non-ridiculous question; what is it?

* although the common sense answer might seem to be $a = 0$ or $a = 1$, and, heuristically, even more obviously $a = 0$ if the range of x_i is $0 < b \leq x_i \leq 1$

$1+\sqrt{2} = 1+1.142 = 2.4$

$\sqrt{5} = 2.23$

$S = \sqrt{1+x^2} + \sqrt{1+(1-x)^2} = \sqrt{1+x^2} + \sqrt{x^2-2x+2}$

$D_x S = \frac{x}{\sqrt{1+x^2}} + \frac{x-1}{\sqrt{x^2-2x+2}} \Big\} = 0$

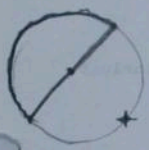
$\frac{x^2}{1+x^2} = \frac{x^2-2x+1}{x^2-2x+2}$

$x^4 - 2x^3 + 2x^2 = x^2 - 2x + 1$

$+x^4 - 2x^3 + x^2$

$\rightarrow x = \frac{1}{2}$ yields min. Tomax use

$\rightarrow 2x^3 - 5x^2 + 6x - 4 = 0$ $x = 0, 1.$



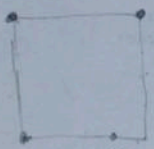
$x-\frac{1}{2}$ | $2x^3 - 5x^2 + 6x - 4$ | $2x^2 + 4x$

$2x^3 - x^2$

$4x^2 + 6x - 4$

$4x^2 - 2x$

$4x - 4$



$S = x + \sqrt{1+x^2} + \sqrt{x^2-2x+2}$

$D_x S = 1 + \frac{x}{\sqrt{1+x^2}} + \frac{x-1}{\sqrt{x^2-2x+2}} = 0$

$\rightarrow \left(\frac{\sqrt{1+x^2}+x}{\sqrt{1+x^2}}\right)^2 = \left(\frac{x-1}{\sqrt{x^2-2x+2}}\right)^2$

$\frac{1+x^2+x^4+2x\sqrt{1+x^2}}{1+x^2} = \frac{x^2-2x+1}{x^2-2x+2}$

$x=0 \quad \frac{1}{1} = \frac{1}{2}$

$x=1 \quad \frac{1+1+1+2\sqrt{2}}{1} = \frac{0}{1}$ ... max + min

6-21-71

What is the basis for the phrase 'the urge to control the forces of nature'?

Man cannot control them, although he may harness them to his peril.

Nature will do as it likes - in particular it will exact every bit of payment for what man wrenches from it.

6-21-71

Etter keeps stressing that things have always been the same, and greeks must over from the ancients. He points out that in ancient times scarcely anyone, as today, knew what to do

But there are several important differences.

1) Now we have a vast scientific knowledge

2) We also have a very fragile society, both from standpoint of individual self reliance and from the danger of atomic destruction and radiation damage (the unseen foe)

3) Society is in the grip of the machine not only quantitatively different but qualitatively as well

I do not think the old social sayings can be quoted as affectively as a hundred or more years ago.

6-30-71

A. M. Have just listened again to Beeth. Op 131 — and
again experienced at the final chords the now so
common convulsive sobs — why has this come about
— it could be just a "pattern" result as FM reaches us.
I'm not sure it is — Who, more than Beethoven, faced
an insane world until we today. Patrons of friends, to
be sure, but patrons of rulers and the 'thought-them-
selves-great-and-important' Today it's hard to remember
their names. Where music, more than his, can de-
present the utter frustration the individual of high
ideals + remarkable standards feels in such days
as these now (Nixon, Johnson, McNamara, even JF-K)
— is it any wonder Adlai Stevenson went down when he
did — his must have been a very lonely life amid
the wolves.

I think it's that B's music now plays upon us as it
never could before. For only in the last year or two
have I come to the real concern I have for society
and, much more significantly, LIFE, which is daily
threatened by these fools, knaves + self-seekers.
I have some of them for my readers, but, somehow or
other, my friends have been largely of the real
people of this world — the esprit of their courage against
the black fact + present (+ and future) must make one
[illegible] to Beethoven as [illegible] can.

6-Jun-71

LA's ⟷ publisher

7-1-71

Bob Haddon's pictures

GOD = LIFE

Resurrection not a found ecological motif
of LIFE is destroyed (in fact suppressed)
There will be no resurrection of it.

The artist (Haddon) cannot be responsible
for what the listeners & the viewers makes
of his work. BUT: 1) the better he is
informed, the more likely his work will
contain his understanding, and 2) the less
likely <u>such</u> work will be misunderstood.

7-9-71

Kellogg Co's (Battle Creek) Self serve bowl.

New plastic packaging. A lesson in pollution on the one hand and a grab (avarice) on the other.

As of today the individual cardboard cereal boxes weigh about .5 oz and the contents about .6 - .75 oz. (In the carton 19, the 12 oz net weighs 15.5 oz total.

! Check the weights, prices etc.

One major wrong in individual packaging not counting pollution in the waste of unused food - this is almost unconscionable in a restaurant, but in a family dining room each may take what he wants

Of course what is the balancing factor of saving water in washing - probably no saving, for some dishes will be washed anyhow, and a few extra cereal dishes will not increase the work of washer - in fact, I see a hope on washer washes (Godless footpedal)

7-9-71

Water washer + Sadie's foot pedal.

7-17-71

This point in time the most critical so far, and our actions in it the most fateful.

Our potential for the future still great, although it has passed its maximum — this because in during the last two centuries man has irrevocably destroyed fat natural resources (fossil fuels & mineral deposits) created not millennia ago but hundreds & thousands of millennia, and others, like soils of extremely complex structure requiring thousands to tens & thousands of years to mature, and

& also during the same period the population has increased beyond any realistic figure for a continuing future — the carrying capacity of the earth during an indeterminately long future is doubtfully as large as one billion (Ehrlich puts it at no greater than half that)

ΦΒΚ = Philosophia bion kubernetes

= Philosophy the guide of life

Never before has this Greek phrase been more imperatively needed than now. No longer can LIFE take care of itself, since one of its members, Homo sapiens, has indeed learned the secrets of good and evil - an event interesting enough to bring about not only the destruction of MAN, but of all LIFE, a good of great futurition, to be sure, but (only effecting) if the love of the knowledge of it is allowed to be the guide, & even better the guardian

Much is made of the necessity that man conform to biological laws, in particular as regards 'spacing' — in which are involved such phenomena as population, aggression, tribing, etc... — At the same time such conformance it is often said will aid man to achieve a 'high quality' life. Exactly what is the reason to believe that such a life will conform to biological laws in general? For example, what about the biological phenomenon in all animals of conforming to a temporal cycle — largely, up at dawn + back down again at sunset. In general animals' conformance is an ecological matter related to the persistence of the species. Man has utterly transcended this type of cycle, members of the same family often living by cycles completely disparate. Most people, at least, would consider the freedom to adopt a cycle of no particular adjustment to the environment and flexible from day to day as indispensable for a 'quality' life. Does this mean anything biologically. At least it indicates that cultural phenomena may perhaps develop without the benefit of biological 'approval'. The old question raises and a venture

8-12-71

(from letter to Larry Anderson)

Yesterday I had an interesting conversation with a woman about 45 yrs old (owner of the best local bookstore) After some arguments on population growth I found that she is a Catholic with eight children. She admitted that the Catholic church has promoted population increase. But, she said, I love my children, I've been very good to them, they are very perceptive, but somehow or other we don't understand each other. I failed to point out to her that perhaps they were more perceptive than she, but I did say, "Yes. I'm sure you've made every effort to rear them in love, and without violence — but that didn't prevent them from growing up among violence — they heard all the lies on the TV, they read all the lies in the advertisements, they recognized all the lies from the pulpit — they had experienced violence from which you didn't protect them." Finally she said "And now none of them want to have any children after all the love I've given them." And she can't understand why! Here is a woman programmed for 8 pregnancies. At least she's had them, and she's obviously worked hard at what she believed was the right thing to do by her children. But they are all in a mess, and so is she — her eight pregnancies have effectively so that now she believes that for her they were futile. And she can't understand why. [illegible] with the world.

8-19-71

Socialism is the human (economic) analog to biological control.

8-21-71

Goals

Last 2 sentences of Galbraith: The Affluent Society.

To have failed to solve the problem of producing goods would have been to continue man in his oldest and most grievous misfortune. But to fail to see that we have solved it and to fail to proceed thence to the next task would be fully as tragic.

Our tones, at best, of what I say here include the belief that a non-cluttered but still comfortable existence [more or less equivalent to that of the upper middle stratum class in XIX] is the minimum for proceeding to the real problems of the mind: knowledge in all its power, bringing about increasing understanding of man's place in nature [the universe], and attendant arts. I think he would value rather little the present youth movement toward Zen and its reinforcements, as a basis for genuine understanding, but still valuing highly the understanding which Zen etc would claim for its own goal.

8-22-71

Why does man (if indeed he does) speak of his 'destiny' as if he were an end product with a terminal goal, while all the rest of the universe is a merely temporal accessory? As I sit and watch two butterflies in nuptial flight I must wonder why ... They can't know beforehand the pleasure of their union, nor after it ever experience it again — all is futile for them (in lectorally, at least) Man's behaviour is personally, of course, less futile, both sexually and in scores of other ways, but why should he believe in a meaning for his future of more transcendence that he accords the rest of the animate world?

He probably didn't before he realized his unique position in nature as the single species conscious of itself. But it is this realization that has set him apart from the very life which created him, which has made him feel his 'right' to dominate it, to turn it unkindly to his own use. Thus in a curious way he has rejected the very God who created him, while at the same time creating his own God in his own image (with many of his own faults) This God he has enthroned in a

naturalers world — heaven — an enormously dull place of static 'glory', everlasting antiphonal trumpets + choruses, winged but sexless angels, and indolent but adoring resurrected souls strumming harps — interminable days unrelieved by cool nights, and the endless 'joy' of never being apart from this mass of the 'chosen', with no marriage nor giving in marriage, and with none of the attendant intimate pleasures.

Do it not easily possible to make a good case for the insanity of such a theies? Is there any good reason for believing that such a species will not destroy its own world, the very cradle in which and by which it was created?

Let C be a continuous closed curve in a plane.
Let P be an interior point of C such that if Q is any point of C the line segment PQ meets C only in Q. Such a point P we call a center of surveillance of C.

Let $\Sigma(C)$ be the set of all centers of surveillance of C. We call $\Sigma(C)$ the surveillance nucleus of C

What are some of the principal characteristics of Σ.
For example: If $\Sigma(C) = I(C)$ [$I(C)$ = set of interior points of C]
Is $\Sigma(C)$ connected?
Is $\Sigma(C)$ convex?

Is this theorem true: $\Sigma(C) = I(C)$ if and only if C is convex*,
Is this theorem true: If $\Sigma(C) = \Sigma(C')$ then $C = C'$.

[What changes come about if we define P as a center of surveillance of C if for P any point of C or $I(C)$ ~~any point exterior to C~~ and Q any point of C, the line segment PQ contains no points exterior to C?]

* C is convex if and only if when R is a point of $I(C)$ every straight line thru R meets C in only two points.

9-6-71

What is Nixon talking about when he tries to placate Labor by telling it to become 'more productive'?

Consider a world of three countries only I, C + J, with monetary units i, c, j in a (genuine, or forced, or faked) stable relation. To simplify the notation let i, c, + j be interchangeable so that $i = c = j$ at the beginning moment, and let each country have a stable population.

Let each country be producing not only everything that it needs, but everything that it can use and no more, except:

1. I cannot produce x, (which it needs) but can produce a surplus of y
2. J also cannot produce x, which it needs, but can produce a surplus of y
3. C cannot produce y, (which it needs) but can produce a surplus of x.

Let each country be 'fully employed'.

Let I's economy be such that 1 unit of y costs 500 i.

Let J's economy be such that 1 unit of y costs 500 j.

Let C's economy be such that 1 unit of x costs 200 c.

Obviously C is going to buy its supplies of y from I or J without preference (assume a stable situation existing*)

But J's people decide to work harder and produce y for a cost of only 400 j. This will induce C to buy more heavily from J. Advantage to C in lower cost. What is the advantage to J? None! Unless some change is taking place, for example, J's population begins to increase, and the segment of the increase which produces y, produces too much y unless the excess can be disposed of to C for needed x.

* i.e. I + J are sending fixed amounts of y to C + C is sending fixed amounts of x in return.

At once I finds its surplus / y would and unplayment goes down. At the same time I's economy is adjusting itself in such a way that more goods can be used and are being made. The natural fay of the lessening of indeed demands for wage increases, which are unfortunately granted, after which prices go up. Simultaneous inflation and unemployment.

The nostrum offered by Nixon is: no more wage increases but more productivity. I ask: more productivity of what by whom for which purpose? I's employed population already produces everything that the whole population of I can use, and part of I's population (unemployed / producers) have no money to buy their part. It can't be the employed who should be more productive. But the unemployed too can't be more productive without flooding the market in which they make.

9-6-71
(4)

The only possibility for being 'more productive' — if no new products can be used in I — is to lower the price of y to, say, 350 i, and thereby undersell I. The first effect will be to go back to full employment in I, but at reduced wages for those producing y; the second effect to make it impossible to sell the full production of other I products, and a consequent recession; the third effect will be to place J in the position I has occupied, and with the same 'opportunities'.

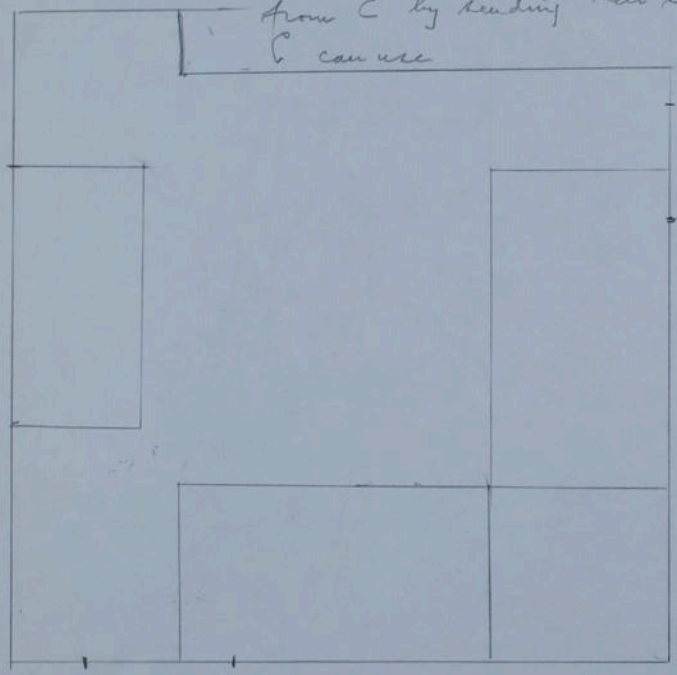
In this example appear very prominently the two spectres which shake the world: increasing population and over production. The effect of the former is shown alone. The effect of the latter is to depress the economy — there is an absolute maximum of goods + services which a fixed population (I in the example) can consume. But the solution is not to allow an increase in the population, ~~as by the Hunt Institute~~

The logical solution is very simple: zero population growth, and full employment in making only that which can be consumed to the best interests of society.

This model is very primitive, to be sure, but it is basic. It brings out very well the two basic ills of the world — note carefully, I say 'ills' not 'evils'. The two basic evils of the world are avarice, and unenlightenment in satisfying complacence.

9-6-71
draft

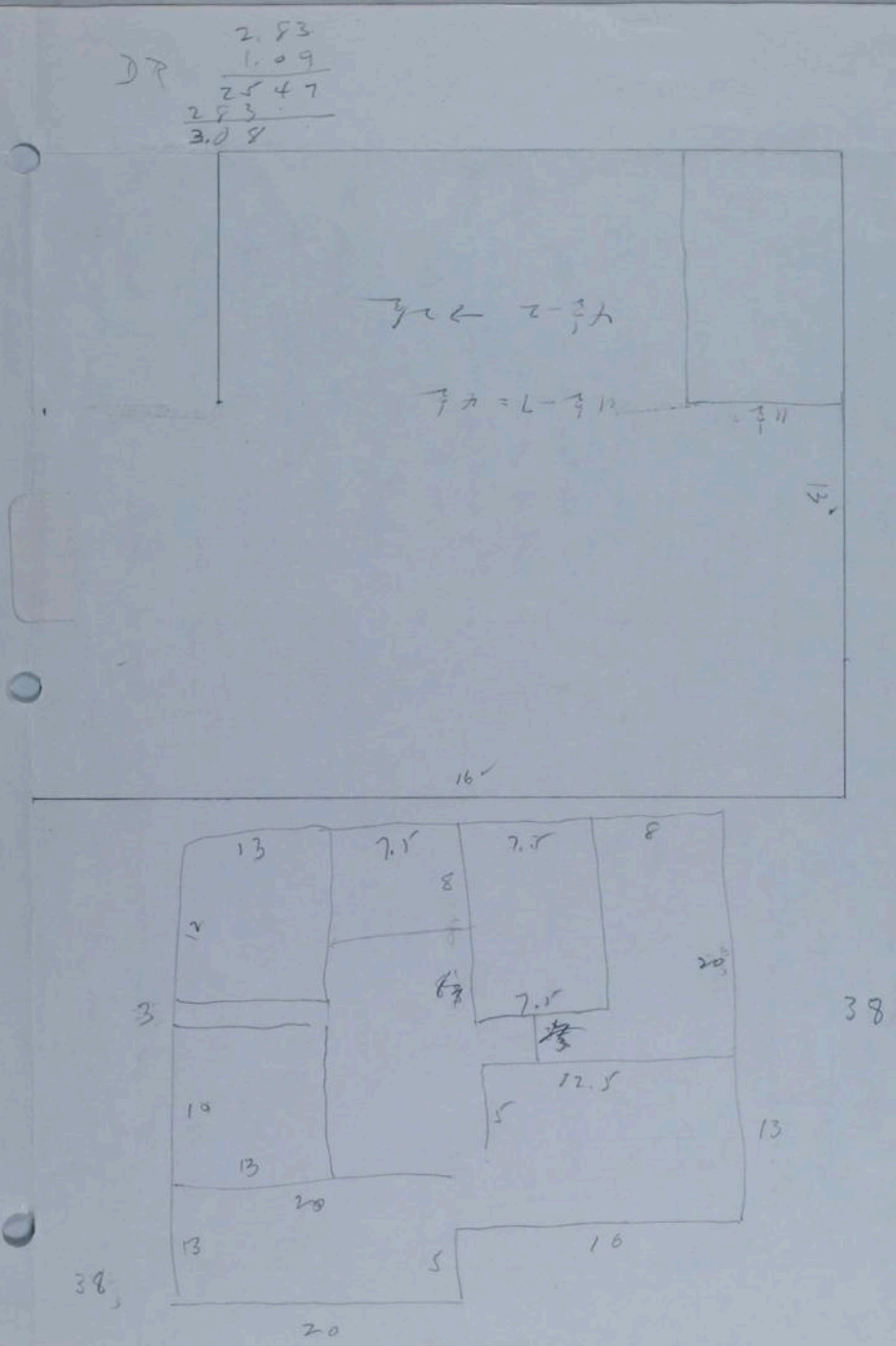
a b c d produce all they can use except article x which they "buy" from C by sending their surplus production of y, which C can use



I also produces all it can use except article x which it buys from C by sending them, surplus product of y to C.

Presently I's economy becomes so productive that its efforts are no longer needed and he becomes unemployed.

At the same time a, b & c demand higher wages (or equivalently more x per y), and I's economy is so productive that it can offer more y for x than I is willing to offer.



9-6-71
Drafts

I's prices go up because J accepts, while at the same time unemployment increases.

P recommends freezing prices and increasing productivity, putting J back at work. But it can still not sell its y for it demands more x for y than J does.

Who is benefited? No one for I's population is spending time producing an unsaleable article. Previously all work on y (in I) ceased and people are again unemployed.

Only by I demanding less x for y than J demands can I diminish unemployment

(or 2) by producing wholly for its own consumption

(or 3) by lowering working hours of those producing y and unemploying them and selling y for less x than J, and paying the a b c d less wages.

1) I will increase unemployment in J which can adjust only by a lowering of its price for J or producing something wholly new

2) I + J receive positions.

Only in 3) is there a real solution. In 1) there is a deficit for I but not for the whole; in 2) new items cannot be created, while in 3) I produces just as much as earlier and J can buy it all and so

9-7-71

The high cost and/or low quality of the book in the 20th century book

The printed book was certainly the first mass produced object of real importance. The quality of the physical object produced in 1450± outshines almost anything which has followed and the cost of the production of books has in the last century (the century of the mass produced object) has increased beyond all reason while the physical quality has often degenerated ---.

If we permit or encourage men to seek colonies we must expect them to seek to keep their gains. But here the risk is really ours for with their gains they can abuse the environment

And not infrequently they are not willing to accept their losses (Lockhead - 1971)

10-16/71

The importance of relating to people is simply unconceivable until you've experienced it. This is what youth has found out, and it is this which is destined to save humanity if anything is.

For years I have said "If only the whole defense budget could be shut on sending American youth abroad and bringing foreign youth here, we'd soon have no need for a defense department."

10-16-71

On having the right amount of space (with apologies to J. B. S. Haldane: On being the right size)

Extreme density of population was the basis of the first multicellular organisms, and we, ourselves, are the finest example of what can be accomplished by such density in an individual cell. But we just about to be prone that anything approaching such a density in human populations will result either in extinction, or mutation into automata such as we already find in many colonial groups — bees, ants, etc.

10-10-71

I would venture to say that Hickel has come a long way (his belief that the people own America, even those parts nominally owned by individuals; his belief that human beings need access to the recreational powers of beauty and wilderness, as well as merely clean air and clean water; his belief that enough of the people care to make it possible for there to be a real public administration, if anything is left in the open - and others)

But I still think he has a considerable way to go. In particular 1) he needs to recognize that underdevelopment will often be far better for man than merely non-polluting development (if there is any such thing) [there is no good reason at the moment why any Alaskan oil should be tapped] 2) he needs to come to a broader + deeper understanding (if indeed he has any now) of biological programming and of the enormous importance of the preservation of diversity. 3) he needs a clearer view of the unalterable fact that man eventually, no matter what is done,

One of the chief polluters of America is the practice of producing poor quality goods, unneeded goods and deliberately goods with built in obsolescence. It is hard to cite any material object the production of which does not lead pollute in some way and at the same time deprive a natural resource to some extent. Hence all material objects should be produced so as to minimize this pollution and their depletion.

The ultimate cure is your biological revolution - only the conscious realization of this phenomenon can guard man's future to the maximum extent.

will become extinct, but, for that very reason man must find a life style which will delay that extinction as long as may be possible, and that now is not too soon to begin constructing that life style [which need not and ought not to become a straight-jacket, but rather a growing understanding on the part of mankind that fulfillment of man's potential is ultimately an intellectual & spiritual matter, not a material one]

Cf his remark on p 129 "beginning: Resources must be developed ..." I say this general statement cannot be true, for some resources must not be developed. What does he mean by "proper respect for the environment".

Cf also p 157 where shows understanding of scientific uses of diversity

INFORMATION SENT WITH NOTICE OF THE ILLINOIS PLANNING AND CONSERVATION LEAGUE ANNOUNCEMENTS

THE DAM ILLINOIS PLAN [FOR WATER MEETING IN URBANA, 10-15-71

if you are interested in belonging to this League, please see mkm.

(A synopsis of the major proposed "improvements" to the water resources of south central Illinois)

by John Carl Marlin, Director, Committee on the Embarras River

September 22, 1971

Decisions made within the next five years will determine the fate of most rivers in the Southern half of Illinois. Plans to dam and channelize rivers are being developed and promoted at an alarming rate. Unless action is taken soon, no major Illinois stream will remain free flowing This article briefly describes the big projects planned for some streams. The Army Corps of Engineers (COE), aided by local politicians and vested interests pose the major threat to our rivers. The Illinois Division of Waterways (DOW) works closely with the Corps and has plans for the few rivers which the Corps has missed. The Soil Conservation Service, (SCS), with dozens of small watershed projects including dams and channelizations, is concerned mainly with small streams. SCS would come under much less pressure from conservationists if it would concentrate on its primary mission of keeping soil on the land. Until Illinois' soil is stabilized, dams and drainage ditches will continue to suffer from rapid sedimentation.

ILLINOIS RIVER. Early explorers commented on the great beauty of the Illinois River. Today this river is highly polluted, sports several dams, and has been channelized to a depth of nine feet to accommodate barges. The barge interests, which pay little or nothing toward the construction and maintenance of waterways, are not satisfied with the present waterway. Consequently the COE is seeking $226 million from Congress to provide new locks on the Illinois waterway and $128 million for a modification of the Calumet-Sag canal. The Corps has also requested $375,000 to study the possibility of channelizing the Illinois to a depth of 12 feet.

MISSISSIPPI RIVER. The Corps is studying the possibility of deepening the present nine-foot barge channel to 12 feet. This project will severely affect the ecology of the upper Mississippi valley.

WABASH RIVER. The Wabash River is generally free flowing. A group of promoters called the Wabash Valley Association (WVA) is about to change that. The WVA proposes that a 12-foot barge channel be created up the Wabash River. A complimentary proposal calls for a branch canal through Vermillion, Iroquois, Kankakee, and Will counties to the Illinois Waterway at Joliet. The first link is to connect Mt. Carmel, Illinois, with the Ohio River. The COE seeks $100,000 to study this proposal.

SANGAMON RIVER. The future of the ill-fated Oakley Dam project which continues to threaten Allerton Park, is uncertain. The whole matter has been taken to court. The $68 million (Illinois share--$14.5 million) project is opposed by conservationists and farmers above and below the dam site. Yet state politicians and Decatur businessmen continue to support it. The project includes a 98-mile recreational greenbelt, which is hailed by the Corps and conservationists as a great improvement over channelization. Unfortunately, the DOW is attempting to decrease the size of the greenbelt.

VERMILLION RIVER (Vermillion County). The Vermillion River has three branches which meet near Danville. The North Fork presently hosts an Illinois Power Company dam. The Middle Fork, which is a good canoe stream, is the site of a hotly-contested proposed DOW recreation dam. The last major wooded area on the Salt Fork has been selected for a COE dam about 10 miles from the proposed dam on the Middle Fork. The WVA will support this dam too.

EMBARRAS RIVER. The Lincoln Resevoir project near Charleston threatens to eliminate what little wildlife habitat remains in Douglas and Coles counties and disrupt drainage on over 150 thousand acres of the nation's best farmland. For these reasons farmers and conservationists are bitterly opposing this project. Less costly alternatives to the $60 million (Illinois' share--$12 million) reservoir exist, but are "politically unfeasible." The WVA, which strongly supports the project, specializes in "political feasibility." (over)

LITTLE WABASH RIVER. The Little Wabash is about to receive the authorized COE Louisville Reservoir near Louisville. This $31 million project (Illinois' share--$7 million) will inundate the section of the river which has the greatest natural value. On the Skillet Fork of the Little Wabash COE plans call for the $24 million (Illinois' share--$8.7 million) Helm Reservoir near Helm. Both projects are supported by the WVA. The DOW has channelized part of the river and have indicated that they would like to dig out much more.

SALINE RIVER. The Saline River is currently being channelized by the COE at a cost of $10 million. This is another "improvement" supported by the WVA.

BIG MUDDY WATERSHED. Rend Lake is nearing completion on the Big Muddy. This $54 million (Illinois' share--$10 million) project is expected to return an annual benefit of two cents on the dollar according to the Corps. An environmental corridor is planned below the dam since the proposed barge canal lacks economic justification. Crab Orchard Lake, Devil's Kitchen, and Little Grassy are completed reservoirs on this watershed. The DOW recently completed a large recreational reservoir on Kinkaid Creek in Jackson County. Despite all these dams in the area, a recent report recommends that the COE and SCS construct 73 more reservoirs in the Big Muddy watershed. Congressman Ken Gray favors this plan.

CLEAR CREEK. A bill which is supported by the DOW has been introduced in the Illinois General Assembly which will authorize a reservoir study on Clear Creek in Union County. This proposed dam may threaten the Pine Hills Natural Area which is sacred to biologists throughout the continent.

KASKASKIA. Shelbyville Reservoir is nearing completion in Shelby County at a cost of 0 million (Illinois' share--$16.4 million). This dam is 50 miles from the proposed Oakley site and 35 miles from the Lincoln site. Downriver in Clinton County is the notorious Carlyle Reservoir. This $42 million (Illinois' share--$3.3 million) "improvement" has flooded the farmers whose land it was to protect as well as its accompanying picnic and camping areas. The Carlyle Water Sports Festival which was supposed to attract over a million visitors in the summer of 1971 was a financial disaster. As a special gift to area coal and barge interests, the lower river is being channelized at a cost of over $100 million so as to accommodate the barges.

MACKINAW RIVER. Two dam sites on the Mackinaw River were recently found economically infeasible by the COE. These sites have been studied since the Thirties.

KICKAPOO CREEK. Two dams are planned along Kickapoo Creek in Peoria County by the COE. A $176,000 study is underway to justify them. The Corps is attempting to placate conservationists by promising to buy woodland around the reservoirs.

LA MOINE. The La Moine River has been studied by the COE for years and proposed reservoirs have been declaired economically unsound. A 1970 DOW report recommends no dams in the river. However, the Corps has a $354,000 study of the river underway. The La Moine Valley Association reputedly wants a dam, and the Corps seems determined to study every possibility.

The above information ignores the innumerable small reservoirs, channelizations, straightenings, and other alterations planned for small streams. It also passes over some major reservoir sites which are scheduled for study. Illinois' water resources are about to undergo rapid development. Serious questions about the need for these costly developments, their environmental effects, and their long-term desirability had best be asked soon--otherwise there will be no major rivers left in anything approaching a natural state for future generations to enjoy--or even "develop."

lr
10/5/71

now living there has any recollection of what
these beautiful valleys of the Housatonic were.

10-17-71

Notes for staff meeting 2/2/71

I draw your attention to The DAM ILLINOIS PLAN (10-15-71) . . .

However and I feel sure that vested interests will gain quick profits from many of these plans, and that many of them (at least) will receive from this segment of society enough support to initiate them & carry them through, I must still believe that many, even of these people, believe the plan they are supporting will also 'benefit society' — at least they believe this passively if not actively. It is very easy to be ignorant — most of us remain so during our whole lives — what I don't know, and wish I did know would fill several libraries. I not only recognize this appalling ignorance now, but I remember back to such 'beautiful sights' as Arkohan Dam (about 1915) and the impoundment of the Schoharie Creek, both in eastern New York, both brought about to send water to New York

can only remember the thrill of making the trip to see it in a Model T — three adults + four children, 11 - 15. Some ten years later I saw the enormous destruction of the Lehahani watershed as the dam was building. It never dawned on me or my very nature-minded father that there might be anything wrong going on — maybe there wasn't, but I doubt it for it is still a very recent past. In 1929 a friend + I were I think the first to circumnavigate Candlewood Lake in southwestern Connecticut. We were discovering the submergence of several small, beautifully forested narrow valleys through which he had tramped for many years. I couldn't remember them and genuinely enjoyed the peace + quiet of almost silent canoeing in wilderness isolation. This was a genuine development Lake, and has given a total lack of noise, pollution, and crowded thousands living on its 80 mile shoreline. The nearest shacks sell for $30 to $40,000. And nearly

10-24-71

Barry Commoner is quoted as saying: Technology is the beautiful body of our knowledge of physics and chemistry [this is not his contention that technology is not the cause of the present crisis but only the instrument, wrongly used – if only we use technology for the proper ends it will free us from this crisis]

So typically crafty. Barry would very doubtfully fail to deny that biology is basically a subclass of our knowledge of physics and chemistry – in fact I should not deny it myself – but in the alleged quotation he is trying to reassure the physicists + chemists, whose "first" business is now biological that it is they, and not the biologists, who have the essential tools, and that they* need not fear the biologists. If he is challenged on this, he can at once take the position that of course he meant physics + chemistry to include biology, and hence technology to include biological art and that he is still a 'good boy' in the biological field. Crafty, crafty!

* He wants them to understand technology as not including 'biological art'.

11-7-71

'Ecology' is not finding ways + means for feeding + clothing as many people as possible who have been 'doped' to 'believe' they are hobby human beings.

A wilderness has essentially no people in it

A good earth has as few as possible and yet make itself fully available — <u>too few</u> cannot provide ways + means to enjoy some of the nearly unique things, like Yosemite, Grand Canyon, Nepal, etc. But, too many make it impossible for these things to be enjoyed at all except as commodities which everyone wants to see, and for a mere glimpse of which most would settle.

11-7-71

Many of society's ills result from failure to realize that each individual has his space requirement and that it is the duty of every other individual to respect it. Any act of A which B finds disturbing is literally immoral, if B's space requirement is invaded by his act. Let us suppose that B requires no sounds not necessary for his contentment — shall we say he has a piano which he likes to play. Depending upon the technology of his living quarters he must see

11-29-71

Is there any hope?

Because we are biological, and to date no evidence exists that anything is immortal, there seems no reason for holding hope that man, who is certainly on the down grade, will reverse the trend and be saved. But this is no reason for ceasing to seek hope. And the place to look for it is in our uniqueness - namely in our cultural evolution. We are the first species which can seek hope and if we fail to make the reversal we shall be the last.

It's as simple as that - can man use his culture to reverse the biological trend? No one knows, but we must try.

1/13/72

An unfavorable trade balance obtains for country A as regards country B, when the 'value' of the products which B has sent to A exceeds the 'value' of those which A has sent to B.

Let us call A's monetary unit a and B's b. and let the 'rate of exchange' be $a = z\,b$. Then if, in year, B has sent A, m a 'value', while A has sent B, l a 'value', where $l < m$, A's trade balance as regards B is unfavorable.

Let us suppose that a ≡ apple and b ≡ banana. Then A and B are exchanging goods, including apples and bananas, in terms of apples and bananas, regularly with the understanding that at any time one apple will be accepted for z bananas, and vice versa.

We now find A having received from B during year y more apples (or their equivalent) than B has received from A. A's trade balance is unfavorable.

Now it happens that A's people are very fond of bananas, and that bananas will not grow in A, but grow luxuriantly in B. In fact, in letting its trade balance become unfavorable A has always asked for as many bananas as possible in payment for whatever it sends B, and in year y has already been living off the top of the heap of bananas, while actually owing B (n-1) apples (or their equivalent) by the end of the year.

B's people are making no complaint because banana-growing is a curse in B and by sending bananas to A they can buy apples and automobiles and refrigerators, etc - no end. Well, no end' except for one curious fact. As things are arranged in A's country, automobiles, refrigerators, etc. etc. are all produced by factories which somehow or other belong to only ten families in A, for whom all the rest of the population work (to make

automobiles, refrigerators, etc.) with the special provision that when any group of, say, 100 of these 'peons' produces, say, 100 automobiles, the owners pay them only 90 automobiles, returning the rest for 'export'. Upon exporting these to B they receive bananas to add to the pile, but not only just enough bananas to equal the value of the 10 automobiles, but lots more, for banana-growing is a cinch in B, and sending bananas to A builds up a favorable trade balance for B. Unfortunately, however, the bananas all belong to the 10 families, and they can't get rid of them to their peons — they've already paid their peons 90 automobiles for having made 100 automobiles — nor can their peons get hold of the bananas — they've got 90 automobiles.

B is a small country, except for bananas, and can't use any more automobiles than it already accepted. The ten families get

families and shut down the automobile factory. Now the poors have neither automobiles nor bananas, and the ten families have a larger and larger pile of rotting bananas.

The whole matter could be solved at once by nationalizing the non-personal property of the ten families, either which the poors (now the people) would be paid for nothing (or automobiles, either the full 100 automobiles or their equivalent in bananas.

Private ownership of non-personal property is the root of all the evil, and it grows in the soil of personal scarcity.

3/5/72

A world full of Heros - the
entertainers & their audiences

3/8/72

Cinquivalli + the computer

There are parallels between M Fi poem + my contention about computers answers, and the answers of man.

The computer, no matter how intricate, cannot judge its answer and call it wrong, as a man often must, pronouncing his verdict not on the basis of any more information, but because he has free will to judge.

At least if he hasn't free will he has so many billion equations that he can always feel a very realistic simulacrum of free will. The computer has no free will in this sense.

3/20/70

tendency?

From now on the/development will have two main
fronts: 1) the unleashed creation of Big Science and
its applications, the latter largely for the personal profit
of an ever decreasing segment of the population,
at the same, however, increasing the affluence
of at least 50% of the population, most of
which will be spent in less + less significant
substitutions ('significant' in the 19th century sense)
and 2) the progressive spread of misery from
the bottom upward. The first 'front' must be
to curb this progression by all humane means,
beyond population decrease obviously by personal
concern + effort, leaving them and the government
to make the effort which may suffice. The second
front has two sectors: a) the progressive re-
striction of personal profit, and b) the in-
tensification of all effort to employ science
for humane and (at least as important) all NATURAL
preservation.

The plight of the factory worker employed as today
or, perhaps worse, as unemployed tomorrow as the
result of automation is [illegible]

3/20/72

Letter reads from some 'Apache'(?) that his people understood the ecology of their land vis-a-vis the tribe and did not destroy it. I remark that perhaps all our ancestors at a substantially remote date did the same, but as record is left, for by the time record-keeping came along our ancestors were increasingly too unfitted to behave with ecological wisdom.

During the 25,000 years man has been in America I maintain he cannot have overpopulated it. Migration southward from Bering St was an enormously rugged experience that culled out most progeny, and at best in northern U.S. many four-to-ten-year-olds must have died in the search. I wonder Is there any archeological evidence of birth control (abortifacts, infanticide) Probably any tribe if infanticide were practiced for small eg? the child would make it leave little evidence.

In Eugene take to Dr Dimond about this

3/22/72

'Humane' environment

Whatever the dictionary may say about 'humane': characterized by behavior befitting a man, i.e. 'kind, benevolent', we already live in a 'humane' society for our behaviour before men - or so at least we'd claim. The real question is 'can we have an environment in which men naturally are kind & benevolent to other men?'

3/29/72

Whatever the 10 most tasteful
books of the world.

3/30/72

What's Hydroperoxide for?

To kill bacteria — not for food, but to make it possible for the less fit to live.

3/31/72

Mr + Mrs. Clark + colleagues

4/20/72

Socialism per O & D

Work – do animals work?

5-6-72

"Big conservation" is not of the type of the dedication of a large piece of wilderness to be a sanctuary

Rather it consists of the dedication of masses of people to the daily individual, family, practice of conservation in their private lives

6-26-72

Thesis. The potentiality and the exercise of speech is the fatal mistake of evolution in man.

Why should this be so. Because only with speech (or a functional equivalent) can disagreement be instrumented.

Most trouble seems only to speak very inadequately and the real meaning of what they say or interpret in another's speech is seldom clear to them, and speech thus fails to be functionally a natural selection characteristic

A proposition and its (or) opposite are rarely phrased and ignorance (a lack of intelligence a tolerance) makes a making of minds between these opposites an irresolvable confrontation instead of the theatre for agreement.

Cf. Fortes as quoted in Mayer Man vs. The State (Center Occ Papers 3(1) p 9)

7-19-72

Skinner

So far I have not found S statement about free will. If he admits it must he not take away part of his theory? If he insists that there is no such thing what is the point of talking about his theory since we are all automatons anyhow — in fact, we cannot, theoretically, ever know whether his theory is right or wrong, except to admit it is inevitable — in fact the ideas of right + wrong must go out the window

7-19-72

re Calderone, Mary in Ebony Magazine July/Aug 72
vol 5(6)

If C believes her theory that both heterosexuality and homosexuality must be programmed what has she to say about the bisexuals?

Also what has she to say about masturbation as programed or not. If heterosexual behavior is programed, it is practiced as a response to an outside influence (more annoyingly 'to outside influences) If m is programmed what prompts it (presumably initially in the infant by the discovery of organ pleasure) - but what in the adult etc, etc.

Presumably some individuals ~~are~~ may be programmed for auto-, hetero- and homosexuality

9-10-72

From The Velikovsky Affair, ed by Alfred de Grazia in his own words: The scientific reception system p 175

Those who speak in the name of this model [The rationalistic reception system] tend to deny a sociology of science. The concept of sociology implies that men are conditioned in their behavior by social factors lying outside of the intellect. The study of the psychology of science is similarly relegated, creating a constant tendency to believe in absolute validities.

Furthermore, since those under the rationalistic spell claim that after all "there is an objective method of testing validity and any reasonable person can see the truth when it is presented to him", they tend to dismiss political problems as irrelevant, and to dismiss power as a factor in the building of the corpus of science.

11-16-72

In his 'Reflections on rarity' (New Colophon 1:134-150, April 1948) John Carter refers to the first edition of Darwin's initial work on evolution as 'Origin of Species'. For him this seems to me to be an outstanding error, purist & the personification of the purist crime that he is now (and was then). In making this today I said 'I must write Jack and remark on this egregious error', suddenly realizing that for the first time in my life I was using the word 'egregious' spontaneously and correctly. For years this word has tormented me in reading - in fact I have looked up its meaning so many times in Webster's Collegiate ed 5 that when I come to the right page in that volume my eye automatically lights on the exact location of the definition. (I wonder what is going on here?)

This is one of the few examples I can recall in my whole life of consciously but spontaneously adding ~~a thing~~ a word to my spoken vocabulary.

1/12/73

What is the correlation, if any, between the use of X ray for diagnosis, Bilharzia examination of the human body and the incidence of cancer.

What is the incidence of cancer in Borneo?

Ency Brit 13 in Vol 1 p. 573 says cancer found more or less universally in all races + in many animals, but in man predominantly in the more civilized groups, and in other animals predominately in those domesticated.

3-20-73

Punctuation dramatizes your writing; if it is badly done, the drama is a farce that fails to amuse.

Bertrand Russell and Kenneth Clark are masters of the art of punctuation. Most modern writers, in their more professional efforts, show no mastery whatsoever, on the contrary, merely confusion.

6-10-73

It is futile to argue the merits of any economic system intended to serve as the most effective system for the society unless the system is to be completely subservient to the society — this for the simple reason that otherwise any license will result in 'useless work', profitable to the industrialist or distributor, done by useless workers who had better be employed for the good of society in some other labor.

(as a trivial example) Whitmer's the marvelous works & time & labor by present day designers & the fashion czars of boredom. Not only is much of their work ugly, but all of it is unnecessary in comparison with such undertakings as cleaning up the detritus in mining, in clear-cutting, or just in the ugly streets. But unless the society dominates there is no way to shift these 'useless' workers into 'useful' jobs.

10-26/75

Getting next to reality

A minor segment of 'the young' is certainly not in contact with reality. The words its members use have no referents in the real world, and their circumstance makes communication between them and the remainder of the group as well as nearly all their elders impossible.

Recently one of them asked me to give him (from) some example of an object in the real world which is not cyclic (this in reply to a third party's insistence that not everything in the real world is cyclic) I said 'Well, a straight line segment, is not cyclic — but this doesn't stop you from continually using 'linear' in a hugely vast sense.

Actually I had been caught off guard, for I was thinking of something such as the range of real numbers $0 \leq x \leq 1$. This range has a beginning [0] and an end [1]. But my example doesn't belong to the real world,

rather to the man-made universe of mathematics. The almost equal range $0 < x < 1$ has no beginning and no end.

But every set of real world functions between two particular functions on a real scale, may does have a beginning and an end, which may be indicated in its description or merely implied.

Until a member of the group is willing to be sufficiently exact in the use of words to understand the matter alone* (or some equivalent matter) he is not 'with it' so far as the real world is concerned, and his discourse is more or less non-communicative regarding the real world..

* whether he agree with it as a valid representation or not

12/13/74

Paul Rotter

The genius of P R was to produce representational drawings of plants so accurate as to astound the beholder by their verisimilitude. He was, however, not otherwise a creative artist. Whatever aesthetic quality the original may have had, that he reproduced as accurately as I have ever seen, but he added nothing — and rightly so since his commitment was to represent, not to embroider.

Feb 1/75

'Absolute' criteria result from the comparisons of the members of a class.*

Last night I heard what seemed at the time and still this morning an 'absolutely' exquisite performance of Mozart's damnit quintet. The/very themes themselves stand apart from the average themes of even good composers, to say nothing of the lesser ones, not to mention the 'Beatles'

This morning I listened to Liszt Piano concertos 1+2. If I never hear them again shall have gained time, their themes are so utterly dull in themselves and the use of them so desperate in invigoration.

(Cf the recurrent philosophical idea of the necessity of the 'opposite', of the 'non-self' etc., etc + in particular in Hirschfeld, An essay on mankind, p. 5-8)

* The 'absolute' as the criterion resulting from comparison among the members of a class.

2/19/75

I can't have any certainty of what a piece of music means to you, or you any of what it means to me. This I feel is a deprivation. I think I can have some certainty of what you hear – you convince me that you hear the same rhythm by imitating what I hear, and the same pitches by the same method, and I believe many other details But this is not what the music means to you, because it means to you can be measured only by you, a unique human being with a past different from mine.

Can I know what Pythagoras theorem means to you. Is there any way I can be sure even that you attach a meaning to it?

Etc, etc. How do we know that we are

12/1 4/71

No! You can't make a silk purse
out of a sow's ear.

Equality 9/14/75

The real question is: How equal can two phenotypes, not genetically equal, be? Mother-care during the (most) critical period (prenatal and postnatal), it seems, affects the cerebellum, autism resulting in many cases when the care is inadequate. But were it never so inadequate, even for one moment, is there any reason to believe that in other areas ~~than motor behavior~~ ('intelligence', talent for music, art, math, etc, athletic enthusiasm, linguistic aptitude, etc, etc) anything like equality is going to result following ideal mother-care — or more widely any kind of care (do so-called 'bright' children attract sympathetic care in their interests, or is there some vice versa effect here? Until we know a great deal more about these and other matters we know much about equality (or inequality)

1/26/77

The oft-heard statement that this invention, or this product, or this construction is necessary to keep our labor force employed is practically never valid, i.e., valid in the sense that, other more desirable services, or products, or construction would not only keep 'em people at work, but would keep all of our people at work providing all of us with greater satisfactions, & convenience.

The key to unlock the secret hidden here is the answer to the question 'Who ultimately pays for what?' The answer is 'you, who often buy what you don't either need or want in the absence of what you could use to your greater satisfaction'. This morning my electric washing machine has broken down, and it will be five

days before a repairman can come to my house. Why not today? Well, obviously because there are too few repairmen, although unemployment is at a near record high. Accordingly those available are receiving a premium wage. I shall have a loss of the use of my machine for at least five days and a loss in that the bill will extract more money from my pocket than would otherwise be necessary.

The obvious remark at this point is 'Tine, but the repairman will have a gain'. I hasten to add that he also has a loss which he can't control, because the same situation faces him with his furnace, a bus and automobile, etc. Meanwhile both I

we take a loss either 1) in being deprived of desirable products we could acquire with the premium charged us by the repairman or the mechanic or any of the others to whom we have paid spare charges; or 2) by clumsily doing the job ourselves ~~with much inconvenience~~. And in the same meanwhile both of us take a loss in paying for things we don't need, and must almost actively don't want. Here are to be mentioned the armies of people producing fill-ins on the radio & TV — there must not be a single silent second, or there painting the same signs all over our country advertising the same products ~~again~~ over and ~~over~~ again and again and ~~again~~, the other armies of which you can think for yourself if you ever get around to thinking.

Now, I course, is the time for somebody to speak up and say, 'Yes, but what about Howard Hughes and — Aristotle Onassis and the lesser barons; they are not taking a loss' — I'm not sure, but I choose not to debate the matter vigorously. Rather I make the simple statement that they don't contribute more somewhat greater than, reasonably, clean management in guiding enterprises, which you and I supported in our somewhat less reasonably clean acts of buying their products at the premium prices they set without our consent, but which method to buy in a world where scoundrels are permitted by law to take ~~our~~ their money ~~in~~ increasingly.

3/2/77

I would do this for a great many of my friends.

This sentence, as spoken, ~~can be~~, can be made to convey at least 9 mutually exclusive messages, any one of which a well educated man might very well select to express with exactly these words in writing. Only by context can there be any discrimination between these 9 possibilities if the sentence is merely written. As spoken no context is required for any spoken message if the speaker uses proper inflexion.

How can anyone expect to solve the problem of exact translation between different languages? See Wiener

The future is observed by the daily kaleidoscope of the ever changing world scene. But to a few of us at least whatever it may be it will be a mixture of 1984 and Huxley's Brave New World — or much worse, for the perils of the atom and DNA come too readily to dominate in their bad dreams. If we few turn out to be right, life literally won't be worth living later than a thousand years hence. But (Right now, it is worth living, but how few of us are making the best of the present — the most choice gift that our universe is likely to bestow on its earth dwellers.

We are not going to find out, presently

~~not~~ doubtfully even, why we are here, but we can know that we are here, and in these few precious years left to humanity before the debacle. The burden of this piece of philosophy is to comment how few are using ---

If life has an essence transcending all other essences it is the self-knowledge that we are alive, the end product of an almost infinite development from the first self-duplicating entity right down to today — the story of this development beyond the imagination of every living creature, is the factor in the present.

Yet, more of us know more of this development than all those who have gone before us. But most of us are frittering away our precious few hours on the bauble which this century has placed before us. Look into any daily newspaper or news magazine. What precious thing which the universe has given us do you find offered on the overwhelming advertising pages. How often will you be offered Shakespeare, Galileo, Newton, Mozart, Beethoven, Rembrandt, Einstein, Sorrowless ... (women) — the immortals through whom the universe has spoken to us?

The hopes are centered with the warm and stimulating photon
of bread and thankly tendered 'teas'
of Yorke, of minor adventure, ...
and these only when the spreading
advertisements of fancy trash or
of bark uncured merchandise give
way.

Blessed me, the inheritors of the
part — a part becoming more and
more revealed to be sure, but also
also more & more shamed inside by
endeavors simply not worth the time
devoted to them. And to be pitied
those of the future ??

9/5/77

This essay is not a treatise on paper, but it is an undocumented* expose of some facts about paper to stimulate you ~~to begin to think~~ thinking about it. Silly as many seem some of the statements ahead, they must presented as laughing matter - I'm in dead earnest in everything I shall say.

For my practical purposes paper is made from trees. Sit for a minute and speculate on how many trees have been cut down to furnish you all the paper you've used in your life, and then multiply the result by some approximate figure such as 220 million, or one billion, or a few trillions —

* If it were documented you'd have dry statistics to glance over and then consider yourself well informed — but I'm not trying to inform you about paper but rather you are very free to think your own thoughts and reach your own conclusions.

let yourself loose on the choices you have right there.

This thing is getting out of hand, so I'm going to cut it down right here to thinkable dimensions. Let's concentrate on some simple uses of paper, and to be very specific I propose paper towels and toilet paper (including toilet tissue, not to be obfuscated) used daily in the United States and compare this mountain of ground up wood with a whole range of mountains of the same stuff on which are daily printed in our USA the advertisements — let's keep it small and simple — to be found in just newspapers alone.

(Advertising & pollution (kill stuff here) worker's feel after stop writing it.

Stuff wonder whether is fault to be undisciplin[illegible] [illegible] have than [illegible]