SMÖRGÅSBORD

Nr. 1

In the day of the manforged moon, uranium-burning engine, synthetic virus, synthetic peace dove, synthetic leadership, conquest of Canaan, theory of games, particle-wave probability function, and law of the conservation of strangeness, greeting.

A man must eat and a man must talk. During the past ten years or so, I have been lucky enough to do both as a free lance (i.e., mercenary) writer. All academic jeremiads to the contrary, I find it possible to say pretty much what I want to say, some of it fairly unpopular, and still get paid. But of course much has to be smuggled in piecemeal, which is due no conspiracy or Philistinism, but a simple and rational public desire not to be snagged in the middle of a story on an angular chunk of discourse. And there has been a gradual accumulation of things that simply could not be sold --- or, if publishable, would pay so little that a long enough search for a specialized enough outlet seems pointless.

What follows represents an attempt to clear out some of this clutter. I do not pretend that you, or you, or that person over there whom I never met but still have the cheek to send a copy, will find anything worth the time in any such drift of stories, essays, japes, speculations, reviews, poems unfashionably metrical and grammatical, translations, superstitions, fragments, and crotchets. If one or two items should prove amusing to someone, I shall be gratified and rather astonished.

Naturally, comments are hoped for. If the response is measurable, I shall consider a repeat performance: at which time all will be invited to submit their own unloved ones for possible unpaid publication.

No, this is not the start of a little magazine, literary revolution, or anything so tedious. It's just an inexpensive way to have some fun.

Poul Anderson
1906 Grove Street
Berkeley 4
California

SESTINA OF THE CAT IN THE DOORWAY

At my command, he's opened up the door;
its jaws distend across a gape of night
and winds give words, not in the tongue of man
nor dealing with a hearthfire or with cream,
out of those wooden lips to call a cat
toward ancient roads --- or so, at least, I think.

Moon-ghostly wind-words give a cat to think
while standing in their mumble at the door:
the wind's akin to all the tribe of cat,
who still remember how another night
was filled with saber teeth and blood --- no cream
to trap the tiger in the cave of man!

The bird called Fear within the ribs of man
must flutter crippled wings when humans think
that all the world's not cushions, light, and cream,
but turns at last to darkness, when the door
alone stands guard against the flowing night
and prowling wind and hunger of the cat.

It's plain to see in twilight how the cat
exists to be appeased by blinded man,
for most of this tall cosmos is a night,
and men must squeak like fieldmice when they think
of hungry stars that hunt beyond their door;
therefore they bribe the child of night with cream.

And yet, bleak dignity is not the cream
which bought the thunder querning in the cat,
and truth to tell, there's pleasure in a door,
the wooden carapace of clawless man,
and fire is fragrant when you pause to think
of gaunt, black, windy, and owl-haunted night.

Indeed, the wish to be of tiger night
and lap the blood of birds in place of cream:
to flow, another shadow, and to think
on glacier years when mammoth and when cat
cried whetted fear into the guts of man ---
is tattered by the wind within the door.

Unrestful night wakes rovings in a cat,
but hearth and cream and cushions speak for man.
I'll have to think. Don't shut that goddam door!

THE IMPERIALIST MANIFESTO

If man were a rational animal, the only problems would be practical. Having devised means to assure himself of food, shelter, health, sex, and the rearing of the young, he could relax and wait for extinction. This is, indeed, the way of nearly every organic species. The problems are not difficult at all; they have been solved again and again, on every evolutionary level from the amoeba up to the Cro-Magnard and down again to the advertising executive. Fortunately, man is irrational and spends most of his time gnawing insolubilities. Hence the rise and fall of sciences, philosophies, arts, religions, empires, morals, movements, and skirts.

Though today we think of politico-economic organization, its exact form and character, as a perennial question, it is actually a historical newcomer. Some three centuries ago, armies marched, cities burned, and men were put on the rack to settle certain delicate theological points. They would have been quite surprised to hear that these issues would eventually dissolve in a mush of nonsectarianism, and that so self-evident a thing as the type and purpose of government would become a matter of armed debate. Guided missiles with nuclear warheads would have horrified them --- not per se, but in application, that man should risk the world to decide the nature of political economy rather than the nature of God.

Let us, then, look beyond the present clash, toward a future when a measure of rationality will again be conceivable. Let us analyze this phenomenon called government with our forebrains rather than our thalami, draw conclusions, and sketch out a somewhat sane program for the ultimate reorganization.

The first and most obvious fact to strike the dispassionate observer is that all existing secular ideologies appeal to the masses. Now the ghastliness of People's Democracy is best described by its own official propaganda; the greasiness of People's Capitalism is visible on every American street and television screen. Nor do the Lumpenproletariat themselves want this buttering. It disquiets them. In every political convention, every election-time argument, every academic quarterly, the mass mind pleads for a Leader. Since the Leader tends to be a man chosen for his presumptive kinship to the masses --- or else the most successful gangster, as in Spain and the USSR --- the plea remains futile.

Even the rare politician of aristocratic temperament is

trapped by the rhetoric of his adherents and the nature of his opponents. He would like to conduct a civilized debate, but a human can only encounter a baboon on the baboon's terms.

The loss of personality and color in government, as in private life, is another inevitable result of actual or pretended catering to the Common Man, whoever he is, and a far more serious loss than generally supposed. Anybody who has watched a Highland regiment on parade, pipes and drums and standards inscribed with the names of fields where men were brave, will know what I mean. You may love or hate the boss, but the company is an abstraction. How loyal can a man be to a society which manifests itself to him only as endless papers to be filled out in triplicate, and to which he is only a number in a filing cabinet? For our stifled liberty, confiscated money, and occasionally squandered blood, we are at least entitled to a show.

The Founding Fathers were well aware of these issues. It is a truism that they sought to establish an aristocracy, in the old meaning of the word: a government of the best, not merely of those who happened to be born into certain families. Alas, all thinking! It took no great time for this aristocracy to become a government of those who happened to have enough money; later, of those who happened to have the best radio voices; currently, of those who happen to be backed by the organization which hires the best public-relations firm; tomorrow, no doubt, of those with the most efficient goon squads. Meanwhile, monarchic Great Britain has maintained a level of statesmanship low enough, but still the highest in the world.

If we could re-establish the USA of 1789, we could re-establish the Republic. But in these sadder days we must look for a realistic solution. We must consider what the norm of human government actually is.

A glance at recorded history shows us that sooner or later all nations revert to bureaucracy or feudalism. The former condition can sometimes be remarkably long-lived, e.g., the Byzantine Empire, but in the end it also breaks down into the latter, which must therefore be regarded as the ground state of civilized man. By "feudalism" I mean the dividing up of the nation between various families, each holding the balance of power in a certain area and embodying most executive, judicial, and military functions within this domain. (Legislative functions are comparatively unimportant, since law tends to become merely the expression of an all-dominant tradition.) Below these families are the commons, more or less hereditarily ranked, the status of each man completely defined; above them may be a king or an emperor, though he is more a symbol than a source of authority.

It will be argued that feudalism is a thing of the past, as impossible to revive as a hunting economy, for the reason that modern weapons would soon destroy any local upstarts. However, these weapons can destroy a capital even more readily. The increasing importance and scientific development of guerrilla warfare techniques foreshadow the feudalistic evasion of the whole problem posed by nuclear missiles. (I say "evasion" since human problems on the nonpractical level are always evaded or ignored, never solved.) Actually, one would expect a balance to be struck. The king is not inevitably and forever at loggerheads with his barons, vide the Tokugawa Shogunate. Nowadays, rapid transportation means the conquest by some neighbor of any country which indulges too long in civil war.

Thus I do not foresee a total breakdown of central government, but rather a parceling out of its prerogatives. In fact, the feudalism of the future could just as well be called oligarchy, except that the oligarchs will have their roots in geography and tradition rather than being any chance group of adventurers.

The economic inefficiency of such localism can also be advanced against it. But the surplus energies liberated by our present industrial consolidation do not seem to have produced anything more noteworthy than tailfins on the tailfins of the Cadillacs. We already have more production than we know what to do with; a cutback would cause no suffering and would conserve natural resources. Finally, reasons will be advanced later for believing that the total efficiency of Imperialist society will be greater than anything now in existence.

I label this modest proposal Imperialism because I envision an Emperor as the focus, and because the word sounds refreshing to a person tired of apologizing for his European blood. I advance the proposal for initial consideration and action in the United States of America because we, having carried mass culture to its most obscene extent, should in simple justice lead the march backward.

Briefly, the American Imperialist Party urges the establishment of a hereditary Imperium; the hierarchic division of the country between aristocratic families which will each be responsible for their respective portions, with rights of the high, the low, and the middle justice; the formal creation of lower ranks down to chattel slave; the abolition of capitalism and the substitution of regional guild mercantilism; and numerous other necessary reforms.

Let it be made clear at the outset that the Party does not advocate any violent or unlawful methods of effecting these changes. Once the simple logic of our argument has convinced enough people, once we have elected enough of our

candidates to key offices, the normal procedures of Constitutional amendment will suffice. We anticipate no difficulty in winning the preliminary elections, for we shall emphasize that rank will be apportioned, after the Amendments, strictly on the basis of character, intelligence, and all-around merit. Thus we expect to poll an overwhelming majority.

Let us examine some of the steps which will then be taken, and the benefits to be derived.

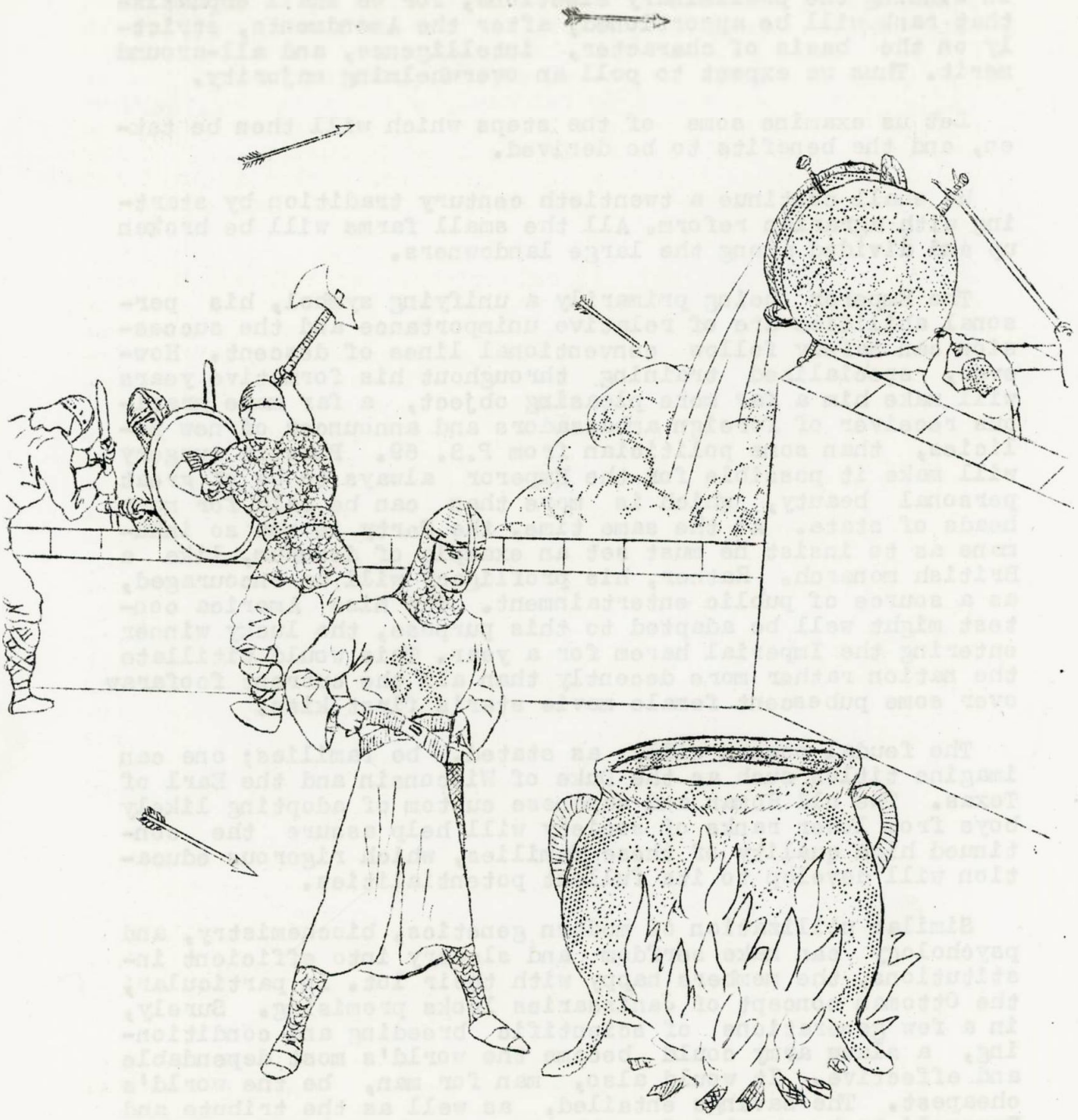
We shall continue a twentieth century tradition by starting with agrarian reform. All the small farms will be broken up and divided among the large landowners.

The Emperor being primarily a unifying symbol, his personal abilities are of relative unimportance and the succession can safely follow conventional lines of descent. However, specialized training throughout his formative years will make him a far more pleasing object, a far more gracious receiver of foreign ambassadors and announcer of new policies, than some politician from P.S. 69. Plastic surgery will make it possible for the Emperor always to be of great personal beauty, which is more than can be said for most heads of state. At the same time, the Party is not so inhumane as to insist he must set an example of decorum, like a British monarch. Rather, his profligacy will be encouraged, as a source of public entertainment. The Miss America contest might well be adapted to this purpose, the lucky winner entering the Imperial harem for a year. This would titillate the nation rather more decently than all the current foofaraw over some pubescent female movie star's first kiss.

The feudal powers will, as stated, be families; one can imagine titles such as the Duke of Wisconsin and the Earl of Texas. The old Roman and Japanese custom of adopting likely boys from lower ranks of society will help assure the continued high quality of these families, which rigorous education will develop to its fullest potentialities.

Similar utilization of modern genetics, biochemistry, and psychology can make serfdom and slavery into efficient institutions, the members happy with their lot. In particular, the Ottoman concept of Janissaries looks promising. Surely, in a few generations of scientific breeding and conditioning, a slave army could become the world's most dependable and effective. It would also, man for man, be the world's cheapest. The savings entailed, as well as the tribute and Danegeld to be exacted from the rest of the world (they can label it foreign aid), could be spent on parades, complete with Cossacks roaring down the streets on motorcycles, bagpipes, beautiful girls, elephants, etc. --- plus many other kinds of diplay, to delight the yeomanry and townsfolk.

These people, the common freemen, will be personally



"I knew it! A watched pot never boils!"

known to their immediate liege lords, often to the Duke himself; government will again have a face, and justice can again be tempered with mercy. Aristocrats have no reason to crawl before pressure groups, so the official morality in which no one but a few blue-lipped male and female spinsters has ever believed, can be scrapped. Taverns may stay open all night; cheap and cheerful bawdyhouses will prevent many a young man from rushing into an ill-considered marriage or rape; gambling can again be done joyously, with cards and dice, rather than bleakly with stock market quotations; in general, a man's divine right to go to the devil will once more respected.

Since an aristocracy is only viable as long as it puts duty before pleasure (and psychological conditioning will be used to inculcate the upper classes with a sense of noblesse oblige), the noblemen and guilds will endow many public improvements. Obviously the wasteful, nerve-ruining, carcinogenic era of the private automobile must end; only aristocrats can be allowed to own motor vehicles. But the commons will have their bicycles and horses, and their superiors will give them streetcars and interurban trains just as medieval lords gave cathedrals. We need not visualize this transportation in the drab terms of today's coach, filled with 40 commuters and 8 executives. Rather it will embody that dash and picturesqueness which Imperialism seeks to restore. Each piece of rolling stock will be largely handmade, gorgeously colored, with intricate figurehead --- or, perhaps, turrets and promenade deck. Within will be found such civilized amenities as beer vending machines. Towns and guilds will vie with each other for the best and most artistic lines, the finest public works of all sorts. For the general decentralization will bring back geographic identity (an aspect of individuality which today's man, mobile and featureless as a ball bearing, has lost) and civic pride.

People will travel less. One reason will be that the great scenic areas must become ducal enclosures, as the only shield against highways, hot dog stands, and gibbering tourists. Those of lower rank who prove themselves worthy will be allowed to hike into these mountains and forests, for the enlargement of their souls; the others will find enough green countryside just beyond the city walls.

And when they do travel, on business or pleasure, by leisured conveyances which make the journey itself an experience rather than a chore, they will find a rich diversity, the direct product of the aforementioned politico-economic decentralization, that will more than compensate for any slight restrictions on their movements. Each barony within the duchy will be itself, with its own peculiar buildings, customs, industries, bearing the individual stamp of its own baronial generations and their people. Each new duchy entered will be as exotic as France or Mexico, especially when

it has tended to form itself along ethnic lines. (Indeed, I use titles like "baron" and "duke" only as shorthand. The actuality should be more autochthonous, so that we may have, for example, an Adelantado of California, a Jarl of Minnesota, or a Sanhedrin of New York.)

A certain limited amount of federal activity is to be encouraged, both as a unifying element and as a practical means of accomplishing things too great for any single duchy. I have already mentioned the army of Janissaries as one example. These, by the way, should be conditioned into fanatical loyalty not to the person of the Emperor, who might then be tempted to use them against the nobles and their household troops (which latter will be constabulary in peacetime, auxiliaries in war), but to the Constitution --- as amended, of course. Since the wars they fight will be for simple reasons of defense or national greed, war can once more be regulated by eighteenth century principles of reason and decency.

Public enterprises of a less martial nature will include the improvement of areas at present desolate but without the redeeming subtle beauty of true desert. We might, for instance, plant forest all over Kansas, or use atomic energy and underground refrigerant pipes to make summer tolerable in the District of Columbia. Some horrible place to send the most obstreperous criminals will be needed, so South Dakota should be left as it is.

While the head of the family, or possibly a council of seniors, governs each fief, younger sons will find their own fields of interest. British history is replete with such men, who served their country well. To be sure, there will always be black sheep. The worst of these may become remittance men, thus helping international trade; but simple wastrels can be allowed to enliven the home scene with pranks and orgies. I repeat, gaiety and romance are not childishness but important human needs, which our present Kultur des Kulturlosen fails wretchedly to supply.

Folk customs will evolve of their own accord, once the suicidally inappropriate application of mass production methods to entertainment has been ended. Common sense will return to abolish such twentieth century absurdities as the belief that congenital psychopaths have the right to go free on parole, that women are identical with men, that adolescents are human, or that a shacking up needs to be preceded by a marriage ceremony and followed by a divorce. Machines will fulfill the proper function of machines, to do those jobs too hard, dangerous, dirty, or monotonous for a human --- not to make and think and lull into stupefaction. Each individual will be educated to the extent appropriate: no longer will Shakespeare be crammed down the throats of morons, for regurgitation at exam time, nor gifted children

made to slump through hours of Life Adjustment. Science will again be identified with the meson, the star, and the living cell, rather than with formaldehyde passed off as deodorization by chlorophyl, or higher-IQ filtertips. Churches will perforce become something else than a social club and inferior gambling hell. Charity will be the help given by one human being to another, not a quasi-cumpulsory handout to the anonymous doorbell ringer of an organization whose president is paid more than you are. Social change will not be forbidden, but it will be made carefully, after much soul-searching, and for a purpose rather than its own sake.

And if this be the end of progress, "I wonder," said the Spaniard in Chesterton's fable, "whether it matters much which end?"

Addendum: I wish to thank my brother John Anderson, with whom I first developed the principles of Imperialism, and those noble souls who have subsequently gone surfboarding on this particular wave of the future: all six of them.

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From the Danish

THE WILD FLOWERS

Wild flowers in the Danish ditches ---
Ah, is there in the wide earth's riches
such summerlike and cool delight,
so sweet a might?

Ere harvest, when the rye field grows,
green of sheaf, and blooming goes,
and chervil spreads its shield so white ---
thou God of light!

Now ice grows in the sound and sea.
Where is the moment summery
when flower and road and God and thou
were in my now?

Johannes V. Jensen

From the Old Norse

FOUR POEMS BY SIGHVAT THORDHARSON

(Skald to Olaf the Stout, King of Norway, who fell at Stiklestad A.D. 1030)

1

Gaily and right gleeful,
girls will spy the dustcloud
raised as we come riding
to Rögnvald's town of Skara.
Hoy! Let's spur the horses
hotly, so the maidens
a long way off can listen
to loudness of the hoofbeats!

2

Full of joy was the faring
on fjords beyond the beaches,
when kingly ships did crafty
catch with sails the breezes;
hurrying sea horses
hewed with keels the waters,
swiftly went we storming
seaward in the longships.

3

Formerly I saw fairness
in fells and cliffs of Norway ---
the king's days; on his craft then
could you often see me.
Now of joy there's nothing,
not in fairest meadows,
such a sorrow feel I
surging for my master.

4

The horse, a-weary, hastens
homeward in the twilight,
making through a meadow
marked by hoofs at evening;
o'er becks the steed has brought me,
borne me from the Dane-lands;
the horse now stumbled heavily
in half-light; darkness meets day.

A R T
AND INFORMATION

At least since the early Greeks, one of man's favorite pastimes has been the attempt to define himself. What exactly is it that makes us unique on earth? A kangaroo is also a featherless biped; many birds use sticks and straws as tools; the great apes seem to have a rudimentary language. (And as we shall see later, language in a broad sense is characteristic of life itself.) It appears safe to say, though, that man is the only artistic animal.

True, birds have their courtship dances and their songs; but these are utilitarian, a rather stereotyped instinctual "Hi-ya, babe!" Man alone shapes matter and his own activity for no other obvious reason than the scarcely definable pleasure it gives him.

In fact, the artistic element pervades nearly all his life, far beyond the limits of the formally recognized arts. The grace of an athlete, the elegance of a mathematical proof, the smooth operation of a machine ... these are certainly esthetic pleasures, for they are quite incidental to the practical purposes at hand.

It is thus clear that any genuine science of psychology must include an explanation of this basic need which seems to lie within us. If the artistic process cannot be axiomatized, it should at least be described in precise terms, terms which are clearly related to those of the more fully developed sciences such as physics. The present essay is an attempt at a preliminary hypothesis. It will not reach any startling conclusions, or make any unusual predictions; however, it may conceivably afford a certain insight.

Briefly, I wish to suggest that the arts, being communication processes, obey the rules of communications theory, and that the basic principles of esthetics are simply those principles of cybernetics which govern our bodies, languages, telephone exchanges, and automatic pilots.

By "art" I shall mean anything which is meant to give esthetic pleasure --- with a side glance at things not meant for this purpose but serving it anyway, such as Colorado sunsets. The formal arts, of course, include literature, music, painting, sculpture, architecture (the decorative aspect, as distinguished from the aspect of merely keeping off the rain), ballet, cuisine, and so on indefinitely. We wish to find out how these arts operate, what logical content they have, and how they are related to physics.

There have, of course, been some prior attempts to do this, of which Birkhoff's and Schillinger's come most readily to mind, but the present essay will be along lines which are, as far as I know, new.

To begin, then, why should communications theory be relevant at all? I would say, because art is a form of communication. This is obvious in the case of literature, where the author is "speaking" directly to the reader. A little thought will show that it also applies to music, whose composers communicate a set of emotions through another sort of code. As for the graphic arts, there is an obvious element of factual information --- in effect, Hogarth says: "This is how the London Dock Hospital looks" --- but more important is the communication of a quality of light or composition; in the most abstract art, the representational function has been wholly discarded. Likewise, the architect tries to convey a sense of line or mass or balance. A chef can very properly be said to communicate tastes, with the food as a vehicle; this is what distinguishes him from a mere cook. And the same holds true for all arts and the artistic side of all activities: the art lies less in particular materials or arrangements than in their meaning, the message they transmit.

I assume the reader is familiar with the principles of cybernetics developed in the past couple of decades, and with their enormous applicability. I have remarked that communication is a fundamental, though not exclusive characteristic of life. Man talks, but animals employ innumerable signals. Sometimes these signals constitute deliberate lies, e.g., the bee-like appearance of the robber fly. A flower uses color and perfume to inform pollinating insects of its presence. Any living thing is an organism, rather than a jumble of molecules, because of some message system by which the parts are made to work together; even the lowly bacteria could not exist without such a system, however simple.

But as Wiener points out, it is not essential that there even be life for a message to pass. The operator who presses a button, thus closing a circuit which activates a machine, is sending that machine an order: "Start working." A thermometer can inform a man what the temperature is, while a thermostat can send an order directly to a furnace.

It may seem that we are stretching the idea of communication pretty thin, but there is a basic criterion: pattern. The static in a radio is random noise; "ahjtc" is a random collection of letters. Neither tells us anything beyond the bare fact of its existence. My point is that any work of art is a message.

Definitions first. By <u>communication</u> I mean <u>the transmis-</u>

sion of information. That which carries the message we may call the transmitter: it can be sound waves, light waves, electrical impulses, or anything else. That which receives the message I shall call the percipient. Note that a percipient need not be human, but can be any organism or machine.

But what is this "information" that is transmitted? For present purposes, information will be defined as any pattern or set of patterns in space-time distinguished by rules of selection and arrangement from the totality of all possible arrangements of the same constituents.

(Professionals will note that "information" so defined is not identical with "informational content," which is a measurable quantity usually specified in bits. They will also note various modifications of the terminology of their science; but I hope that its spirit is preserved.)

To explicate a little, let us remember that a written message is a spatial arrangement of certain arbitrary symbols, while a spoken message is an arrangement of sounds in time. If I write: "The quick brown fox jumps over the lazy dog," the letters and their spacings are distributed over the paper; if I pronounce the sentence, the corresponding noises succeed one another in time. In either case, there must be rules governing the order of succession. "The lazy brown dog jumps over the quick fox" is an entirely different message, while "Fox the over brown the dog quick jumps lazy" is gibberish. The nine words can be arranged in 362,880 possible ways; the rules of English grammar exist so that we may select the two or three possibilities which make sense, i.e. which are information. This is a simple example of the general principle that disorder is more probable than order, and that information represents a kind of low probability or negative entropy. In fact, mathematically speaking, the informational content of any arrangement of any constituents is proportional to the negative of the logarithm of the probability.

So to form a message, we must have rules of arrangement. The more complex these rules are, the less complex the pattern itself has to be, and vice versa. For instance, a military code may use "BXJ" to mean a certain officer; obviously this is a simpler pattern than "Lieutenant Colonel John J. Jones of the Fourth Armored Brigade," but the simplicity is bought by adding a complicated code book to the rules of ordinary English composition. In either case, the information conveyed is the same. This consideration is important in the arts.

Having defined information more or less conventionally, we must make a distinction which I have not found elsewhere but which is now necessary: between information and its meaning. If I talk English to a man who only understands French,

information --- the pattern --- is by definition conveyed, but there is no percipient able to make much use of it. The pattern is the same, but it lacks meaning. I shall define a message as a stimulus or set of stimuli with informational content, and its meaning as the total reaction of the percipient to this information. Thus, to an automatic photoelectric door, the meaning of the information conveyed by breaking a beam of light is: "Open." To a moose in mating season, the meaning of certain noises and odors is sexual.

On a human level, though, meaning becomes most complex. Suppose someone bids me: "Come here." My total reaction depends on the circumstances. Part of the reaction, of course, is the set of electrochemical processes involved in "understanding" the message; but the rest of my immediate reaction will depend quite strongly on whether the speaker is a man I dislike or a beautiful woman with an inviting look. Similarly, when two people see a mathematical theorem, both may understand the same thing by it. But one of them, a professional mathematician, may also get a sense of its beauty and its relationship to the whole body of mathematics; the other, a student, may associate it with very little except an unpleasant suspicion that he will be asked in the final examination to prove the thing.

We must thus divide meaning into a "common" and a "private" part. The former is that which all people acquainted with the symbol system involved (or all animals and machines adjusted to it) will understand; the latter is much more vague, mostly subconscious (in man). Science and ordinary discourse are concerned with common meanings, while the arts go deeply into private meanings. Since there is no sharp distinction between the two parts, we begin to see why the artistic element is so all-pervasive.

I might suggest in passing that psychoanalysis could be defined as the study of private meanings.

We shall need the concepts of feedback and homeostasis, but I assume that everyone is familiar with them and proceed to the application of all the foregoing.

All, or most art is informational (some nowadays is frankly constructed by randomization; vide infra). But as we just remarked, meaning cannot be conveyed except to a percipient who understands the rules: more accurately, a percipient conditioned to react appropriately. Thus, the music which a sensitive and intelligent Chinese enjoys sounds to me like a cat in a washing machine; however, since graphic art the world over usually employs the obvious convention of one-one spatial correspondence between subject and representation, I can look at Chinese paintings with pleasure. It is a moot point, but one which deserves scientific investiga-

tion, how many artistic conventions are either inborn or so obvious as to be universal. Is there some neurological reaction to bright red which brings thoughts of flamboyance and violence; could it arise from everyone's experience with blood and fire; or is it a symbol with worldwide meaning only because of a series of historical accidents?

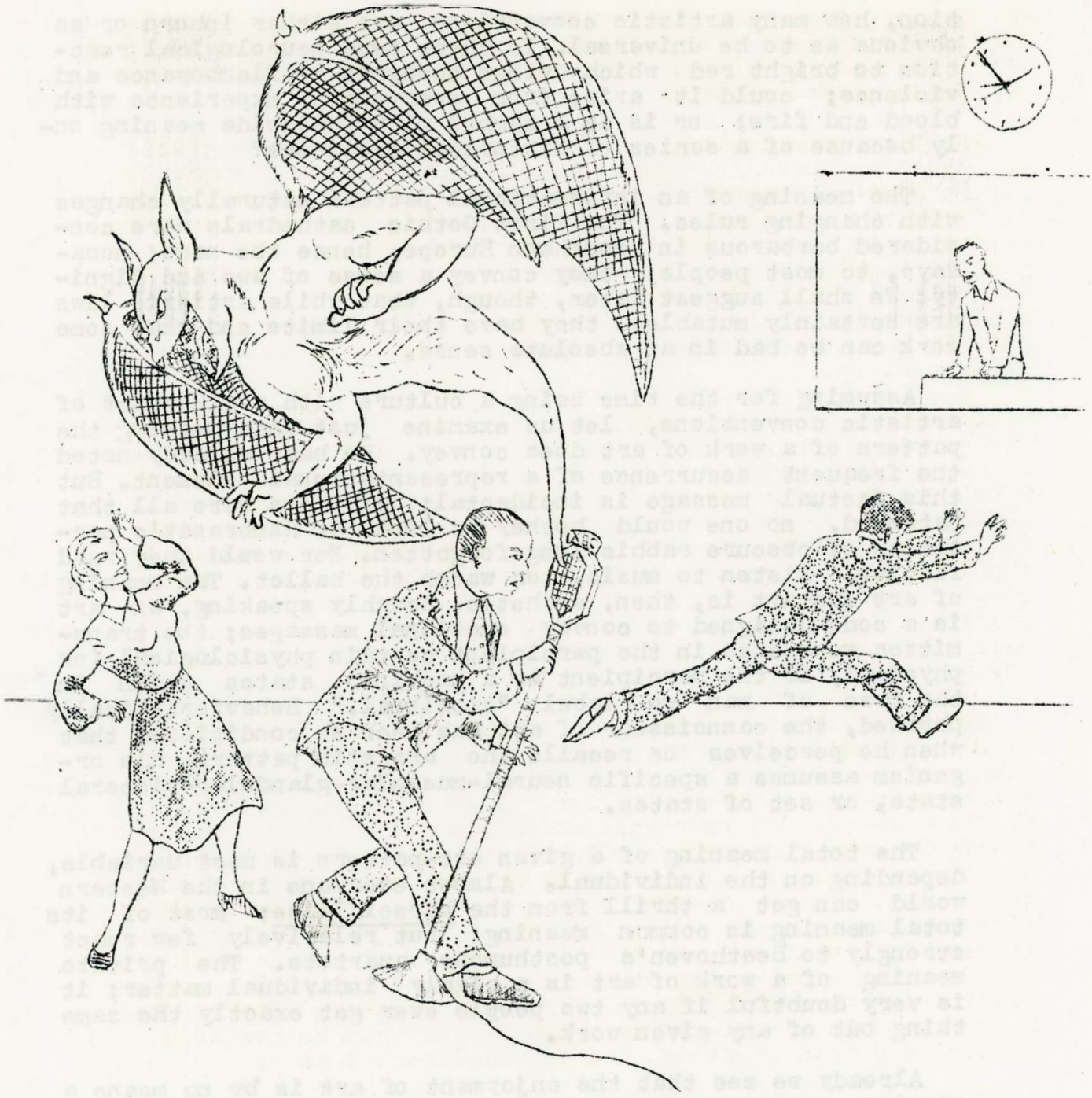
The meaning of an informational pattern naturally changes with changing rules. The first Gothic cathedrals were considered barbarous in southern Europe, hence the name; nowadays, to most people, they convey a sense of awe and dignity. We shall suggest later, though, that while artistic laws are certainly mutable, they have their limits and that some work can be bad in an absolute sense.

Assuming for the time being a culture with a given set of artistic conventions, let us examine just what meaning the pattern of a work of art does convey. We have already noted the frequent occurrence of a representational element. But this factual message is incidental; if facts were all that mattered, no one would bother to look at Rembrandt's portraits of obscure rabbis long forgotten. Nor would they read fiction, listen to music, or watch the ballet. The meaning of art qua art is, then, esthetic. Roughly speaking, an art is a code designed to convey emotional messages; the transmitter generates in the percipient certain physiological (or physical, if the percipient be a machine) states which in the case of man we label "emotional." Behavioristically phrased, the connoisseur of art has been so conditioned that when he perceives or recalls the artistic pattern, his organism assumes a specific neural-muscular-glandular-visceral state, or set of states.

The total meaning of a given art-pattern is most variable, depending on the individual. Almost everyone in the Western world can get a thrill from the Marseillaise; most of its total meaning is common meaning; but relatively few react strongly to Beethoven's posthumous quartets. The private meaning of a work of art is a highly individual matter; it is very doubtful if any two people ever get exactly the same thing out of any given work.

Already we see that the enjoyment of art is by no means a passive process. The percipient must not only have learned the rules, but he must detect those separate elements of the pattern which make up the total information; and "getting the meaning" is not a matter of absorbing it as a sponge does water, but of assuming a series of definite physiological states. Thus we see why great art, especially music and drama, sometimes leaves the audience physically exhausted.

At this point we can discuss the objective distinction



"Due to technical difficulties beyond our control,
this program will be temporarily off the air."

between "superficial" and "profound" art. It is one of informational content. The average popular song contains less information than a Bach fugue. One might listen to the song many times with pleasure, but find nothing new in it; the fugue, on the other hand, has so many nuances, not only elements in the pattern but relationships between the elements and relationships between these relationships, that a single hearing is insufficient to detect them all. Similarly, Shakespearean tragedy can first be read for pure narrative and later for poetic beauty, character development, and intellectual profundity. It has many levels of meaning --- a common phrase which we now see refers to works analogous to cryptograms containing a ciphered message within a ciphered message.

To be sure, complexity alone is not enough for greatness, and complexity can be overdone. We must consider this later in more detail. First, though, let us dispose of one case. Why are the turreted houses popular around 1900 so hideous? Is it only that conventions have changed? Hardly: because the history of architecture shows few such excrescences. Instead, the trouble with the Victorian house was that it lacked conventions. The architect simply piled on towers, roofs, dormers, and assorted scrimshaw. It is not a too elaborate taste, but an absence of taste in a very literal sense --- an absence of artistic rules --- which makes the Charles Addams house ugly. There is a jumble of elements with little pattern, a randomness; and we have seen that pure randomness has no informational content. A latter-day example of the same mistake is the Cadillac and its imitators.

I do not mean that the rules of an art are ever neatly formulated, any more than primitive people with a complex language write grammar texts. Man's body is an intricate homeostatic mechanism, operating smoothly without requiring that its owner be consciously aware of what is going on. So is man's language, including his artistic language(s). The rules are not laid down, they evolve, in some manner not yet understood. However, it is just as necessary that these unverbalized rules exist as it is that the muscles be trained in the indescribable complexities of walking.

It cannot be denied that a degree of randomness is necessary, to introduce the occasional fresh element from which creativity can take inspiration. But it must be kept well within bounds, or no information will be generated. In this connection, see "J. J. Coupling's" interesting articles on the formation of random sentences and random music.

It is not impossible that randomness produce great beauty, but it is highly improbable. The equally probable ugliness, and the esthetically neutral majority of random combinations, can only be weeded out by some conscious, rule-

obeying process. And randomness completely outside the artistic conventions will normally give an effect of ugliness --- the Victorian house, the Cadillac, or the static interrupting a radio concert.

In this connection, we can mention the non-artistic things which have the human effects of art, e.g., sunsets, autumn leaves, mountains, pretty girls. It might appear superficially that these are random arrangements which somehow manage to be beautiful. But in point of fact, they are not random. One sunset or thunderstorm has strong similarities to another. These "rules" function exactly like the artificial conventions of painting or music, which indeed may originally have been simple imitations of regularities observed in nature.

Leaving aside the question of ultimate origins, let us now consider the evolution of the rules governing art. The statement that cliches are expressions so good that they have been worked to death, is a cliché. From our standpoint, while their information has remained the same, their meaning has changed because of changing rules. This, I think, is why literature remains living even though it has long ago covered all the basic situations in which a human being can possibly find himself. Man wants, needs, to experience certain emotions, but it takes ever new messages to make him do so.

In saying that the content of art is emotional, I may seem to be neglecting the so-called intellectual pleasures, such as the delight of one writer in the craftsmanship of another. But this, by definition, is an emotion. In fact, if we stick to our behavioristic definition of emotion, man is always in one or another emotional state, be it only placidity or boredom. It is the aim of art to arouse other states than these. Thus a blueprint is a message arousing an emotion just as much as a painting is. So we must distinguish between "factual" and "emotional" messages by asking whether they are aimed primarily at the cerebrum or the thalamus. Our distinction does point up the fact that no sharp line can be drawn: the driest scientific communication has an artistic aspect, the most emotional art an intellectual side.

The artist, then, is forming a message whose meaning is primarily emotional. He has the usual human need to share his feelings, and art is his particular method of doing so. If I say, "I am hungry," I want to induce in you a state of understanding that I need food; if I paint a stormy landscape, I want to induce in you the same sense of its threatening bigness that I have. But the very act of formulating a communication of any sort is clarifying: it gives the feeling a definite symbolic form, brings the conscious mind into gear (so to speak). The man who "knows what he thinks but

doesn't know how to say it" actually does not know what he thinks. The action of symbolizing a state has its reaction, developing and sharpening the state itself. Occasional rare artists are content to stop here, with a degree of clarification achieved and a chance to renew the state by contemplating the finished work. But most of us want to share our feelings. We publish, or perform, or exhibit.

At this point, though, the artist runs into the second law of thermodynamics. Any process involves an increase of entropy, tantamount to a loss of information; communication itself is not exempt.

A simple, though philosophically unimportant example is that of reproduction. So far I have never seen or heard of a really good method for reproducing paintings; there just is no comparison between the print and the original. The hi-fi vogue is an attempt to reduce the entropy gain involved in reproducing music.

Now the artist has a certain feeling, not only expressed in a form such as musical notes, but about that form. Many of his breed have complained that their works never come quite right, never express fully and unambiguously what they want to express. It is a safe bet that this applies in some degree to all serious artists, whether they are consciously aware of it or not. Creating the symbol helps create the feeling itself, but the symbol never has a precise one-one correspondence with its referent. This loss of information cann be said to occur in a preliminary stage of transmission: the formulation of the pattern.

The greatest loss, however, occurs in the second stage, between pattern and percipient. Quite apart from the peculiarities of optics, acoustics, and individual sense organs, there is the reaction of the percipient. We have seen that probably no stimulus has an identical total meaning for any two people. There is a loss of information in transmission and a further loss in perception and a still further loss in reaction. The artist's message never comes through undistorted; some of it is always lost in random "noise" (e.g., the gallery visitor's awareness that his feet ache) and some of it by the introduction of extraneous and irrelevant material by the percipient. The latter cannot help this; he may try earnestly to get the artist's "real meaning," but to him this material is not extraneous or irrelevant. There is no such thing as a perfectly comprehensible work of art.

Perhaps this is a partial reason for avantism, in which the artist works with esoteric symbols meaningful only to a small cult. A person willing to take the trouble of fully learning Joyce's, Picasso's, or Schonberg's language probably concentrates more and thus loses less information in perceiving their work. In addition, he gets the intellectual

pleasure of deciphering --- or believing he is deciphering --- their cryptograms. We must touch again on the phenomenon of the clique.

Meanwhile we can comment on the aging New Critics and their assertion, "I don't care what the artist wanted to say; I'm only interested in what is there." From our present standpoint, the critics are right insofar as it is impossible ever to know fully what the artist meant; but they are wrong if they think they can extract more information than was put into the work. To be sure, the artist's subconscious mind may create symbols of which his conscious is unaware; but it seems unlikely that the critic, playing at psychoanalysis, will interpret them any more correctly. We shall later have a bit more to say about the role of criticism.

The esoterica illustrate a problem we mentioned earlier, that of complexity of pattern versus complexity of rules. Eliot's The Waste Land is quite a simple pattern with a very broad meaning, because his conventions include an entire corpus of corn-god mythology with all that it stands for in the way of fate, death, resurrection, and the associated human emotions. It would take a long book to give, even approximately, in ordinary language the information contained. And, of course, the book would have quite a different meaning, since much of the poem's effect lies in the brevity and concentration.

It is plain, though, that such compactness can be overdone. When the percipient has too long a struggle to decipher, the effect of immediacy is lost. Antagonistic souls will claim that the Imagist poets have already overstepped the line; but to a degree, at least, this is a matter of personal taste. However, the application of the strictly defined communications concept of redundancy to the study of art might prove rewarding. Certainly in other communication processes, there is a desirable range of redundancy; if this quantity goes below that range, there is too much danger of garbling the message, while an overly high redundancy leads to slowness and awkwardness.

Returning briefly to the problem of entropy increase, Wiener remarks that translation is a process involving considerable loss of information. Perfect translation is an impossibility because the rules of one language do not have a one-one correspondence with the rules of any other. The smallest loss of information occurs in translating scientific papers, because the technical part of every language is closely similar to that of all others. The literary dialect is of necessity more subtle and complex than this, because it must describe more complex phenomena. Since music is absolutely and inherently untranslatable, one may speculate whether music is not potentially the most highly developed set of languages which man possesses.

This brings us to another mathematical warning to the critics. Any two finite sets of data can be correlated by any one of an infinity of functions. To borrow an example from Russell, it is possible to write an equation correlating the numbers of all the taxicabs a man takes in his lifetime with the times of day at which he takes them. It is equally possible to correlate the "singularities" of an information-field with those of any emotion-field --- or, in plain English, to find any number of meanings in a work of art, whether they are intentional or not. One purpose of rules is to limit the area of admissible interpretations. Thus we see that the artist's conventions and intent are not quite so irrelevant to the understanding of his work as some modern critics believe.

But the critic can insist that he has one valuable function: he is a feedback mechanism. The trouble is, he is a most inadequate mechanism, and so is the artist's entire audience.

The artist's task is to create a certain emotional state in the audience. Artist-art-percipient can be regarded as a communications line. The artist's input is his work of art; his output is the effect on the percipient.

But how can he gauge the degree of success unless he knows the output --- knows what the effect actually is?

Ideally, the critic tells him what the effect has been, and the artist corrects his work according to how far off the mark it was. In practice, this homeostasis does not work very well. A painting, statue, opera, building or whatever, is not easily re-done. Anyway, the critic's views are only one man's opinion, usually not a man whom the artist holds in any particular esteem.

The small cult of highly trained admirers and colleagues seems actually to offer a better feedback. Pound and Eliot criticized each other's work effectively, because they had similar rules and each understood fairly well what the other was trying to do. A large audience is too diffuse, a professional critic seems too obtuse, and generally neither has much in common with the artist. This may be another reason, besides more adequate transmission, for the existence of cliques.

Probably the art with the best feedback is the legitimate theater, especially when small and intimate. An actor on stage has some idea, even as he performs, of how his work is going over, and can thus hold it on a successful course or adjust it to a closer approximation of effective communication. The play doctor and the provincial tryout are similar mechanisms. Is this a reason why the stage has retained its vitality and still usually offers better fare than the film?

But for most arts there is no efficient feedback loop. Certainly there is nothing which operates continuously; at best, the artist can, if he wishes, guide himself in later works by the public reaction to the first. But an insensitive feedback, or one which introduces distortions, is about as bad as none at all. So from this standpoint, the hack and the snob are artists who have let themselves be guided by the wrong people.

It seems likely to me that such considerations will explain the historic tendency of the arts either to stiffen into a barren conventionality or to swing wildly between extremes. Certainly the tendency toward stasis or uncontrolled oscillation is typical of nonhomeostatic mechanisms. I am also inclined to think, for similar reasons, that the estrangement of the artist and the public in today's world is at least in part an inescapable result of the sheer size of the audience, with its consequent impersonality and unresponsiveness.

In reviewing this essay, one will probably think it has been much ado about nothing. Admittedly we have said few if any things about art which have not long been known. However, the only aim has been to systematize these truisms and relate them to certain principles of physics. If our attempt has any value at all, its mathematical development and use for prediction will come later.

POSTSCRIPT

In the discussion which followed presentation of this paper before the S Cube society, it was suggested by R. Buechley that the phenomenon of the cliché could be given an alternative explanation, not necessarily incompatible with the original one. Remembering that informational content is an inverse function of probability, we can see that the excellent phrase, when first coined, is improbable --- an arrestingly unusual juxtaposition of words. But the more often the phrase is used, the more probable it becomes in the total context of its language, and therefore the less informational. Thus, for example, "There's method in his madness" startled the Elizabethans with sheer aptness, but is now just a conventional tag for vaguely odd and vaguely logical behavior. "How do you do?" has even ceased to be a question, and become a mere ritual of greeting. Mutatis mutandis, this consideration is applicable to all the other arts.

To this I would add the following. First, since the relation between informational content (I) and probability (P) is logarithmic, this process of degradation slows. It does not itself approach a limit, but the rate does:

If $I = -k \log P$

then $\frac{dI}{dP} = \frac{-k}{P}$, approaching -k as P approaches unity.

The first million or so times a phrase is used, the loss of information is considerable; thereafter the loss with each successive use becomes progressively smaller. Thus the phrase from Hamlet, above, is scarcely more a cliché now than it was two centuries ago.

Another preserving factor, in some cases, is that the overuse of the cliché may be confined to a small class of people, so that within the entire culture the phrase may retain quite a lot of informational content. And, of course, it will have approximately its original content for someone who comes upon it for the first time in its proper context.

Presumably similar considerations apply to entire works of art which are very often encountered, e.g., Beethoven's Fifth Symphony or Rodin's Thinker. But such works are nearly always more complex, in a purely physical sense, than the small group of words forming a literary phrase: so their information is not so rapidly exhausted. Even so, the meaning of a given work of art is apt to alter drastically with repeated viewing; commonplaceness enters in. The Japanese custom of frequently changing the pictures on the wall seems to be a wise one.

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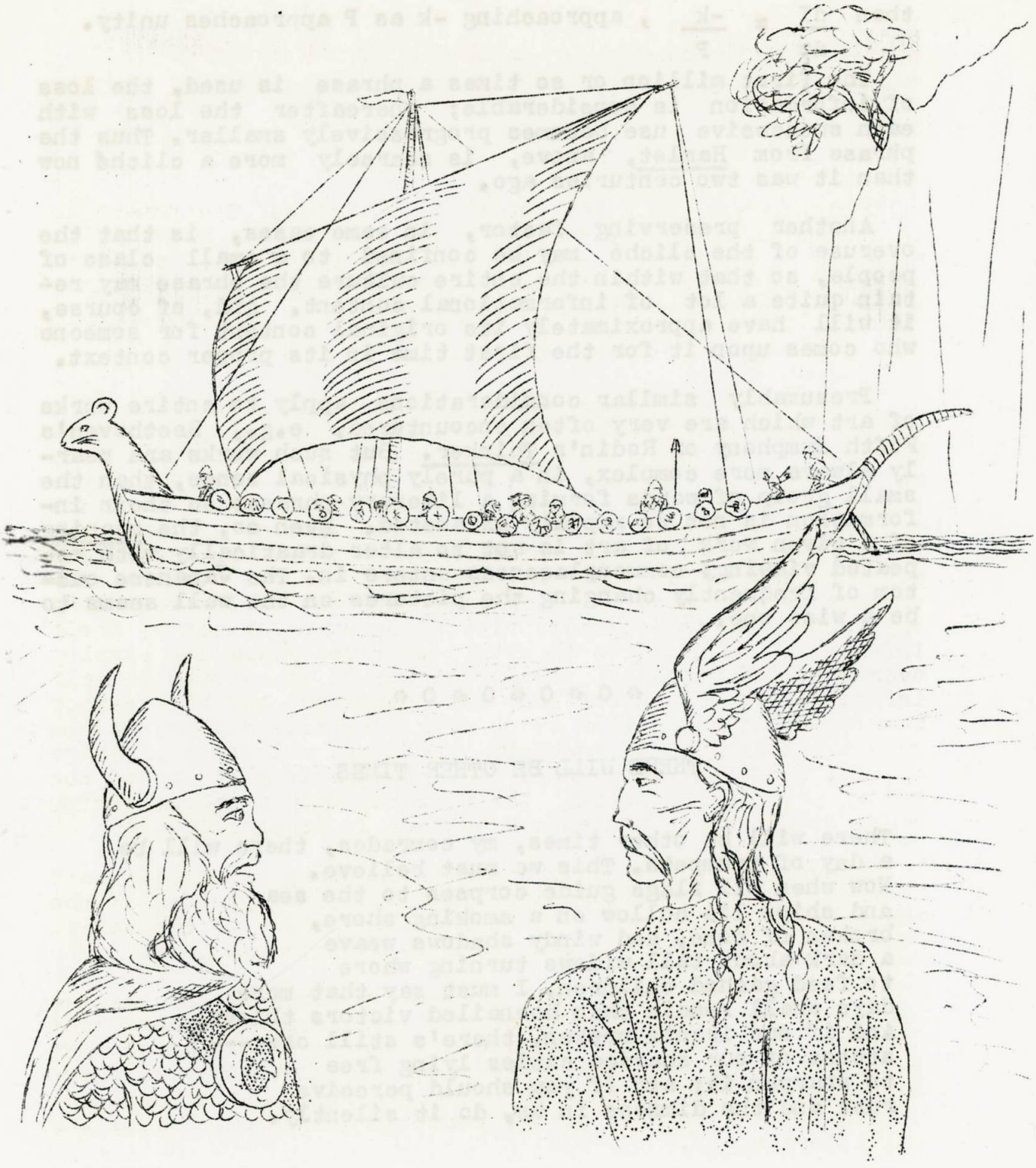
THERE WILL BE OTHER TIMES

There will be other times, my comrades, there will be
a day of trumpets. This we must believe.
Now when all flags guide corpses to the sea
and ships lie hollow on a smoking shore,
broken of bone, and windy shadows weave
a dark about tall widows turning whore
to feed gashed children, I must say that more
days shall remain than hobnailed victors thieve.
And if our iron's broken, there's still ore ---
stones of our sharded cities lying free
to sharpen it; and if you should perceive
rust and the dimness in us, do it silently.



"He's a pretty peaceable fellow, you know."

HEARINGS

Too often, what passes for realism is simply lack of imagination.

* * * * *

Prolegomenon to a new theory of politics: Government is an essential self-protective device of society whereby its robbers, parasites, sadists, and busybodies are enabled to live off it fairly peacefully and under some restraint rather than using uncontrolled violence.

* * * * *

It seems to me that people get excited about the right things for the wrong reasons, and the wrong things for possibly sound reasons. Take the income tax, for example. Yes, do take it; take it far away; don't bring it back. The typical conservative whine against this piracy has two notes: (A) The government doesn't need all that money. [I am sure friend Khrushchev would be delighted to have us emasculate our military still further, and renege on our word to such classes as the aged.] (A Flat) A 90% tax on incomes over, say, $500,000 is a penalty visited on superior men by their inferiors, and deprives them of incentive. [Any man earning over $500,000/year, who shells out 90% of it, proves himself inferior. To the extent that the graduated tax bite cannot be dodged, it has little to do with incentive anyhow; no one can want that kind of money to spend, but only as a prestige symbol, a counter in a game. The corporations can avoid the whole problem by paying their executives a modest living wage, with further raises and bonuses in poker chips.]

So much for the Republicant. The Democrap is equally hard to take, with its assumption that the true purpose of the tax is to squeeze us all into the gray middle of the normal distribution curve, and that this is a desirable goal.

No one seems to see that the real trouble is not the money collected but the manner of collection --- the power given the government to make me keep records, answer any number of highly personal questions, and trot downtown whenever some two-bit bureaucrat wants an afternoon of citizen-baiting. Every time I look at that insolent form, I feel the walls closing in.

Why not abolish it and be free men again? The same revenue could be raised by a graduated tax on transactions, plus a national lottery and, perhaps, the operation of such public enterprises as TVA for profit. Less money would be needed in all events, once the expensive income tax apparatus was dismantled.

The debate on capital punishment is another case of assorted sentiment substituting for logic. Proponents argue that it deters crime, which is demonstrably false, and keep silent about its real value: an outlet for the sadism in the rest of us. Opponents get so maudlin about the sufferings of the poor condemned malefactor (they always pick someone unquestionably guilty, like Leopold and Loeb) that they seem to resent the victim's infernal gall in having suffered rather more for rather less reason.

All of which misses the point. To me, at least, the fate of human trash is not important. Kill them, lock them up for life, even salvage them if you can, the safety of the harmless is all that matters. And the damning aspect of capital punishment is that innocent men do get convicted once in a while. Sometimes they can be vindicated. But in the present stage of technology, death is pretty irrevocable.

* * * * *

The pursuit of amusement has brought about more friendships, and better and more enduring ones, than work or war.

* * * * *

The trouble with prostitution is that, like going to a movie on your first evening in a strange city, it is a confession of defeat.

* * * * *

The investigations of the Institute of Logozoology have to date been severely handicapped by lack of value, but we can use this space to report some of our findings. Besides closer examination of such well-known species as the Charlie Horse (Equus carolus) and the Aching Dog (Canis dolorosus), the ranges and partial life cycles of several less famous animals have been established by our bullet-headed, gimlet-eyed, needle-nosed, bat-eared, bull-necked, barrel-chested, ham-handed, bow-legged, pigeon-toed workers, all of whom have steel-trap mouths and flaming mops of hair.

The Throat Frog (Rana laryngica)

A large, fat amphibian, inhabiting the human gullet and feeding upon assorted wild verbiage. It occasions much annoyance by jumping up and down on the larynx with wet splay feet. Travelers through an auditorium may often hear impressive choruses of Throat Frogs, bellowing and croaking. Its range is the same as that of the Phlegmatic Hawk, a rather stolid bird which apparently preys on it. These two species have been domesticated in the Netherlands, where they are quite essential to pronouncing the language.

The Spinal Mouse (Mus frigipedis vertebricus)

The Spinal Mouse is a small, extremely active mammal, which runs up and down the backs of frightened humans, presumably to warm its feet, which are notoriously cold. This only serves to chill the human, which makes the Spinal Mouse run all the faster. It is always described as invisible, so we cannot report on its appearance.

The Vertebral Spider (Arachnea supracoccygeus)

This creature shares the range and habits of the Spinal Mouse. Indeed, since it is also invisible, some authorities have suggested that the two species are identical. This question could be settled by counting the number of icy footfalls, but so far the Institute has found no sufficiently terrified person who was willing to do so. (In this connection, our pathologists are making studies of those bacteria which cause such blood diseases as freezing and curdling.)

The Bonnet Bee (Apis mitricus)

This bee, which inhabits human headgear, is a most energetic insect with an irritatingly repetious buzz, given to zooming back and forth and rebounding from the hat, which is not good for the hat. The Ear Flea (Siphonaptera aurica) is of similar habits, though confined to the Eustachian tubes; this distresses Eustace.

The Trouser Ant (Formica braccarum)

This insect is also wont to rush about in great numbers and at high speed throughout its range. The reason is uncertain. Possibly it is inspired by advice to quit a life of idleness and work hard for decades in order to retire to a life of idleness; or it may be a Positive Thinker.

The Great Flutterer (Papilio stomachi insatiabilis)

A scavenger in the gastro-intestinal tract, this butterfly does not, as popularly supposed, live on the dregs of alcohol. If you believe so, try ordering a whisky or martini with dregs sometime, and see what happens. However, there is indubitably some connection with ethanol. A very large and beautiful species, its wings of a color like bloodshot buttermilk, the Great Flutterer sometimes emits rumbling or burbling sounds, but is acutely sensitive to extraneous noise.

Belfry's Bat (Myotis turricus)

A rather ridiculous creature, with buck teeth, a silly smile, and straws in its fur, this bat has of late become especially common in all national capitals. Quite probably it is destined to inherit the earth.

* * * * *

"When you're through with your head," says my not-quite-five, "put it outside to melt."

DEPARTMENT OF NUMISMATICS

"Obverse."

SMÖRGÅSBORD

from: Paul Anderson
1906 Grove St.
Berkeley 4 Calif.

TO:

MIMEOGRAPHED MATERIAL ONLY