

*Mavor Moore*

## THE ARTS IN A SCIENTIFIC AGE

WHEN CAPTAIN COOK landed on the shores of Vancouver Island in 1778, the Nootka Indians greeted him with songs and dances. Some of them, he records in his diary, were solemn, some gay. And so un-Canadian were these early Canadians that they refused to get down to business affairs until these appropriate entertainments had taken place. With them the rule was pleasure before business—or, to put it another way, they put first things first: business was only a means to an end, the end in this case being a full and creative life.

It has occurred to me that a fine project for this Centennial Year in Canada would be to rewrite our history books and give credit where credit is due.\* We call the early explorers, those main-chance European carpet-baggers, "Discoverers". Whereas in the meeting of Europeans and North Americans it must surely have been the Indians who did most of the discovering—like Dr. Samuel Johnson, who—as I recall—when his wife discovered him kissing the maid and said "Dr. Johnson, I am surprised!" replied "No, madam, you are astonished—we are surprised!"

Among the delights of civilization the Indians were to discover from the newcomers were that it was improper to talk while music is being played, to sing while dancing, or to dance while worshipping the Almighty; and that having fun consisted of getting drunk as quickly as possible at parties held after more important matters were disposed of. The Indians knew all along, of course, that the only thing which made sense of trade and commerce was what you did with what you made out of it. We ourselves use the phrase "to make a living", but we have forgotten what it means: with us it is all making and no living. The Indians have always known better: but so dangerous and subversive is their secret that we still bribe them with an annual bounty to shut up about it.

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Now we are in another age of exploration. The Captain Cooks of today are aiming for outer space and the moon. And we are in grave danger of making the same mistake all over again. What will we say to the Moon-men when we get there? What are we going to offer them? With what delights of our civilization are we planning to woo and win the creatures of other planets? What love-songs will we serenade them with? We can proudly show them a television set—but what will we show them *on* it? Will we land in our space-ships like the Angel Gabriel announcing “I bring you great tidings”—of what?

The truth is that this is an age of science, and science is a basket into which we are putting most of our eggs. Science is a very good basket, proof against error and superstition, even perhaps against the weather; but it is not the only basket, and science cannot make a soufflé, even if it can doctor the eggs. And so I think it of some importance that we ask ourselves what is happening to the *arts* in this age of science—lest we repeat the exploits of the good Captain Cook and may be said, like him, to have missed the boat.

Now I had better define my terms if I wish to argue. What is the difference between science and art? In his *Modern English Usage*, Fowler makes the following useful distinction: “Science knows, Art does”. Science is an ever-increasing, ever-improving collection of data; the new builds upon the old, in the way a snail builds its shell—an accretion of solid facts, developing and growing, a body of known information. Art, on the other hand, is in continual flux, like the creature inside the shell. It must keep on renewing itself, changing, fighting to get out of the shell, always dynamic and experimenting—or it too will become simply another datum.

If science is always developing and improving, moreover, art cannot be said to progress. Has anyone written a better play than *Oedipus Rex*, painted a better painting than the *Mona Lisa*, written a better poem than *The Canterbury Tales*, composed a better symphony than Beethoven’s Ninth? And if not, why didn’t the arts quit long ago, while they were ahead? We know better than that; we know that one does not have to disparage Michelangelo to admire Gauguin, or Bach to enjoy Duke Ellington. We do not waste time calling one better and the other worse—we enjoy the differences in point of view, in the style dictated by time and place and the artist’s personality. In science, on the other hand, anomaly must go; a theory is either proved or discredited. Science must obey the rules; when art does so it becomes sterile. Science must have method in its madness, art madness in its method.

But science does change the course of art. It develops the tools of art: science gave us paint and the violin and scenery; it gave us artificial light and radio and

films. And it also changes art by altering its subject-matter, the world around us which our artists reflect. William Blake once defined the artistic problem as "To see a world in a grain of sand". Now that the world has spread to such enormous proportions, into both outer and inner space, thanks to physics and biology and psychology and chemistry and geology and the rest, the context of Blake's proposition is somewhat changed. For example, Religion (a subject about which our parents knew so much) was a favorite topic at the turn of the century, while sex was seldom referred to; we have inverted their importance, until sex is now *de rigueur* as a subject, and you may search hundreds of best-sellers in a vain attempt to discover what, if anything, the hero or heroine thinks of God.

Let us make a short catalogue of the main effects of science on art. Science gave us the printing press, the first mass medium larger than the manuscript or a man's voice in an arena. Then it gave us gaslight and electricity, which altered the way we look at things around us and at the works of art themselves, and opened up new possibilities for the performing arts. It also brought us the microscope, which presented to the artist a whole new range of patterns and shapes, giving rise to abstract-seeming natural patterns—although it was not until recently that artists such as Henry Moore began to see the whole world in terms of bone-forms. Then science gave us photography and sound recording, which brought at least three revolutions in their wake: the ability to record the sights and sounds of events directly as they happen, the close-up (that is, a closer and more magnified picture than would be accessible even to a nearby human), and the sensational ability to distribute these visual and aural symbols to an even larger audience than the printed page permitted, since they were immediately intelligible to the illiterate. They were, moreover, the real thing and not a mere word-picture. Seeing and hearing are Believing.

Then came radio, bringing another revolution: radio could link a mass audience *simultaneously*; and it could reach people either in a group or in the privacy of one's own home—thus for the first time combining the intimacy of literature with the social chemistry of concert-hall and theatre. And finally, in our own day, came television, which combined all the powers of radio with the power of the picture, this time on a mass scale capable of uniting the entire globe in a single simultaneous experience. It does not seem to me that most of us are yet aware of the power of television—that, for example, the average family in North America (by *all* statistical surveys) watches the set for at least five or five and a half hours every day; or that a single performance of, say, *Peter Pan*, may be watched by more people than ever saw Shakespeare's *Hamlet* in the theatre.

Science is now making possible the production of artifacts like suits in the world of fashion, "from factory to you". I once found in New York an African head-sculpture, one of many identical thousands, with the label "This is a *Genuine Work of Art*, handcarved by a *Real Illiterate Tanganyikan Native*". Musical sounds are being made by electronic beepers, by marks on magnetic film and tape, by scratches on wire. Pictures are being painted (or at least put together) with mechanical contrivances such as stencils or blow-torches; by chemical resistance, or—Lord help us!—by numbers. Photographers vie to introduce to their millions of magazine-readers an abstract of the latest champion mammary glands. And publishers will tell you that their industry is now closely geared to the sale of a book to Hollywood, for the gold is really in Beverly Hills; in other words, a book is written primarily to become a film. Failing that triumph, it may be lucky enough to find another kind of mass distribution through the Book Clubs, where one buys automatically what everyone else is reading only because they automatically bought it on the assumption that you were reading it. It is a little like the religious bookstore which carried in its window a poster for the film *The King of Kings* and a copy of the Bible, with the sign "You've seen the movie, now read the Book".

It is worth noting that the arts of mass reproduction are what we might call Co-operative Arts. In them no single man is the creative force; whoever sires the idea, it is taken up by an army of middle-men: editors, cameramen, directors, producers, girl Fridays, publicists, distributors. In an earlier day, Milton could write and publish a pamphlet as he wished; today he would have to go through the unions.

Now while the artist has had to cope with these revolutions in his craft, his audience is no less subject to the winds of scientific advance. I have a great deal of sympathy with today's audiences, caught up in a whirlwind of changing categories. The old, familiar landmarks are gone. We cannot tell any longer when a play is a comedy or a tragedy, or any of the other categories listed by old Polonius in another, simpler age. We do not know whether a painter is trying to be profound or merry, or even whether the joke is on us. We became accustomed to the idea of "talking pictures", but that was only the first of the modern contradictions in terms. We listen to a radio program called *Stage '64*; we watch a television program called *Playhouse '90*; we read News Magazines, even when the news is a month old; we may buy recordings of literature, or (if we prefer) literary magazines with long-playing records inside them; as a matter of fact, one can buy records to read by—or to do almost anything by—I found one album labelled "Music to Lay Eggs By", and decided without listening that it was for the birds. Teachers have had to become clowns to compete with television, and clowns have become our teachers—why else



should our comedians be the ones to exhort us to contribute to the Red Cross and the Red Feather campaign? We no longer know, when we watch a television program, whether it is "live" (that is to say, simultaneous) or whether it is "canned" (that is to say, pre-recorded), or whether a dramatic incident is a "documentary" or staged for our benefit. And there is little doubt that some of the available techniques of mass *reproduction* improve on original paintings, sculpture, and musical compositions. You may hear the Boston Symphony more perfectly on your Hi-Fi than in the concert hall. With few of the old criteria to fall back upon, no wonder we are awash in a sea of aesthetic bewilderment. And developments which science has brought to transportation have literally taken us asea. Nowadays one no longer needs to be satisfied with a *description* of the Taj Mahal: one goes there. And the riches of the world's art galleries and symphony orchestras and museums may now travel to us.

But there is one other change in the relationship of the audience to the artist which is perhaps more subtly revolutionary than all the rest, and the final effect of which we can only guess at. The social scientists have moved into the area of mass communications with a vengeance and with few holds barred. Their method, whether their aim be to sell cornflakes or elect a political candidate, is that of the conditioned reflex, which is in turn based upon a scientific analysis of our sense-perceptions coupled with a system of reward and punishment for choosing the path the scientist wishes you to choose. Once they discovered, for example, that you were more likely to buy a red triangular package than a blue square one, or that you would vote for a candidate with a full head of hair as against a bald one, they immediately began a two-pronged assault on our sensory equipment: with one hand to condition us to the superiority of their brand, and with the other to predict that we would choose it anyway. The grim truth is that they very often succeed. And if they continue to do so, daily refining and improving their methods, they may before long be in a position to tell us what colour and what form will affect us in such and such a way; how we shall react to a given piece of music, a given play, or a given novel. It may not be long, in fact, before the man who says about art "I know what I like" is talking nonsense; he will like what he *gets*. (Of course, the remark is nonsense anyway; no one knew he would like frozen orange juice until it was put on the market). But when science is able to *predict* the reaction of people to a work of art, and art then becomes the manufacture of what people in the mass are *conditioned* to want, 1984 may already be here.

As the mass media become more and more massive, private or coterie art becomes either a mass fad, a sudden and suddenly passing fashion, or a total loss.

The maverick artist, the one with a personal message, finds he cannot gain access to any of the power-stations that control this Niagara. There is, in the language of the communications experts, no talk-back. And when we remind ourselves that Shakespeare was for a long time considered inept and Ibsen obscene; that Bach, his contemporaries said, was unsingable and Mozart would never last; that Renoir and Degas were rejected by the French Academy (the batting average of academies is appalling); that at this very moment Parliament is trying to muzzle the CBC (which is tame enough to start with)—then the value to the human race of the artist who goes against the grain, the outrider of the herd, that is, the maverick, should be painfully plain to all of us. Can we wonder, then, that the individual artist today often fights to discover and protect his individuality? Is it surprising that he sometimes invents a nearly private language, and invites the world to enter his private world on his terms or go to hell if they prefer? A quarter of a century ago, Picasso remarked,

I do not read English, an English book is a blank to me. This does not mean that the English language does not exist. Why should I blame anyone but myself if I cannot understand what I know nothing about?

Picasso, as usual, has a point there—although the ability to understand something does not mean the will to like it. Whether we enjoy an artist's private world is something each of us has to decide for himself; but certainly we have to learn his language before we can get anything out of what he is trying to say. And there is a curious coincidence here: at the same time as we complain that artists have become obscure, we ourselves, as an audience, have developed a weakness for private worlds—and I refer not only to the intelligentsia. How else may one explain the unprecedented popularity of "True Confession" magazines? Of books which reveal someone's private life in explicit detail, such as the biographies of Caitlin Thomas or Lillian Roth, or the numberless best-selling novels of sexual morbidity, or the clinical abnormalities of Tennessee Williams or Jean Genet? We too, like the artist, often seem to be seeking a refuge from mass art in small worlds of grubby minutiae, spiting the legions of the many by retreating into a private cell, seeking (as the mass media flow ever closer) the comfort of knowing a single other human being to his uttermost depths.

There is, however, *another* path, another way of fighting back against a world of bewildering massiveness and complexity. It is a path many modern artists have taken, and which is followed by many modern *audiences*—a way which chooses to mock a world governed by science, to turn the weapon of reason against the very citadel of reason itself. It is the way of the clown, who meets disaster,

like the Fool in *King Lear*, with a quip; who breaks the point of, and turns the weight of, the attack of the bewildering and the overwhelming by turning what might be tragedy into farce. Once world wars and atom bombs had become part of our daily lives, some of our artists met the challenge by toughening us up against the shocks with monstrous jokes, as men trapped in a mine will do. It is a method of saving ourselves from ugly reality; we find it easier to say that a man "kicked the bucket" than that he "died". And the richest gag in a recent film was a man who actually kicked a bucket with his final fling. That really *is* showing the Fates who is boss.

That shrewd analyst of our life and times, Gerald Heard, puts it this way:

Certainly the increasing use of humour, the employment of farce for detensioning, the deliberate cultivation of nonsense are striking facts . . . during the last fifty years. During the latter part of the nineteenth century there had begun to appear a new development in the psychology of humour and the use of word-surprise to create nervous relief. Books such as Edward Lear's went beyond wit and indeed the earlier idea of humour, and . . . used complete nonsense to fire the mind out of its rut of bored complacency, depression or bewilderment. Satire and farce, which derived from social criticism of unpopular factions in society, were now transmuted into a jest at the expense of reason itself. In the last half-century this retreat (or return) to the pre-rational, has been increasingly practised. It is probably not without significance that the man who most influenced this development was a mathematician, Lewis Carroll (C. L. Dodgson) . . . . He stands, then, like a watershed—one stream of his work contributing to the efficiency world of the engineer and the non-sensory cosmogony of the pure mathematician, and the other contributing to that compensatory world of guarded and cushioned social intercourse whereby we sustain the tension of living in a nonsensical universe. So by parables and paradoxes we still manage to assure each other that although the age of reason may have followed the age of faith, living is still fun. . . . Fun—derived from the same word-root as "something waved", is in fact that borderland raid whereby language dares, in moments of prophetic exuberance, to outrun all rational or even sensory experience, creating comic monsters and utterly fantastic situations. So, with this odd weapon . . . . the mind would outbid and outdare the terror of the unknown, the incalculable possibilities and shocks of nature.

(Gerald Heard, *Morals since 1900*)

And so we find today a great many artists who aim to shock us with nonsense. We find, for example, the so-called Theatre of the Absurd, where anything can happen—nay, must happen. Where elephants are delivered to the house, or juke-boxes are tried in court. We find composers scoring jokes for full symphony, and painters

hanging the *reductio ad absurdum* of art, a blank canvas. Why do they do it?

Science—in this case psychology—has proved that when colours, shapes, tones, or words appear in bold disjunctions or collisions, when they are ripped out of their usual context, then what one writer has called their “quality as brute sensations” affects us with a fresh and increased intensity. The artist has found that in a day when almost every style has become a cliché, he must give the cliché a twist before we will pay attention to it. And so he sets out deliberately to create confusion, to destroy our sense of time and place—using the tricks of flashback and violent juxtaposition taught him by radio and the films—and always, at whatever cost, to keep us guessing. Do we expect a nose in the middle of the face?—it will be where we expect an ear. Do we expect the heroine to enter and make love to the hero?—it will be the undertaker with a hearse. The pieces of the jig-saw have been jumbled. When we expect something to fit, it never will. When we do not expect it to, it will.

This insistence on the element of surprise has led to the most modern of all art forms, an extemporaneous combination of painting, sculpture, theatre, and poetry, known as the “happening”, in which all the elements are first assembled—both performers and objects—and the chips allowed to fall where they may. This, at least, we may say, precludes the “canned”, the contrived, the mechanically predictable, mechanically reproduceable art of the mass media, because it happens once and can never happen again the same way. It is a pure protest against science, with its predictability and its mechanization.

Are we puzzled by this sort of nonsense? Relax and enjoy it. Perhaps it is as well to remind ourselves that in the age which commenced with the internal combustion engine, we now and then need to let off steam. A joke, in all seriousness, can be a life-saver. And if modern art is sometimes shrill, it is surely not the fault of the artist alone. We all tend to raise our voices when we speak to people who are getting deaf. We need to shout above the television set.

If it is becoming difficult for the individual artist to circumvent the machines and reach his audience, and for the audience to hear him over the persistent background of Muzak and the blinding ubiquity of neon lights, there is a way out if both audience and artists grow up with the times. The artist must learn for his part to master the new tools which science has given him, just as he once mastered the chisel and the flute, and not to be afraid of them simply because they are complex. And his audience must learn not to cling like neurotic children to old toys, for neurotic children grow into neurotic adults. We *can* find the stuff of life in Pogo as well as Raphael, in Brecht as well as Goethe, in Belafonte as well as Olivier,



in Bernstein as well as Brahms. The more the merrier. In fact, as science leads us into what Sir James Jeans called "the expanding universe", we would be very silly to start shutting any of the doors and windows which art provides. It will not do us much good to find out all there is to know about the universe unless we can use it to enrich our own lives and those, perhaps, of the Men in the Moon.



*Willis Eberman*

### THE FURIES

What if the Furies should descend  
out of the ocean-sky: destruction, death,  
pestilence; would the Arch Cape tunnel,  
that high shelter, save most of the people?

What if that wave, my grandfather predicted,  
should wash our coast clean, and only  
the hawk and gull remain to patrol it?  
The shy, wild animals return from the hills.

Surely something will happen: we sense it.  
We hear it in the wind above the ocean;  
in the waves' rock-thud, the sighing spray,  
the silence before storm: the time is near

for the end of the times. Time now to fall,  
even as Byzantium, Greece, Rome:—But O, this time  
The Furies descend on the total scope of the world;  
and then peace, and the lonely, noble Pacific forever.