

collage: Jodie Sibert

## By David Graham

I'd like to sketch out some attitudes toward technology which I personally prefer. These aren't the only attitudes possible. Nor are they the only ones I'm likely, eventually, to prefer myself. They're just attitudes.

Some will find these attitudes naive, arguing that the development of technology has its own logic to which we must adapt. Others will find these attitudes dangerous, arguing that technology is, definitionally, bad for man, nature and society and that it must therefore be destroyed. Some will recognize that these attitudes are an initial attempt to see technology as our servant and the servant of the environment.

The first attitude toward technology is that it is the creature of man. Man makes technology. Therefore, it makes sense to say that man can control it. The truth of the Frankenstein myth—the myth of technology taking matters into its own hands and eliminating human control—is that the people who created the monster allowed (or intended) it to get beyond their control.

The second attitude toward technology is that man can do with it whatever he wants. Technology is the same as magic. This means that the only significant question regarding technology is, what should be done. Showing that something can be done is, definitionally, an irrelevant activity.

Like the Sabbath, technology is made for man; man is not make for technology.

The third attitude toward technology is that it should function invisibly. What is important about a machine is what it does. That it does something is irrelevant. Our tendency to place technology in places where it can be highly visible derives from the attitude that one should prove that one can do something. This attitude involves a lack of self-confidence.

An analogy with the human body is useful here. We tend to flaunt our achievements by exposing them to view: phone lines. Imagine if the brain wanted to flaunt its abilities by stringing brain cells around the outside of our skulls.

Technology should be invisible, recessed. This reality is signaled by the phrase, technological infrastructure.

The fourth attitude toward technology is that it should develop in the direction of "doing more with less". Thus unless other considerations should take precedence, technology should develop in the directions of:

miniaturization
speed
low heat production
low energy consumption
zero waste production
multi-channel control capabilities
multi-environmental compatibility
zone organization (i.e. systems which organize
progressively large hunks of reality; this goal is
only possible through miniaturization.)

The fifth attitude toward technology is that both the form and the function of technology must be "beautiful" in every respect. Not sanitized like an IBM office, but beautiful and warm. The machine itself and the thing it does must be optimally esthetically pleasing to those who are associated with it. A technology which degrades people and the environment is, definitionally, bad. The idea that we can use an unattractive and degrading technology (e.g. a factory or an office building) to manufacture a pleasing product is nonsense. A beautiful environment is the minimum requirement, not the idealized goal.

The sixth attitude toward technology is that it can be changed and improved. If a piece of technology is not doing what people want it to do, they must find a way to change it or build another piece which does what they want. It is unreasonable to say that any piece of technology is "as good as we can get it". Technology is fully and fundamentally mutable. The development of technology is an infinite pro/regress.

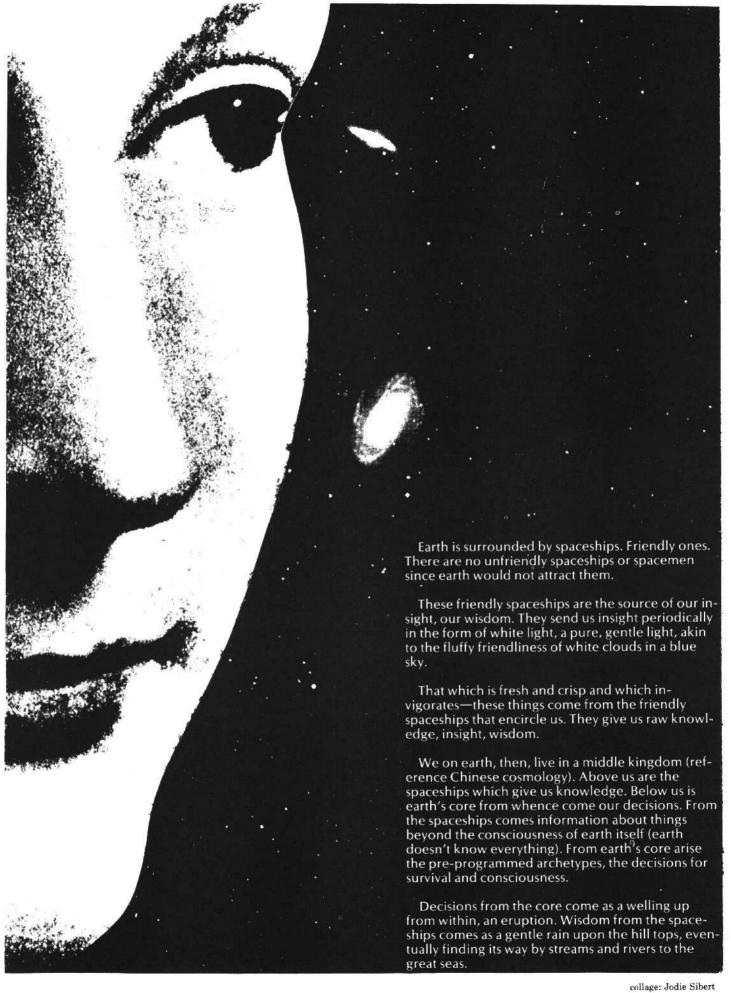
The seventh attitude toward technology is that technology is necessary. The relevant questions regarding technology are whether, what, when, should and will.

The eighth attitude toward technology is that, like magic, it is a quick-sand. In fact, there is no fundamental difference between using technology for "beneficial purposes" and using it for "other" purposes. We need not to do away with technology but to get beyond it. Beyond technology we do not get into hassles like "good" and "bad" technology. In a sense, we get beyond much of what has been said in the previous three pages.

The most fundamental attitude toward technology, therefore, is that it *IS* magic.

The metaconcept behind that statement is that thinking is technology. It is the idea in one's mind which is real and the hardware is merely a realization or manifestation of sets of ideas.

DEFINITION: technology is thinking is technology is magic



What calms a man's deepest fears is not the rational but the ritual.

All communication is mediated.

By a screen you place around your partner. You place the same screen around yourself.

The effect is that communication is simply seeing yourself in a mirror. The mirror is the screen you place around your partner.

In communication, you always and only receive exactly those messages you want to receive.

That means you transmit in order to receive your own transmissions.

Transception.

The medium is the message and you are the medium. Always.

As communication begins, there is an instantaneous and simultaneous assessment of compatibilities. Channels over which messages might be exchanged.

From then on, communication is speaking with yourself.

In polytime multi-mirroring multi-communication multi-self

The issue today is not one of insight or even one of knowledge.

The issue today is one of courage and of strength.

Are you able to withstand the thermal winds of outerspace? Without a spacesuit?

Can you pass a spiritual examination before quasars and black holes?

When all your possessions have departed you and you stand naked within an intergalactic radiation storm, will you be able to say, "Yes, I belong here"?

When all of mankind and all of spacekind are your brothers and sisters, when each of them knows you from the first time you masturbated, and when each knows your every fault in detail, will you be able to accept their rejection of you?

When, finally, the bottom drops out of you and you see that you're standing on nothing and hanging from nothing; when, in fact, you finally discover that you're alone and you've been doing all these things TO YOURSELF, will you have courage to say,

"Yes, all my striving has been in vain, I am the source of all error and of all truth, I am always where I belong, I am always doing what I should be doing, I can do no wrong"?

Let me suggest that earth is a sentient being. Earth is a conscious, decision-making, reproducing, goal-oriented being of some considerable intelligence, fortitude and skill. Furthermore, earth is on a life trip. Earth is not about to do itself in.

Let me go a little farther. The core of earth is an information storage and retrieval facility. Earth's brain. Man and his/her intelligence, located on earth's surface, are reflections or manifestations of the information which is stored in earth's core. An analogy here would be with a computer and a CRT (Cathode Ray Tube). Earth's core is like the computer core. Man is like the CRT.

Earth's core is a blue light, making earth blue as a whole.



The functions of earth's core are to:

- (1) store information generated locally and on the surface
- (2) reflect or relay messages between points on the surface
- (3) scramble the coding systems of messages reflecting through the core. (Code scrambling is the means of creativity and self-actualization.)
- (4) gradually, over time, simplify its categories so that all information can be processed by just a few archetypical programs. (We on the surface call this process of simplification "maturing" or "growing up." Religious people call it, getting down, back up or into essences.)

It helps to picture the eruption from within and the rain from without as the two poles of a vertical axis. Then, if we picture East and West as the two poles of a horizontal axis, we find ourselves in a most interesting coordinate system. Teilhard's radial and tangential energy vectors.

In place of schools:

- Build quick-access, poly-media data banks that vary output according to user feedback. User cost: zero.
- 2- Install computer-based programmed learning for all skills compatible with this technique. System should be on-line to any user with a telephone and/or a CRT or typewriter terminal. User cost: zero. User paid for each course completed.
- 3- Generate networks for information describing self-experiences. Any and all experience appropriate. Only it has to be in the first person, singular or plural. Accessible for a minimal fee. Free to those claiming no cash. Use Whole Earth Catalogue as initial model.
- 4- Give each individual quick access to software production and distribution systems for each medium currently in use. Means decentralizing and simplifying production and distribution techniques, making systems instantly reprogrammable according to user feedback.
- 5- Be sensitive to the times when a guru calls you. Chances are he or she will find you within but take you outside of most or all of your external technologies, relying instead on earth's meta-electronic systems. When called, GO.

beep...beep...beep...

Long ago, they thought it was a question of oratory. The Greeks and the Romans believe that was how it's done: the spoken word.

Then we invented printing, and this was the Great New Thing.

Then we invented telegraphy and the radio, and very soon we knew we had MEDIA. Video followed, naturally enough, giving us multi-media . . . it could go on, and it probably will go on.

That is not all bad—but each time it happens, some one tells us that the traditional way is obsolete. . . . that is what was holding us back. . . . ten years from now, no one will be using that: this is the only way to communicate effectively.

In our time, some people are showing a tendency to put their hopes in psychic communication. It seems very probably that we are indeed moving in this direction, BUT:

It is all too easy to be fascinated by telepathy, etc., to the relative exclusion of previously known channels of communication that continue to be vital. It is not merely a general sense of balance which is appealed to here, but beyond that, optimum proportions in that area where the quantitative meets the qualitative (as in aesthetic considerations, such as the ideal rectangle.)

The most efficient way to convey a message to some one is to use that combination of audio-visual-kinesic-psychic (etc.?) signals to which he or she is most sensitive. Each individual may need a unique combination with regular patterns of proportions. This would be comforting in the sense that there could be no single set of signals which would . . . hypnotize(?) . . . everyone at one time. But it presents a lasting challenge where complex communication between very diverse individuals and groups has to be accomplished.

Be careful of what you want: You just might get it.

The future is half dream, half reality. The reality is the past choices that we have made whose consequences we still must live with. The dream is the countless possibilities that open up as the universe unfolds.

Many people have some ideas about what they expect to happen. Yet few of them stop to think about how their expectations shape the future.

In general, the world does its best to conform to your ideas about it. You can usually find what you are looking for. The reason's simple: the fact that you believe something's going to happen can set up the conditions that assure that it will happen. Self-fulfilling prophecy.

self-fulfilling prophecy operates in many areas. it's easy to alter feedback so that you just see what you want to see. scientists are now finding evidence suggesting that expectations affect things in a way that can be physically measured. both of these are the same thing really—in different areas of the field.

John Lennon: You radiate everything you are.

- 1. What is the role of projection/radiation/self-fulfilling prophecy in the complex harmonics of a world that must be collectively energized (created)?
- 2. What ways are there to close the feedback loops to allow people to see the realities they are projecting?

CORECALL NETWORK . . . . Towards a community memory

The task before mankind is not an easy one. We've got to build a new culture. The one designed for the agricultural era just isn't in harmony with the reality we're living in anymore.

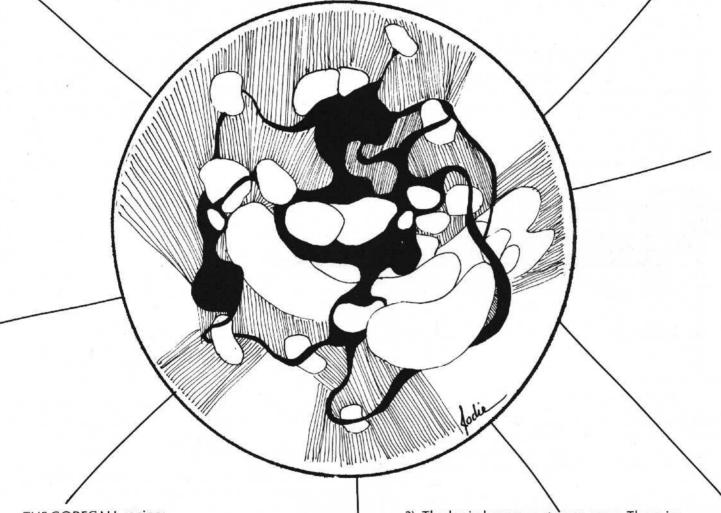
The work needs to be done quickly—probably in less than one generation. Few cultures have survived basic change. Most have tried to work piecemeal. And cultural schizophrenia—maintained much too long—drained them of life.

One of the keys to culture-building seems to be redundancy. All the different aspects of culture must have elements in common. Institutions as a set of overlapping sets. In this way they can be mutually supportive—synergetic.

CORECALL NETWORK is an idea we've been playing with. We think that it might be able to accelerate discovery of redundancy. A tool for cultural craftsman.

Add some of the operational principles of the human brain.

- 1) Information can be stored in the brain in a form that can be called "synaesthetic" or "total field". The brain does not record a separate track for audio, video, tactile, etc. inputs. Whole situations are scanned and information from all sources is recorded simultaneously in a single "image."
- 2) Information at many levels of generalization is stored. . . . routines, programs, metagrograms and beyond.



THE CORECALL recipe:

Start with 1 basic idea.

Redundancy has to do with memory. It starts with, "I've seen this before" and "I'll see it again" completes it. Recall and generalization.

What if we had a system where entire communities had a shared memory—CO-RECALL—and each member of the community could have access to the basic perceptions and ideas of all the other members—CORE-CALL?

- 3) The brain has many storage areas. There is a wide range in the access available to the various areas. Only a minute fraction of the information stored is immediately (consciously) available.
- 4 Programs and metaprograms are called from storage by key control symbols (secondary control centers). The key controls are usually elements of the program that are insignificant by themselves. But when they are input, the entire program is called up.

5) Key control symbols can be used singly or in sets. When used in sets they function much like the combinations to locks. Also there may be a threshold trigger on any key control. In this case the symbol will not activate the program until a threshold of intensity (etc.) is reached.

Blend in a couple of new techniques.\*\*\*

- 1) A control language that can be used by a wide variety of people working in various media (e.g. print, video, music). This would be a set of categories that people would agree to use—like a library of congress system—for concepts and metaconcepts.
- 2) A computer programming technique of making "most probably matches" involving sets of overlapping sets. (This particular technique would have many applications. For example, it would make possible computer diagnosis of disease.)

Pour it all into a computer and set up terminals at convenient places all over the community. Put in your input. Output may be seasoned to taste.

And you have CORECALL NETWORK. . . . the most generalized of the new media.

\*\*\* Note: The recommended method of growing new techniques is to apply generous amounts of the resources necessary for self-actualization to a group of talented people.

Supplementary Channels

(or) whatever you would like to call it. . . . .

Humanity has seldom, if ever, discovered things in a quick, efficient manner; it seems to be our lot to prove vaguely into the unknown, often getting things incomplete, upside-down and inside-out.

This appears to apply fully to our explorations of ESP to date. Conclusion: we should look for other approaches. One of them appears to lie in the field of wave phenomena at very low frequencies. This is not a statement that -adepts will all be able to develop telepathy. Rather, we are beginning to perceive the possibilities of very small particles that cross the spatial boundaries of the cells of all life forms on earth.

In the industrial era, it has been customary to look "up" and to go "up". Why not look "down"?

.... neither kilocycles nor megacycles, just plain cycles ....

For example, the possibility that our planet, its surrounding ionosphere, and the space between them could behave as a kind of resonator has been considered by Schumann (Z. Naturforsch. 7a, 150, 1952); his calculations show a fundamental resonant frequency of about 10 Hz (+ cycles per second). Konig checked this out, and found something definite at around 9 Hz, plus a variety of other atmospheric phenomena which gave patterned readings at very low frequencies (Z. angew. Physik 11, 264, 1959).

EEG measurements tell us that there is a great deal of brain activity at very low frequencies. Also, it is known that many live forms (including ourselves) physically perceive and respond to a variety of differences in this range of phenomena (see Gauquelin: "The Cosmic Clocks", Chapter 8).

EEG measurements tell us something else: that there appear to be specific ranges of recorded brain wave activity, with functional correlations. Here are two versions of the boundaries of these ranges (figures are approximate; neither version is guaranteed to be correct, but both are realistic hypotheses).

RANGE

**VERSION I** 

18 - 23

8 - 13

4-7

? - 4

**VERSION II** 

14 - 32

7 - 14

4-7

? - 4

(figures are frequencies in Hz)

Look at the vertical columns, from top to bottom: there is a numerical pattern—the boundaries show a tendency to be halved, each step down. A similar pattern occurs in music and acoustics: OCTAVES.

For comparison, here is a lower extension of the tempered music scale (A + 440):

C 0

C-1

C-2

C-3

16.352 - 30.868

8.176 - 15.434

4.083 - 7.717

2.041 - 3.858

(Hz)

Who is going to compose the music of the mind? ..... and what will we be able to do with it?

There is a context in which all these things may be relevant—and some of them will probably turn out to be vital. One of our basic, general attributes is the possession of limited capabilities, many of which we have managed to extend, for better or for worse. A man who wants to lift a 250-pound rock with his bare hands has a problem: adding a suitable hydraulic jack, or winch, to the use of his bodily effort solves the problem, providing he is willing to override nature and take the consequences. It will probably not be long before we have some kind of amplifier or catalyst that will extend our biologicallybased psychic abilities. If so, we shall be confronted with a new array of serious questions, for example:

who? (yet another elite class . . . . ?)

What happens if we add to earth's existing inventory of infrasonic vibrations and their electromagnetic equivalents?

The writer is collecting information on such topics readers are invited to contribute comments and any data which might be of interest.

## epilogue

I'd like to say a few things about dissolving boundaries and resolving boundaries we learn by joy and by fear actually, we learn through both simultaneously, but one is always behind the other learning through joy is the process of acquiring richer and richer stability for yourself

getting more and more together

you need to be comfortable to learn through joy

the boundaries of your ideas must not dissolve faster or more fully than you deliberately make them dissolve also, new boundaries must not resolve for you before you're ready for them to re-

the old theory is that creativity occurs in conditions of extreme stress and imbalance Van Gogh

Beethoven

Nietzsche

I think we'll find this theory to be partial and mis-

creativity is the process of dissolving and resolving the boundaries you value—comfortably

