## The Proper Study

Isaac Asimov

“The demonstration is ready,” said Oscar Harding softly, half to himself, when the phone rang to say that the general was on his way upstairs.

Ben Fife, Harding’s young associate, pushed his fists deep into the pockets of his laboratory jacket. “We won’t get anywhere,” he said. “The general doesn’t change his mind.” He looked sideways at the older man’s sharp profile, his pinched cheeks, his thinning gray hair. Harding might be a wizard with electronic equipment, but he couldn’t seem to grasp the kind of man the general was.

And Harding said mildly, “Oh, you can never tell.”

The general knocked once on the door, but it was for I show only. He walked in quickly, without waiting for a response. Two soldiers took up their position in the corridor, one on each side of the door. They faced outward, rifles ready.

General Gruenwald said crisply, “Professor Harding!” He nodded briefly in Fife’s direction and then, for a moment, studied the remaining individual in the room. That was a blank-faced man who sat apart in a straight-backed chair, half-obscured by surrounding equipment.

Everything about the general was crisp; his walk, the way he held his spine, the way he spoke. He was an straight lines and angles, adhering rigidly at all points to the etiquette of the born soldier..

“Won’t you sit down, General,” murmured Harding. “Thank you. It’s good of you to come; I’ve been trying to see you for some time. I appreciate the fact you’re a busy man.”

“Since I am busy,” said the general, “let us get to the point.”

” As near the point as I can, sir. I assume you knowabout our project here. You know about the Neurophotoscope.”

“Your top-secret project? Of course. My scientific aides keep me abreast of it as best they can. I won’t object to some further clarification. What is it you want?”

The suddenness of the question made Harding blink. Then he said, “To be brief-declassification. I want the world to know that—”

“Why do you want them to know anything?”

“Neurophotoscopy is an important problem, sir, and enormously complex. I would like all scientists of all nationalities working on it.”

“No, no. That’s been gone over many times. The discovery is ours and we keep it.”

“It will remain a very small discovery if it remains ours. Let me explain once more.”

The general looked at his watch. “It will be quite useless.”

“I have a new subject. A new demonstration. As long as you’ve come here at all, General, won’t you listen for just a little while? I’ll omit scientific detail as much as possible and say only that the varying electric potentials of brain cells can be recorded as tiny, irregular waves.”

“Electroencephalograms. Yes, I know. We’ve had them for a century. And I know what you do with it.”

“Uh-yes.” Harding grew more earnest. “The brain waves by themselves carry their information too compactly. They give us the whole complex of changes from a hundred billion brain cells at once. My discovery was of a practical method for converting them to colored patterns.”

“With your Neurophotoscope,” said the general, pointing. “You see, I recognize the machine.” Every campaign ribbon and medal on his chest lay in its proper place to within the millimeter.

“Yes. The ’scope produces color effects, real images that seem to fill the air and change very rapidly. They can be photographed and they’re beautiful.”

“I have seen photographs,” the general said coldly. “Have you seen the real thing, in action?”

“Once or twice. You were there at the time.”

“Oh, yes.” The professor was disconcerted. He said, “But you haven’t seen this man; our new subject.” He pointed briefly to the man in the chair, a man with a sharp chin, a long nose, no sign of hair on his skull, and still that vacant look in his eye.

“Who is he?” asked the general.

“The only name we use for him is Steve. He is mentally retarded but produces the most intense patterns we have yet found. Why this should be we don’t know. Whether it has something to do with his mental—”

“Do you intend to show me what he does?” broke in the general.

“If you will watch, General.” Harding nodded at Fife, who went into action at once.

The subject, as always, watched Fife with mild interest, doing as he was told and making no resistance. The light plastic helmet fitted snugly over his shaved cranium and each of the complicated electrodes was adjusted properly. Fife tried to work smoothly under the unusual tension of the occasion. He was in agony lest the general look at his watch again, and leave.

He stepped away, panting. “Shall I activate it now, Professor Harding?”

“Yes. Now.” Fife closed a contact gently and at once the air above Steve’s head seemed filled with brightening color. Circles appeared and circles within circles, turning, whirling, and splitting apart.

Fife felt a clear sensation of uneasiness but pushed it away impatiently. That was the subject’s emotion-Steve’s-not his own. The general must have felt it too, for he shifted in his chair and cleared his throat loudly.

Harding said casually, “The patterns contain no more information than the brain waves, really, but are much more easily studied and analyzed. It is like putting germs under a strong microscope. Nothing new is added, but what is there can be seen more easily.”

Steve was growing steadily more uneasy. Fife could sense it was the harsh and unsympathetic presence of the general that was the cause. Although Steve did notchange his position or give any outward sign of fear, the colors in the patterns his mind created grew harsher, and within the outer circles there were clashing interlocks.

The general raised his hand as though to push the flickering lights away. He said, “What about all this, Professor?”

“With Steve, we can jump ahead even faster than we have been. Already we have learned more in the two years since I devised the first ’scope than in the fifty years before that. With Steve, and with others like him, perhaps, and with the help of the scientists of the world—”

“I have been told you can use this to reach minds,” said the general sharply.

“Reach minds?” Harding thought a moment. “You mean telepathy? That’s quite exaggerated. Minds are too different for that. The fine details of your way of thinking are not like mine or like anyone else’s, and raw brain patterns won’t match. We have to translate thoughts into words, a much cruder form of communication, and even then it is hard enough for human beings to make contact.”

“I don’t mean telepathy! I mean emotion! Ifthe subject feels anger, the receiver can be made to experience anger. Right?”

“In a manner of speaking.”

The general was clearly agitated. “Those things-right there—” His finger jabbed toward the patterns, which were whirling most unpleasantly now. “They can be used for emotion control. With these, broadcast on television, whole populations can be emotionally manipulated. Can we allow such power to fall into the wrong hands?”

“If it were such power,” said Harding mildly, “there would be no right hands.”

Fife frowned. That was a dangerous remark. Every once in a while Harding seemed to forget that the old days of democracy were gone.

But the general let it go. He said, “I didn’t know you had this thing so far advanced. I didn’t know you had this-Steve. You get others like that. Meanwhile, the army is taking this over. *Completely!”*

*“*Wait, General, just ten seconds.” Harding turned to Fife. “Give Steve his book, will you, Ben?”

Fife did so with alacrity. The book was one of the new Kaleido-volumes that told their stories by means of colored photographs that slowly twisted and changed once the book was opened. It was a kind of animated cartoon in hard-covers and Steve smiled as he reached out eagerly for it.

Almost at once the colored patterns that clustered above his plastic helmet changed in nature. They slowed their turning and the colors softened. The patterns within the circle grew less discordant.

Fife sighed his relief and let warmth and relaxation sweep over him.

Harding said, “General, don’t let the possibility of emotion control alarm you. The ’scope offers less possibility for that than you think. Surely there are men whose emotions can be manipulated, but the ’scope isn’t necessary for them. They react mindlessly to catch words, music, uniforms, almost anything. Hitler once controlled Germany without even television, and Napoleon controlled France without even radio or mass-circulation newspapers. The ’scope offers nothing new.”

“I don’t believe that,” muttered the general, but he had grown thoughtful again.

Steve stared earnestly at the Kaleido-volume, and the patterns over his head had almost stilled into warmly colored and intricately detailed circles that pulsed their pleasure.

Harding’s voice was almost coaxing. “There are always the people who resist conformity; who don’t go along; and they are the important ones of society. They won’t go along with colored patterns any more than with any other form of persuasion. So why worry about the useless bogey of emotion control? Let us instead see the Neurophotoscope as the first instrument through which mental function can be truly analyzed. That’s what should concern us above an. The proper study of mankind is man, as Alexander Pope once said, and what is man but his brain?”

The general remained silent.

“If we can solve the manner of the brain’s workings,” went on Harding, “and learn at last what makes a man a man, we are on our way to understanding ourselves, and nothing more difficult-or more worthwhile-faces us. And how can this be done by just one man, by one laboratory? How can it be done in secrecy and fear? The whole world of science must cooperate. —General, declassify the project! Throw it open to all men!”

Slowly the general nodded. “I think you’re right after all.”

“I have the proper document. If you’ll sign it and key it with your fingerprint; if you use your two guards outside as witnesses; if you alert the Executive Board by closed video; if you—”

It was all done. Before Fife’s astonished eyes it was all done.

When the general was gone, the Neurophotoscope dismantled, and Steve taken back to his quarters, Fife finally overcame his amazement long enough to speak.

“How could he have been persuaded so easily, Professor Harding? You’ve explained your point of view at length in a dozen reports and it never helped a bit.”

“I’ve never presented it in this room, with the Neurophotoscope working,” said Harding. “I’ve never had anyone as intensely projective as Steve before. Many people can withstand emotion control, as I said, but some people cannot withstand it. Those who have a tendency to conform are easily led to agree with others. I took the gamble that any man who feels comfortable in uniform and who lives by the military book is liable to be swayed, no matter how powerful he imagines himself to be.”

“You mean-Steve—”

“Of course, I let the general feel the uneasiness first, then you handed Steve the Kaleido-volume and the air filled with happiness. You felt it, didn’t you?”

“Yes. Certainly.”

“It was my guess the general couldn’t resist that happiness so suddenly following the unease, and he didn’t. Anything would have sounded good at that moment. ”

“But he’ll get over it, won’t he?”

“Eventually, I suppose, but so what? The key progress reports concerning Neurophotoscopy are being sent out right now to news media all over the world. The general might suppress it here in this country, but surely not elsewhere. —No, he will have to make the best of it. Mankind can begin its proper study in earnest, at last.”

The painting was simply a crudely done head surrounded by a series of aimless psychedelic designs. It meant nothing to *ine* and I had a terrible time thinking up THE PROPER STUDY. Foul Anderson also wrote a story based on the same painting and probably had no trouble at all.

The two stories appeared in the same issue and I suppose it might be interesting to compare the stories and try to get an idea of the different workings of Poul’s brain-and mine-but, as in the case of BLANK!, I didn’t save the other story. Besides, I don’t want you to compare brains. Poul is awfully bright and you might come to me with some hard truths I’d rather not face.

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In early 1970 *IBM Magazine* came to me with a quote from J. B. Priestley which went as follows: “Between midnight and dawn, when sleep will not come and all the old wounds begin to ache, I often have a nightmare vision of a future world in which there are billions of people, all numbered and registered, with not a gleam of genius anywhere, not an original mind, a rich personality, on the whole packed globe.”

The editor of the magazine asked me to write a story based on the quote, and I did the job in late April and mailed it in. The story was 2430 A.D., and in it I took I Priestley’s quotation seriously and tried to describe the world of his nightmares.

And *IBM Magazine* sent it back. They said they didn’t want a story that backed the quotation; they wanted one I that refuted the quotation. Well, they had never *said* so.

Under ordinary circumstances I might have been very indignant and might have written a rather scathing letter.However, these were hard times for me and there was another turning point, and a very sad one, coming up in my life.

My marriage had been limping for some years and it finally broke down. On July 3, 1970, with our twenty-eighth anniversary nearly upon US, I moved out and went to New York. I took a two-room hotel suite that I was to use as an office for nearly five years.

You can’t make a change like that without all kinds of worries, miseries, and guilts. And among them all, I being what I am, one of my worries, as I sat in the two rooms in a strange environment, with my reference library still undelivered,\* [\* As long as I was a fiction writer I needed very little in the way of a library and could write anywhere. One of the less pleasant aspects of my switch to nonfiction was that I gradually built up an enormous reference library which nails me to the ground.] was whether I would still be able to write.

I remembered my story 2430 A.D., which ordinarily I might have abandoned in indignation. Now, just to see if I could do it, I began another story, on July 8, 1970, five days after my move, one which would refute Priestley’s quotation. I called it THE GREATEST ASSET.

I sent it to *IBM Magazine,* and you’ll never believe me but after reading my second story they decided to take my first one after all. It was utterly confusing. Was my second story so bad that it made the first look good? Or had they changed their mind before I had written the second story and had they not gotten round to telling me? I suspect the latter. Anyway, 2430 A.D. was published in the October 1970 issue of *IBM Magazine.*