

# Atoms In Japan

May 1990 Vol.34 No.5

ATOMS IN JAPAN is published monthly and distributed by the Japan Atomic Industrial Forum, Inc., to affiliate members only.

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Printed in Japan by SANYO Co., Ltd.

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# Public Acceptance of Nuclear Energy and Cerebro-Physiology — An Essay

The public attitude toward nuclear power has not been favorable in Japan since the Chernobyl accident.

But public approval of nuclear energy has nevertheless recovered over the past two years, through the efforts of the government and the nuclear industry, to a level that balances out on the "low plateau" of disapproval. The Prime Minister's Office and the news media samplings of public opinion show another remarkable tendency in the past year, i.e. diminishing percentages among both advocates and opponents carrying their cases to extreme, compared to the upsurge of the moderates who would like to "see nuclear power remain in status quo." In a recent "analysis of public opinion on nuclear energy," the Japan Atomic Industrial Forum found 30% calling for a "buildup" or a conditional buildup in nuclear power; 45.7% wishing to see it "remain in status quo with no further build up," and 18.3% demanding "a cut-back or a halt" — moderates thus forming the majority.

Public response to the question, "What will be the mainstay of energy sources for the next ten years?" seems rational, with nuclear energy finding favor with 39.3%, compared to 26.4% for oil and 20.0% for solar energy (heat and light). But the approval rating on nuclear energy mentioned above is apparently contrary to this because some 60% say "no" when it comes to the question of nuclear "safety."

Responses vary remarkably between men and women. Nuclear power finds favor with 38% of men, but with only 22% of women (although disapproval ratings do not differ greatly between men and women). Among future energy sources, "nuclear energy" is given first choice by 43% of men and 36% of women, and nuclear safety wins recognition from 45% and 35% respectively.

Men and women also differ by a ratio of 25% to 12% in trusting the "explanations" given by the nuclear advocates. Nuclear exponents get a very bad rating for lack of persuasive power.

Among the moderates, who form the majority, there are three times as many people as (38% to 12%) those who contend that nuclear critics give more convincing explanations than are given by the advocates. What is this all about? Two main reasons for the bad rating for nuclear advocates are that "they conceal what may affect their interests" and that "they claim anything to be 'safe' even if a serious accident should happen to it." On the other hand, nuclear critics are equally under criticism for "emphasizing nothing but the dangers of nuclear energy" and for "failing to offer an alternative to nuclear energy." The sensibilities of the moderates are so healthy that they may sound disagreeable to the ear of both advocates and critics.

Whose explanations can be trusted? First come the academics and specialists, second the newspapers, and third the TV networks. Among nuclear interests, "those who are working at nuclear power plants" stand out, finding nearly twice as much favor as do the electric utilities and the government.

Young people between the ages of 16 and 25, among others, seem to have enlightened and sensible opinions to offer. Though not differing perceptibly from other groupings of people in regard to the questions about "future energy sources," "the advisability of nuclear energy development" and "the exercise of judgement on information," they show similar tendencies — something that may bring us new hope for the future.

But are we really right in assuming this? It may be advisable to see the young people in the light of their outlook on life and society. Our



consciousness analysis has produced enough data for us to make a cluster analysis of the respondents. According to differences in their way of thinking, we classified them into six groups — first, the hard working elite (17.3%); second, the pleasure-seekers (17.4%); third, the time-servers (15.7%); fourth, the aggressive activists (15.0%); fifth, the depressed grumblers (18.6%) and sixth, the political dissenters (16.1%). Many youths are among the pleasure-seekers in the second group and show the second highest percentage, following the second group, among the respondents approving of nuclear energy. If past conditions of Japanese society continue, the second group will change their status as they age and join the “hard workers” of the first group. But recent circumstances in Japan are such that there is no warranty that this pattern of life will continue. In other words, I have been at great pains to reason out an answer to the question as to why Japanese youth appear relatively to be in favor of nuclear energy. Is this because they have a positive and constructive view of the future or because their world outlook is that “whatever will be will be,” as they seek “nothing more than a good time for the day?” On the other hand, a further analysis can be made by some other method\* — although I do not go into details — which indicates that nuclear energy is out of favor with “serious-minded people” despite the fact that few things can make people more “serious” than the development of nuclear energy.

Another thing that is difficult for nuclear interests to understand is that responses to the questions about energy (resources, environment, future prospects, etc.) are at cross-purposes with the pros and cons of nuclear power. In an explanation of this, I once said: “I would suggest that people use the left side of their brains to think about energy issues and approve what may

be logically convincing to them, but the term ‘nuclear power’ can never come to them without giving play to the right side of their brains, and so they immediately say ‘no.’”

Let me elaborate further on this. Any explanation about energy would come in “words,” in large measure, to the language field of the left side of the brain; no explanation about nuclear power and radiation can come in “non-words,” as it goes off to the music field of the right side of the brain. An old Chinese book says, “Speech is a figure of the mind.” Apparently, the JAIF chairman was deeply concerned with what it means when he said in his opening address at the forum’s Annual Conference in April: “We realize that nuclear energy poses a social problem because the nuclear civilization has not yet reached maturity. We are called on to see that the nuclear civilization is handed on to the 21st century as a model for all civilizations. To achieve this ...”

\* Barring some individual differences, man’s cerebrum is divided between the left and right halves, the former serving to receive digital information and the latter to receive analog information. It is cerebro-physiologically known that the corpus callosum adjusts all such information before putting it into action. But the Japanese alone have a peculiarity in that they accept things like the vowel sounds and the chirping of insects through the left half of their cerebra. This is related to the rhythm of the Japanese language and the peculiarities of Japanese culture. I give this explanation at the risk of its being a little over-simplified. But it seems very interesting to consider how these things should be reflected in the effort to get public acceptance in Japan. I will discuss this on the next opportunity.

Editor