

The Association for Rational Thought is a new organization committed to encouraging rational, well-informed evaluation of fringe-science, pseudoscience, and paranormal claims. A.R.T. encourages the investigation of paranormal and pseudoscientific claims from a responsible, scientific viewpoint and the distribution of the results of such investigations to the public. You are cordially invited to become a member of A.R.T.  
Recognize Quack Science!

At the April meeting, Membership Secretary Roy Auerbach presented a talk on how to detect scientific quackery. He described characteristics of and varieties of quackery, and compared pseudosciences to sound sciences. I summarize the first part of his talk, characteristics of quack science, here and will continue with the rest in the October newsletter.

Quackery and sound science, Roy emphasized, are not clearly distinguishable categories. Although some sciences are easy to assign to one category or the other, some contain elements of both, and sorting them out requires careful investigation. Mere weirdness does not automatically consign a science to quackery?legitimate science considers such far- out topics as alternative universes and wormholes. Excluding medical quackery and creationism as two large topics worthy of attention on their own, Roy turned to some common characteristics of quack science.

The first law of quack science is Think Big. Quack sciences rarely concern anything less expansive than a theory of the origin of the universe, or at least the solar system. Another favorite target of quack science is the discovery of extraordinary significance, for example, an anti-gravity device, or cold fusion, touted as the solution to the world's energy problems. Quack sciences are also likely to take on the giants of sound science, rarely attacking the lowly assistant professor, preferring instead to claim that Einstein (or Newton, Pauling, or Feynman) was wrong.

The second law of quack science is Think Difficult. The laws of a quack science are usually claimed to be very difficult to verify. Some researchers may be able to detect the effect, others are not. The effect appears to be sporadic for undetermined reasons. Equipment that detects the effect reliably seems to be hard to come by. The claim is often made that the effect is just beyond the reach of current scientific technology. These same problems occur in sound science, too. But in time they vanish from sound science as better methods are developed. Quack science is rarely blessed with such progress, and the difficulties persist.

The laws proposed by quack science may be difficult to verify for other reasons--equipment may be unavailable for inspection, procedures may be unobservable, raw data may be missing, and summary data may not be published in a usable form. Such weaseling occurs in legitimate science, too. It is occasional rather than systematic, however, and is not tolerated by an alert scientific community. Research which is unavailable for thorough inspection and replication is eventually discarded by sound science.

The third law of quack science is the Rule of Paranoia: "I'm a genius and they're out to get me." Often the quack scientist views himself or herself as brilliant, which may explain the characteristic tendency to take on the giants of science like Einstein. They are also likely to view themselves as victims of persecution. Fellow scientists are seen as dishonest blockheads who reject the quack scientist's papers, grant applications, and requests for promotion. Huge organizations--the government, business, the "Eastern Establishment," the Trilateral Commission--repress his work. This is a fairly reasonable position to take, considering the reaction of sound scientists to quack efforts. The quack may not be a genius, but legitimate scientists may very well be out to attack her or his research. The uproar over cold fusion is a good example of this characteristic of quack science.

Fourth, quack science is likely to adhere to a characteristic law of dissemination: No Criticism Allowed. A typical maneuver is to release the astounding findings to the press before they are available to the scientific community in standard refereed journals. The refereed journals may be passed over in favor of self-publication, where no hyper-critical fellow researchers can slow the flow of information by objecting to the methods used. Publication in conference

proceedings, also unrefereed, is another typical path for the dissemination of quack science. The common effect shared by these methods is the production of citable, quotable, published research unimpeded by peer review. This allows the public to absorb the new alleged findings in the absence of immediate critical response.

And finally, the quack scientist is typically a Lonely Hero of the Laboratory, isolated in his or her discovery. Scientific advances normally are produced through a social process that involves communities of scientists over time?new findings are often not unexpected and are usually compatible with earlier work. The quack scientific discovery, however, is likely to arrive out of the blue, unsupported by previous research. The isolation of the work is often apparent in the exclusive lingo used to clothe the research--terminology unheard of in mainstream science.--Ed.

Failed Arguments with Non-Skeptics: Ships That Pass in the Night

Skeptics have difficulty communicating with those lacking a skeptical perspective, and often find themselves uncomfortably cornered by the tactics of non-skeptics. In his talk at the May A.R.T. meeting, President Keith Brabender offered some suggestions for improving communication with non-skeptics, at least those who are not deliberate frauds. He believes better communication is possible with better understanding of your opponent's perspective and methods of argument.

If opponents argue from vastly different perspectives, neither understands what the other is saying. Their arguments and counter-arguments glide past each other like ships that pass in the night. The perspective a person argues from depends on what she or he believes is a reasonable basis for argument. Three common bases for argument are verifiable facts, personal experience and personal values. Unless you understand clearly what you are basing your argument on and what your opponent is basing his or her argument on, you are likely to be trapped.

Skeptics base their arguments on facts, which they define as events or conditions that are mutually observable and verifiable. Believers in psychic or paranormal phenomena do not argue from mutually observable reality, but instead base their argument on unverifiable personal experiences, which they believe have the same logical standing as mutually observable fact. A common tactic for a believer in the psychic realm is to urge the skeptic to concede that there is no mutually verifiable reality, that we are each trapped alone inside our own universe and cannot know the real world. The antidote to this tactic is to make the point that all of us depend all day long on mutually verifiable facts, from clocks and traffic lights to bank statements.

Skeptics also need to emphasize the importance of the testability of facts as a basis for argument. Neither personal experience nor personal values can be verified as having substance independent of the individual, and so are not useful for the purposes of establishing verifiable fact. Distinguishing between meaning and substance is also a useful tool. The content of a hallucination has personal meaning for the hallucinator, but it has no substance because it cannot be verified as existing independently of the hallucinator.

Failure to stick firmly to the verifiability of the facts can land the skeptic in another difficulty, that of the false dilemma. The false dilemma, a favorite tactic of all who argue, is a forced choice between two simple alternatives. One way to skirt this problem is to refuse to choose either alternative and insist on a third. Another is to stay focused on observable facts and sound methods of discovering them.

Although skeptically and scientifically-minded people are most comfortable arguing from statistically significant facts, that is not true of others. Many people do not understand the isolated anecdote or example cannot reasonably be generalized to a large group. Thus an individual may believe that smoking doesn't really cause lung cancer if his Aunt Helen is ninety-three, has been smoking for fifty years and is as healthy as a horse. Thus the skeptic will find useful the ability to explain why anecdotal evidence is not a sound basis for an argument.

Often people who believe in a paranormal event argue their belief on the basis of their personal experience of the event as a witness. They believe themselves to be reliable witnesses to a remarkable event. In this case the skeptic may be able to make some headway by asking the witness for details of the event and pointing out gaps in the account of the event and alternative naturalistic explanations. Joe Gastright used this technique to good effect in interviewing the family who had come to believe that their house in Hamilton was haunted.

In addition believers are likely to argue from their own personal experience as actors. Many Americans have a strong bias towards believing that their own experience is more persuasive than scientific evidence because it is more personal than scientific evidence. Facts and statistics are impersonal, indifferent to the individual, and thus hard to accept.

An even more difficult case is presented by the person who has had a paranormal experience but didn't know about it at the time, and only found out later through the services of a "hypno-therapist." Near death experiences, UFO abductions, satanic abuse, and other common delusions fall into this class. If people have a hard time understanding the limits of generalizing from personal experience, they are completely unprepared to even begin to think about the possibility of memories fabricated entirely in the process of therapy. The belief that "We all know the hypnotized never lie." is likely to be much stronger than a contrary belief in the constructibility of memory. One can argue that hypnosis is poor therapeutic methodology, but it is not likely to be persuasive.

Finally, there are those who base their arguments for the reasonableness of paranormal events on their personal values. Such values include the notion that unscrupulous scientists will burden society with knowledge that is dangerous to humankind. A related belief is that scientists have a hidden agenda, and wish to destroy traditional values that give meaning and discipline to life and substitute relativistic, humanistic values. Scientists, from this perspective, are not to be trusted as sources of information. More trustworthy sources of knowledge, including personal experience must be substituted. The skeptic may be able to point out that scientists participate in society's values just as other people do, and that science often provides useful knowledge, and even insight into the human condition.

In discussing the origin of paranormal phenomena with those who believe in them, it is important to remember that the skeptic's perspective is quite different from and even alien to that of the believer. Where the skeptic emphasizes mutually verifiable, generalizable observation, the believer emphasizes individual, personal experience, belief and values. Keeping these differences in mind may help make communication easier. As Lance Moody suggested in the discussion following Keith's talk, maintaining a sense of humor and a firm conviction that your opponent is not your enemy are also helpful in establishing better communication.- -Ed.

Officers Elected at April Meeting

The Second Annual Election of Officers for the Association for Rational Thought was held Saturday, April 10, at the Bethesda Blue Ash Medical Building.

The officers for the coming year were nominated by the Executive Council and elected by the members present. The new officers are President, Keith Brabender; Vice-President, Dick McGrath; Corresponding Secretary and Publicity Coordinator, Mary Pacinda; Treasurer, Peggy Borger; Membership Secretary, Roy Auerbach; Investigations Officer, Joe Gastright; Newsletter Editor, Virginia Jergens.

These officers make up the Executive Council, which meets several times a year at the discretion of the president. All of these officers served in the same positions last year. Officers elected in April take office in May.

We still need a Recording Secretary, a Meeting Organizer and a Media Resources Coordinator.

The Recording Secretary takes minutes at Membership and Executive Council meetings. The Meeting Organizer's job is to determine topics for meetings and introduce the program at each meeting. The Media Resources Coordinator will organize a pool of experts to be available to respond to inquiries made by the media about pseudoscientific or paranormal phenomena. The Meeting Organizer and the Media Resources Coordinator may each organize a committee to help carry out her or his duties.

Please call Keith Brabender if you are interested in doing one of these jobs next year (May, 1993 - April, 1994). Get involved! Being an involved skeptic is twice as much fun as being a sideline skeptic, and provides a truly useful service to the community. --Ed.

Executive Council Plans for Fall

The Executive Council met June 12 at the Bethesda Blue Ash Medical Building. President Keith Brabender reported that legal expenses to complete application for an exemption from federal income taxes for A.R.T. would require \$150,

but that the exemption was likely to be accepted by the Internal Revenue Service. He will pursue the exemption, which will be used to apply for a lower postage rate for large mailings.

Keith also reported that the possibility of a radio program on WAIF has evaporated due to difficulties at WAIF. Other means of publicity were considered, including establishing a speakers bureau.

The issue of protecting A.R.T. from legal claims rising from individuals presenting themselves as representatives of A.R.T. when making public statements was also discussed. Virginia Jergens and Roy Auerbach will bring a statement to guide speakers in this respect to the Executive Council for consideration.

The Executive Council set meeting dates and newsletter publication dates for 1993-94 and began planning meeting programs for next fall. The Council also decided to expand the newsletter from eight to twelve pages.

The council meeting adjourned for lunch and a discussion of whether the movie "Jurassic Park" is art. There was general agreement that it isn't science. --Ed.

1992-93 Annual Reports

President's Report:

The 1992-93 year has been successful for A.R.T. in several ways. We were able to increase our membership, and our income, and to increase interest in the group through larger newsletter mailings. The monthly meetings were also successful, attracting about 25 people each to knowledgeable talks and lively discussions. Many of those attending for the first time came because of the newsletter mailings. In addition, thanks to the generosity of Claudia Harsh, M.D., and the Crescent Women's Medical Center, we now have a well-equipped and comfortable meeting place in Blue Ash, a great improvement over our old meeting place at the Greenwich Tavern.

During the year Roy Auerbach joined the Executive Council as Membership Secretary, in charge of establishing and maintaining computer based membership records. His hard work has provided A.R.T. with a reliable means of staying in touch with old members and attracting new ones. During the year also Secretary Mary Pacinda gradually took over the job of publicity coordinator, providing local media with news of A.R.T. meetings. At the Annual Meeting this April Mary was officially elected Secretary and Publicity Coordinator for the coming year. Mary Pacinda and Virginia Jergens, Newsletter Editor established an informal Coffee Committee to provide coffee at meetings.

Because we have not yet discovered a volunteer to act as Meeting Organizer, I will continue to act in this capacity. The Executive Council is actively seeking new program ideas. If you would like to give a talk or make another kind of presentation at an A.R.T. meeting next year, please contact me as soon as possible at 351-0921 and give me your name and topic. I believe that A.R.T. needs to bring new speakers to the monthly meeting. We are grateful for the members who have volunteered their expertise, but new voices are always welcome. Over the summer, the Executive Council hopes to schedule speakers for the winter meetings so they can be announced to the membership in October.

The 1993-94 year will be a continuation of the past year's progress. A.R.T. is considering a joint meeting with a Kentucky skeptics group, the Kentucky Association of Science Educators and Skeptics (KASES), which meets in Lexington, Ky., if a mutually agreeable meeting place can be found. A.R.T. is also under consideration to host an hour long radio show once a month on WAIF, which would be a great way to hold a public forum on our concerns. Some members have also proposed field trips to "haunted" sites, or visiting a 'New Age' meeting. Such trips would extend A.R.T.'s involvement in investigating paranormal activities. Members indicate a greater interest in investigations now than they did last year.

Finally, I would like to thank everyone for their generosity towards me as a newly elected president who was not certain how to achieve the goals A.R.T. wanted to fulfill. The Executive Council made a decision early in the year that the survival of A.R.T. would only be possible if we could attract new membership while continuing to work to fulfill A.R.T.'s purpose. I believe that this has been done. That does not mean that we have not had our disagreements and that all will be perfect in the future. It does mean, however, that A.R.T. is heading into its third year stronger than it began its second.

--Keith Brabender, President  
Vice-President's Report:

Since I see the office of Vice- President as assisting the President, such has been by focus during the past year. While remaining fairly quiet in the background, I tried to contribute to the Executive Council's decisions and suggestions for programs. This first year we have all been still trying to define our jobs and find ourselves in relation to the whole membership.

Hopes for the coming year include giving support and assistance to the association's programs and efforts, as these may be needed. I expect to work to promote greater fulfillment of the goals of the association, to keep things on track, to arouse interest in the programs and, in general, help where I can. Should there be no one acting as recording secretary at the meetings, I can substitute as such.--Dick McGrath, Vice-President.

(Dick modestly omitted his fine lecture on religious stigmata, given at the February meeting.--Ed.)  
Investigations Officer's Report:

This report describes what I believe to be the goals of skepticism in general and of the Investigations Committee in particular, and invites all A.R.T. members to join the battle for a naturalistic interpretation of the world around us. The term "investigations committee" originated in turn of the century organizations devoted to studying psychic phenomena. Much to their regret the psychic investigators found that mainline science wasn't terribly interested in their claims concerning clairvoyance, telepathy, and telekinesis. The more bizarre claims involving precognition (fortune telling) and spirit contact (spiritualism) were never acceptable research topics to materialistic investigators. Out of necessity and indignation the psychic types set out to prove for themselves that science was overlooking these hidden sources of truth. They organized their efforts as "investigations committees." Skeptics have adopted the term for their own investigative teams. .

As skeptics, we do not propose a source of truth separate from science. The findings of science, however provisional, are what we defend. The methods of science and the sloppy findings it often produces are the best we have to defend so-called rational thought. Skeptics don't have a research agenda separate from science--rather the skeptical agenda is defending the hind end of science from nonsense.

Skepticism has an ancient and unproductive reputation of doubting everything. A friend of mine described a true skeptic with an anecdote about an old farmer who glanced across the fence and said to his fellow traveler, "My, what a fine brown cow that is over there!" The skeptic said, "Well, it's brown on this side." Rather than being simply negative and doing away with Santa Claus and the Easter Bunny, the supporter of rationality must be for something. That "something" will certainly be different from skeptic to skeptic, but it must include a commitment to the power of the shared truth possible with the scientific method.

Unless skeptics believe in or promote something positive, they may become impediments to progress. There is no way to prove that something is wrong. It is not only futile but irrational to make "distruth" claims about the silliest of credulous nonsense. If skeptics do this, they are in the untenable position of trying to prove the non-existence of nonsense. The rational position must always be to force the miracle mongers to prove that their claims are true on scientific terms. In other words, the goal of the skeptic is to urge parascientists to substantiate their claims in a way that can be tested and replicated.

The existence of nonsense is not only certain but infinite in its scope and predictability. It is the skeptic's effort to sort unfalsified scientific claims from unfalsifiable intuitive ones which distinguishes "us" from "them" in the science game. Scientists often propose incorrect hypotheses, but they seldom get away for long with claims that are not testable. Cosmologists, nuclear physicists without super colliders, and self-help psychologists excepted, science lives and dies on whether its predictions work. When a "science" can effectively avoid such truth tests, then it can live forever on the truth claims of its most influential practitioners.

Our mentors at CSICOP seldom conduct independent investigations, despite their charter. What should a local investigations committee do? I think that we should follow their example, and rarely conduct independent

investigations, but instead respond to requests for investigation from members and the community. In addition, the Investigations Committee should support individual A.R.T. members in their investigations of local psychic claims. I have given this matter a great deal of thought and have come to the following conclusions about what we should do as a committee:

The Investigations Committees should be aware of all local paranormal claims and keep files of information concerning these claims.

The Investigations Committee should be prepared to respond to individual and media requests for information about or investigation of these claims.

The Investigations Committee should encourage individual members to pursue their own investigations of paranormal claims by providing naturalistic interpretations of such claims and by providing a forum for critically discussing research into claims of paranormal powers.

The Investigations Committee should be concerned only with claims which contradict the findings of materialistic, mainstream science. Science can study questions for which there exist physical, shared, well-defined bases for investigation. Skeptics, and the Investigations Committee, shouldn't claim to know what is true. We should, however, be well aware of what the scientific community thinks of various ideas. When the best informed science is negative about a hypotheses, then we should be prepared to explain why. When the best thought is confused or divided, we as skeptics have no stake in the matter, except for intense intellectual curiosity.

Finally, skeptics and rationalists of every sort need to support the open-minded contest of opinions based on testable hypotheses. Every A.R.T. member is a member of the Investigations Committee. Just step up and join the fray. Every volunteer will be welcomed.

--Joe Gastright, Investigations Officer.  
Secretary's Report:

The secretary's main job is to take minutes at membership and Executive Council meetings, keep a file of past minutes and mail copies to members of the Executive Council. I sent welcoming letters to new members until confusion about our meeting place made that difficult and Roy Auerbach took over the membership records.

During the past year I have prepared and mailed post card meeting reminders for monthly meetings to members and recent members, about 60 per meeting. In addition, I have prepared and mailed about 30 press releases for each meeting. Press releases go to Cincinnati and Dayton area newspapers, television and radio stations, and newspapers and radio stations at local colleges and universities, including Antioch, University of Cincinnati, Xavier University, Thomas More College, Sinclair Community College, University of Dayton.

In addition, I searched the surveys returned to A.R.T. in the process of forming the organization and wrote to those who had responded to the survey but never joined. There were no responses. I have added several Dayton area communications media to the press releases list.

Next year I plan to continue the minutes, meeting announcements, and press releases as in the past, and to bring the press release list up-to-date, eliminating duplications and checking with the sources to make sure I am giving the right person the right information. I also plan to add media in the area between Dayton and Cincinnati to the list, including the Miamisburg, Mason, and Middletown newspapers.

--Mary Pacinda, Secretary.  
Treasurer's Report:

Due to steadily increasing membership and renewals, dues are coming in, which I deposit in the A.R.T. account in Fidelity Federal Savings Bank. The balance has been about \$1000 for several months and continues to rise. The most recent bank statement, for example, shows \$267 in dues and contributions.

The only expenses are the newsletter, postage and supplies for mailings, supplies for meetings and corporation expenses such as tax preparation fees. No officer is paid.

All expenses so far have been paid by check, so that a record of all outgoing monies is available.

Many thanks are due to the members and supporters who have contributed to A.R.T. Their donations have kept us afloat, especially regarding the newsletter, which is our largest expense.

--Iduna Borger, Treasurer.

#### Membership Report:

The current membership is 63. At the start of the year 34 members had renewed. During the year a continuing campaign was started to add new membership and to pursue former members who had not renewed. The following steps were taken:

Membership activities are now tracked with a Filemaker Pro database. The database maintains a unified record of current members, former members, courtesy members and potential contacts.

Yearly memberships are now tracked from the date of membership and renewal letters are sent out each quarter.

Memberships that have lapsed will be sent the newsletter for a year after expiration to encourage renewal.

An active program of contacting potential members is underway. Each potential contact is sent two newsletters. If they have not joined in this period, they are placed on an inactive list. Recruitment this year has been targeted on the local subscription list of CSICOP. Future contacts will come from lists of professional organizations such as doctors and engineers. Other recommendations as to who to contact are welcome. Please send lists of names to me.

During the first year of this effort, there have been 18 new memberships and 11 renewals. Approximately 350 new contacts were made for this result. This group had already been targeted two years ago and forms the nucleus of the current membership. On this basis, the contact list has already been culled. On the other hand, this is the most fruitful group to contact. I hope that the new membership yield through recruitment next year is as good as this year's.

Next year I intend to maintain an active mailing to some 300- 400 people who are not members for each newsletter. The Executive Council has not decided whether we should continue mailing two newsletters or send a flyer and one newsletter to save money. It is considered good practice to attempt contact twice for best membership drive effect. An ongoing effort is essential. The size of our organization is barely large enough to maintain itself. Recruitment must be maintained to prevent the organization's membership shrinking from attrition and ideally to increase our size.

--Roy Auerbach, Membership Secretary.

#### Newsletter Editor's Report:

During our first year the newsletter was published monthly from October, 1991 to April, 1992, a total of seven issues, 832 copies in all. Total cost was \$415.47 (\$.50 a copy). Four issues were four pages, three issues were longer. The newsletter did a good job in getting membership information, meeting announcements, reports on meeting programs and organizational information to the people who received it. It also provided some information on other topics of skeptical interest.

This year the newsletter was published quarterly beginning in October, 1992, a total of four issues, 1464 copies in all. The total cost was \$580 (\$.40 per copy.) The October issue was four pages plus a dues reminder and envelope. The January issue was six pages, April, eight, and June, estimated at eight.

We were able to expand the mailing list because of the work done by Roy Auerbach, who designed, implemented, and maintained a comprehensive database for membership information and made the mailing labels for the newsletter and meeting announcements. Dick Shepherd and Ruthann West helped fold, staple, address, and stamp hundreds of newsletters. Special thanks also go to Joe Gastright, Keith Brabender, and Everett Dejager, who wrote articles for the newsletter.

In addition to the newsletter, with the advice of the Executive Council, I designed a one page flyer describing A.R.T.'s activities. With a generous contribution from Joe Gastright we were able to have 1000 flyers made. Everyone who

attended the March meeting helped fold, count, and distribute the flyers. About 150 flyers are still available for distribution. These provide an inexpensive and effective way to spread the word about A.R.T.

Next year we plan to publish the newsletter quarterly, according to this schedule: October issue: deadline, Aug. 21, mailing date, Sept. 25; December issue: deadline Oct. 16, mailing date Nov. 20 ; February issue: deadline, Dec. 28, mailing date, Jan. 29; April issue: deadline, Feb. 19, mailing date March 26.

My first goal for next year is to apply for non-profit postage rates for A.R.T. The largest expense in publishing the newsletter is postage, which is \$.29 of the \$.40 cost per copy. Non-profit rates would cut our cost per piece of mailings of 200 or more pieces to \$.11. In addition, I would like to include more articles on topics of interest to skeptics, including reports on local paranormal and pseudoscientific events, book reviews, and articles reprinted from other skeptical publications.

To do this I will need the help of members to report, read, research, and write articles. Please call me at XXX-XXXX before 9:00 PM with your ideas for reports, articles and book reviews.

--Virginia Jergens, Newsletter Editor. [an error occurred while processing this directive]