

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

April 19, 1983

8305030629 830419
PDR ADDCK 05000247
G PDR

My name is Robert R. Holt. I am Professor of Psychology at New York University; my specialties are clinical and social psychology. Before obtaining my Ph.D. in psychology at Harvard University, I worked as an interviewer for the Elmo Roper organization and briefly ran a small independent polling organization, the New England Public Opinion Research Association. My first post Ph.D. job was as a Study Director in the Division of Program Surveys, B.A.E., in the U.S. Department of Agriculture. After World War II, I learned clinical psychology at the Menninger Foundation in Topeka, Kansas, where I subsequently became Director of the Psychological Staff. Since 1953, I have been at New York University, where I founded the Research Center for Mental Health, and directed it for about fifteen years. A principal theme of my scientific work has been the prediction of human behavior, on which I have published several papers and a book, Methods in Clinical Psychology, Vol. II: Prediction and Research, New York: Plenum (1978).

I participated in the discussion of psychological stress in the area of the Three Mile Island nuclear power plants in McLean, Virginia, held by the MITRE Corporation, and was asked to prepare a commentary on that discussion presenting my theory of the impact of radiological accidents on psychological health. This commentary was submitted to the Nuclear Regulatory Commission and appears in NUREG/CP-0026. I also made a thorough study of the relevant research on the TMI accident, and most recently was invited to present a survey of that material at the International Forum on Nuclear Energy in Middletown, Pennsylvania, March 28-30, 1983.

I have been asked to comment in this testimony on: a) the utility of sample surveys as a means of predicting human behavior in general, and of predicting the responses of people to an accident at Indian Point in particular; and, b) on the research literature on "bystander behavior". I have been given to read the testimony presented in this proceeding on these subjects by Drs. Lecker and Dynes.

A. The Utility of Sample Surveys

Surveys typically collect several types of data:

- a) factual information that can be directly reported, (for example, "Have you received an information brochure about Indian Point?");
- b) knowledge possessed by the respondent, indicating his or her degree of acquaintance with relevant data, (for example, "What are you supposed to do if you hear a siren warning of an accident at Indian Point?");
- c) beliefs, (for example, "Can radiation cause cancer?");
- d) attitudes, (for example, "How much trust do you have in statements about nuclear power made by Con Edison?");
- e) values, (for example, "Which is more important, a man's duty to his job, or to his family?");
- f) statements of intention, (for example, "What do you plan to do to prepare your family for a possible evacuation of this area?"); and,
- g) statements of probable future behavior under hypothetical circumstances, (for example, "What would you do if there

were an accident at Indian Point and people within 5 miles were advised to stay indoors with windows shut?").

It should be evident that no sharp dividing lines can be drawn between these classes of questions and the kinds of data they provide. Moreover, the above listing is not exhaustive or definitive. My point is to illustrate some of the many kinds of data that can be obtained from surveys, and to suggest that such data play different roles in a scientific attempt to predict behavior. Consider the issue of greatest interest, behavior at the time of a possible accident serious enough to require the evacuation of a given region.

One possible way to go about it is to ask people directly to predict what they would do, for example, if asked to evacuate. Ordinarily, a psychologist or sociologist does not take the responses at face value, translating them directly into his own predictions. In predicting elections, for example, the forecaster often does not report the raw percentages, but takes into account the degree of a respondent's declared intention to vote the strength of feeling for and against the candidates, and trends over time (which may affect the interpretation of the undecided vote). Similarly, in attempting to predict how well an evacuation plan could be carried out, one probably would want to use information of all the kinds just described, and not simply rely on the respondents' own predictions.

As to the validity of information gained from surveys, it is difficult to give a simple answer, since the kinds of information are so variegated. Sample surveys are in many respects like a census, except that they use statistical sampling techniques to draw representative small groups of a population of interest from whose responses predictions accurately can be made about an entire population. The technology of sampling is highly

developed and amazingly precise. Even 40 years ago, when I was conducting surveys of the American public's buying of war bonds for the U. S. Treasury Department, we were able to draw samples of about 1,000 respondents and project from their answers the amount of bonds sold in a drive to within a few percentage points. The basic technique of probability sampling is to give every member of a population an equal chance to be included. And that can be done so accurately that the degree of precision attained is a simple function of the number of persons in the sample.

In recent years, methodological research has shown that a population can be sampled to a degree of adequacy satisfactory for most purposes by taking a sample of telephone numbers, since 97% of households in the U. S. now have telephones. The validity of data obtained by this cost-effective method has proved to be equal to that from face-to-face interviews.

When it comes to obtaining demographic information, like the number of families having children in school, the numbers of persons in an area who own cars or who live alone, there simply is no better way to find out than to ask people as a census does. The amount of lying or dissimulation on most items of information that are not self-incriminating is truly negligible. There can hardly be any doubt that emergency planning could be carried out more effectively in the presence of full information of this relatively objective kind than without it. Unfortunately, the U. S. Census does not provide a great deal of the kinds of information needed. For example, the census does not tell how many persons in the EPZ do not have a fluent grasp of spoken or written English; hence, we do not know how many people would be unable to read the information brochures distributed by the licences or to understand emergency instructions given in English over the EBS. The only feasible way to estimate the size of

the problem is a sample survey.

Likewise, there is no better way to ascertain a person's beliefs than to ask him or her directly. Values and attitudes can to some extent be inferred indirectly from observations of behavior, but few psychologists would rely wholly on such observations if it were possible to ask questions.

Statements of intention, especially intentions to buy or save, are considered such a valuable basis for economic prediction that both the government and industry have invested a good deal of money in annual surveys of spending and saving behavior. The best known are those conducted for many years under the direction of the late George Katona at the University of Michigan's Survey Research Center, which began during the years when Katona and his colleagues worked at the Division of Program Surveys in Washington. I had the privilege of working with Dr. Katona on the first of these studies.

If the question is asked, "How well can overt behavior be predicted from attitudes?" an answer is given by Cialdini, Petty and Cacioppo (1981) in the authoritative Annual Survey of Psychology. They write: The attitude-behavior problem has continued to generate a great deal of research, but no longer are researchers questioning if attitudes predict behaviors, they are investigating when attitudes predict behaviors. ...attitudes have a great deal of predictive utility." The research of Ajzen and Fishbein (1977) in particular shows that poor results in past studies are largely attributable to a failure to zero in on the particular behavior precisely enough. Thus, one could not predict very accurately how many people would evacuate an area in case of a specific accident scenario on the basis of answers to a general question about attitudes toward nuclear power. Asking something like, "What would you do--go about your usual business, stay indoors, or leave the area--

in case of an accident at Indian Point?" would permit somewhat more accurate prediction because it would match the behavior in terms of what Ajzen and Fishbein call action (the specific act of evacuating) and context (that of an accident at Indian Point), but is still vague on target and time, and the context lacks specificity. The Suffolk County survey is exemplary in this respect, for (in terms of context) it spells out a series of precise accident scenarios, and in follow-up questions it clarifies target (where the respondent would go and by what means). Only the time referent is necessarily unspecified; it is doubtful that it would have made much difference if the question had included something like this: "Suppose that Shoreham were to start operations next month, and three weeks later there were an accident..."

In short, it means nothing to invoke a vague concept of "authenticity," when research has zeroed in on the specific aspects of behavior that must be invoked in a question to maximize predictability. Indeed, when there is a good match between attitude questions and the behavior being predicted as to action, target, context, and time, it is possible to predict behavior in situations the respondent has not yet experienced. The objection by Drs. Lecker and Dynes to the use of sample surveys to aid in emergency planning on the ground that the situation is too hypothetical thus lacks cogency. Consider the Suffolk County survey: questions about hypothetical accidents at Shoreham produced a set of answers about expected evacuation behavior that show a close match to the actual number and pattern of spontaneous evacuation during the Three Mile Island emergency. That is rather strong evidence for their presumptive validity.

The Suffolk-Shoreham study gives a good example of the difference made by specificity concerning the hypothetical situation. In the first scenario presented, respondents were asked to imagine that as a result of

an accident at the Shoreham nuclear plant, persons with 5 miles of the plant were advised to remain indoors; 40% of those surveyed living within that area said that they would evacuate, plus 40% of those living from 6 to 10 miles from the plant. When the scenario closely matched the actual accident at TMI (pregnant women and pre-school children asked to evacuate within 5 miles, those from 6 to 10 miles advised to remain indoors), the percentages indicating they would leave the region went up to 57 and 52. These rather closely match the actual figures obtained by Flynn (1979) in a telephone survey at TMI: within 5 miles, 60% evacuated and from 6 to 10 miles, 44%. (In the next more remote zone, the figures are 30% for Shoreham and 32% for TMI--a close correspondence, even though the areas were not defined in exactly the same way.) Note also that Houts et al. (1981) report "approximately 60 percent" of the respondents in their telephone survey of the 5-mile zone had evacuated. It is striking that the Suffolk results from the TMI-like scenario more closely match the actual TMI results than they do the results from their own, slightly less severe, first scenario.

The TMI data are noteworthy also for the degree to which the two independent telephone surveys replicate one another, though they were done at slightly different times. Even the reasons given for leaving showed great agreement:

	<u>Flynn</u>	<u>Houts</u>
Situation seemed dangerous	91%	82%
Information on situation was confusing	83%	78%
To protect children	61%	50%
To protect pregnancy	8%	8%
To avoid confusion of forced evacuation	76%	68%
Pressure from someone outside family	28%	22%
Trip planned before incident	5%	7%
Other (free response)	<1%	<1%

It is true that the less time elapsed between the survey and the behavior to be predicted, the better the prediction (Davidson & Jaccard, 1979; Schwartz, 1978). The implication is that surveys like the Suffolk County study need to be done frequently. I would advise an annual survey in the Indian Point area; if the results of the second study are very close to those of the first, and if relevant conditions in the area do not change markedly, a third study could be deferred somewhat.

It might be added that a considerable body of research has validated Fishbein and Ajzen's (1975, 1980) theory that the best predictor of behavior is the actor's intention to perform the behavior. It has been successfully applied to predicting family planning behavior (Davidson & Jaccard, 1979; Vinocur-Kaplan, 1978), use of alcohol by adults (Kilty, 1978) and adolescents (Schlegel, Crawford & Sanborn, 1977), and voting on a nuclear power plant initiative (Bowman & Fishbein, 1978).

The principal alternative theory attracting current research effort in this field is that of Triandis (1977, 1980). It uses a combination of a person's intentions, habits (often measured by a record of past behavior), psychological arousal, and facilitating conditions in the environment. Though some research supports this theory, in the only direct comparison of predictions based on the two approaches, the Fishbein-Ajzen theory proved superior in predicting students' church attendance (Brinberg, 1979). Note that even in this alternative theory (that of Triandis, 1977), predictions are based on the past behavior in the same situation of the particular persons in question, not that of other people in other situations, as is advocated by Dr. Dynes. It would be impossible to apply the Triandis theory to predicting evacuation behavior at Indian Point, since there is no history of such previous behavior by the persons

involved on which to build.

Let us consider, by contrast, the procedure urged by Drs. Dynes and Lecker--one could hardly dignify it by calling it a theory--namely, that the future behavior of people during a radiological emergency at Indian Point can be predicted on the basis of the behavior of other people at other places in different types of emergencies taking place some years ago. It relies upon three obvious fallacies.

First, it ignores the major role of the situation in determining behavior, which has been thoroughly established in a large body of recent psychological research stimulated by the radical situationalism of Mischel (1968).

Second, it assumes that people everywhere are the same, in all relevant respects, but especially that they have a uniform dominant response to stress, which is to become conforming and dependent upon constituted authorities. The literature to the contrary is so enormous that it would be tedious indeed to document more than a representative fraction of it. Surely the extraordinary diversity of human responses to stressful situations like emergencies is well known (see, for example, Goldberger & Breznitz, 1982; Janis & Mann, 1981; Menninger, 1968; Grinker & Spiegel, 1945; Hamilton & Warburton, 1979). A substantial subdiscipline in psychology for many years has been devoted to the study of individual differences (see, for example, Anastasi, 1958; Tyler, 1956). A great deal of the work done at the Research Center for Mental Health has been focused on important dimensions of individual difference called cognitive styles (Gardner, Holzman, Klein, Linton & Spence, 1959). We have demonstrated over and over that people of contrasting cognitive styles react to precisely the same situation in diametrically opposite ways (see,

for example, Klein, 1954; 1970). Likewise, a large part of the literature of abnormal and clinical psychology, like that of psychiatry, is devoted to elucidating the extremely variegated ways in which people break down under various types of stress (see, for example, Holt, 1968; Janis, Mahl, Kagan & Holt, 1969). Dr. Lecker's uniformitarian stance is not supported by any serious scientific literature known to me.

The third fallacy is to assume that the American people have not changed in any important respects during the past few decades. It happens that one of the most striking and consistently reported long-term trends in American public opinion ever reported is the steady erosion of public faith in authority figures. Long reported in various journals of public opinion, it is now the subject of a full-length book, by Lipsit (1983).

In Appendix I, I present some representative data from a variety of reputable polling firms, which document this trend. All of the constituents of the establishment, from governmental institutions like the Congress and the Presidency to the mass media, big business, labor unions, and the universities, have lost their trust and faith of the public over the past 20 years. It is not difficult to understand why people would have been disillusioned about the credibility of duly constituted authorities when the President of the United States was shown up to have deliberately lied and covered up the Watergate affair, and when so many figures in a previous administration were shown in the Pentagon Papers to have behaved in a similar way about the war in southeast Asia.

It is difficult to understand how anyone who lays so much stress on the role of faith in authorities and leaders in an emergency could shrug aside as of no importance such massive evidence of widespread

attitudinal change over time. One manifestation of it in human response during emergency is the looting and other forms of public disorder during the New York City blackout of 1977. Dr. Lynes himself has written about looting as a new phenomenon of public behavior. It can hardly be disregarded as a portent that the growing mood of alienation in America will make it considerably less certain that the public will believe what authorities and experts tell them in case of an accident at Indian Point, and that they will comply with instructions. These data help us to understand the surprising new phenomenon of shadow evacuation at Three Mile Island. In this instance, people did not follow the course of behavior indicated by the authorities when at least 150,000 of them outside the 5-mile zone (where a limited evacuation was recommended) decided on their own to leave the area.

In relation to Dr. Lecker's repeated statement during his cross-examination that in an emergency at Indian Point, people would turn trustingly and obediently to the constituted authorities because of the existence of an emergency plan, certain data from the studies of Altschuler and of Yankelovich, Skelly and White (1981) are especially important. They agree in finding that most people in the EPZ do not trust Con Edison, and that very substantial minorities indicate that they would give little credence to statements by PASNY, the NRC, or elected governmental figures. These are clear warning signals that many people will not behave in the traditional fashion of publics in nonradiological emergencies of bygone years, and that the smoothly coordinated, lockstep evacuation presumed by the licensees' consultants will be seriously disrupted by unpredictable and rebellious behavior of substantial numbers of people.

Given this state of affairs, it is even more urgent that a thorough and adequately funded study of the entire affected area be conducted by a firm of such impeccable reputation for objectivity as Yankelovich, Skelly & White, along the lines of the Suffolk County survey.

B. On 'Bystander Behavior' and Related Research

Since, under cross-examination, Dr. Lecker referred a couple of times to the literature on 'bystander behavior' as if it supported his contention that everyone could be counted on to be helpful at a time of an accident at Indian Point, a few comments on this literature are in order. The concept of 'bystander behavior' came into the social-scientific literature following the highly publicized case of Kitty Genovese. In March 1968, she was stabbed to death in plain sight of 38 people who ignored her loud pleas for help and did not even call the police until after she was dead. Darley and Latané (1968; Latané & Darley, 1970) and Darley and Batson (1973) initiated a large literature with a series of ingenious experiments focused on elucidating why onlookers and passers-by so rarely emulate the Good Samaritan. A review paper (Berkowitz, 1973) focused on seeking explanations for the general finding of an "unwillingness to help others." The concept of 'bystander behavior' (or, often, 'bystander apathy') has thus been used to mean just the opposite of the interpretation suggested by Dr. Lecker.

The literature in this field has grown enormously; the recent review volume by Rushton and Sorrentino (1981) covers over 1,000 studies. There is little in it to support optimistic conclusions about emergency planning or the Lecker-Dynes advice to let it take care of itself. One noteworthy study (Mathews & Canon, 1975) showed both in the laboratory and in field studies,

that people help others more under quiet than noisy conditions. Their interpretation is that loud noises are stressful, and it is generally established that people's attention is restricted when they are highly aroused, as by stress. The work of Toi and Batson (1982) indicates that people help others when they can think about the feelings of those who need it. But being in danger oneself interferes with empathy for others. Altogether then, an emergency evacuation is likely to be a situation in which spontaneous helping behavior toward strangers would be at a minimum.

What, however, about the behavior of emergency workers, health care workers, bus drivers, police officers and others whose devotion to duty is presumed and required if the emergency plans are to work? It is such an established fact that human beings put helping their own families above helping the general public, if a choice must be made, that sociobiologists have put forth theories of altruistic behavior postulating that helping behavior is under direct genetic control: the more closely one is related to another (the more shared genes), the greater the likelihood of altruistic behavior toward that person (Wilson, 1979; Dawkins, The Selfish Gene. N.Y.: Oxford, 1976). Critiques of sociobiology (e.g., Gould, 1983) find other, cultural reasons preferable, but do not challenge the fundamental starting point.

In this connection, I would like to add one personal observation. In March 1981, I conducted some interviews with persons who had been through the Three Mile Island experience. One, a nurse, reported that at the hospital where she worked, the medical and other staffs were seriously depleted during the crisis, in striking contrast to the situation just a few years earlier when there had been a flood on the Susquehanna River. Though the hospital was in some danger as a result of the flood, the staff had consistently showed up for duty. The difference was that they had been

able to secure the safety of their families during the flood, but could not be sure their loved ones were safe when faced with the pervasive, impalpable threat of radiation, except by getting them to a safe distance.

APPENDIX 1

Measures of confidence in institutional representative-
ness, trustworthiness and accountability.

- 1) "The government is run by a few big interests looking out for themselves."

	<u>1958</u>	<u>1980</u>
AGREE	18%	76%

- 2) "The government in Washington cannot (only some of the time/
none of the time) be trusted to do what is right."

	<u>1964</u>	<u>1980</u>
AGREE	25%	71%

- 3) Feel that "quite a few of the people running the government
don't seem to know what they're doing."

	<u>1958</u>	<u>1980</u>
AGREE	28%	63%

(SOURCE: Center for Political Studies, Institute for Social Research
University of Michigan Election Studies)

- 4) "Most public officials (people in public office) are not really
interested in the problems of the average man."

	<u>1980</u>
AGREE	73%
DISAGREE	27%

(SOURCE: National Opinion Research Center; General Social Surveys, 1980)

- 5) "As far as people in charge of running (READ EACH ITEM) are concerned, would you say you have a great deal of confidence, only some confidence, or hardly any confidence at all in them?"

CONFIDENCE IN INSTITUTIONS

	<u>1981</u>	<u>1980</u>	<u>1979</u>	<u>1978</u>	<u>1977</u>	<u>1976</u>	<u>1975</u>	<u>1974</u>	<u>1973</u>	<u>1972</u>	<u>1971</u>	<u>1966</u>
Medicine	37	34	30	42	43	42	43	49	57	48	61	73
Higher educational institutions	34	36	33	41	37	31	36	40	44	33	37	61
The U.S. Supreme Court	29	27	28	29	29	22	28	34	33	28	23	50
The military	28	28	29	29	27	23	24	29	40	35	27	61
The White House	28	18	15	14	31	11	X	18	18	X	X	X
The executive branch of the federal government	24	17	17	14	23	11	13	18	19	27	23	41
Television news	24	29	37	35	28	28	35	32	41	X	X	X
Major companies	16	16	18	22	20	16	19	15	29	27	27	55
Congress	16	18	18	10	17	9	13	16	X	21	19	42
The press	16	19	28	23	18	20	26	25	30	18	18	29

(X=not asked)

SOURCE: Harris Survey: Trends in Confidence in Institutions; 1981/#85; as of Oct. 22, 1981)

- 6) "Do you think public officials have been honest in telling the people all they know about the danger from the Three Mile Island accident, or was the danger greater, or less than they said?"

	<u>1979</u>
More danger than they said	55%
Told all they knew	20%
Danger was less than they said	8%
No opinion	17%

(SOURCE: CBS/New York Times Poll; April, 1979)

--

- 7 "How much trust do you have in what the government tells you about the risks of nuclear power?"

	<u>1978</u>
A great deal	16%
Some	42%
Very little	42%

"How much trust do you have in what the opponents of nuclear power tell you about the risks of nuclear power?"

	<u>1978</u>
A great deal	8%
Some	51%
Very little	41%

(SOURCE: Bureau of Social Science Research, for Resources for the Future; July/Aug, 1978)

APPENDIX 2

Measures of attitudes toward nuclear power, on issues of safety, proximity, and general desirability.

- 1) "Would you be afraid to have a plant located in this community which was run by atomic energy?"

	<u>1956</u>
Yes	20%
No	69%
Don't Know	11%

(SOURCE: Gallup; January, 1956)

- 2) "....How do you feel -- that it would be safe to have an atomic energy plant somewhere near here, or that it would present dangers?"

	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>
"Are safe"	36%	37%	42%	33%	39%
"Present dangers"	44%	41%	43%	46%	47%
"Don't know"	23%	22%	15%	21%	14%

(SOURCE: Roper Organization, as of October 1, 1977)

- 3) "All in all, from what you have heard or read, how safe are nuclear power plants that produce electric power?"

	<u>1975</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
Safe*	54%	65%	64%	67%
Not safe*	18%	23%	28%	30%
Not sure	18%	12%	8%	3%

*(Safe=very & somewhat safe)
(Unsafe=not so safe & dangerous)

(SOURCE: ABC/Harris Poll; Lou Harris & Associates, as of April 4, 1979)

- 4) "Would you approve or disapprove if the nuclear plants for generating electricity are built in your community?"

	<u>1977</u>	<u>1979</u>
Approve	55%	38%
Disapprove	33%	56%

(SOURCE: CBS/New York Times Poll; as of April 7, 1979)

- 5) "Do you agree or disagree with the following statement: no more nuclear power plants should be built in this country until questions about safety are resolved, even though this will mean energy shortages within ten years?"

	<u>1978</u>
Agree (no more plants until safety questions resolved)	57%
-- Disagree	43%

(SOURCE: NBC/Associated Press Poll; as of September 20, 1978)

- 6) "Considering the accident (at Three Mile Island) do you approve or disapprove of the following policies...? The federal government should allow the 44 more nuclear power plants now planned, but should supervise their construction more strictly than has been the case up to now."

	<u>1979</u>
Continue with stricter supervision	73%
Should not continue	27%

"Do you feel that what happened (at Three Mile Island) could happen at any of the other nuclear power plants in the United States, or do you think an unusual series of things went wrong there that are extremely unlikely to happen in other nuclear plants?"

	<u>1979</u>
Could happen at other plants	70%
Unusual occurrence	30%

(SOURCE: ABC/Harris Poll; April 9, 1979)

- 7) "I'm going to read you several statements relating to ways that have been suggested to improve our energy situation. As I read each statement, please tell me whether you strongly favor it, mildly favor it, mildly oppose it, or strongly oppose it....--More nuclear power plants to generate electricity..."

	<u>March, 1979</u>	<u>March, 1981</u>
Strongly favor	51%	31%
Mildly favor	26%	25%
Mildly oppose	12%	15%
Strongly oppose	12%	29%

(SOURCE: Opinion Research Corporation, for LTV Industries Co.; as of March, 1981)

- 8) "We now import from foreign countries about 45% of the oil we use, and estimates are that at present usage rates we will need to import more over time. Furthermore, while other oil producing countries now have excess oil supplies, these excess supplies cannot last forever. Experts say this all means that we must find ways both to conserve oil and to develop new energy sources. Here are some suggestions that have been made...For each, tell me whether it is something you think should or should not be done....'go into greatly increased program to develop nuclear energy.'"

	<u>2/1977</u>	<u>3/1979</u>	<u>3/1980</u>	<u>3/1981</u>
<u>Should go into nuclear development program</u>	61%	57%	45%	49%
<u>Should not</u>	23%	30%	43%	35%
Don't know	16%	13%	12%	16%

(SOURCE: Roper Organization, #81-4; as of March 28, 1981)

A) "In general, do you feel that we should continue to build nuclear power plants or do you feel it's too dangerous to continue to build these plants?"

	<u>1982</u> %	<u>1981</u> %	<u>1980</u> %	<u>1979</u> %	<u>1978</u> %	<u>1977</u> %
Should continue to build	41	50	47	50	49	50
Too dangerous to continue building	50	41	40	39	37	32
Don't know/no answer	9	9	13	11	14	18

B) "Some people say that we will be using more and more nuclear power plants to generate electricity, but this seems to worry some people. Which of the following, if any, worry you about nuclear power plants?"

	<u>1982</u> %	<u>1981</u> %	<u>1980</u> %	<u>1979</u> %	<u>1978</u> %	<u>1977</u> %	<u>1976</u> %
Problem of radioactive waste disposal	76	69	70	67	62		
Possibility of small seepage causing health hazards	60	62	54	48	46	44	45
Contamination of water	61	61	53	49	46	47	47
Possibility of massive seepage causing death	58	58	52	42	33	32	31
Danger to workers	53	50	49	47	44	36	40
Atomic explosion	45	47	42	37	35	25	28
Possibility of sabotage	42	44	45	34	32	32	28
Danger of seepage from earthquakes	45	41	42	36	33	33	30
Theft of nuclear materials	36	37	38	29	29	32	27
Problem of what to do with plants that are no longer in use	34	34	35				
None of these	4	8					

(SOURCE: Yankelovich, Skelly and White surveys; as of March, 1982)

Curriculum Vitae

ROBERT R. HOLT

Personal Information

Born in Jacksonville, Florida, December 27, 1917
Address: 20 East 8th Street, New York, NY 10003
Married; 4 children

Education

Princeton University, B. A., 1939 (Highest honors)
Harvard University, M.A., 1941
Harvard University, Ph.D., 1944
Attended courses and seminars for several years in the Washington School
of Psychiatry and the Topeka Institute for Psychoanalysis (1944-53)

Certification

Diplomate in Clinical Psychology of the American Board of Examiners in
Professional Psychology, 1952
Certified Psychologist, New York State, 1958-present

Honors/Fellowships/Awards

Phi Beta Kappa, 1938
Sigma Xi, 1943
Fellow, Center for Advanced Study in the Behavioral Sciences, Stanford,
Calif., and Special Research Fellow, National Institute of Mental
Health, 1960-61.
Research Career Award, National Institute of Mental Health, 1962-present.
Great Man Award, Society for Projective Techniques and Personality
Assessment, 1969.
Psychologist of the Year Award, New York Society of Clinical Psycholo-
gists, 1973.
William V. Silverberg Memorial Lecturer, American Academy of Psycho-
Analysis, December 1973.
Award, Distinguished Contributions to Clinical Psychology for 1974.
Division of Clinical Psychology, Division 12 of the American Psy-
chological Association, August, 1974.
Sandor Rado Memorial Lecturer, Columbia University Institute for Psycho-
analysis, 1978.
Philips Distinguished Visitor, Haverford College, Nov. 20-21, 1980.

Positions Held

- 1941-44 Research Assistant, Harvard Psychological Clinic, Cambridge, MA
- 1941-44 Tutor and Teaching Fellow, Harvard and Radcliffe, Cambridge, MA
- 1944-46 Study Director, Division of Program Surveys, B.A.E., Wash., DC
- 1944 Instructor, American University, Wash., DC
- 1946-49 Clinical Psychologist, Winter V.A. Hospital, Topeka, Kansas
- 1946-50 Clinical Assistant Professor, University of Kansas, Lawrence, Kansas
- 1947-49 Associate Psychologist, The Menninger Foundation, Topeka, Kansas
- 1949-53 Senior Psychologist, Research Department, The Menninger Foundation, Topeka, Kansas
- 1949-53 Lecturer, Topeka Institute for Psychoanalysis, Topeka, Kansas
- 1951-53 Director of Psychological Staff, The Menninger Foundation (Also served as Acting Director, Department of Research, June-September, 1952; June-September, 1953)
- 1953-58 Associate Professor of Psychology, Graduate School of Arts and Science, New York University
- 1953-63 Director, Research Center for Mental Health, New York University
- 1953-60 Part-time private practice of diagnostic testing, New York, NY
- 1956-61 Member, Fellowship Committee, Foundations Fund for Research in Psychiatry
- 1958- Professor of Psychology, New York University
- 1963-69 Co-Director, Research Center for Mental Health, NYU
- 1963-65 Member, National Institutes of Health, Mental Health Fellowship Review Panel
- 1964-68 Member, NYU Arts and Science Research Fund Committee
- 1967-68 Visiting Professor of Clinical Psychology, Harvard University
- 1968-69 Member, NIMH Mental Health Extramural Research Advisory Committee
- 1969- Senior Staff Member, Research Center for Mental Health, NYU
- 1969-72 Member, Board of Trustees, Psychological Service Center, New York Society of Clinical Psychologists
- 1970-74 Member, NYU Institutional Grants Committee
- 1975-76 Member, NYU Arts and Science Research Fund Committee
- 1976-77 Member, NYU Center for Humanistic Studies
- 1981- Member, NYU Human Subjects Committee
- 1982- Member, NYU Graduate Curriculum Committee

Professional Society Participation

- American Psychological Association: Associate, 1941-51; Fellow, 1951-present (Divisions 8 and 12).
- Member, Advisory Committee on Psychological Bulletin and Psychological Monographs, 1954-55.
- Member, Council of Representatives, 1954-56, 1961-63.
- Representative, World Federation for Mental Health, 1954-56.

APA Division of Clinical Psychology (Division 12): President-elect,
 1961-62; Past-President, 1962-63
 Committee on Examinations in Clinical Psychology: Member, 1947-48;
 Chairman, 1948-49
 Committee on Nominations and Elections: Member, 1948-50, 1954-58;
 Chairman, 1956-57, 1962-63
 Committee on Publication Outlets in Clinical Psychology: Chairman,
 1949-52
 Executive Committee: Member-at-large, 1951-53; Member and Council
 Delegate, 1954-57, 1960-63
 Committee on Divisional Reorganization: Member, 1961-62
 Organizing Committee, Conference on an Idealized Training Program for
 Psychotherapists: Chairman, 1961-63
 Awards Committee: Member, 1964-65
 Society for the Psychological Study of Social Issues: Member, 1941-60;
 1961-present
 Committee on Atomic Education: Member, 1948-50
 Committee on Arms Control and Disarmament: Member, 1961-64
 Topeka Psychoanalytic Society: Associate Member, 1947-54
 Society for Projective Techniques and Rorschach Institute, Inc.:
 Fellow, 1948-58
 Committee on Membership: Member, 1949-51
 Executive Committee: Member, 1949-53
 Committee on Ethics: Member, 1954-58
 New York Chapter: Executive Board Member, 1954-55
 American Association for the Advancement of Science: Member, 1949-62;
 Fellow, 1962-present
 Council for the Advancement of the Psychological Professions and Sciences:
 Member, Board of Governors, 1971-74
 New York State Psychological Association: Member, 1955-1972
 Committee on Peace: Member, 1961-62
 Committee on Mental Health Clinic Licensure: Member, 1962-63
 Committee on Response to Social Issues: Member, 1969-71
 World Federation for Mental Health: Associate, 1956-63
 American Association of University Professors: Member, 1958-present
 Psychonomic Society: Member, 1960-70
 Association for the Psychological Study of Sleep: Member, 1961-71
 Congress of Scientists on Survival: Interim Council Member, 1962-63
 Federation of American Scientists: Member, 1962-present
 Council on Research in Bibliography: President, 1965-73
 Peace Science Society (International): Member, 1965-present
 Environmental Research Fund: Member, Board of Scientific Advisors,
 1971-present
 Society for General Systems Research: Member, 1976-present

Editorial Experience

The TAT Newsletter, Editor, 1946-52
Journal of Social Issues, Member, Editorial Advisory Board, 1949-51
Journal of Projective Techniques, Member, Editorial Advisory Board, 1949-60
Journal of Abnormal and Social Psychology, Consulting Editor, 1955-60
Journal of Psychological Researches (Madras, India), Editorial Board, 1956-66
Journal of Nervous and Mental Disease, Member, Editorial Board, 1957-present
Psychological Issues, Member, Editorial Board, 1958-present
American Imago, Member, Board of Consultants, 1963-present
Handbook of Clinical Psychology, Member, Editorial Board, 1963-65
Psychoanalysis and Contemporary Science, Member, Editorial Board, 1969-77
Core Information Series: Psychology, Member, Editorial Advisory Board, 1974-75
Psychoanalysis and Contemporary Thought, Member, Editorial Advisory Board, 1978-present
Journal of Mental Imagery, Member, Editorial Advisory Board, 1981-present
Imagination, Cognition and Personality: The Scientific Study of Consciousness, Member, Editorial Advisory Board, 1980-present
Review of Psychoanalytic Books, Member, Editorial Board, 1980-present
International Forum of Psychoanalysis, Member, Advisory Board, 1982-present

Consultantships

Consultant to Research Department, Menninger Foundation, 1953-60
 Training Consultant, New York Area Veterans Administration, 1953-64
 Consultant to Bank Street College of Education, Advisory Committee for Teacher Selection Project, New York, NY, 1953-58
 Consultant to Society for the Investigation of Human Ecology, New York, NY, 1957-58
 Chairman, Committee of Consultants, Mental Health Book Review Index, 1958-73
 Consultant to New York State Psychiatric Institute, 1958-59
 Consultant to Psychology Panel of the Armed Forces--NRC Committee on Bio-Astronautics, 1959-60
 Consultant to Pregnancy Research Project, Beth Israel Hospital, Boston, MA, 1959-60
 Consultant to Department of Psychiatry, City Hospital at Elmhurst, Queens, NY, 1960-61
 Consultant to Milledgeville State Hospital, Milledgeville, Georgia, 1962-63
 Consultant to PANE (People Against Nuclear Energy), Middletown, PA, 1981-present

Bibliography

ROBERT R. HOLT

1. Holt, R. R. Level of aspiration as ego defense. Psychological Bulletin, 1942, 39, 457 (Abstract).
2. Sanford, F. H., & Holt, R. R. Psychological determinants of morale. Journal of Abnormal and Social Psychology, 1943, 38, 93-95.
3. [Holt, R. R.] Contribution to Chapter XIII. In E. G. Boring and Marjorie Van de Water (Eds.), Psychology for the fighting man. Washington, DC: The Infantry Journal, 1943.
4. Holt, R. R. Effects of ego-involvement upon levels of aspiration. Psychiatry, 1945, 8, 299-317.
5. Holt, R. R. Level of aspiration: Ambition or defense? Journal of Experimental Psychology, 1946, 36, 398-416.
6. Maccoby, E. E., & Holt, R. R. How surveys are made. Journal of Social Issues, 1946, 2, 45-57. Reprinted with minor modifications in T. Newcomb & E. Hartley (Eds.), Readings in social psychology. New York: Holt, 1947.
7. Holt, R. R. The TAT Newsletter, from Vol. I, No. 1 (September, 1946) to Vol. V, No. 4 (Spring 1952. Vol. III, No. 1, through Vol. V, No. 4, reprinted in Journal of Projective Techniques (Rorschach Research Exchange), from 1949, 13, to 1952, 15.
8. Holt, R. R. Motivational factors in levels of aspiration. Summaries of theses 1943-45. Cambridge: Harvard University, 1947. Pp. 603-607 (Abstract).
9. [Holt, R. R.] The didactic curriculum. Bulletin of The Menninger Clinic, 1947, 11, 123-134 (Special issue on training in clinical psychology).
10. Bellak, L., & Holt, R. R. Somatotypes in relation to dementia praecox. American Journal of Psychiatry, 1948, 104, 713-724. Reprinted in G. W. Lasker & F. P. Thieme (Eds.), Yearbook of physical anthropology, Vol. 4, 1948. New York: The Viking Fund, 1949.
11. Holt, R. R. The assessment of psychiatric aptitude from the TAT. American Psychologist, 1948, 3, 271 (Abstract).
12. Holt, R. R. Some statistical problems in clinical research. Educational and Psychological Measurement, 1950, 10, 609-627. Reprinted in S. J. Beck & H. B. Molish (Eds.), Reflexes to intelligence, entitled "What price quantification." New York: Basic Books, 1959.

13. Holt, R. R. An approach to the validation of the Szondi test through a systematic study of unreliability. Journal of Projective Techniques, 1950, 14, 435-444. (Abstract in American Psychologist, 1949, 4, 269.)
14. Luborsky, L. B., Holt, R. R., & Morrow, W. R. Interim report of the research project on the selection of medical men for psychiatric training. Bulletin of The Menninger Clinic, 1950, 14, 92-101.
15. Holt, R. R. The accuracy of self-evaluations: Its measurement and some of its personological correlates. Journal of Consulting Psychology, 1951, 15, 95-101. (Abstract in American Psychologist, 1947, 2, 276-277.)
16. Holt, R. R. The Thematic Apperception Test. In H. H. & G. L. Anderson (Eds.), An introduction to projective techniques. New York: Prentice-Hall, 1951. Pp. 181-229.
17. Holt, R. R. Part III--Psychological tests. In G. Devereux, Reality and dream. New York: International Universities Press, 1951. Pp. 377-413.
18. Holt, R. R. An inductive method of analyzing defense of self-esteem. Bulletin of The Menninger Clinic, 1951, 15, 6-15.
19. Holt, R. R. Chapter 10 [untitled; an analysis of TAT and MAPS test]. In E. Shneidman et al., Thematic test analysis. New York: Grune & Stratton, 1951. Pp. 101-118.
20. Holt, R. R. Our fears and what they do to us. Menninger Quarterly, 1951, 6, 9-16.
21. Holt, R. R., & Luborsky, L. Research in the selection of psychiatrists: A second interim report. Bulletin of The Menninger Clinic, 1952, 16, 125-135.
22. Holt, R. R. The case of Jay: Interpretation of Jay's Thematic Apperception Test. Journal of Projective Techniques, 1952, 16, 457-461.
23. Holt, R. R., Chotlos, J. W., & Scheerer, M. Publication problems in psychology. American Psychologist, 1953, 8, 235-242.
24. Holt, R. R. Implications of some contemporary personality theories for Rorschach rationale. In B. Klopfer, M. D. Ainsworth, W. G. Klopfer & R. R. Holt, Developments in the Rorschach technique, Vol. I. Technique and theory. New York: World Book Co., 1954. Pp. 501-560.

25. Holt, R. R. Problems in the use of sample surveys. In R. Kotinsky & H. L. Witmer (Eds.), Community programs for mental health Cambridge: Harvard University Press, 1955. Pp. 325-338.
26. Holt, R. R., & Luborsky, L. The selection of candidates for psychoanalytic training: On the use of interviews and psychological tests. Journal of the American Psychoanalytic Association, 1955, 3, 666-681.
27. Holt, R. R. Rejoinder to Mayzner's review of Schafer's "Psychoanalytic interpretation in Rorschach testing." Psychology Newsletter, 1956, 7, 47-50.
28. Holt, R. R. Gauging primary and secondary processes in Rorschach responses. Journal of Projective Techniques, 1956, 20, 14-25.
29. Luborsky, L., & Holt, R. R. The selection of candidates for psychoanalytic training: Implications from research on the selection of psychiatric residents. Journal of Clinical and Experimental Psychopathology, 1957, 18, 166-176.
30. Holt, R. R. Clinical and statistical prediction: A reformulation and some new data. Journal of Abnormal and Social Psychology, 1958, 56, 1-12. Reprinted in M. Zax & G. Stricker (Eds.), The study of abnormal behavior: Selected readings. New York: Macmillan, 1964; 2nd ed., 1969. Also in I. N. Mensh (Ed.), Clinical psychology: Science and profession. New York: Macmillan, 1966. Also in E. I. Megargee (Ed.), Research in clinical assessment. New York: Harper & Row, 1966. Pp. 657-672.
31. Klein, G. S., Spence, D. F., Holt, R. R., & Gourevitch, S. Cognition without awareness: Subliminal influences upon conscious thought. Journal of Abnormal and Social Psychology, 1958, 57, 255-266. Abstract in American Psychologist, 1955, 10, 380.)
32. Holt, R. R. Formal aspects of the TAT--A neglected resource. Journal of Projective Techniques, 1958, 22, 163-172. Also in Bobbs-Merrill Reprint Series in the Social Sciences, P-481, 1966.
33. Goldberger, L., & Holt, R. R. Experimental interference with reality contact (perceptual isolation): Method and group results. Journal of Nervous and Mental Disease, 1958, 127, 99-112.
34. Holt, R. R., & Luborsky, L. Personality patterns of psychiatrists (2 vols.). New York: Basic Books, 1958.
35. Holt, R. R. Researchmanship, or how to write a dissertation in clinical psychology without really trying. American Psychologist, 1959, 14, 151. Reprinted in R. A. Baker (Ed.), Psychology in the wry. New York: Van Nostrand, 1963. Also reprinted in Psygram, 1978, 18(1), 34-35 (South African Psychol. Assn., Johannesburg).

37. Holt, R. R. A comment on the Wiener-Nichols controversy. Journal of Projective Techniques, 1959, 23, 377-378.
38. Holt, R. R. Discussion remarks on "Further observations on the Poetzl phenomenon--A study of day residues" by Charles Fisher. Psychoanalytic Quarterly, 1959, 28, 442.
39. Holt, R. R., & Goldberger, L. Personological correlates of reactions to perceptual isolation. USAF WADC Technical Reports, 1959, No. 59-735, 46 pp.
40. Holt, R. R. (with the collaboration and assistance of Joan Havel, Leo Goldberger, Anthony Philip and Reeva Safrin). Manual for the scoring of primary process manifestations in Rorschach responses (7th ed.). New York: Research Center for Mental Health, New York University, 1959 (mimeographed). (Later drafts in 1962, 1963 and 1969.)
41. Holt, R. R., & Goldberger, L. Research on the effects of isolation on cognition functioning. USAF WADC Technical Reports, 1960, No. 60-260, 22 pp.
42. Holt, R. R., & Havel, J. A method for assessing primary and secondary process in the Rorschach. In M. A. Rickers-Ovsiankina (Ed.), Rorschach psychology. New York: Wiley, 1960, pp. 263-315.
43. Klein, G. S., & Holt, R. R. Problems and issues in current studies of subliminal activation. In J. G. Peatman and E. L. Hartley (Eds.), Festschrift for Gardner Murphy. New York: Harper, 1960. Pp. 75-93.
44. Holt, R. R. Discussion remarks on "The effect of dream deprivation and excess: An experimental demonstration of the necessity for dreaming" by William C. Dement and Charles Fisher. Psychoanalytic Quarterly, 1960, 29, 608.
45. Holt, R. R. Recent developments in psychoanalytic ego psychology and their implications for diagnostic testing. Journal of Projective Techniques, 1960, 24, 254-266.
46. Holt, R. R. Cognitive controls and primary processes. Journal of Psychological Researches, 1960, 4, 105-112.
47. Pine, F., & Holt, R. R. Creativity and primary process: A study of adaptive regression. Journal of Abnormal and Social Psychology, 1960, 61, 370-379.
48. Goldberger, L., & Holt, R. R. Experimental interference with reality contact: Individual differences. In P. Solomon et al. (Eds.),

- Sensory deprivation. Cambridge: Harvard University Press, 1961. Pp. 130-142.
49. Holt, R. R. The nature of TAT stories as cognitive products: A psychoanalytic approach. In J. Kagan & G. Lesser (Eds.), Contemporary issues in thematic apperceptive methods. Springfield, IL: C. C. Thomas, 1961. Pp. 3-43.
 50. Holt, R. R., & Goldberger, L. Assessment of individual resistance to sensory alteration. In B. E. Flaherty (Ed.), Psychophysiological aspects of space flight. New York: Columbia University Press, 1961. Pp. 248-262.
 51. Holt, R. R. Clinical judgment as a disciplined inquiry. Journal of Nervous and Mental Disease, 1961, 133, 369-382. Bobbs-Merrill Reprint Series in the Social Sciences, P-480, 1966.
 52. Goldberger, L., & Holt, R. R. Studies on the effects of perceptual alteration. USAF ASD Technical Reports, 1961, No. 61-416, 20 pp.
 53. Goldberger, L., & Holt, R. R. A comparison of isolation effects and their personality correlates in two divergent samples. USAF WADC Technical Reports, 1961, No. 61-417, 46 pp.
 54. Holt, R. R. The president's column. Newsletter, Division of Clinical Psychology, APA, 1961, 14(4), 5; 1962, 15(1), 1-2; 15(2), 4-5; 15(3), 6-7.
 55. Holt, R. R., & Proshansky, H. Roles for psychologists in promoting peace. SPSSI Newsletter, June 1962, 1-4.
 56. Holt, R. R. A critical examination of Freud's concept of bound vs. free cathexis. Journal of the American Psychoanalytic Association, 1962, 10, 475-525.
 57. Holt, R. R. Indiuidality and generalization in the psychology of personality. Journal of Personality, 1962, 30, 377-404. Translated into Italian: Individualita e generalizzazione nella psicologia della personalita. Bollettino di Psicologia Applicata, N. 57-58, Giugno-Agosto 1963. Reprinted in F. H. Sanford & E. J. Capaldi (Eds.), Advancing psychological science, Vol. I: Philosophies, methods, and approaches. Belmont, CA: Wadsworth, 1964. Also reprinted in E. Southwell & M. Merbaum (Eds.), Personality: Readings in theory and research: A book of readings. New York: Prentice-Hall, 1966. Also, Bobbs-Merrill Reprint Series in the Social Sciences, P-482, 1966. Also abridged under the title, "The logic of the romantic point of view in personology," in T. Millon (Ed.), Theories of psychopathology. Philadelphia: W. B. Saunders, 1967. Pp. 315-322. Also reprinted in J. O. Whittaker (Ed.), Recent discoveries in psychology. Philadelphia: W. B. Saunders, 1972.

Revised version: In R. S. Lazarus & E. M. Opton (Eds.), Personality: Selected readings. Penguin Modern Psychology UPS 9. Harmondsworth, England: Penguin Books, 1967. Pp. 38-65.

58. Holt, R. R. A clinical-experimental strategy for research in personality. In S. Messick & J. Ross (Eds.), Measurement in personality and cognition. New York: Wiley, 1962.
59. Holt, R. R. Two influences on Freud's scientific thought: A fragment of intellectual biography. In R. W. White (Ed.), The study of lives. New York: Atherton Press, 1963. Pp. 364-387.
60. Holt, R. R. New directions in the training of psychotherapists (Editorial). Journal of Nervous and Mental Disease, 1963, 18, 677-79.
61. Holt, R. R. Forcible indoctrination and personality change. In P. Worchel & D. Byrne (Eds.), Personality change. New York: Wiley, 1964. Pp. 289-318.
62. Holt, R. R. Imagery: The return of the ostracized. American Psychologist, 1964, 19, 254-264. Reprinted in E. P. Torrance & W. F. White (Eds.), Issues and advances in educational psychology: A book of readings. Itasca, IL: F. E. Peacock, 1969. Also abridged in B. L. Kintz & J. L. Bruning (Eds.), Research in psychology: Readings for the introductory course. Glenview, IL: Scott, Foresman, 1970. Pp. 314-320.
63. Holt, R. R. The emergence of cognitive psychology (book essay). Journal of the American Psychoanalytic Association, 1964, 12, 650-665.
64. Holt, R. R. A review of some of Freud's biological assumptions and their influence on his theories. In N. S. Greenfield & W. C. Lewis (Eds.), Psychoanalysis and current biological thought. Madison: University of Wisconsin Press, 1965. Pp. 93-124.
65. Holt, R. R. Experimental methods in clinical psychology. In B. Wolman (Ed.), Handbook of clinical psychology. New York: McGraw-Hill, 1965. Pp. 40-77.
66. Holt, R. R. Ego autonomy re-evaluated. International Journal of Psycho-Analysis, 1965, 46, 151-167. Reprinted with critical evaluations by S. C. Miller, A. Namnum, B. B. Rubinstein, J. Sandler & W. G. Joffe, R. Schafer, H. Weiner, and the author's rejoinder (see No. 71 below), International Journal of Psychiatry, 1967, 3, 481-536.
67. Holt, R. R. Freud's cognitive style. American Imago, 1965, 22, 163-179.

68. Holt, R. R. Psychotherapy as an autonomous profession: An alternative to the Clark Committee's proposal. In Preconference materials prepared for the Conference on the Professional Preparation of Clinical Psychologists. Washington, DC: American Psychological Association, 1965. Also in E. L. Hoch, A. O. Ross, & C. L. Winder (Eds.), Professional preparation of clinical psychologists. Washington, DC: American Psychological Association, 1966.
69. Holt, R. R. A brave beginning to an enormous task. Critical evaluation of "A methodological study of Freudian theory" by A. Kardiner, A. Karush, & L. Ovesey, International Journal of Psychiatry, 1966, 2, 545-548.
70. Holt, R. R. Measuring libidinal and aggressive motives and their controls by means of the Rorschach test. In D. Levine (Ed.), Nebraska symposium on motivation, 1966. Lincoln: University of Nebraska Press, 1966. Pp. 1-47. Reprinted in P. M. Lerner (Ed.), Handbook of Rorschach scales. New York: International Universities Press, 1975.
71. Holt, R. R. On freedom, autonomy, and the redirection of psychoanalytic theory: A rejoinder. International Journal of Psychiatry, 1967, 3, 524-536 (see also No. 66 above).
72. Holt, R. R. (Ed.). Motives and thought: Psychoanalytic essays in memory of David Rapaport. Psychological Issues, Monograph 18/19. New York: International Universities Press, 1967.
73. Holt, R. R. David Rapaport: A memoir (September 30, 1911-December 14, 1960). In R. R. Holt (Ed.), Motives and thought (No. 72 above). Pp. 7-17.
74. Holt, R. R. The development of the primary process: A structural view. In R. R. Holt (Ed.), Motives and thought (No. 72 above). Pp. 345-383.
75. Holt, R. R. Beyond vitalism and mechanism: Freud's concept of psychic energy. In J. H. Masserman (Ed.), Science and psychoanalysis, Vol. XI: Concepts of ego. New York: Grune & Stratton, 1967. Pp. 1-41. And in B. Wolman (Ed.), Historical roots of contemporary psychology. New York: Harper & Row, 1968. Pp. 196-226. Abstract in Psychiatric Spectator, 1967, 4, 16-17 (Sandoz publication).
76. Holt, R. R. Discussion: On using experiential data in personality assessment; Symposium: The role of experiential data in personality assessment. Journal of Projective Techniques and Personality Assessment, 1967, 31(4), 25-30.
77. Holt, R. R. Diagnostic testing: Present status and future prospects. Journal of Nervous and Mental Disease, 1967, 144, 444-465.

78. Holt, R. R. (Ed.). Revised edition of Diagnostic psychological testing by D. Rapaport, M. M. Gill & R. Schafer. New York: International Universities Press, 1968.
79. Holt, R. R. Freud, Sigmund. International encyclopedia of the social sciences (Vol. 6). New York: Macmillan and The Free Press, 1968. Pp. 1-12.
80. Holt, R. R. Assessing personality. Part IV of I. L. Janis, G. F. Mahl, J. Kagan & R. R. Holt, Personality: Dynamics, development, and assessment. New York: Harcourt, Brace & World, 1969. Pp. 575-801.
81. Holt, R. R. Kubie's dream and its impact upon reality: Psychotherapy as an autonomous profession. Journal of Nervous and Mental Disease, 1969, 149, 186-207.
82. Holt, R. R. The lasting value of the unconscious, or Rabkin fails to Peirce Freud. Critical evaluation of "Is the unconscious necessary?" by Richard Rabkin. International Journal of Psychiatry, 1969, 8, 585-589.
83. Holt, R. R. Yet another look at clinical and statistical prediction: Or, is clinical psychology worthwhile? American Psychologist, 1970, 25, 337-349.
84. Holt, R. R. On the interpersonal and intrapersonal consequences of expressing or not expressing anger. Discussion of paper, "Experimental investigations of hostility catharsis," by L. Berkowitz. Journal of Consulting and Clinical Psychology, 1970, 35, 8-12.
85. Holt, R. R. Artistic creativity and Rorschach measures of adaptive regression. In B. Klopfer, M. M. Meyer & F. B. Brawer (Eds.), Developments in the Rorschach technique, Vol. III: Aspects of personality structure. New York: Harcourt Brace Jovanovich, 1970. Pp. 263-320.
86. Holt, R. R. Freud's two images of man. Western Psychologist Monograph Series, No. 2, 1971, 5-25.
87. Holt, R. R. Some neglected assumptions and problems in psychology's information crisis. American Psychologist, 1971, 26, 331-334.
88. Holt, R. R. Assessing personality. New York: Harcourt Brace Jovanovich, 1971 (paperback reprint of Part IV, No. 80 above).
89. Holt, R. R. (Ed.). New horizon for psychotherapy: Autonomy as a profession. New York: International Universities Press, 1971.

90. Holt, R. R. Summary and prospect: The dawn of a new profession. In R. R. Holt (Ed.), New horizon for psychotherapy (see No. 89 above), pp. 312-411.
91. Holt, R. R. In memoriam: George S. Klein. Psychological Issues, 1971, 7(3), v-vii.
92. Barr, H. B., Langs, R. J., Holt, R. R., Goldberger, L., & Klein, G. S. LSD: Personality and experience. New York: Wiley, 1972.
93. Holt, R. R. Freud's mechanistic and humanistic image of man. In R. R. Holt & E. Peterfreund (Eds.), Psychoanalysis and Contemporary Science, 1972, 1, 3-24.
94. Holt, R. R. On the nature and generality of mental imagery. In P. W. Sheehan (Ed.), The function and nature of imagery. New York: Academic Press, 1972.
95. Holt, R. R. Should the psychotherapist prescribe the pills? Preferably not! International Journal of Psychiatry, 1972, 10(4), 82-86.
96. Holt, R. R. Methods of research in clinical psychology. Morristown, NJ: General Learning Press, 1973.
97. [Holt, R. R.] Personality. In B. B. Wolman (Ed.), Dictionary of behavioral science. New York: Van Nostrand Reinhold Co., 1973. P. 275.
98. Holt, R. R. On reading Freud. Introduction to Abstracts of the Standard Edition of Freud. New York: Jason Aronson, 1974.
99. Holt, R. R. Book review: Loevinger, Jane, & Wessler, Ruth. Measuring ego development, Vol. 1: Construction and use of a sentence completion test. Loevinger, Jane, Wessler, Ruth, & Redmore, Carolyn. Vol. 2: Scoring manual for women and girls. San Francisco: Jossey-Bass, 1970. In Journal of Nervous and Mental Disease, 1974, 158, 310-318.
100. Holt, R. R. In retrospect: Response to the Distinguished Contributions Award, Division 12, APA. Clinical Psychologist, 1974, 28(1), 5-6.
101. Holt, R. R. The current status of psychoanalytic theory. Behavioral Sciences Tape Library. Leonia, NJ: Sigma Information, 1974.
102. Holt, R. R. Clinical and statistical measurement and prediction: How not to survey the literature. JSAS Catalog of Selected Documents in Psychology, 1975, 5, 178. MS No. 837.
103. Holt, R. R. The past and future of ego psychology. Psychoanalytic Quarterly, 1975, 44(4), 550-576.

104. Holt, R. R. Drive or wish? A reconsideration of the psychoanalytic theory of motivation. Psychological Issues, 1976, 9(4, Whole No. 36), 158-197.
105. Holt, R. R. Freud's theory of the primary process--present status. Psychoanalysis and Contemporary Science, 1976, 5, 61-99.
106. Holt, R. R. A method for assessing primary and secondary process in the Rorschach. In M. A. Rickers-Ovsiankina (Ed.), Rorschach Psychology (rev. ed.). New York: Krieger, 1977.
107. Holt, R. R. Introduction to L. Affierbach & M. Franck (Eds.), The emerging field of sociobibliography: The collected essays of Ilse Bry. Westport, CT: Greenwood Press, 1977.
108. Holt, R. R. Methods in clinical psychology: Assessment, prediction and research (2 vols.). New York: Plenum, 1978.
109. Holt, R. R. Ideological and thematic conflicts in Freud's thought. In S. Smith (Ed.), The human mind revisited: Essays in honor of Karl A. Menninger. New York: International Universities Press, 1978.
110. Holt, R. R. The death and transfiguration of metapsychology. (The Sandor Rado Lecture, April 20, 1978) Reported by D. D. Olds in the Bulletin of the Association for Psychoanalytic Medicine, 1978, 18(1), 21-25.
111. Holt, R. R. Theory, no; method, yes. (Review of Coping and defending: Processes of self-environment organization by Norma Haan) Contemporary Psychology, 1978, 25(3), 139-141.
112. Holt, R. R. Review of Language and insight by Roy Schafer. Psychoanalytic Quarterly, 1979, 48(3), 496-500.
113. Holt, R. R. Freud's impact on modern morality. The Hastings Center Report, 1980, 19(2), 38-46.
114. Holt, R. R. Was Freud really a psychologist? (Review of Freud's early psychology of the neuroses: A historical perspective by Kenneth Levin) Contemporary Psychology, 1980, 25(2), 128-129.
115. Holt, R. R. Review of The scientific evaluation of Freud's theories and therapy by S. Fisher and R. P. Greenberg. Journal of Nervous and Mental Disease, 1980, 168(7), 445.
116. Holt, R. R. Loevinger's measure of ego development: Reliability and national norms for short male and female forms. Journal of Personality and Social Psychology, 1980, 39(5), 909-920.

117. Holt, R. R. Review of Symbol and neurosis: Selected papers of Lawrence S. Kubie. Journal of the American Psychoanalytic Association, 1980, 28(3), 703-704.
118. Holt, R. R. The great analyst re-analyzed. (Review of Freud: Biologist of the mind. Beyond the psychoanalytic legend by Frank J. Sulloway) Contemporary Psychology, 1981, 26(2), 95-96.
119. Holt, R. R. The death and transfiguration of metapsychology. International Review of Psycho-Analysis, 1981, 8(Part 2), 129-143.
120. Holt, R. R. A note on philosophy and the history of psychology's concern with imagery: Commentary on Ernest R. Hilgard's "Imagery and imagination in American psychology." Journal of Mental Imagery, 1981, 5(1), 38-40.
121. Holt, R. R. Review of Freud, the man and the cause by Ronald W. Clark. Review of Psychoanalytic Books, 1982, 1(2), 3-13.
122. Holt, R. R. Comment on psychological stress workshop. In P. Walker, W. E. Fraise, J. J. Gordon & R. C. Johnson (Eds.), Workshop on psychological stress associated with the proposed restart of Three Mile Island, Unit 1. NUREG/CP-0026 MTR-82W26. Washington, DC: U.S. Nuclear Regulatory Commission, 1982. Pp. 76-89.
123. Holt, R. R. Occupational stress. In L. Goldberger & S. Breznitz (Eds.), Handbook of stress. New York: Macmillan/Free Press, 1982.
124. Holt, R. R. Come migliorare la ricerca descrittiva in psicologia clinica [Improving descriptive research in clinical psychology]. Psicologia Clinica (Rome), 1982, 1(1). (By invitation)
125. Holt, R. R. Family secrets (Review of M. Balmory, Psychoanalyzing psychoanalysis: Freud and the hidden fault of the father). The Sciences, 1982, 22(8), 26-28.

Publications in press

- Holt, R. R. The manifest and latent meanings of metapsychology. The Annual of Psychoanalysis, in press.
- Holt, R. R. Freud's impact upon modern morality and our world view. In A. L. Caplan & Bruce Jennings (Eds.), Darwin, Marx, and Freud. New York: Plenum, in press.
- Holt, R. R. Freud, the free will controversy, and prediction in personology. In R. A. Zucker, J. Aronoff & A. I. Rabin (Eds.), Personality and the prediction of behavior. New York: Academic Press, in press.