

A CHANGING ERA IN U.S. JEWISH POPULATION RESEARCH:  
MULTIPLE RESEARCH STRATEGIES -  
INDEXES AND HEURISTICS<sup>(1)</sup>

Fred Massarik

Impact of Trends: 1970-1980

The U.S. National Jewish Population Study (NJPS) now is a historical document.<sup>(2)</sup> From its planning phase in the 1960s to completion of data collection, 1970-71, and analysis and reporting to the mid-1970s, this broad-scale inquiry represents a design strategy that currently is less practical than it proved to be in past decades. Several factors force upon us this requirement to move away from study plans based essentially on a combination of multi-stage stratification by Jewish household geographic concentration and door-to-door interviewing. To respond to the significant new developments that underlie this conclusion, we must first consider the drastic realignments - sociologic and financial - that have occurred since completion of the NJPS.

1. *Redistribution of the U.S. Jewish Population*

The 1970s have been characterized by a substantial shift in the Jewish population's geographic pattern. This important change in relative distribution of adult Jewish population is shown in Table 1. As noted in the Table, figures are based on data made available by the National Opinion Research Center (NORC). Information is obtained for Jewish adults (18 years old and over) for two time periods, 1972-74 and 1975-78, identified as *Early 1970s* and *Late 1970s*. "Jewish" cases, by a generic not halachic definition of Jewishness, respectively are 153 and 133 for the time periods noted.

If we put aside, for the moment, the obvious statistical limitations pertaining to such small Jewish samples, the following are the major findings:

a) The 12 largest Standard Metropolitan Statistical Areas (SMSAs) and their contiguous suburbs show important percentage (and numerical) declines. While in the Early 1970s, they accounted for an overwhelming 70% of the total, by the Late 1970s the corresponding figure had shrunk to 45.1%.

b) The next largest SMSAs (ranked 13-100 in total population, 1970 base) rose in their share of relative Jewish adult population from 21.5% to 24.8%.

c) Still smaller urban places, and rural locations provide the most dramatic picture of relative growth, from 8.5% to 30.1%.

A comparison with the total U.S. adult population is not germane for our present purposes: we may note, however, that this total population likewise has shown a decrease in the 12 largest SMSAs, and growth in smaller urban and rural locations.

Returning to the Jewish adult population shift - (for present purposes a reasonable index to Jewish *household* population though rigorously not synonymous) we note that the traditional and dominant urban concentration of Jewish population is waning: the largest metropolitan areas no longer account for a majority of the Jewish adult population, nor likely its numeric household equivalent. Instead, smaller urban centers - including many outside SMSAs - are moving to the forefront.

As our present concern is principally methodological, we will not make an effort here to consider the possible causal forces generating this shift. We may note - in general and here without rigorous substantiation - that changes in values and life-styles, including a perceived increased

Table 1. Geographic Redistribution of U.S. Adult Jewish Population, Early 1970s/Late 1970s (NORC Data)(a)

	Early 1970s		Late 1970s		% Change within category
	N (b)	%	N (b)	%	
Total	153	100.0	133	100.0	
12 Largest SMSAs	74	48.4	44	33.1	-31.6
12 Largest SMSAs' suburbs	33	21.6	16	12.0	
Other SMSAs (13-100)	12	7.8	12	9.0	+15.4
Other SMSAs suburbs	21	13.7	21	15.8	
Other Urban (not SMSA)	11	7.2	34	25.6	+255.6
Rural	2	1.3	6	4.5	

(a) Data reported are derived from NORC (National Opinion Research Center, Chicago, IL) *General Social Surveys*, 1972-1978; data on tape file. Early 1970s = 1972-74; Late 1970s = 1975-78; non-institutional English speaking adults, 18 years old and up; Continental U.S.; name-of-place "information" per NORC sampling units; "SMSAs" (Standard Metropolitan Statistical Areas) per *Statistical Abstracts*, 1972, (Table 20); "Suburbs" per U.S. Census PC (1)-A; "Other Urban" per Country characteristics; *Statistical Abstracts*, (Table 10).

(b) N is number of "Jewish cases" (reported as "raised Jewish" and/or as "now identifying as Jewish").

attractiveness of life in smaller communities, "flight" from suburbs affected by busing, redistribution of certain industries - and thus jobs - away from urban centers (e.g. high-technology occupations in California's "Silicon Valley" and the like), may be in part responsible. Further, various aspects of Jewish life associated with intermarriage and assimilative tendencies may co-act in this context.

This redistribution of Jewish households - as suggested by the "Jewish adult" data cited - has important implications for costs and thus for the feasibility of conventional survey study designs. We recall that the NJPS, and other geographically delimited studies of its kind are based on the utilization of stratification procedures. These are most efficient, viz. economical, if there are major Jewish population concentrations - both in the selection of primary sampling units, and in specification of sub-areas within them, pointing to "Jewish neighborhoods", or at least to discernible above-average proportions of Jewish households. If we find, as the data reported in Table 1 suggests, that more and more Jewish people are widely dispersed, and geographically "intermixed" in the general population, then sample stratification becomes less efficient. This has important cost implications. Greater numbers of screening contacts would be required to reach equivalent numbers of Jewish households at levels found in the NJPS and in similar investigations. Travel distances among sample locations increase, leading to higher travel time costs, compounded as well by the rise in such mundane particulars as gasoline prices, insurance premiums, etc. And, of course, these additional distances and geographic dispersions - associated with the reduced effectiveness of stratification - result in higher personnel costs for interviewers and in field supervision.

Before leaving this matter of changing Jewish population distribution and its correlative cost, some caveats are in order: first, we must recall that NORC data, though involving *combinations* of years, still constitute somewhat modest data bases. They are, however, corroborated to some extent by some "Distinctive Jewish Name" (DJN) figures for several original NJPS sampling units (see Table 2).

Again, it is found that in Jewish household totals urban core areas show relative decline, while more distant suburbs, and smaller geographic locations show growth.

Second, while the data provided point to notable trends, they do not specifically indicate the extent of reduction in Jewish population concentration *within* various geographic units as may be used in sample design nor the exact degree of loss in stratification efficiency under these changed circumstances. An interesting future exercise calls for a construction of a hypothetical U.S. Jewish population sample design taking account of the changing geographic distribution as noted.

Table 2. Estimated Totals of Jewish Households in Selected U.S. Cities and Suburbs, 1969-1979 - Distinctive-Jewish-Names ("Modified Kohs"/M.K.) Household Index Data

City or suburb	DJN (M.K.) Household Index <sup>(a)</sup>		% Change
	1969	1979	
Greater N.Y. area	937,618	699,248	- 25.4
New York City	739,708	501,778	- 32.2
Manhattan	168,450	143,160	- 15.0
Queens	184,900	130,020	- 29.7
Bronx	119,310	60,390	- 49.4
Brooklyn	266,670	167,430	- 37.2
Staten Island	378	778	+105.6
N.Y. Suburban counties	197,910	197,470	- 0.2
Westchester	45,030	43,890	- 2.5
Nassau	115,140	115,840	+ 0.6
Suffolk	20,630	37,740	+ 82.9
Greater Washington Area	54,570	72,660	+ 33.2
Washington, D.C.	14,860	16,240	+ 9.3
Washington Suburbs	39,710	56,420	+ 56.3
Virginia Suburbs	8,280	15,700	+ 59.6
Maryland Suburbs <sup>(b)</sup>	31,430	40,720	+ 29.6
Cleveland, OH	28,720	26,240	- 8.6
Las Vegas, NV	2,420	5,680	+134.7
Tucson, AZ	3,030	6,050	+ 99.7
Phoenix, AZ	5,950	13,530	+127.4
Fort Worth, TX	2,170	2,920	+ 34.6
Birmingham, AL	2,450	3,180	+ 29.8
Seattle, WA	4,990	6,860	+ 37.5
San Diego, CA	7,210	16,110	+123.4

(a) Data shown here are approximate *household*, not person counts, and therefore are not directly comparable to figures reported in *AJYB* 1983, v. 83, (p. 129; pp. 133-139). 1969 data based on NJPS or corresponding *AJYB* figures. "Household Index" may be only *very roughly* interpreted as indication of number of Jewish households figures derived, without corrections or adjustments, on basis of modified Kohs DJN Index, Telephone Book data for 1969/1979 or nearest available year.

(b) Exclusive of Prince Frederick County, Laurel area and Annapolis.

## 2. Differentiation in Jewish Household Composition

While the issue of "defining Jewishness" is ancient yet ever-new, the related matter of defining a "Jewish household for inclusion in a Jewish population study" assumes heightened relevance. Already at the time of the NJPS, it became apparent that, especially in view of intermarriage and "drift" from one to another religious orientation or ideology, substantial numbers of "non-Jews" or persons of ambiguous religious-ideological self-identification, reside in households together with others more readily definable as "Jewish". Among the former there are, of course, non-Jewish spouses in intermarriage, children in mixed marriages, and others who may describe themselves as non-Jewish. In this connection, a reanalysis of NJPS data indicates the nature of the issue, though not necessarily its present magnitude (see Tables 3 and 4).

It is evident that the concepts "persons in Jewish households" and "Jewish persons" are not synonymous.

Intermarriage (or "mixed marriage") in itself does not necessarily lead to Jewish population loss, in view of the increase in the *number* of resulting marriage units, with two persons forming separate marriages, and in-conversion balancing out-conversion and possible drift away from Judaism. Still, high intermarriage rates have implications for household composition and structure. For purposes of empirical research, therefore, it is urgent to clearly indicate just what is to be considered a *Jewish* household suitable for inclusion. For instance, is a male born of a non-Jewish mother and a Jewish father, who now identifies as an "atheist" sufficient basis for considering his constituent household as "Jewish"? Or we may wish to know - in computation of household size and in eventual computation of Jewish population numbers - that a male born of a Jewish mother is "living together" with a non-Jewish woman. Should this Jewish household size equal 1 or 2 in our computations? As new "life styles" appear such questions abound.

It is evident that the "number of Jewish people" is not the same thing as the "number of people residing in households included in a Jewish population study." In view of the likely continuation at high levels of intermarriage, and the evolution of more complex "mixtures" of Jewish/non-Jewish/part-Jewish family patterns, it is clear that study designs need to (a) explicitly recognize the conceptual issues associated with these differentiations; and (b) implement procedures that recognize these differentiations in data collection and analysis. At present, many studies and Jewish population estimates are deficient on both counts.

## 3. Persistent Dissatisfactions

While the 1970s witnessed considerable progress in Jewish demographic research, including a number of major studies, various dissatisfactions persist. In spite of their pragmatic usefulness, Jewish population estimates

Table 3. Inflow/Outflow: Patterns of Jewish Identification, by Age/Sex Categories, NJPS Data

Age	Born Jewish		Not Born Jewish		Born Jewish		Not Born Jewish		Total	
	Now Jewish		Now Jewish		Now Jewish		Now Jewish		M	F
	M	F	M	F	M	F	M	F		
Weighted Number of Cases										
Total (a)	33,560		520		407		2,339		36,826	
	16,186	16,984	175	345	250	157	973	1,342	17,584	18,828
0 - 4	731	809	2	3	3	5	210	243	946	1,060
5 - 9	1,056	1,099	24	50	4	0	78	72	1,162	1,221
10-14	1,685	1,649	3	2	35	5	96	117	1,819	1,773
15-19	1,608	1,648	5	4	7	37	182	66	1,802	1,755
20-24	1,430	1,386	9	140	52	4	70	103	1,561	1,633
25-29	898	801	12	22	9	11	62	278	981	1,112
30-34	774	769	3	22	8	5	52	104	837	900
35-39	868	1,036	6	13	7	4	55	90	936	1,143
40-44	1,045	1,070	5	42	4	38	11	37	1,065	1,187
45-49	1,159	1,276	1	6	44	34	41	132	1,245	1,448
50-54	1,244	1,195	1	12	37	3	9	32	1,291	1,242
55-59	1,114	1,112	3	8	10	1	93	14	1,220	1,135
60-64	913	874	0	9	4	2	8	33	925	918
65-69	587	907	101	8	11	6	4	7	703	928
70-74	480	650	0	1	14	1	2	8	496	660
75-79	320	445	0	1	1	1	0	4	321	451
80+	274	258	0	2	0	0	0	2	274	262
Percentages										
Total (a)	91.1		1.4		1.1		6.4		100.0	
	92.1	90.2	1.0	1.8	1.4	0.8	5.5	7.1	100.0	100.0
0 - 4	77.3	77.6	0.2	0.3	0.3	0.5	22.2	22.9	100.0	100.0
5 - 9	90.0	90.0	2.1	4.1	0.3	0.0	6.7	5.9	100.0	100.0
10-14	92.6	93.0	0.2	0.1	1.9	0.3	5.3	6.6	100.0	100.0
15-19	89.2	93.9	0.3	0.2	0.4	2.1	10.1	3.8	100.0	100.0
20-24	91.6	84.9	0.6	8.6	3.3	0.2	4.5	6.3	100.0	100.0
25-29	91.5	72.0	1.2	2.0	0.9	1.0	6.3	25.0	100.0	100.0
30-34	92.4	85.4	0.4	2.4	1.0	0.6	6.2	11.6	100.0	100.0
35-39	92.7	90.6	0.6	1.1	0.7	0.3	5.9	7.9	100.0	100.0
40-44	98.1	90.1	0.5	3.5	0.4	3.2	1.0	3.1	100.0	100.0
45-49	93.1	88.1	0.1	0.4	3.5	2.3	3.3	9.1	100.0	100.0
50-54	96.4	96.2	0.1	1.0	2.9	0.2	0.7	2.6	100.0	100.0
55-59	91.3	98.0	0.2	0.7	0.8	0.1	7.6	1.2	100.0	100.0
60-64	98.7	95.2	0.0	1.1	0.4	0.2	0.9	3.6	100.0	100.0
65-69	83.5	97.7	14.4	0.9	1.6	0.6	0.6	0.8	100.0	100.0
70-74	96.8	98.5	0.0	0.2	2.8	0.2	0.4	1.2	100.0	100.0
75-79	99.7	98.7	0.0	0.2	0.3	0.2	0.0	0.9	100.0	100.0
80+	100.0	98.5	0.0	0.2	0.3	0.2	0.0	0.9	100.0	100.0

(a) Including missing data.

Table 4. Major Inflow/Outflow Points: Selected Age Groups, by Sex<sup>(a)</sup>, NJPS Data

Age group	Total im age group	Number of cases	% of total in age group	Inflow/Outflow		Predominant sex	Inflow excess
				Direction	sex		
5-9	2,383	74	3.1	In	F	+	
10-14	3,592	40	1.1	Out	M		
15-19	3,557	44	1.2	Out	F		
20-24	3,194	149	4.7	In	F	+	
"	"	56	1.8	Out	M		
25-29	2,093	36	1.7	In	F	+	
"	"	20	1.0	Out	F		
30-34	1,737	25	1.4	In	F	+	
35-39	2,079	19	0.9	In	F	+	
40-44	2,252	47	2.1	In	F	+	
"	"	42	1.9	Out	F		
45-49	2,693	78	2.9	Out	M		
50-54	2,533	40	1.6	Out	M		
65-69	1,631	109	6.7	In	M	+	

(a) Data are reported for age/sex categories in which inflow or outflow number of cases equals or exceeds 18; adapted from Table 3.

(b) No sufficient data available for infants and very young children; see Table 3, 0-4 category. However, more than 22% in this category are 'not born Jewish; not now Jewish'.

reported in the *American Jewish Year Book* continue to draw more criticism than praise; the issues are well-known and do not need to be restated in detail here. They include uncertainties concerning the validity of estimates locally reported, dependence on community studies of varied and inconsistent methodologies, and the like. In spite of increased awareness of the limitations, the situation leaves much to be desired.

As far as local community studies are concerned, questions persist regarding standardization of questions, suitability of sample designs (particularly as relates to consistency of definition of "Jewishness") and coverage or representativeness of households/respondents actually reached.

Recently developed and popular data collection methodologies such as Random Digit Dialing (RDD), have proved to be mixed blessings. In some instances, the method predisposes to superficiality, especially in the hands of relatively inexperienced investigators. Often, it is limited to collection of simple demographic data and brief attitude variables. Especially to the extent that there is increased concern with detailed assessment of **patterns** of intermarriage and their consequences, or the "quality of Jewish life," RDD is subject to severe constraints. Its capacity for probing in depth is limited.

At another polarity, available small-sample studies and anecdotal reports, speaking to more subtle issues in Jewish life, often are unsystematic, difficult to interpret and almost impossible to generalize.

No panacea lies before us. Therefore, on conceptual and on practical grounds, it becomes more urgent than ever to re-examine the scope and "mix" of our research strategies.

### Multiple Research Strategies for the 1980s

In terms of over-all plans for the field - and, as possible, in individual studies, the following orientations may prove useful: (a) multiple and often varied methods need to be employed; and (b) increased reliance needs to be placed on discerning cumulative patterns of results, as elicited by these varied methods.

To illustrate, one may wish to include in a given study design "broad-scope" approaches such as RDD procedures for suitable selected variables, combined with smaller numbers of highly detailed, deeply-probing interviews. Or procedures for Jewish population estimation may be based on indexes using "Distinctive Jewish Names", together with analyses of Jewish respondents drawn from a cumulation of general surveys. Further, it may be useful to adopt longer time horizons, examining evolving trends revealed by a variety of independent data points.

In connection with the purposeful move to multiple methodologies, we will suggest that certain procedures, such as the DJN-method and the re-

analysis of "Jewish data" obtained in the course of other research deserve particular attention, if appropriate methodological elements are carefully tested before full study implementation. Resulting findings need to be viewed in context, as *cumulation* of knowledge and in inductive terms.

1. *Toward Inclusion of a "Religious Preference" Question in the 1990 U.S. Census*

It is well known that in the United States the principle of separation of church and state has (with limited exceptions) prevented the U.S. Census from including questions on "religion" or "religious preference." The organized Jewish community has taken an active role opposing inclusion of such religious questions in Census inquiries. Particularly in preparation for the 1970 Census, dialogue - some of it heated - took place in the Jewish community regarding a possible change in this prevailing policy. No change in policy was forthcoming.

Looking forward to the 1990 decennial count, it now may be useful to reopen this dialogue. It is this writer's view (a) that it is now appropriate for the Jewish community to withdraw its opposition to inclusion of a "religion"-question in the U.S. Census, and (b) that it is possible to do this with sufficient safeguards, so that the principle of separation of church and state is preserved, both in concept and in practical protection of individual and communal rights.

First we may note the history of the U.S. Census, in its rigorous protection of information bearing on individuals and in its restraints in release of small-area results. There is no indication, given procedures classically upheld, that a significant risk exists in public or malicious governmental identification of self-identified Jewish persons. To argue that such risk *potentially* exists, is to assume cataclysmic reversals of past social policy. Were such reversals to occur (and I believe that this is highly unlikely) they would surely be associated with more widely-hazardous policies of possible danger to the Jewish population, policies which would need to be combatted at levels of considerably broader and significant scope than inclusion of a question in a censal survey.

Second, it may be possible to eliminate the *legal* requirement that the "religion-question" must be answered; it may be made optional. Whether this would result in substantial loss of data, with numerous refusals, would need to be tested in pilot studies. However, if the Jewish community's general endorsement of response were to prevail, together with suitable dissemination of such approval, it is probable that this kind of question would be answered as a matter of course. Even limited data would provide helpful bases for Jewish population study sample design in studies conducted under Jewish communal and non-governmental auspices.

In addition, we may note the benign experience in countries such as

Canada in governmental statistical identification of "religion."

One may recognize possible danger to principle, viz. separation of church and state. Still, the principle can be confirmed, especially with inclusion of a "religion-question" in census *sample* surveys only (with requested but optional response), and by the strengthening of existing protections. Further, additional computer code safeguards may be devised to assure that no individuals can be specifically identified as Jewish. Given these possibilities, it seems to me that the advantages of inclusion of a "religion-question" in the U.S. Census, establishing a geographic and numerical basis for additional inquiry on Jewish life - clearly outweigh probable risks. With this in mind, I believe that the next several years are opportune to resume the necessary discussions within the Jewish community and with the U.S. Census as well as with other interested religious bodies, noting the substantial planning horizon required in construction of the 1990 decennial Census.

## 2. Development of Improved "Distinctive Jewish Names" Indexes

The concept of using some name or names as indicators of Jewish population number and distribution has ancient origins. The notion of the "Cohen Test", asserting that - as rule of thumb - one percent of all Jews are named Cohen constitutes one obviously-crude approach to this matter.

In the 1940s, Samuel C. Kohs generated new interest in Jewish-name based procedures in his work for the National Jewish Welfare Board and Jewish War Records.<sup>(3)</sup> Particularly in studies conducted in Los Angeles, he specified inclusive lists of 106 and 35 "Distinctive Jewish Names" (DJNs). These lists were used extensively, especially in the 1950s and 1960s, in local Jewish population studies and in establishing the stratification system for the National Jewish Population Study.

For many practical purposes, the DJN method, as proposed by Kohs, has proved useful and convenient.<sup>(4)</sup> It provides helpful initial estimates of geographic distribution of "Jewish Households"; with some adaptations it may be used to estimate "Jewish Household" numbers, though not "Jewish Population". The latter is possible only if average Jewish household size figures are available.

It is less clear whether DJNs, in the specific mold proposed by Kohs, indeed constitute a suitable basis for study of Jewish population *characteristics*. Some empirical findings concerning the matter, together with results provided by supplemental heuristic indexes, appear in Tables 5, 6, and 7.

Each of these tables, respectively for religious self-identification, household composition, and occupation of household's heads, reports percentage distributions derived from NJPS data for the following:

35 DJNs (Kohs)  
 71 DJNs (supplemental part of Kohs' list of 106 DJNs)  
 106 DJNs (total Kohs list)  
 'SET 17' (new 17 DJNs)  
 'SET 18' (new 18 DJNs)  
 "Total Jewish Households": (all Jewish Households; Household Heads, NJPS)  
 'NEW INDEX', computed on the basis of specific weighted DJN results  
 (explained in text).

Whether or not DJN results are considered as "good enough" measures of total Jewish population results depends on study objectives and on the margin of error that one wishes to tolerate. For example, as is shown in Table 5, the list of 106 DJNs clearly overestimates the proportion of Orthodox as compared to the total Jewish household figure: 14.9% versus 11.4%. On the other hand, the "Just Jewish" category is significantly underestimated: 9.4% versus 12.2%. In terms of an index: DJN as % of "total J. Households", with the total Jewish heads of households included in the NJPS equals 100, the lower part of Table 5 shows overestimation (figures in excess of 100) or underestimation (figures less than 100) for each of the various parameters. Thus, the 106 DJN list overestimates by 31% (index 131) the proportion of Orthodox, and underestimates by 23% (index 77), the number of "Just Jewish". On this basis, a review of this portion of Table 5 provides a rough indication of the relative accuracy/inaccuracy of estimates provided by the several DJN lists versus total NJPS data here examined.

As a very crude approximation, without present concern for number of cases, number of categories, or possible use of least-square or logarithmic measures of similarity of error, one may simply compute a "sum of deviations" from the "total Jewish population" criterion shown in the next to the last column in each of the Tables cited. While by no means a sophisticated measure, this "sum of deviations" provides a first-cut indication of fit between various DJN estimates of Jewish population characteristics and corresponding total Jewish household criteria. At this point, we may wish to recall the proportion constituted by each of the DJN sets, of the weighted total "Jewish Households" (n= 12,393):

35 DJNs	- 10.7%
71 DJNs	- 3.4%
total 106 DJNs	- 14.1%
SET 17	- 4.0%
SET 18	- 1.7%

As indicated in Table 5, in religious self-identification both the 35 DJNs and the 106 DJNs overestimate the Orthodox by a major margin, slightly overestimate the Conservative and come fairly close to the mark for the Reform. However, more peripheral groups such as the "Just Jewish" and "Others" (e.g. Reconstructionists), are materially underestimated.

Considered as a whole, the *relatively* nearest overall approximation,

Table 5. Religious Self-Identification: Comparison of Various DJN Results and Total Jewish Population Results; NJPS Data

Religious self-identification	35 DJNs	71 DJNs	106 DJNs	SET 17 DJNs	SET 18 DJNs	Total J. House.	NEW INDEX
n (a)	1,324	423	1,747	494	210	12,393	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Orthodox	15.4	13.2	14.9	10.7	11.9	11.4	13.9
Conservative	45.2	34.3	42.5	57.1	46.7	40.7	43.9
Reform	27.9	37.1	30.1	23.7	23.3	29.9	27.8
Just Jewish	8.4	12.5	9.4	4.7	15.2	12.2	11.3
Other	3.1	2.9	3.1	3.8	2.9	6.0	3.0
Index: DJN as % of Total Jewish Households							
Orthodox	135	116	131	94	104	100	122
Conservative	112	85	105	141	115	100	108
Reform	93	124	101	79	78	100	93
Just Jewish	69	102	77	38	125	100	93
Other	52	48	52	63	48	100	50
Sum of deviations	133	109	108	167	118	(b)	94

(a) Number of cases, weighted for National results, NJPS, 1970-71.

(b) Not applicable.

per the "sum of deviations", is shown for the 106 DJN list, in this instance, at a somewhat more satisfactory level than attained by the 35 DJNs. Actually, in absolute terms, all the approximations provided by the several alternate DJN lists leave much to be desired.

Can we improve on results obtained by means of the usual DJN lists, while still focusing on conveniently identifiable "Jewish Names"? The answer appears to be a cautious "yes". Based on initial trial-and-error and subsequent computer-generated heuristics, we derive a NEW INDEX computed as follows:(5)

$$\frac{(2 \times 106 \text{ DJNs}) + (1 \times \text{SET } 18 \text{ DJNs})}{3}$$

This NEW INDEX simply weights results provided by the 106 DJNs by a factor of 2, adding - (weighted 1) - figures derived for SET-18 DJNs, and dividing the total by 3, noting that three estimate series are used in this computation.

Computing the NEW INDEX in Table 5, we find that it yields the following estimates:

	<u>NEW INDEX</u>	<u>Total NJPS</u>
Orthodox	13.9%	11.4%
Conservative	43.9%	40.5%
Reform	27.8%	29.9%
"Just Jewish"	11.3%	12.2%
"Others"	3.0%	6.0%

On a cumulative basis, the NEW INDEX provides a "sum of deviations" of 94, compared to the corresponding figure for the 106 DJNs of 108. Thus, with lower "sum-of-deviation" figures indicating greater accuracy of estimate, the NEW INDEX constitutes an improvement over the index derived on the basis of the 106 DJNs.

Table 6 provides comparisons for household composition. Both the 106 DJNs and the component 35 DJNs tend to overestimate the proportions of households in which the respondent lives alone, or lives with spouse only. The NEW INDEX does not eliminate, but moderates these overestimates. Either way, it appears that the relatively small households, lacking children, tend to be overestimated by DJN methods. The following recaps the findings, with figures here derived by the NEW INDEX:

	<u>NEW INDEX</u>	<u>Total NJPS</u>
Lives alone	15.1%	14.9%
Lives with spouse only	31.9%	26.4%
Lives with spouse and children	41.7%	48.8%
Live with children only	3.3%	3.1%
Any other	8.0%	6.8%

Again, the "sum of deviations" for the NEW INDEX reveals an improvement over the 106 DJN "sum of deviations": 61 versus 70.

Table 6. Household Composition: Comparison of Various DJN Results and Total Jewish Population Results; NJPS Data

Household composition	35 DJNs	71 DJNs	106 DJNs	SET 17 DJNs	SET 18 DJNs	Total J. House.	NEW INDEX
n (a)	1,324	423	1,747	494	210	12,393	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Lives alone	16.7	13.9	16.0	11.1	13.3	14.9	15.1
Lives with spouse only	37.1	23.4	33.8	42.3	28.1	26.4	31.9
Live with spouse and children	38.3	49.2	40.9	38.5	43.3	48.8	41.7
Live with children only	2.7	1.9	2.5	0.8	4.9	3.1	3.3
Any other	5.2	11.6	6.8	7.3	10.4	6.8	8.0
Index: DJN as % of Total Jewish Households							
Lives alone	112	93	107	75	89	100	101
Lives with spouse only	141	89	128	160	106	100	121
Lives with spouse and children	79	101	84	79	89	100	85
Lives with children only	87	61	81	26	158	100	106
Any other	76	171	100	107	153	100	118
Sum of deviations	111	129	70	187	139	(b)	61

(a) Number of cases, weighted for National results, NJPS, 1970-71.

(b) Not applicable.

Table 7, addressing occupation/head of household, provides generally corroborative findings. Again, the NEW INDEX proves superior to the 106 DJN figures (as well as to the 35 DJN results), with a "sum of deviations" of 136 compared to corresponding figures of 182 and 187.

Substantively, we note that the various DJN estimation series tend to overestimate the "not in labor force" category, while underestimating those occupations in which Jews are relatively infrequently employed, e.g. blue collar (craftsmen, operatives, etc.) and labor and service occupations, included in the "all other" rubric.

In summary, we conclude that it is not advisable to rely on 35 or 106 DJN figures as such, especially if we seek substantially accurate representations of key variables such as religious self-identification, household composition and occupation. However, with caution - noting that certain overestimates and underestimates are likely to occur, it is possible to derive somewhat more elaborate "New Indexes", also based on Distinctive Jewish Names. The NEW INDEX reported here provides more satisfactory estimates of Jewish population characteristics than the conventionally used 35 DJNs or the inclusive 106 DJNs.

Further experimentation using these and other sets of "Jewish Names" whether or not based on the Kohs list, and seeking additional more highly predictive algorithms, seems in order. By this means, we may be able to obtain reasonably satisfactory Jewish population data - if not necessarily ideal data sets - on a cost-effective basis.

### *3. Reanalysis of General Survey Data*

A strategy pointing to the selection of "Jewish respondents" from general survey samples often has been found appealing. As early as the 1960s (and possibly before), "Jewish data" have been culled from broader samples and reanalyzed.<sup>(6)</sup> Unfortunately, because the Jewish population (either "adults" or "households") constitutes but a very small percentage of the total, general studies yield only very small Jewish sub-samples. For instance, in a typical year, choosing a single survey with a total number of cases circa 1,000, one may expect to find only 20 to 30 Jewish cases. Obviously, such limited numbers severely restrict statistical conclusions, especially if more detailed cross-tabulations are desired.

Given the increased availability of a variety of data bases contained in various public opinion archives, one need not, of course, rely on any single survey. Rather, two kinds of combinations are possible: (a) combining generally comparable "Jewish data" drawn from a number of surveys at approximately the same time, and (b) combining data collected by a particular survey organization during a specified set of years.

In the latter instance, heed must be paid to the cultural forces characterizing a given period and to historic "watersheds": e.g. the end

Table 7. Occupation of Head of Household: Comparison of Various DJN Results and Total Jewish Population Results; NJPS Data

Occupation of head of household	35 DJNs	71 DJNs	106 DJNs	SET 17 DJNs	SET 18 DJNs	Total J. House.	NEW INDEX
n (a)	1,324	423	1,747	494	210	12,393	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Not in labor force	29.4	23.6	28.0	39.3	24.8	21.5	26.9
Professionals	19.8	20.8	20.0	18.0	36.7	23.7	25.6
Managers	24.8	39.0	28.3	22.5	21.4	30.2	26.0
Clerical	5.4	3.3	4.9	4.5	1.9	4.1	3.9
Sales	12.9	9.9	12.2	8.7	8.1	10.6	10.8
Crafts	2.9	1.4	2.5	3.8	2.9	4.2	2.6
Operatives	2.4	1.9	2.3	1.8	2.4	2.9	2.5
All other	2.3	0.0	1.8	1.4	2.0	2.7	1.9

Index: DJN as % of Total Jewish Households

Not in labor force	137	110	130	183	115	100	125
Professionals	84	88	84	76	155	100	108
Managers	82	129	94	75	71	100	86
Clerical	131	80	120	110	46	100	95
Sales	122	93	115	82	76	100	102
Crafts	69	33	59	90	69	100	62
Operatives	83	66	79	62	83	100	86
All other	85	(b)	67	52	74	100	70
Sum of deviations	187	189	182	256	251	(b)	136

(a) Number of cases, weighted for National results, NJPS, 1970-71.

(b) Not applicable.

of the Vietnam war, significant transitions from one presidency to another, changes from philosophies of growth to philosophies of limits, etc.. One must be aware of technical changes in sample design and definition as may affect data to be analyzed. For example, one needs to note explicitly different meanings of questions such as "in what religion were you raised?"

In the analysis based on NORC data (see Table 8), an affirmative response to *either* of the two questions indicated above sufficed for inclusion in a "Jewish sample". Under these circumstances, it is not possible to ascertain adherence to traditional criteria, such as birth by a Jewish mother or formal conversion. However, in pragmatic terms a meaningful matrix of definition is generated. Choosing two sample periods within which the questions used in the definition of Jewishness are asked, in successive NORC surveys, one may generate cross-classifications as those shown in Table 8. These tables include other major religious denominations as well as Jewish respondents. For the two sample periods combined, the number of Jewish respondents/"raised" totals  $92 + 126 = 218$ ; or Jewish respondents/"now identified",  $86 + 114 = 200$ . These figures are derived from a total of  $2,977 + 6,027 = 9,004$  respondents, yielding a "percentage Jewish" of 2.4.

In interpretation of the findings reported in Table 8, it is possible to observe the "inflow/outflow" of persons moving from one religious group to another, as well as those remaining. Looking specifically at the Jewish data, it appears that about 85% of those raised Jewish continue to affirm their Jewish heritage, while about 10% currently assert that they have no religious preference. In 1972-74, only about 1% moved from Jewish upbringing to either Protestant or Catholic adult status, while the corresponding figure for 1975-78 approaches 5%. Small percentages, generally less than 1%, are shown for Protestants or Catholics (of course with a numerically large base) specifically moving to Jewish religious preference in adulthood.

The net effect of the various shifts is shown in Table 9, Comparative Religious Preferences. It is of interest to note that during the sample periods considered, all major religious denominations show net percentage losses, ranging from 3.7 to 9.5%. The latter - the relatively largest loss - is shown from Jewish respondents, 1975-78, a rise in the size of loss from 6.5% during the 1972-74 sample period. The principal "gainer" is the "none"-category - those expressing *no* religious preference. Here one notes immediately that, in Halachic terms, those who fall within this latter category but who were born of a Jewish mother, remain within the scope of the formal definition of Jewishness and constitute a "loss" in Jewish population in qualitative, but not necessarily in quantitative terms.

From a methodological standpoint, the above is intended as an illustration of strategies for reanalysis of secondary data, as provided by general surveys conducted in the U.S. under a variety of auspices. While the num-

Table 8. Religious Preference Shifts - 1972-74 and 1975-78<sup>(a)</sup>

Now identifies as	Raised as:					Total	n
	Protestant	Catholic	Jewish	None	Other		
1972-74							
n	1,962	819	92	75	29		2,977
Row %	65.9	27.5	3.1	2.5	1.0	100.0	
Column %, total	100.0	100.0	100.0	100.0	100.0	100.0	
Protestant	90.6	8.2	1.1	50.7	24.1	63.5	1,891
Catholic	3.0	84.7	-	14.7	3.5	25.7	764
Jewish	0.1	0.6	85.9	-	-	2.9	86
None	5.4	6.0	10.9	33.3	17.2	6.5	194
Other	1.0	0.5	2.2	1.3	55.2	1.4	42
1975-78							
n	4,055	1,613	126	179	54		6,027
Row %	67.3	26.7	2.1	3.0	0.9	100.0	
Column %, total	100.0	100.0	100.0	100.0	100.0	100.0	
Protestant	90.2	8.6	3.2	55.3	13.0	64.8	3,906
Catholic	3.5	83.3	1.6	8.4	14.8	25.0	1,509
Jewish	0.0 <sup>(b)</sup>	0.2	84.9	1.1	-	1.9	114
None	5.8	7.4	9.5	33.5	9.3	7.2	432
Other	0.4	0.6	0.8	1.7	63.0	1.1	64

(a) Source: NORC, various sample surveys.

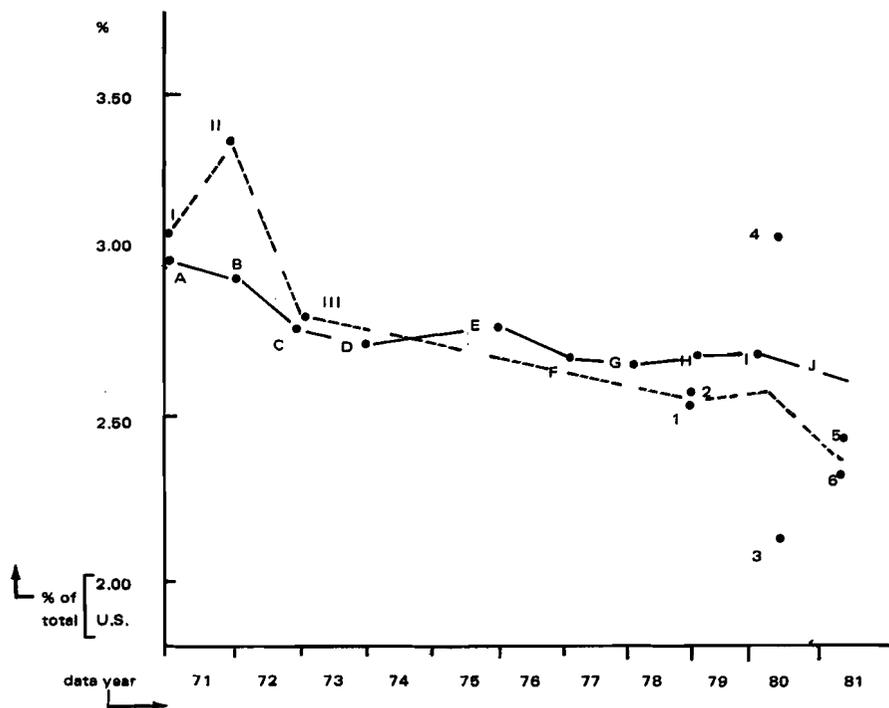
(b) Less than 0.1.

Table 9. Comparative Religious Preferences: "Raised" vs. "Identifies Now" - 1973-74 and 1975-1978(a)

Religious preference	Raised as...	Now identifies as...	% Change		
			Raw	Ratio now/raised	100-Ratio $\frac{\text{now}}{\text{raised}}$
1973-74					
n	2,977	2,977			
Total	100.0	100.0			
Protestant	65.9	63.5	-2.4	96.4	-3.6
Catholic	27.5	25.7	-1.8	93.5	-6.5
Jewish	3.1	2.9	-0.2	93.5	-6.5
None	2.5	6.5	4.0	260.0	160.0
Other	1.0	1.4	0.4	140.0	40.0
1975-78					
n	6,027	6,027			
Total	100.0	100.0			
Protestant	67.3	64.8	-2.5	96.3	-3.7
Catholic	26.8	25.0	-1.8	93.3	-6.7
Jewish	2.1	1.9	-0.2	90.5	-9.5
None	3.0	7.2	4.2	240.0	140.0
Other	0.9	1.1	0.2	122.0	22.2

(a) Source: NORC, various sample surveys.

Figure 1. Percentage of Jews Among Total Population in the United States, 1971-1981



Symbols A to J (capital letters), solid line, refer to percentages, Jewish population as % of total U.S. population, respectively derived from *American Jewish Year Book* and U.S. Census total U.S. population estimates.

Symbols I to III, and 1 to 6, dashed line, refer to similar percentage figures derived on the basis of a variety of General Surveys. Each symbol denotes a particular data point, associated with a given survey. The Surveys involved are briefly identified as follows:

			<u>% of Jews</u>
I	Gallup	- 1970	3.08
II	NORC	- 1972	3.37
III	NORC	- 1972	2.80
(1)	Gallup	- 1979	2.51
(2)	CBS	- 1979	2.53
(3)	NORC	- 1980	2.18
(4)	LA Times	- 1980	2.93
(5)	Roper	- 1981	2.46
(6)	ABC	- 1981	2.35

If more than one data point available for a given year, average (unweighted arithmetic mean) is shown.

ber of "Jewish cases" remains modest, depending on the number of surveys, combined and the time spans considered, and while sampling variances undoubtedly remain substantial, an inductive approach to the examination of trends, especially in context with other independent data sources, provides helpful indications of Jewish population characteristics. One must recall, of course, that general surveys typically include demographic data and information on a wide and varied range of topics, but with few that focus specifically on *Jewish* issues. Thus, topics such as views toward intermarriage between Jews and non-Jews, kashruth, high holiday observances, attitudes towards Israel, etc. may not appear at all or in rare instances only.

One often neglected use of "Jewish data" drawn from general surveys relates to their use as a supplemental method in assessment of Jewish population trends. Clearly, if only a single survey is used as a data base, the very small number of Jewish respondents found is grossly insufficient to provide Jewish population estimates, given the massive variances encountered. However, as one cumulates individual "clues" provided by a succession of surveys, conducted under different auspices (and, for that matter, possibly using slightly differing definitions in identification of Jewish respondents), it becomes possible to ascertain *emerging patterns and trend lines*. By way of illustration, it appears that the *percentage* of the U.S. population, constituted by the Jewish population (as indicated by figures for adults) has continued to decline from the early 1970s to the late 1970s and early 1980s (see Figure 1).

### Rethinking the Future

This paper suggests that, in view of developments in the 1970s and early 1980s, more varied and flexible, yet rigorous approaches to Jewish population study are in order. We cannot afford to remain "married" to a single method, be it the door-to-door sample survey, random digit dialing, distinctive-Jewish-names procedures or whatever. Rather, the time has come (as though this were news...) to "work smarter, not harder". While this kind of injunction is never likely to be denied, it often is violated, and while funds for Jewish population research in the U.S. never have been ample, such violation is even less in order when financial and organizational limitations constrain our task.

On this basis, we need to turn to the development of multiple research strategies, including but not confined to: (a) generating statistics on Jewish populations under U.S. Census auspices (a political as well as a technical issue); (b) the development of Indexes, providing data on Jewish population numbers and characteristics, based on distinctive-Jewish-names and on other convenient and low-cost indicators - with interviews (in-person or by telephone) studying readily discernible *index populations*; and (c) continuing and more effective utilization of secondary data sources, as provided by general surveys, with systematic and cautious reanalysis of "Jewish cases".

Throughout, it is urgent that we create study designs that provide purposeful combining of "clues" and information, derived from several, often individually imperfect sources. Such study plans should consider the significance of *cumulative* findings, both with advanced intent and by retrospective *inductive* analysis of various available data sets.

In all this, we need to affirm heightened commitment to innovation and to flexibility, reaching beyond the self-imposed prisons of conventional but narrow statistical analysis. In the 1980s, we need to look toward further eclectic and multiple approaches in U.S. Jewish population research.

### Notes

1. Aspects of this paper especially pertaining to FIGURE 1 are reported in modified form in Fred Massarik, "Assessing Jewish Survival: Considering the Evidence, 1971-81", a Report prepared for the Federation of Jewish Philanthropies of New York, January 1983.
2. The author served as Scientific Director of the National Jewish Population Study, sponsored by the Council of Jewish Federations, New York.
3. Relevant research in this connection can be traced to Samuel C. Kohs, "Survey of Recreational and Cultural Needs of the Jewish Community of Los Angeles", conducted under auspices of the National Jewish Welfare Board, 1942; Louis I. Dublin and Samuel C. Kohs, *American Jews in World War II* (Bureau of War Records, National Jewish Welfare Board), New York: Dial Press, 1947, (2 vols.). For an empirical study of the method see: Fred Massarik, "New Approaches to the Study of the American Jew", *Jewish Journal of Sociology*, Vol. VIII, no. 2, Dec. 1966, pp. 175-191.
4. It is *not* assumed, however, that the ratios of Distinctive Jewish Names to Other Names of Jewish Household Heads are invariable. One may expect moderate changes with geographic location and over time. The U.S. National Jewish Population Study (1970) has examined geographic variations among Primary Sampling Units, and tests on various Jewish community lists in Los Angeles have investigated temporal variation. In spite of differences found, the ratios noted constitute useful indicators. Updating and continuing adjustments of ratios to specific geographic locations, cultural circumstances (e.g. the substantial presence of Sephardim), intermarriage factors (impact of non-Jewish husband/Jewish wife patterns) and inherent limitations of list composition (e.g. in use of telephone lists - homes without phones, homes with unlisted phone numbers, and multiple phone listings) are in order.

5. As indicated, the NEW INDEX constitutes a heuristic, not a theoretically-based algorithm. It was developed by means of a computer program systematically testing a larger number of estimation series variously combining the 35 DJNs, the 71 DJNs, the 106 DJNs, SET-17 and SET-18, and comparing resulting values with the values for corresponding Total Jewish Household data, NJPS, 1970-71, National weights.
6. For instance: G. Lenski, *The Religious Factor*, Garden City, N.Y., Doubleday, 1961.