COMMUNISM AND COHORTS CONTINUED:

American Tolerance in 1954 and 1972-1987[1]

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(Abstract)

This paper compares trends in free speech attitudes during the GSS years (1972-1987) with those of the "Stouffer Shift" (1954-1972) in the light of Stouffer's prediction that cohort replacement would generate increased tolerance. Cohort replacement appears to have facilitated tolerance to the same degree in both periods but the GSS era saw slight negative intra-cohort trends while the Stouffer Shift was buttressed by large intra-cohort increases in Tolerance. Twelve specific conclusions are drawn regarding the changing shape of the cohort/tolerance function, the relative impact of newcomers and departures on change, the surprising effects of "threat variables", etc.

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In 1954 28 percent[2] of a US national sample chose "Yes, allowed" rather than "No" when asked "Suppose an admitted communist wants to make a speech in your community. Should he be allowed to speak or not?" (Stouffer, 1954 p. 41).

In 1972, 18 years later, the first NORC General Social Survey repeated the question and obtained 54 percent "yes", a 26 point increase or 14.4 points per decade. Nunn, Crockett and Williams, obtained a near identical 56 percent in an independent 1973 replication (1978; Mueller, 1988 p. 4).

This "Stouffer shift" is not only one of the largest public opinion changes spotted by replication studies; it also confirmed

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[2] Here and throughout this paper "Don't Knows" are excluded from the tabulations. They rarely exceed five per cent of the respondents and the proportions are similar across items and years.

one of the few specific predictions made by an empirical
Sociologist - Stouffer's forecast that cohort replacement would
produce a national trend toward tolerance as an ever more
tolerant younger generation is substituted for less tolerant
older ones. Davis (1975, p. 509) decomposed the change between
1954 and 1972-73 claiming that about half of the shift (15
points, 8.1 points per decade, out of a total shift of 28,
averaged over six items) was due to cohort replacement and
increased education, while 13 points came from intra-cohort
trends toward tolerance. (Stouffer himself expected the intra-
cohort change to be _negative_ as the frustrations of age eroded
tolerance.) Nunn, Crockett, and Williams' analysis supported the
cohort replacement hypothesis, as did Cutler and Kaufman (1975)
in an independent analysis of Stouffer and GSS72.

The 1987 GSS, 15 years after GSS72 and 33 years after
Stouffer, gave a reading of 61 percent, a mere six point gain
since 1972. Regression analysis of the ten GSS marginals (See
Table 2b below) gives a slope of just two points per decade, one
seventh the size of the Stouffer shift. Indeed, Mueller (1988, p.
12), reviewing the entire battery of Stouffer items up to 1985
concludes:

> ..By 1972, tolerance for the civil liberties of Communists,
> Socialists and Atheists had risen sharply..(but) for the
> next 13 years tolerance for these groups and for other
> divergent groups has remained steady at this high level..

Why was the Stouffer shift followed by the "70s slump"?

Mueller discusses a number of psychological and political trends as plausible candidates for explainers, but he does not test them with data. This paper seeks to (a) build on Mueller's work by subjecting his and similar hypotheses to the discipline of multi-variate analysis and (b) update the analysis in Davis (1975) with data through the 70s and mid 80s.

YEAR, COHORT, TOLERANCE

Figure 1 shows a stripped-down version of the Stouffer cohort replacement hypothesis.

(Figure 1 here)

The model says:

> (+A) Over time the average year of birth increases (because of births and deaths, i.e. cohort replacement)
>
> (+B) Within years, younger Americans (more recent birth cohorts) are more tolerant.
>
> (-C) Within cohorts, Americans become less tolerant with the passage of years (Stouffer, 1954, p. 108).

Noting that the total effect of Year on Tolerance _is_ change in Tolerance and following classic flow graph rules:

$$\text{Change in Tolerance} = (+AB) - (C) \qquad \text{Eq. 1}$$

Stouffer thus saw attitude trends as a "contest" between the increased liberalism (+AB) of cohort replacement and the

increased conservativism of Aging (-C) but he predicted, in effect, that AB would be larger than C (p. 108).

When Davis (1975) applied this model to the Stouffer Shift data he found that AB was positive and nontrivial (i.e. younger, more tolerant cohorts had replaced older, conservative ones) but that C was also positive (within cohorts, Americans had become more tolerant during the 50s and 60s).

Logically, if the rate of change for the 70s Slowdown differs from that during the Stouffer Shift, there must have been a change in A or B or C. This assertion does not stretch one's Sociological imagination but it will serve to organize the initial analysis.

(A) Cohort replacement

The question about cohort replacement is not "whether" but "how much". Table 1 gives a simple summary.

(Table 1 here)

Persons born in 1955 or later were 17 or younger in 1972 and ineligible for the GSS sample. Over the years their proportion increased steadily so that by 1987 they comprised 29 percent of the sample. In other words, by 1987 almost a third of the 1972 adult population had been replaced by newcomers.

In 1972 the average birth year of GSS respondents was 1927.0, while by 1987 it was 1941.7. Regressing these annual means on year we get:

Mean Year of birth = -41.59 +.9599 (Year, 2 digits)   Eq. 2
(r squared = .99)

For all practical purposes .9599 equals 1.00. Consequently:

Change in Tolerance $\approx$ B + C   Eq. 3

Equation 3 says: when both are expressed in years, the total change will be the sum of the Inter and Intra Cohort coefficients and if the coefficients differ in sign, the sign of the trend will be the sign of the larger coefficient. Taking the idea one step further, the trend from 1972 to 1987 will depend on the relative impact of (B) a year of exposure to pre-1972 America and (C) a year of exposure to post 1972 America.

(Equation 3 has another implication. Since the mean year of

birth advances at the rate of 1.00 per annum, the average <u>age</u> of
the GSS population was essentially constant during the period.
Although "it is well known" the American population is aging
rapidly, one wouldn't know it from the GSS. Two explanations come
to mind. First, a good part of the Aging is a shrinkage of the
proportion of children 0-17 who are excluded from the GSS.
Second, the most spectacular "demonstrations" of Aging are
projections of very small trends for very large periods of time.)

Clearly the GSS years saw substantial amounts of Cohort
replacement. How does this compare with the amount during the
Stouffer shift? Since the Stouffer data only report age in five
categories and Stouffer sample had a floor or 21 rather than 18
a precise comparison is tricky. However, Davis (1975, p. 501)
reported that 41.9% of the cases 21 and older in GSS72-73 were
from cohorts too young for Stouffer. This is can be compared with
the 29 percent for 1987 in Table 1. Since the Stouffer shift was
18.5 years (1972-3 v. 1954) while the 70s slowdown involves 15
years, we can multiply the 29 per cent in Table 1 by 18.5/15.
This gives 35.9% to compare with 41.9%. It seems that the amount
of Cohort replacement during the Stouffer shift was greater,
probably because the baby boomers entered adulthood during this
period. Nevertheless, the difference is far from spectacular, and
both periods saw considerable turnover. Indeed, save perhaps for
inflation, cohort replacement shows the sharpest change of any of
the hundreds of GSS variables.

Conclusion #1: The 70s slowdown period saw substantial
cohort replacement, albeit a bit less than the period of the
original Stouffer shift.

(B) Cohort and Tolerance

Cohort replacement can only influence population means when
the "newcomers", "departers", and "stayers" differ on the
dependent variable. In Stoufferian terms, we predict that
coefficient B in Figure 1 is positive - i.e. the later the birth
year the greater the tolerance, net of Year. In other words, we
predict the younger generation to be more tolerant whatever the
GSS year.

To test this proposition I chose ten GSS Stouffer items
directly focused on free speech, selecting five target groups
(Communists, Atheists, Homosexuals, Racists, Militarists) and
two free speech issues (Public Speech, Library Book). For some
analyses I combined speech and book for each form of dissent
giving five indices designated with nonGSS mnemonics (TOLCOM,
TOLATH, TOLHOMO, TOLRAC, TOLMIL). Table 2 gives the details.

At the right side of Table 2 are the results of simple
regressions for the marginal percentages and year. Nine of the
ten item slopes are positive, but the values and r squares are

very small. Thus, generally speaking, tolerance on free speech
issues increased trivially (e.g. 2 to 3 points per decade)
during the GSS years.

(Table 2 here)

As a first test of the cohort/tolerance hypothesis I
transformed each of the ten items to dummy variables and
regressed them on Year and Cohort (Year of birth)[3]. Table 3 gives
the results.

(Table 3 here)

All ten coefficients are positive. Across the ten issues
the younger generation is more supportive of free speech.
Multiplying the raw coefficients by 100 we get the number of
percentage points per decade. Except for Racist, all of the items
are close to +7.00. Thus, a decade's seniority seems to lower
support for free speech by about seven percentage points. This is
not far from the 8.1 points per decade for the Cohort

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[3] Logistic regression would be an alternative method here.
It is appropriate when the marginals are extreme, confidence
intervals are at issue, interest focuses only on direct effects,
obscure metrics are tolerable and one wishes to be fashionable.
Here, however, the marginals are all middling, the samples are so
large "everything" is significant, the interactions built into
logistic analyses would obscure indirect effects, it is crucial
for the reader to grasp coefficient sizes and one hopes the
substantive conclusions can outweigh the absence of trendy
techniques.

replacement portion of the Stouffer shift (discussed above).

But when we look at these correlations <u>within</u> years, we find
they are not stable. <u>During the GSS years the correlation between
Cohort and Support for Free Speech declined steadily.</u> Tables 4
and 5 document the claim.

(Table 4 here)

(Table 5 here)

Table 4 shows for each year the standardized coefficient
(beta) for Cohort and Tolerance averaged over the eight items
with the longest time spans. The coefficients start around .30 in
the early 70s and decline steadily to the low .20s in the early
1980s. The ten point drop is about a third of the original
magnitude.

Table 5 shows the declines for each of the ten items. I
regressed the cohort/tolerance betas on Year and multiplied the
raw slopes by 100 to give percentage points per decade. For
example, the -.129 in the top left column of Table 5 says the
beta for Year of Birth and SPKRAC is negative and the raw, single
year, dummy variable coefficient, -.00129, implies a decline of
12.9 points per decade. While all the coefficients are negative,
the drop seems strongest for Racist and weakest for Militarist,

with the declines for Speech a bit stronger than for Library.

What happened? The decline is not a general erosion.
Instead: beginning in the early 70s, for the first time since
1954, the newest cohorts of adults were LESS tolerant then their
predecessors.

Figure 2 shows what happened. The chart displays age
differences in tolerance (averaged over eight items) in each of
ten years.

(Figure 2 here)

All ten lines slope down from left to right - in each year
the overall tendency is for tolerance to decrease with age. But
closer inspection at the top end (ages 18-22, 23-27, 28-32, 33-
37) shows steady changes in the shape. In the earliest GSS years,
1972 and 1973, the youngest adults, ages 18-22, are as tolerant
or more tolerant than their immediate predecessors, ages 23-27;
but in 1974, 1976, 1977, and 1980 this is no longer true - the
newcomers are less tolerant than those in their mid20s; and in
1982, 1984, 1985, and 1987 the relationship becomes curvilinear.
By the mid 1980s, for ages 18 to 40 the newer the generation, the
lower the tolerance on free speech items.

Table 6 shows this pattern is consistent across the ten free

speech items, using the tolerance difference between respondents 18-22 and those 33-37 as an index. For each of the five forms of dissent the numbers shift from positive (newcomers are more tolerant) to negative (newcomers are less tolerant) as one moves from left to right. Unfortunately the GSS design did not include the two "right wing" dissents (Racist, Militarist) before 1976, but where they do appear, their results look pretty much the same as those for "left wing" dissenters. Indeed, the pattern seems to be broad. Alwin (1987, p. 22) suggests such a shift for the GSS items on valued child qualities and a nonsystematic search through the cumulative GSS file shows this pattern - a decline or reversal in the difference between the youngest adults and those in their 30s - turns up for a variety of items on sex roles, sex norms, race relations, politics, etc.

Figure 3 puts these findings in a longer time frame.

(Figure 3 here)

The bottom curve shows age and tolerance (averaged over four items) in Stouffer, the top lines display GSS results for 1972 and 1987 with ages grouped as in Stouffer. To my eye the 1954 and 1987 lines are roughly parallel and the 1987 line is quite different. This suggests, if nothing funny happened between 1954 and 1972:

<u>Conclusion #2: During the 1970s, for the first time in the
postwar period, the newer generation was less tolerant on
free speech than its predecessors. Consequently, the
correlation between cohort and tolerance declined (but did
not disappear).</u>

(C) Year and Tolerance

Statistical logic (Equation 3) tells us the Year
coefficients will tend to be negative since the Cohort
coefficients average more than six points while the total shifts
are mostly two to three points per decade. In other words, there
has probably been a shift toward less tolerance during the GSS
years <u>within cohorts.</u> Iterative proportional fitting ("log
linear modeling") allows a direct test.

For each of the ten free speech items I fitted Year by
Cohort by Tolerance models, with results shown in Table 7. Cohort
was grouped into six categories (1917-23, 1924-1929, 1930-1935,
1936-1941, 1942-1947, 1948-1954). This (temporarily) excludes (a)
those born 1955 and later, who entered the GSS population after
1972 and (b) the 1883-1916 cohorts, ages 56 and older in 1972
and 70 or older in 1987. The idea is to limit the analysis to
cohorts with little or no membership change due to "births" and
"deaths".

When assessing small differences in data sets with large
and different N's, the sheer significance of chi square vis a vis
a criterion value can be misleading. Therefore, I adjusted the

results to give N*, the number of cases required to make the table significant at the given (.05) significance level. No information is lost (if N* is smaller than N, the chi square is significant) and one may recover chi square easily. Thus:

N* = N to detect = (Criterion value/Chi Square)xN   Eq. 4.

Chi Square = (Criterion x N)/N*   Eq. 5.

Consider, for example the value 4,409 at the top right of Table 7. It says this particular Chi Square would have been (just barely) statistically significant if we had multiplied each of the cell frequencies by some constant to give a total sample size of 4,409. Looking at the left hand column we see the actual sample N is 9,720. Thus, the Chi Square "is significant". Since the criterion value is 16.9190 (9 d.f., .05), Equation 5 tells us the value of Chi Square was 37.3.

The third column of numbers in Table 7 tests the no-interaction hypothesis that the effect of Year on Tolerance is identical in each cohort. The values of N* are large (7,062 to 13,527) and well above the sample sizes (6,457 to 8,585). We can not reject the no-interaction hypothesis and the values of N* suggest that such interactions as there might be would require extremely large samples (by survey standards) for detection.

So far then Table 7 says that whatever happened within cohorts during the GSS years impacted each generation the same way. Moving to the column headed Cohort, we do find significant association. In each row N* is smaller than N and the absolute values (264 to 562) tell us these Cohort/Tolerance differences are strong enough to produce significance in samples much smaller than a single GSS (N=1500).

The right hand column (Year by Tolerance), the one that is central here, gives less clear cut results. Four effects (LIBMIL, LIBRAC, LIBHOMO, and SPKHOMO) are insignificant. That is, taking sample sizes "at face value" we can not reject (.05 level) the hypothesis that Year and Tolerance are independent within cohorts.

But multi-stage area probability sample Ns should not be taken at face value since they generally have design effects of more than 1.00. The actual design effects can be worked out for each item but survey analysts conventionally assume the effective N to be about two thirds of the raw data N, as in Column 2 of Table 7. Three of our items (SPKCOM, SPKATH, LIBCOM) have N* values smaller than the "effective N". That is, these relationships would still be significant if design effects were as large as 1.5.

Finally, three items (SPKRAC, SPKMIL, LIBATH) have values of
$N*$ somewhere between N and .67 N. They would be significant
assuming simple random sampling and insignificant assuming a DEFF
of 1.5. I consider them borderline.

Adding it up, we find significant Year/Tolerance differences
for three items, borderline significance for three, and
insignificance for four. This is not a fat catch, especially
when we see the smallest $N*$ for Year/Tolerance is 4,409 or
roughly "three GSSs".

Figure 4, Table 8, and Table 9 help us see what - if
anything happened.

(Figure 4
Table 8
Table 9 here)

Figure 4 graphs year to year changes for the items with the
largest and smallest values of $N*$ (SPKCOM and SPKHOMO). The
figure displays fitted values for models excluding the
interaction. SPKHOMO looks flat but SPKCOM does trend down as
one moves from left to right although the differences between
the two items are hardly striking.

Table 8 reports regression results for the fitted data[4].
Starting with shape, Column three suggests a gradual downward
trend rather than sharp oscillations, as the mean value of r
squared is a respectable .28. Table 9 buttresses this conclusion:
there is no year where the average residual reaches 3 points. If
these changes were produced by the national crises beloved by
journalists and historians (e.g. "Watergate", "The Reagan
landslide") one would expect large residuals in selected years.
Moving to magnitude, Table 8 shows the strongest intra cohort
shifts to be a modest three points per decade while the mean is
-2.4.

Conclusion #3: Within cohorts, the 1972-1987 period saw a
small decline in support for free speech. The anti-free
speech influences appeared to operate continuously
throughout the period.

Tables 8 and 9 also give us a better understanding of how the
changing curves in Figure 2 happened. Columns 2 and 4 of Table 8
give regression results for Year and Tolerance among 18-22 year

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[4] The fitted data, of course, contain six parallel trend
lines, one for each cohort. To get a single line, I followed the
reasoning in Clogg and Eliason (1988), with an important
difference. Their "partial cg" strategy would lead one to fit the
model (Cohort, Tolerance)(Year,Tolerance), assuming Year is the
"group variable" and Cohort the "composition variable". This,
however, violates the classic methodological principle, "never
control a consequent variable". Fitting the model (Cohort,Year)
(Year,Tolerance) achieves the same goal - by eliminating any
Cohort/Tolerance associations within years - without violating
fundamental causal logic. In the language of Clogg and Eliason
this would be "partial cd purging". For the fitted data, I simply
tabulated Year by Tolerance to get trend lines freed from the
influence of Cohort.

olds, i.e. the "newcomer cohorts". We see: (a) the signs are
negative: newer newcomers tended to be less tolerant than their
immediate predecessors (b) magnitudes of the coefficients are
larger than the intra-cohort magnitudes, with a mean of .10.0
versus -2.6 intracohort, and (c) the r squares are as large or
possibly larger than those for intra-cohort change. Remembering
the absence of interaction effects (Table 7), these findings
support this proposition: the curve in Figure 2 changed its shape
because of steadily decreased tolerance among entering cohorts,
not because of accelerated tolerance among their predecessors.

This pattern is consistent with the approach of some
political behavior researchers who argue that (a) eras have
definite political flavors (e.g. "the great depression", "the
Vietnam era") which influence attitudes, (b) young adults (new
voters) are especially impressionable while (c) older adults
(earlier cohorts) show lesser impact. Our basic facts: (a) a
small negative trend among older cohorts (b) no
Cohort/Year/Tolerance interaction and (c) sharper trends among
entering cohorts - are all consistent with this "imprinting"
model.

Conclusion #4: The youngest adults were more strongly
influenced by the anti-free speech factors than were
their elders.

(B v. C) Decomposing change

Net shifts in a dependent variable may be seen as a function
of three processes (1) intra-cohort (Aging/Year) shifts, (2) the
entrance into the population of "newcomers" - if they differ from
their predecessors and (3) the "departure" from the population of
persons who differ from the majority (Davis, 1987, pp. 144-155).
Calculations go as follows:

1) Run the bivariate Year x Dependent relationship
(here percentage differences) to get Total Change.

2) Delete Newcomers (persons in cohorts too young for
Time1 readings) and repeat.

3) Subtract (2) from (1) to get the effect of Newcomers.

4) Run Year by Dependent, controlling Cohort to get
intra-cohort change.

5) Subtract (4) from (2) to get the effect of Departures.

6) Total change due to Cohort replacement equals (3) + (5).

Table 10 gives such analyses for the six items with the
longest GSS series. Four of them (SPKCOM, LIBCOM, SPKATH, LIBATH)
also appeared in Stouffer's questionnaire. This allows us to
compare change during the 70s slump with change during the
Stouffer shift.

For the Stouffer Shift I compared Stouffer's 1954 data with

GSS72-73-74 assuming his Ages 21-29 equal birth cohorts 1925-
1933, ages 30-39 equals 1915-1924, etc. Since GSS samples begin
at age 18, not age 21, I treated cohorts 1934-1952 - who reached
21 in 1973 or earlier - as "newcomers" and excluded GSS
respondents in cohorts 1953 and later. Thus, for the 54/72-74
comparisons I treated the GSS as if its minimum age was 21.

For the 70s slump I used cohort groups that gave me ages 18-
29, 30-39, 40-49, 50-59, and 60+ in 1973 and did not exclude
persons under 21. I then analyzed data for 1972-3-4 ("1973")
versus 1985 and 1987 ("1986").

Table 10 summarizes the results.

(Table 10 here)

Beginning at the left (Total Change) we see what we already
know, 13 to 15 point per decade shifts from 1954 to 1973 and one
or two point shifts from 1973 to 1985. Moving to the right,
however, we see (for the four comparable items), the Cohort
effects are quite similar after adjusting the numbers to "per
decade". The totals run about six points, of which about four are
from Newcomers and two from Departures. The difference between
the eras, of course, comes from the intra-cohort column where
three point declines in the 70s to 80s contrast with 13 to 15
point increases for the Stouffer shift. Thus:

Conclusion #5: Cohort replacement had about the same liberalizing effect during the 70s and 80s that it had during the 50s and 60s.

Conclusion #6: The main difference between the Stouffer shift and the 70s slowdown is that the former saw strong intra cohort increase in tolerance, the latter saw weak intracohort declines.

While the Cohort replacement results for the GSS era are all slightly smaller than the Stouffer shift numbers, the effect of Newcomers dominates both eras and all items. Thus, the major liberalizing force in the postwar era has been the advent of more tolerant younger adults. This is not inconsistent with conclusion #2 since Newcomers raise levels as long as they differ from the previous mean. The newcomers of the 70s and 80s are less tolerant than their immediate predecessors but more tolerant than the general run of older Americans. Consequently, their advent raised levels of tolerance. Given the stickiness of these relationships, this effect will probably continue for the next decade although sooner or later an increasingly less tolerant Newcomer group will not longer liberalize by then moderate population.

Conclusion #7: In both eras the impact of Newcomers is considerably larger than the impact of Departures.

Conclusion #8: The relatively conservative Newcomers of the GSS era were still tolerant enough that their advent raised overall tolerance. This effect will probably continue for the next few years, though with decreasing impact.

To sum up, while discernable "conservative" forces appear in the GSS era data, they are not in any way "revolutionary". The liberalizing cohort replacement predicted by Stouffer occurred with about the same force in both eras and slightly outweighed the conservative "weather" (Davis, 1980) of the latter period. Put another way, what is really surprising is not the reactionary forces of the GSS era but the strength of the liberal intra-cohort trends during the Stouffer shift.

INTERVENING VARIABLES

Conclusions One through Eight tell us <u>what</u> happened and <u>how</u> it happened but they give little insight into <u>why</u> it happened. For that we must introduce intervening variables and see whether they account for the changing shape of the Cohort/Tolerance relationship and the negative trends within cohorts. Three possible factors, Stress, Education, and Threat, run through the literature and are amenable to study with the GSS.

Stouffer himself suggested the stress hypothesis when he predicted a negative trend within cohorts (Stouffer, 1954, p. 108):

> (there is a)..tendency, among people at the <u>same</u>
> educational level, for the older ones to be not only
> less tolerant but also less optimistic about their
> personal future. This lack of optimism often reflects
> anxiety about such matters as health and old-age
> security. It was suggested that the presence of such
> anxiety is not as conducive to tolerance as its
> absence.

In short, Stouffer advanced the classic "frustration/aggression"
hypothesis. Other Sociologists have advanced the related
hypothesis that frustration in socioeconomic achievement (e.g.
low income or a lower prestige occupation than one's education
warrants) facilitates intolerance. The latter notion is
especially interesting since the GSS years saw rather large
economic fluctuations and an apparent end to the post war growth
in real incomes. It is thus conceivable that the economic
crunches of the 70s and 80s account for the slowdown in
Tolerance. Since the GSS is replete with measures of frustration
and achievement, it is easy to test these ideas. Table 11 defines
a number of potential "stressor" variables.

(Table 11 here)

As a check on face validity, each stressor was run against
HAPPY, the GSS subjective global morale measure, under the common
sense hypothesis that stressors make one unhappy. Table 12
displays the results.

(Table 12 here)

The coefficients are consistent with the main line research on
happiness, both as raw data and in dummy variable form. Happy
marriages, Good health, Financial progress, and Age (not youth)
contribute to happiness. Sociological hypotheses do not fare well
here. Neither education or occupational prestige have any net
effect and the "relative deprivation" income variable (FINRELA)
is left in the dust by the "economic change" income variable
(FINALTER). Table 13 shows what happens when Tolerance is
regressed on these predictors. (Since the results are
essentially similar for each of the items, only averages over the
ten tolerance measures are reported.)

(Table 13 here)

The table shows the frustration/aggression hypothesis doing just
about as badly as plausible hypothesis can. The results are quite
simple: the variables that predict Happiness in Table 12 (MARHAP,
HEALTH, FINALTER) do not predict Tolerance in Table 13 (save for
Cohort, where the sign is wrong) and a variable that is
unrelated to HAPPY (Education) is the best predictor of
tolerance.

Conclusion #9: Changes in "stress" can not explain
changes in Tolerance because Tolerance is not related
to stress.

Education (years of schooling) is a second possible

intervenor. As Stouffer first discovered, others have repeatedly

demonstrated (e.g. Hyman and Wright, 1979) and Table 13 confirms,

Education is correlated with Tolerance, net of Cohort. This

finding has withstood the assaults those revisionists who

claimed the effects of Education are limited to tolerance of

"left" dissidents (Licari and Bobo, 1988) but we are just

beginning to learn how schooling "works" (See, for example, Hall,

Rodeghier and Useem, 1986; Weil, 1985). Table 14 give more detail

on Education's effects.

(Table 14 here)

We see: (a) the effect of Education is quite powerful – a

year of schooling has about ten times the impact of a year's

exposure to pre GSS America (Cohort) or the GSS decades (Year),

(b) with the possible exception of "racist speech", the effect of

Education is very similar across ideologically diverse forms of

dissent and (c) once Education has been controlled, the effects

of Cohort and year are very similar, supporting the previous

claim that the reactionary influences of the GSS era are far from

"revolutionary".

Granted that Schooling, unlike Stress, is a strong predictor, let us consider whether it can explain the intracohort decline in Tolerance and/or the changing shape of the Cohort/Tolerance function.

(Table 15 here)

(Table 16 here)

The top line of Table 15 exonerates Schooling from a role in the intra-cohort shift. Among respondents 25 years of age and older there is virtually no relationship between Year and Schooling, controlling for Cohort, although a decade of Cohort goes with almost a year (.7284) of schooling. In plain English, Americans seldom improve their levels of Education after age 25 and a constant can not explain a variable.

The question of the Newcomers is a bit more complicated. Perhaps the newest generations are less well educated than their predecessors. Table 15 says "no". The mean schooling of 18-22 year olds in the GSS increases from 1972 to 1987, albeit at the rather small rate of less than two tenths of a year per decade. Perhaps, then, the increase in schooling for the newcomers is less than that of their immediate predecessors so the relative difference increased. Table 15 doesn't support this notion either as the increase among the 23-27 year olds is a bit less and the increase among the 28-32 year olds is only a bit more. It is

extremely doubtful that these slight differences in Educational
trends could produce the dramatic bends in the Cohort/Tolerance
curve.

A final hypothesis is that, even though the newcomer
generation is not less schooled, its schooling had a lesser
impact. This is consistent with the interpretations in Weil
(1985). To test this idea I looked at the correlation between
years of schooling of Tolerance within five cohort groups, with
1955-1968 bracketing the "newcomers". Table 16 displays the
results.

(Table 16 here)

Again, no luck. If anything, the opposite holds, as a year of
schooling has a smaller Tolerance payoff in the two <u>oldest</u>
cohorts, 1883-1916 and 1917-1929.

<u>Conclusion #10: Although Education is strongly related
to Tolerance, changes in levels of Education or in the
effects of Education do not explain any of the trends
in Tolerance.</u>

The final intervening variable is Threat or attitude to the
substance of the dissent. Stouffer himself noted how fear of
Communism depressed Tolerance and more recently such variables
have become central to "revisionist" approaches to Tolerance
(e.g. Sullivan, Piereson, and Marcus, 1982). In a sense, the very

definition of Tolerance implies something like threat since it sounds odd to "tolerate" something one admires. The notion, however, is sometimes taken to the extreme of claiming that there is very little true Tolerance and variations in Tolerance items are simply due to the waxing and waning of Threat. Such ideas are congruent with the iconoclastic tone of contemporary Sociology, but, as usual, it may be useful to ground one's Sociological imagination in data.

Table 17 defines Threat or negative affect measures for each of our five forms of dissent and Table 18 gives statistical details on a set of tabulations involving Cohort/Education/ Threat/Tolerance. The independent variables are all trichotomized as evenly as possible to minimize the influence of "cuts" on the outcomes.

(Table 17 here)

(Table 18 here)

In brief, Table 18 says the tabulations contain statistically significant three variable interactions. Thus, for example, the effect of Education on TOLCOM is not the same at every level of Cohort. Inspection of the data, however, reveals two qualifications. First, the interaction effects are small. When I compared Tolerance percentages in no-interaction models for the five significant interactions with the raw data

percentages I found, of 45 percentages, 43 differ by 4 points or less and the two largest differ by 6 points. Second, most of the interpretable interactions reflect the lower correlation between Education and Tolerance in the oldest cohorts, as in Table 16. In sum, the tables contain no important interactions.

Using the best fitting models (bottom of Table 18) I explored the effect of the Threat variables using multivariate standardization (Davis, 1984.) Assuming the causal order Cohort>Education>Threat>Tolerance, in Standardization I (SI in Figures 5,6,7) I adjusted the data to eliminate any association between Cohort and Education; then in Standardization II (SII) I eliminated any association between Threat and Cohort x Education. Figures 5, 6, 7 display the results.

(Figure 5 here)

(Figure 6 here)

(Figure 7 here)

Figure 5 treats Cohort and Tolerance. For each of the five dissidents, the left hand "pole" displays the raw data, with the younger cohort at the top (most tolerant) and the older cohort at the bottom. The middle pole shows the same tabulation after standardizing on Education (SI). In each case there is a bit of "funnelling" - when Education is controlled, the cohort difference is reduced. The right hand "pole" shows the relationship with both Education and the appropriate Threat controlled. We seem more funneling, but not total convergence:

strong cohort differences remain even after standardizing for
Education and threat. You will note that after standardization
the youngest (46-68) and middle (25-45) cohorts of whites no
longer differ on free speech for racists (TOLRAC). This item has
behaved slightly differently through the analysis. My guess is
that this is because it shows the greatest shift in the
cohort/tolerance curve (e.g. Table 6). One should not go
overboard here - throughout the analysis it shows the same
differences and coefficient signs as the others - but it does
seem to straggle, especially where Cohort is involved.

Figure 6 displays a similar analysis for Education. The
pattern is clear and simple. Despite some funneling, the effect
of Education on Tolerance holds strongly - across forms of
dissidence and after controlling for Cohort and Threat.

Conclusion #11: Threat variables do little to explain the
greater tolerance of the better educated and younger
generations.

Figure 7 displays the association between threat variables
and tolerance before (left "pole") and after ("right" pole)
standardizing on Education and Cohort. At first glance, it looks
like Figures 5 and 6, but a closer inspection reveals surprises.
For Communists and Homosexuals, revisionist Sociological
imagination works: negative attitudes to the dissidents reduce
tolerance substantially.. But this is not the case for the other
three. For Racists and Militarists the greater the threat, the

greater the tolerance!. Putting it the other way around, net of
Cohort and Education, Racists (whites who give intolerant answers
to race relations items) and Militarists (persons who have
greater confidence in military leaders) are _less likely_ to
tolerate free speech by their ideological affines! Whether it is
time to resurrect the "Authoritarian Personality" I do not know,
but I hope Figure 7 puts to rest the common Sociological belief
that the Stouffer items merely tap ideology in diluted form.
As for TOLATH, the result is middling, consistent with Stouffer,
"Strong" religionists are definitely less Tolerant, but "Nones"
are less tolerant than the "Somewhat, Not Very" category. (GSS
research suggests that "Nones" are not generally Tom Paine
atheists by any means, but rather persons with extremely diluted
religious backgrounds)

Using the Threat variables that "work right" and appear
throughout the GSS years, I used standardization do see whether
they account for the intra and inter cohort trends.

(Table 19 here)

(Table 20 here)

Table 19, ala Table 6, attempts to tap the changing curve
phenomenon by comparing the tolerance of those 18-22 and those
33-37, before and after standardizing a Cohort/Year/Tolerance
table by giving each Cohort/Year combination the marginal
distribution on its Threat. I don't see much difference between

the paired rows.

Conclusion #12: The lesser Tolerance of the newest
generation can not be explained by Threat variables.

Finally, Table 20 shows a similar exercise for intra-cohort
trends, comparing year to year changes within cohorts (partial
percentage differences) before and after standardizing for
Threat. At last, something - though not much. For TOLCOM and
TOLHOMO but not TOLATH, standardization does change the amount of
intra-cohort shift so that when Threat is controlled, the decline
in Tolerance within cohorts is reduced (TOLCOM) or trivially
reversed (TOLHOMO).

Conclusion #13: Increasing levels of Threat contribute
to the small intra-cohort declines in Tolerance of
Communists and Homosexuals.

CONCLUSION

The specific results of the analysis are summarized in the
thirteen "conclusions" above, so there is no need for
recapitulation. However, some remarks on American Tolerance and
Sociological theory may be in order.

While the numbers do not support those commentators who see
the nation in a period of striking ideological reaction, they are

hardly comforting for those who give high priority to the First amendment. One does have to go far beyond the marginals: throughout the period only about half of the adult population gave consistent (both SPEECH and LIBRARY) support to Free Speech. Furthermore, the change data are hardly optimistic: while the GSS years did see increased Tolerance, it was slight, came entirely from Cohort replacement and that was mostly from the advent of Newcomers - whose future commitment to Free Speech can not be assumed. But, one can find shreds of optimism: even in a period where "conservative" forces dominated, Free Speech did not decline, Cohort replacement should provide a positive force for the next few years, and the Threat data tell us that what Tolerance we do see is true Tolerance, not just a tendency to be "soft on Communism".

Turning to Sociological theory, Stouffer's model comes off better than one might think. Indeed, the trends during the GSS years (opposite signs for intra and inter cohort effects) are more in line with his prediction than the data during the "Stouffer shift". Nevertheless, his model can not be taken literally and mechanically: his frustration/aggression hypothesis fails completely, we must substitute some form of "imprinting" for the simple linear hypothesis on Cohort and Tolerance, and Threat seems to be an important variable but a loose cannon in terms of direction. Nevertheless, the Stouffer variables; Year, Cohort, Education, Threat, and Tolerance remain as the framework

for any analysis of Free Speech. As Hoover puts it (1988, p. 66);

> ..a theory is a set of related propositions that
> attempts to explain and sometimes to predict, a set of
> events..a collection of hypotheses linked by some kind
> of logical framework. The term "theory" connotes a
> degree of uncertainty ...Theories, then, are tentative
> formulations.

By this definition, the Stouffer theory of mass attitude change is more than respectable. Indeed, one may ask "where are its competitors?"

TABLES FOR "COMMUNISM AND COHORTS, CONTINUED"

Table 1

Percent Born 1955 and later
and Mean Year of Birth by GSS Year

Year	Per Cent Born 1955+	Mean Year of Birth
1987	29	1941.7
1986	28	1940.6
1985	25	1939.3
1984	27	1940.0
1983	23	1938.7
1982	21	1936.9
1981	*	*
1980	15	1935.0
1979	*	*
1978	11	1934.0
1977	8	1932.3
1976	7	1930.7
1975	6	1930.7
1974	2	1929.4
1973	0	1928.8
1972	0	1927.0

* = No GSS
Ns range from 1459 to 1608

Table 2

Free Speech Items Treated In This Analysis

2a) Wordings and Mnemonics

Dissenter	Speech*	Library**	Both***
..a man who admits he is a Communist	SPKCOM	LIBCOM	TOLCOM
..somebody who is against all churches and religion..	SPKATH	LIBATH	TOLATH
..a man who admits he is a homosexual..	SPKHOMO	LIBHOMO	TOLHOMO
..a person who believes that Blacks are genetically inferior	SPKRAC	LIBRAC	TOLRAC
..a person who advocates doing away with elections and letting the military run the country	SPKMIL	LIBMIL	TOLMIL

* "If such a person wanted to make a speech in your (city/town/community) should he be allowed to speak, or not?" Yes, allowed to speak; Not Allowed

** "If some people in your community suggested that a book he wrote be taken out of your public library, would you favor removing this book or not?" Not favor; favor

*** In some analyses Speech and Library are combined. In all cases the dichotomy is Tolerant on both v. all other.

2b) Marginals (Percent Tolerant) by Year

					Year						Regression	
	72	73	74	76	77	80	82	84	85	87	100b	rsq.
Communist												
Spkcom	54	61	60	56	57	57	58	61	59	61	+1.9	.16
Libcom	56	60	61	58	57	60	59	62	59	63	+2.5	.38
Tolcom	44	52	51	48	47	49	50	52	50	52	+2.4	.25
Atheist												
Spkath	67	66	63	65	63	67	65	69	66	70	+1.2	.34
Libath	63	62	61	61	60	64	63	65	62	68	+2.6	.40
Tolath	54	54	53	53	50	55	53	57	54	58	+2.4	.32
Homosexual												
Spkhomo	na	63	65	64	64	68	68	71	69	70	+5.0	.84
Libhomo	na	55	57	58	57	60	58	61	57	60	+1.8	.46
Tolhomo	na	49	52	52	50	56	53	56	54	55	+3.8	.60
Racist												
Spkrac	na	na	na	62	60	63	61	59	57	62	-1.8	.11
Librac	na	na	na	62	63	66	63	65	62	65	+1.8	.13
Tolrac	na	na	na	50	48	55	49	50	48	52	+0.5	.01
Militarist												
Spkmil	na	na	na	55	51	58	56	58	56	58	+3.6	.39
Libmil	na	na	na	58	56	60	59	60	58	60	+2.2	.31
Tolmil	na	na	na	47	43	49	46	49	48	49	+3.3	.38

Cell entry equals percent choosing the more tolerant alternative
...na equals not asked in that GSS...100b and rsq are the raw
slope per decade and r squared when the cell entries are
regressed on year..n's vary slightly but are generally between
1400 and 1450.

Table 3

Cohort and Free Speech, Controlling for Year
(GSS72-87)

| Dependent | Beta | | 100b | |
Dummy	Speech	Library	Speech	Library
Communist	+.257	+.275	+6.96	+7.40
Atheist	+.303	+.286	+7.92	+7.57
Homosexual	+.261	+.286	+6.72	+7.73
Racist	+.168	+.155	+4.50	+4.09
Militarist	+.277	+.274	+7.52	+7.39
Mean	+.253	+.255	+6.72	+6.84

Ns range from 10061 (Spkrac) to 14836 (Spkath).

Table 4

Trends in the Correlation Between Cohort and Tolerance

(Betas, cohort by item, averaged across six items - Spkcom, Libcom, Spkath, Libath, Spkhomo, Libhomo - within years.)

GSS	Average Beta
1987	+.24
1985	+.23
1984	+.22
1982	+.25
1980	+.27
1977	+.28
1976	+.29
1974	+.31
1973	+.30

Table 5

Decline in Correlation Between Cohort
and Tolerance, Item by Item

(raw regression coefficient adjusted to percentage
points per decade)

	Speech	Library
Racist	-.129	-.101
Atheist	-.093	-.053
Homosexual	-.079	-.022
Communist	-.066	-.020
Militarist	-.005	-.036

Table 6

Percent Tolerant Age 18-22 minus Percent
Tolerant Age 33-37 by Year by Item

Dissent	72	73	74	76	77	80	82	84	85	87
Tolcom	+12	+22	+13	+2	+1	-6	-10	-10	-12	-6
Tolath	+7	+18	+14	+8	+3	-2	-16	-12	-17	-9
Tolhomo	na	+18	+4	+2	-4	-0	-14	-23	-12	-20
Tolrac	na	na	na	-1	-9	-5	-16	-27	-23	-22
Tolmil	na	na	na	+7	-3	-13	-19	-21	-12	-9
Average	+10	+19	+10	+4	+1	-5	-15	-19	-15	-13

Cell n's vary but are approximately 100 cases in both age
categories for each item each year.

Table 7

Cohort, Year, and Tolerance (Results of Iterative
Proportional Fitting)

				N*/d.f.	
Item	N	.67N	Interaction	Cohort/Tol	Year/Tol
SPKCOM	9,720	6,483	13,527/45 ns	385/5 *	4,409/9 *
SPKRAC	6,520	4,347	13,152/30 ns	506/5 *	5,068/6 ?
SPKATH	9,862	6,575	10,570/45 ns	264/5 *	5,400/9 *
LIBCOM	9,634	6,426	11,353/45 ns	342/5 *	6,221/9 *
SPKMIL	6,518	4,345	7,062/30 ns	256/5 *	6,514/6 ?
LIBMIL	6,457	4,305	8,338/30 ns	233/5 *	6,890/6 ns
LIBRAC	6,459	4,306	9,955/30 ns	562/5 *	7,896/6 ns
LIBATH	9,716	6,481	13,308/45 ns	285/5 *	8,474/9 ?
LIBHOMO	8,585	5,723	10,294/40 ns	328/5 *	8,756/8 ns
SPKHOMO	8,555	5,703	10,671/40 ns	511/5 *	28,277/8 ns

* = significant at the .05 level, assuming DEFF=1.5; ? =
significant at the .05 level, assuming SRS; ns = not significant
at .05 level. See text for explanation

Table 8

Regression Slopes (raw, points per decade) and R squares
- Within Cohorts and for Respondents Ages 18-22.

| Item | Points Per Decade | | r squared | |
	Within	18-22	Within	18-22
SPKCOM	-3.2	-10.1	.34	.62
SPKRAC	-3.6	-21.0	.32	.85
SPKATH	-2.9	-11.0	.49	.72
LIBCOM	-3.1	- 5.7	.50	.40
SPKMIL	-1.9	- 5.6	.11	.16
LIBMIL	-3.0	- 8.9	.28	.40
LIBRAC	-0.8	-10.1	.02	.56
LIBATH	-1.8	- 9.4	.25	.70
LIBHOMO	-2.8	-10.2	.50	.67
SPKHOMO	+0.5	- 7.5	.04	.69
Mean	-2.4	-10.0	.28	.58

Table 9

Residuals for Regressions in Table 8

(Average of "SPK" and "LIB", rounded)

Item	72	73	74	76	77	80	82	84	85	87
Communist										
Intra	-3	+3	+3	-1	-1	-1	-0	+2	-1	+0
18-22	-1	+7	-1	-0	-2	-3	-7	+3	+1	+4
Atheist										
Intra	+2	+1	-0	-1	-3	+0	-0	+1	-1	+2
18-22	+2	+2	-3	-0	-1	+1	-5	+3	-4	+4
Homosexual										
Intra	na	-1	+1	-0	-1	+2	+1	+2	-2	-0
18-22	na	+3	-2	-1	-3	+5	-4	-2	+2	+1
Racist										
intra	na	na	na	-0	-2	+3	+1	-0	-2	+0
18-22	na	na	na	+3	-2	+2	-3	+1	-4	+4
Militarist										
intra	na	na	na	+1	-3	+3	+1	+0	-2	+0
18-22	na	na	na	+3	+3	-3	-9	+0	+1	+5
Total +	2	5	2	3	1	7	3	8	3	9
Total -	2	1	4	7	9	3	7	2	7	1
Mean	0.0	+2.5	-0.3	+0.4	-1.5	+0.9	-2.5	+1.0	-1.2	+2.0

Table 10

Decomposing Changes in Tolerance, 1954-1972/3/4
and 1972-1985/77

(In percentage points per decade)*

Item Years	Total Change	Intra Cohort	Cohort Replacement		
			Total	Newcomers	Departures
SPKCOM					
72-4/85-7	+1.2 =	(-3.8) +	(5.0 =	3.8 +	1.2)
54/72-74	+15.3 =	(+8.7) +	(6.6 =	5.1 +	1.5)
LIBCOM					
72-4/85-7	+1.8 =	(-3.1) +	(4.9 =	3.8 +	1.1)
54/72-74	+15.3 =	(+8.8) +	(6.5 =	4.7 +	1.8)
SPKATH					
72-4/85-7	+2.1 =	(-3.4) +	(5.5 =	4.2 +	1.3)
54/72-74	+13.8 =	(+5.5) +	(8.3 =	5.8 +	2.5)
LIBATH					
72-4/85-7	+2.1 =	(-3.2) +	(5.3 =	4.1 +	1.2)
54/72-74	+12.8 =	(+5.5) +	(7.3 =	5.1 +	2.2)
SPKHOMO					
73-4/85-7	+4.1 =	(-.05) +	(4.6 =	3.5 +	1.1)
LIBHOMO					
73-4/85-7	+1.6 =	(-3.2) +	(4.8 =	3.7 +	1.1)

* 1954 to 1972-4 figures divided by 1.9; 1972-4 to 1985-7 figures divided by 1.3.

Table 11

"Stressors" and Happiness (Variables)

Content
Values**
Mnemonic   Mean   Standard Deviation

COHORT   Year of Birth
               (1883 through 1968)
                    Mean = 1932.7, Std. dev. = 17.49

EDUC   Years of Schooling completed
               (0 through 20)
                    Mean = 11.94, Std. dev. = 3.24

FINALTER "..has your financial situation been getting..
               (Worse = -1, same= 0, Better = +1)*
                    Mean = +0.15, Std. dev. = .764

FINRELA   "Compared with American families in general, would you
               say your family income is..."
               (Far below average = 1, through Far above
                average = 5)
                    Mean = 2.88, Std. dev. = .804

HAPPY   "Taken all together, how would you say things are these
               days--would you say that you are..."
               (1= Not too happy through 3= Very Happy)
                    Mean = 2.21, Std. dev. = .646

HEALTH   "Would you say your own health, in general, is...
               (1= poor through 4= Excellent)*
                    Mean = 2.99, Std. dev. = .878

MARHAP*   dummy variable - Happily married v. all other
               (0 = Marital status other than married or
                Married and HAPMAR is other than Very Happy v.
               1 = Married and HAPMAR = Very Happy)
                    Mean = .397, Std. dev. =.489
PRESTIGE Hodge-Segal-Rossi Prestige score of respondent's
          occupation
               (12 through 82)
                    Mean = 39.18, Std. dev. = 13.91

YEAR   GSS year
               (1972 through 1986)
                    Mean = 78.82, Std. dev. = 4.61

---

* = Not a standard GSS mnemonic
** = item renumbered so high scores go with lesser stress

Table 12

Stressors and Happiness (Regressions, GSS72-86)

betas

| Predictor | Bivariate | Partial | | |
		All 8	Best 3	(dummy)*
MARHAP	+.396	+.349	+.356	+.362
HEALTH	+.253	+.205	+.178	+.161
FINALTER	+.213	+.131	+.135	+.072
COHORT**	+.041	+.127		+.083
FINRELA	+.178	+.044		+.030
YEAR	-.005	+.041		+.014
EDUC	+.086	+.005		-.020
PRESTIGE	+.108	+.003		+.009
R squared		.231	.214	.201

Ns for bivariates range from 13,800 to 19,578
** sign reversed so "older" is positive
** all variables transformed to dummies, cut at medians

Table 13

Stressors and Tolerance

(Means and standard deviations for partial betas in 10
regressions in which Tolerance items, e.g. SPKCOM, are
regressed on eight stressors)

Stressor	Mean Beta	Std. Dev. of Betas	Prediction
EDUC	+.231	.030	
COHORT (Young)	+.171	.042	−
PRESTIGE	+.062	.015	
YEAR	−.053	.012	
MARHAP	−.052	.012	+
FINRELA	+.041	.009	+
HEALTH	+.013	.011	+
FINALTER	+.003	.008	

Table 14

Education, Cohort, Year and Tolerance (GSS72-87)

(Raw partial regression coefficient multiplied to
give percentage points per 10 years)

Dependent Dummy	Education	Cohort	Year
SPKCOM	+46.9	+4.20	-5.35
LIBCOM	+47.9	+4.56	-5.15
SPKATH	+44.0	+5.32	-5.68
LIBATH	+44.7	+4.93	-5.20
SPKHOMO	+43.5	+4.16	-2.18
LIBHOMO	+45.3	+5.05	-5.74
SPKRAC	+31.0	+2.66	-6.15
LIBRAC	+36.9	+1.91	-3.38
SPKMIL	+40.6	+5.12	-4.98
LIBMIL	+43.2	+4.83	-5.93
Mean	+42.4	+4.27	-4.97

Table 15

Regression coefficients (Raw) for Cohort
and Education (GSS72-87)

Dependent	Predictor	b per decade
Respondent's schooling (respondents age 25+)*		
	Year	+.0291 ns
	Cohort	+.7284
Yearly means for schooling**		
respondents ages 18-22	Year	+.164
respondents ages 23-27	Year	+.083
respondents ages 28-32	Year	+.530

* N=17,102, ** N=14

Table 16

Education and Tolerance Within Cohorts (GSS72-86)

(Raw regression coefficient,
Education on Tolerance,
percentage points per
10 years of schooling)

Item

Birth Cohort	TOLCOM	TOLATH	TOLHOMO	TOLRAC	TOLMIL	Mean
1955-1968	+50.7	+55.5	+62.8	+40.6	+52.5	+52.4
1942-1954	+60.2	+53.8	+57.4	+50.0	+57.4	+55.8
1930-1941	+65.3	+62.4	+58.3	+47.1	+60.5	+58.7
1917-1929	+52.6	+52.7	+51.3	+35.7	+43.2	+47.1
1883-1916	+35.5	+36.1	+32.9	+21.5	+26.9	+30.6
Mean	+52.9	+52.1	+52.5	+39.0	+48.1	

Table 17

Threat Measures and Marginal Percentages, GSS72-87

Dissident	GSS Mnemonic
Communist	COMMUN

Thinking about all the different kinds of governments
in the world today, which of these statements comes
closest to how you feel about Communism as a form of
government?"

It's the worst kind of all   = HIGH THREAT (55%)
It's bad, but no worse than some others = MEDIUM THREAT (26%)
It's all right for some countries...it's a good form of
   government = LOW THREAT (19%)

Atheist   RELIG, RELITEN

"What is your religious preference?...(If Protestant,
Catholic, Jewish, other, "Would you call yourself a
strong_____or a not very strong_____?"

RELIG	RELITEN	THREAT
Some	Strong	HIGH (43%)
Some	Somewhat, Not Very	MEDIUM (48%)
None	-	LOW (10%)

Homosexual   HOMOSEX

"What about sexual relations between two <u>adults</u> of the
same sex -- do you think it is....

..always wrong   HIGH THREAT (72%)
..almost always wrong, wrong
    only sometimes   MEDIUM THREAT (13%)
..Not wrong at all   LOW THREAT (15%)

Racist (whites only)   RACSEG, RACMAR

"Do you think there should be laws against marriages between (Negroes/blacks) and whites?" Yes..No

"White people have a right to keep (Negroes/Blacks) out of their neighborhoods if they want to, and (Negroes/Blacks) should respect their right?"..Agree Strongly, Agree slightly, Disagree slightly, Disagree Strongly.

No and Disagree   HIGH THREAT (57%)
all other   MEDIUM THREAT (26%)
Yes and Agree   LOW THREAT (18%)

Militarist   CONARMY

"I am going to name some institutions in this country. As far as the <u>people running</u> these institutions, would you say you have a great deal of confidence, only some confidence, or hardly any confidence at all in them?"...Military

Hardly any   HIGH THREAT (14%)
Only some   MEDIUM THREAT (51%)
A Great Deal LOW THREAT (35%)

Table 18

Cohort (1883-1924,1925-1945,1946-1968), Education (0-11,12,13-20), Threat (Low, Medium, High) and Tolerance (TOLCOM, TOLATH, TOLHOMO, TOLRAC/whites only, TOLMIL: GSS72-85)

a) Testing Effects

	TOLCOM	TOLATH	TOLHOMO	TOLRAC	TOLMIL
N	11,138	9,177	10,779	7,191	6,423
.67xN	7,429	6,118	7,186	4,794	4,282

N* for models

	TOLCOM	TOLATH	TOLHOMO	TOLRAC	TOLMIL
all 3s	14,890ns	19,349ns	7,848?	9,868ns	9,229ns
all 3s minus					
coh/threat/tol	16,512ns	7,774?	37,877ns	12,873ns	19,042ns
ed/threat/tol	5,056*	18,140ns	19,296ns	8,860ns	5,345?
coh/ed/tol	3,747*	3,870*	9,297?	3,629*	4,224*

* See Table 7 and related text for explanation of cell entries.

b) Final models

	N*
TOLCOM	
(Cohort,Educ,Threat)(Cohort,Educ,Tol)(Educ,Threat,Tol)	13,010ns
TOLATH	
(Cohort,Educ,Threat)(Cohort,Educ,Tol)(Threat,Tol)	11,888ns
TOLRAC	
(Cohort,Educ,Threat)(Cohort,Educ,Tol)(Threat, Tol)	8,659?
TOLMIL	
(Cohort,Educ,Threat)(Cohort,Educ,Tol)(Threat,Tol)	6,650ns
TOLHOMO	
(COHORT,Educ,Threat)(Cohort,Tol)(Educ,Tol)(Threat,Tol)	8,659?

Table 19

Threat and Changes in the Cohort/Tolerance curve

(Percent Tolerant Age 18-22 minus Percent
Tolerant Age 33-37, Raw and Standardized
for Threat)

Item	1973-74	1976-77	1980	1982-84	1985-87
Tolcom					
Raw	+18	-1	-7	-11	-9
Standardized	+14	-1	-8	-11	-12
Tolath					
Raw	+15	+6	-1	-14	-13
Standardized	+11	+5	-2	-15	-16
Tolhomo					
Raw	+13	-1	0	-19	-16
Standardized	+5	-3	+2	-17	-14

Table 20

Threat and Intra-Cohort Changes in Tolerance

(Change in Percentage Points, Controlling Cohort*,
Before and After Standardizing for threat)

Item	Time2= Time1=	76-77 73-74	1980 76-77	82-84 1980	85-87 82-84	85-87 73-74
Tolcom						
raw		-5.1	+0.2	+0.4	-1.6	-6.4
std		-3.2	+2.9	+1.1	-2.0	-1.6
raw-std		-1.9	-2.7	-0.7	+0.4	-4.8
Tolath						
raw		-5.1	+2.2	-1.6	-1.1	-5.6
std		-5.3	+2.6	-0.7	-1.3	-4.7
raw-std		+0.2	-0.4	-0.9	+0.2	-0.9
Tolhomo						
raw		+0.6	+2.1	-2.4	-1.7	-1.3
std		-0.1	+3.4	-1.9	0.0	+1.6
raw-std		+0.7	-1.3	-0.5	-1.7	-2.9

* 1883-1916, 1917-1923, 1924-1929, 1930-1935, 1936-1941, 1942-1947, 1948-1954. "Newcomers" (1955-1969) omitted.

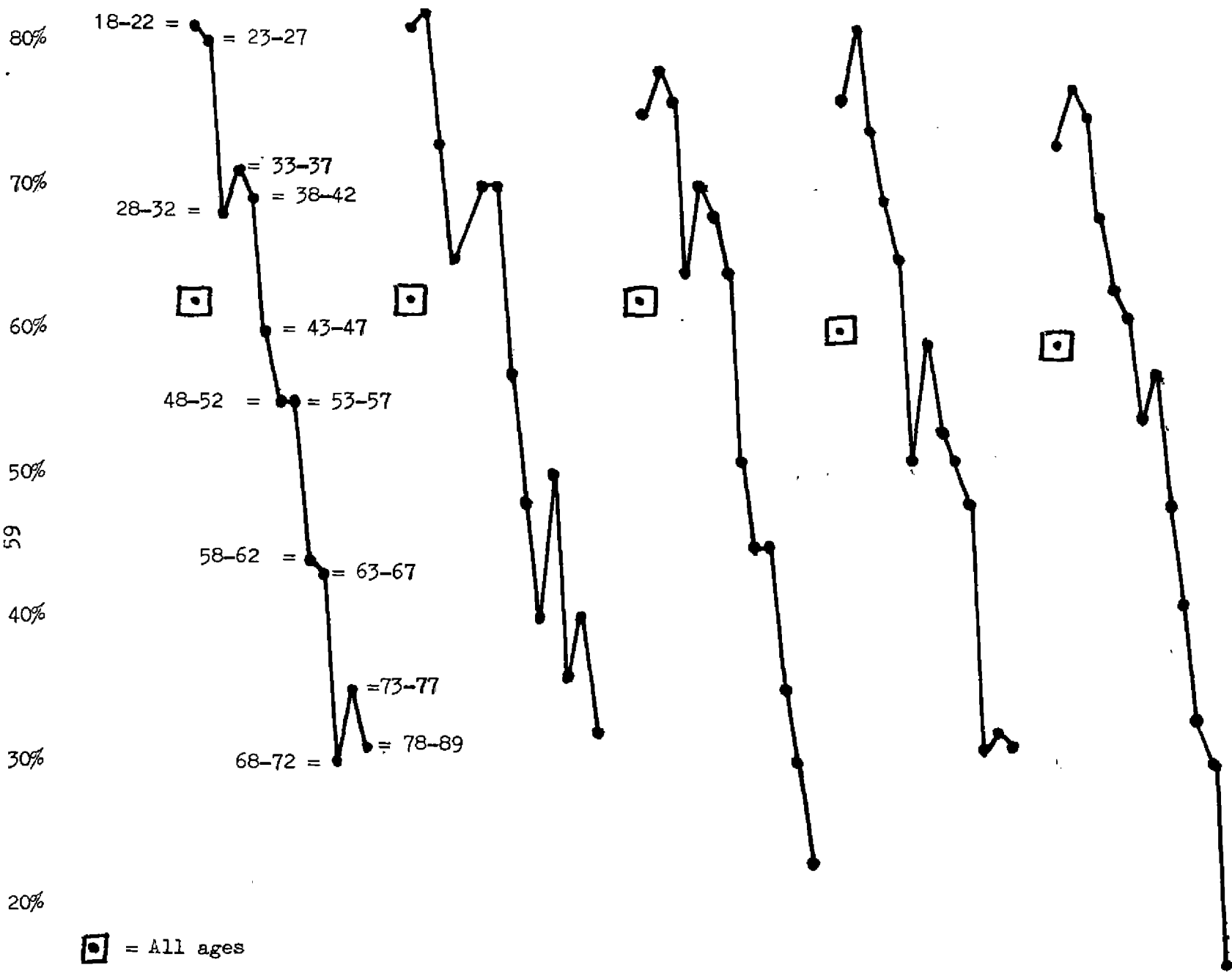FIGURES FOR "COMMUNISM AND COHORTS CONTINUED"

Figure 1.

The Stouffer Model

Cohort*

(+A)

(+B)

(-C)
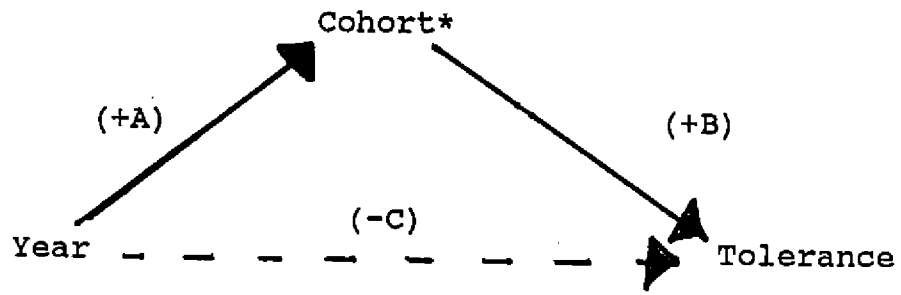
Year

Tolerance

* = Mean Year of Birth

Figure 2

Age in Five Year Groups by Percent Tolerant (Average of Spkcom, Libcom, Spkath, Libath) 1972-1987

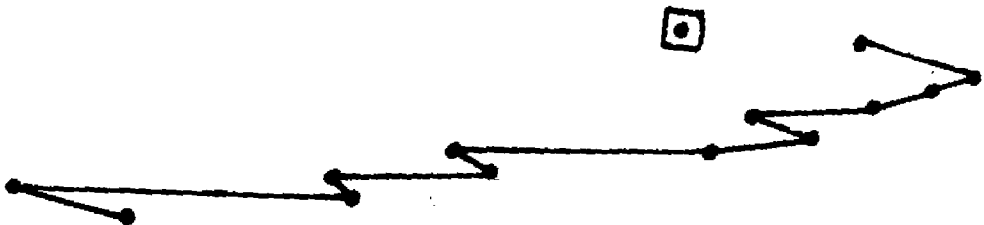☐● = All ages

For ages 18-22 to 63-67, base Ns range from 80 to 205. For older ages, most Ns are
40-60. The smallest N is 21 cases for ages 73-89 in 1973.

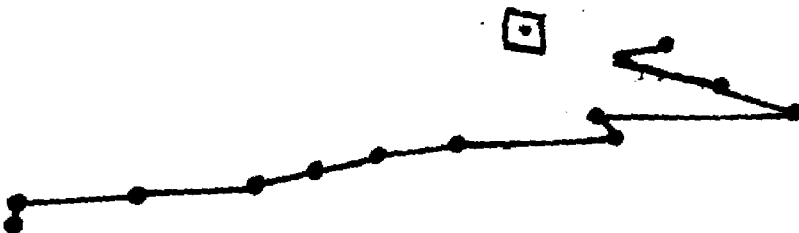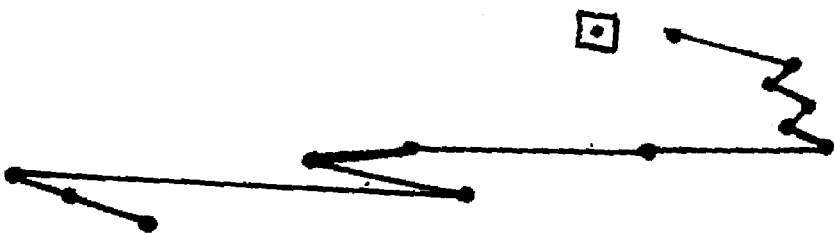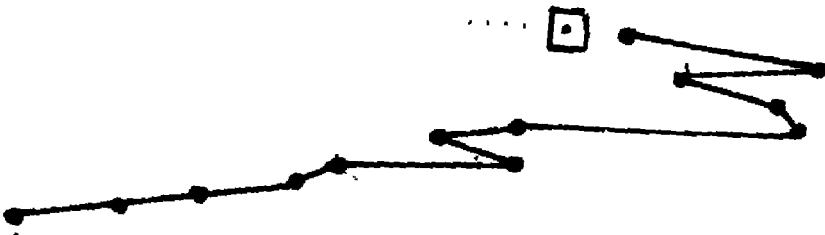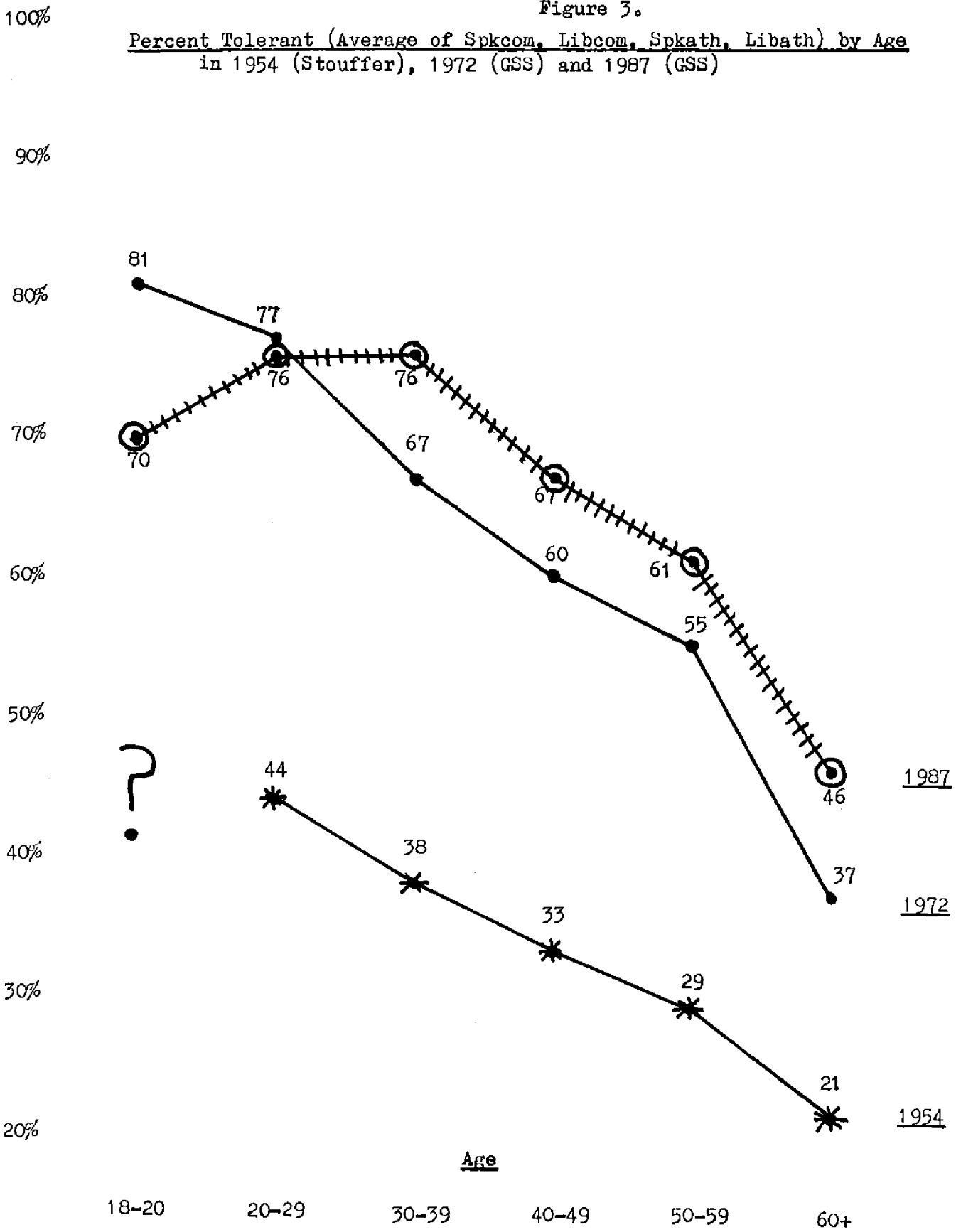1972   1973   1974   1976   1977

Figure 2.

(Data for Artist)

Age in Five year Groups by Percent Tolerant (Average of Spkcom, Libcom, Spkath, Libath) 1972-1987.

Percent Tolerant

Age	Midpoint	72	73	74	76	77	80	82	84	85	87
						Year					
18-22	20	81	81	75	76	73	71	64_	72+	66_	69+
23-27	25	80	82	78	81	77	77	73_	70+	72+	79+
28-32	30	68	73	76	74	75	75	78+	75_	71+	72_
33-37	35	71	65	64	69	68	72	75+	79+	73+	77_
38-42	40	69	70	70	65	63	66	66+	69+	72+	78
43-47	45	60	70	68	51	61	69	67	70	74	64
48-52	50	55	57	64	59	54	64	60	62	65	60
53-57	55	55	48	51	53	57	51	56	58	53	64
58-62	60	44	40	45	51	48	53	54	55	48	55
63-67	65	43	50	45	48	41	45	43	52	56	53
68-72	70	30	36	35	31	33	46	42	46	33	48
73-77	75	35	40	30	32	30	29	34	40	36	44
78-89	83	31	32	23	31	16	35	31	40	40	39
all ages		62	62	62	60	59	62	62	65	62	66

Figure 3.

Percent Tolerant (Average of Spkcom, Libcom, Spkath, Libath) by Age
in 1954 (Stouffer), 1972 (GSS) and 1987 (GSS)

100%

90%

80%

81
77
76
70
76
67
67
60
61
55
46   1987
44
38
37   1972
33
29
21   1954

70%

60%

50%

40%

30%

20%

?

Age

18-20   20-29   30-39   40-49   50-59   60+

Average (across four items) Ns=

	18-20	20-29	30-39	40-49	50-59	60+
1987	(41)	(271)	(350)	(248)	(178)	(342)
1972	(61)	(325)	(268)	(289)	(262)	(346)
1954	—	(860)	(1116)	(1009)	(757)	(937)

Figure 4.

Percent Tolerant by Cohort and Year

Fitted data: (Cohort, Year) (Cohort, Tolerance) (Year, Tolerance)
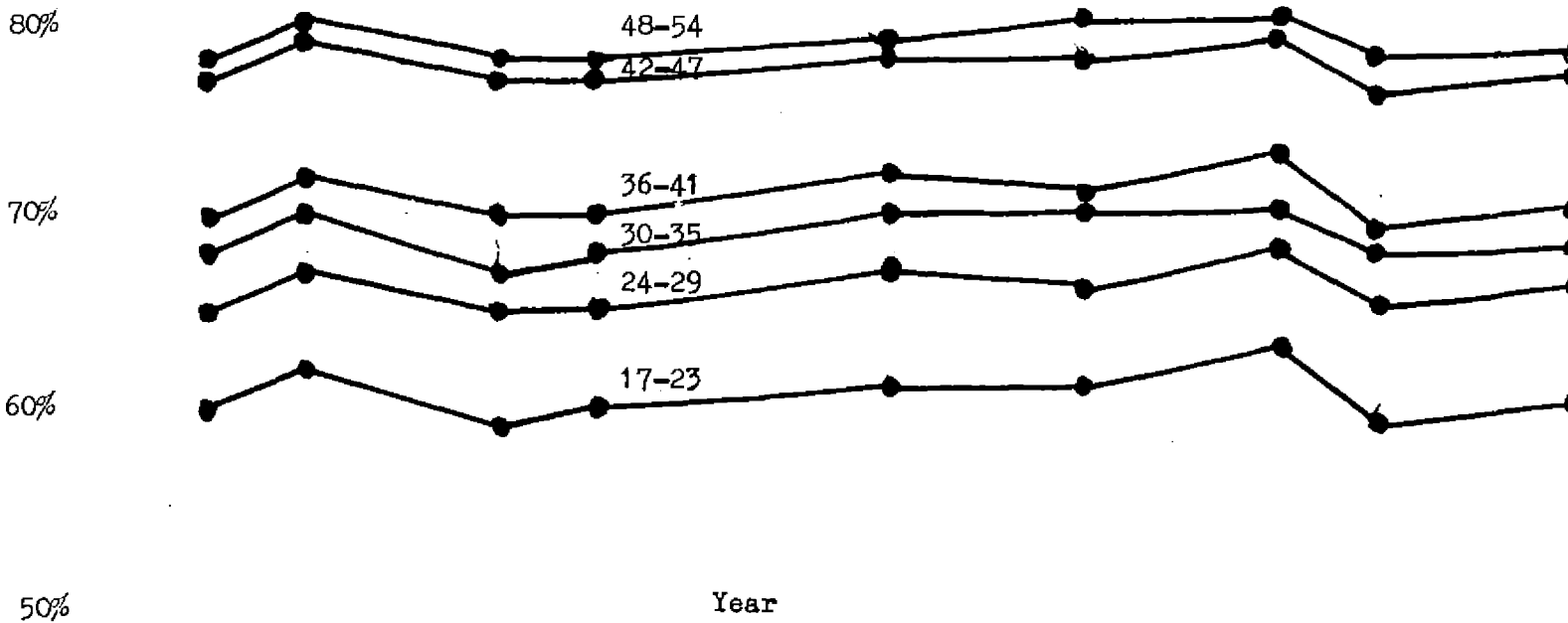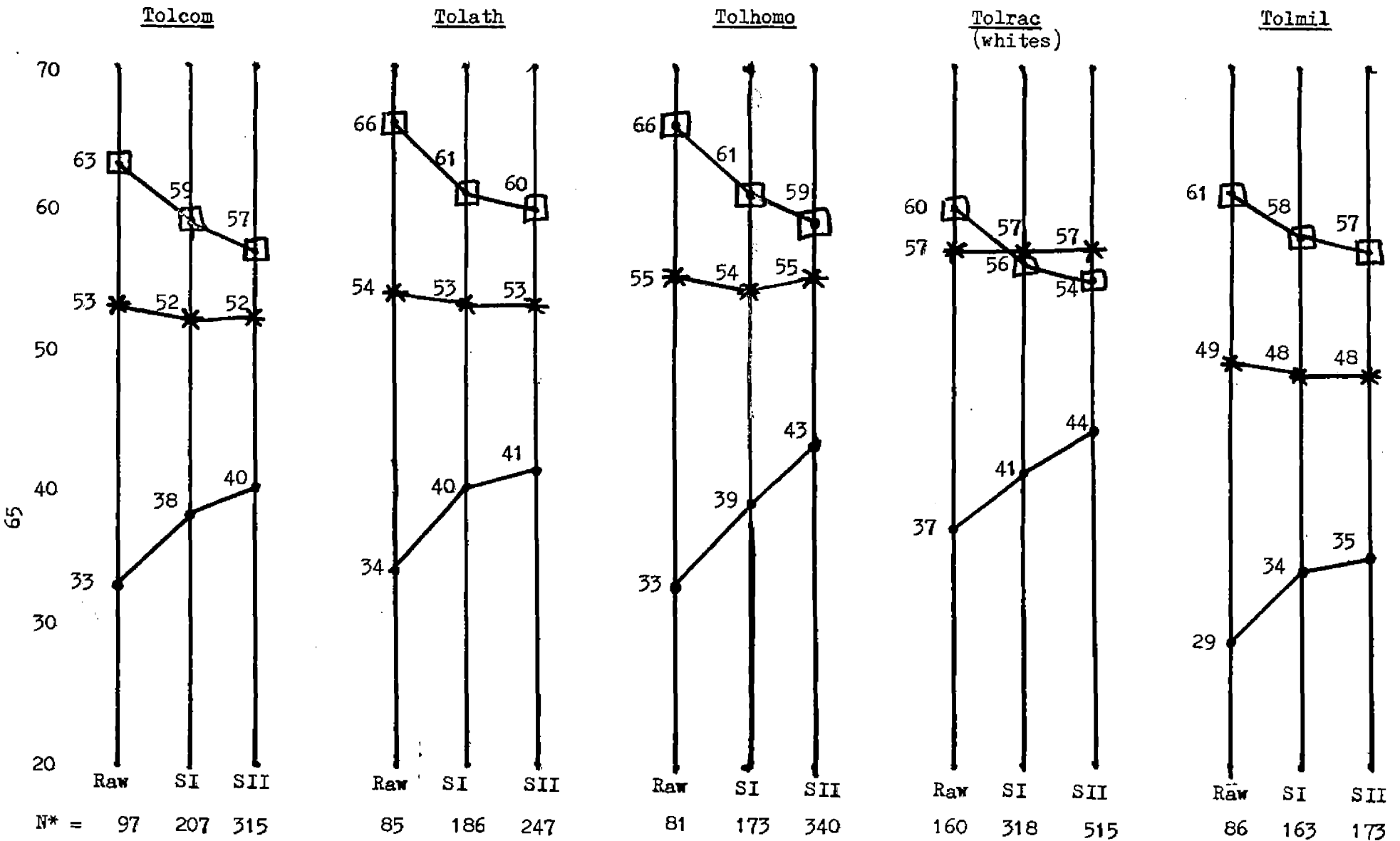
SPKCOM (N* = 4,409)

SPKHOMO (N* = 28,277)

Year

73   75   77   79   81   83
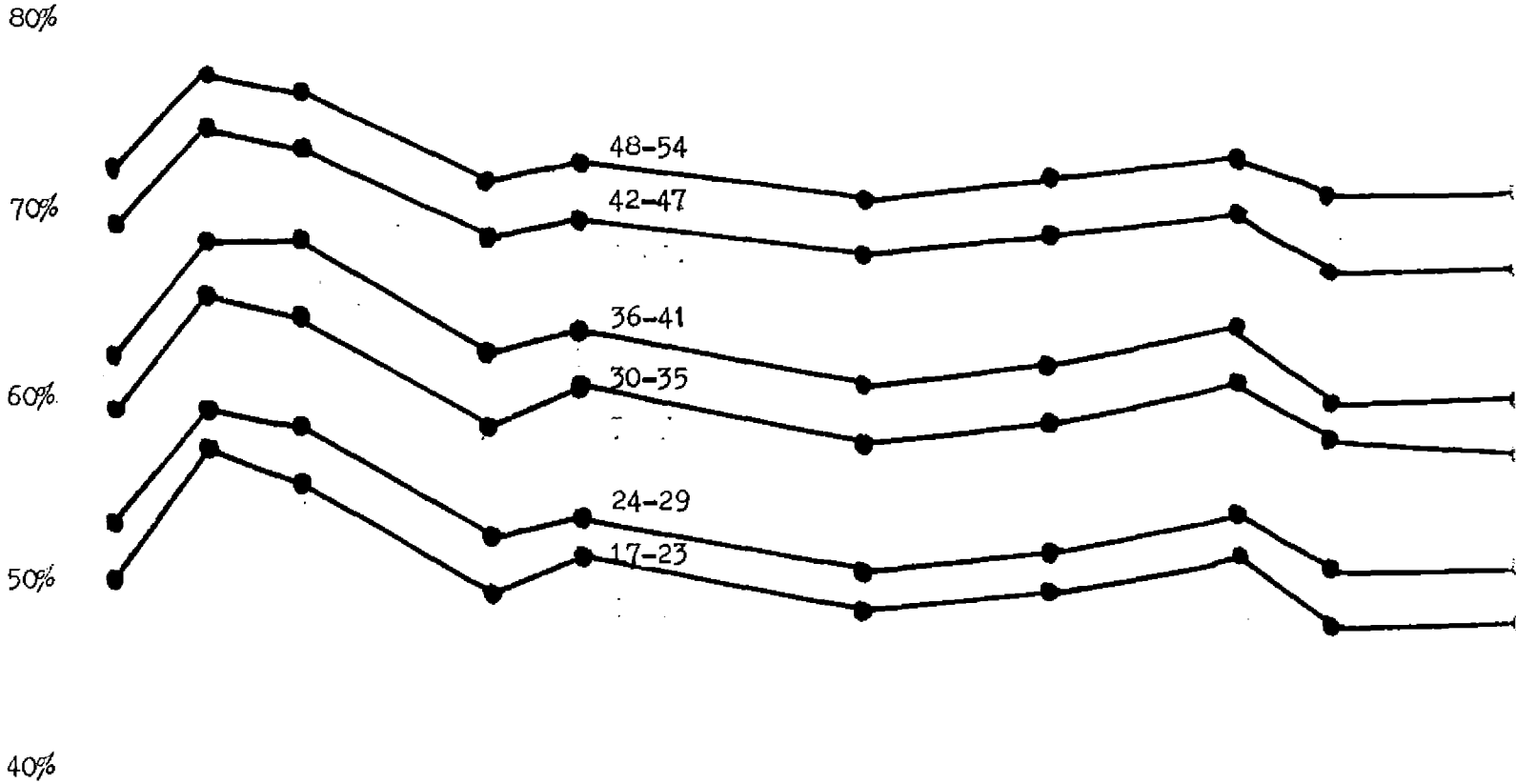
Figure 4.

(Numbers for Artist)

Percent Tolerant (Spkcom and Spkhomo) by Year and Cohort (fitted values with no interaction)

Cohort	72	73	74	76	77	80	82	84	85	87
				Spkcom N*=4,409						
48-54	72	77	76	71	72	70	71	72	70	70
42-47	69	74	73	68	69	67	68	69	66	66
36-41	62	68	68	62	63	60	61	63	59	59
30-35	59	65	64	58	60	57	58	60	57	56
24-29	53	59	58	52	53	50	51	53	50	50
17-23	50	57	55	49	51	48	49	51	47	47
				Spkhomo N*=28,277						
48-54	na	78	80	78	78	79	80	80	78	78
42-47	na	77	79	77	77	78	78	79	76	77
36-41	na	70	72	70	70	72	71	73	69	70
30-35	na	68	70	67	68	70	70	70	68	68
24-29	na	65	67	65	65	67	66	68	65	66
17-23	na	60	62	59	60	61	61	63	59	60

Figure 5

Cohort and Tolerance, Raw and Standardized*(GSS72-85)

Tolcom   Tolath   Tolhomo   Tolrac (whites)   Tolmil

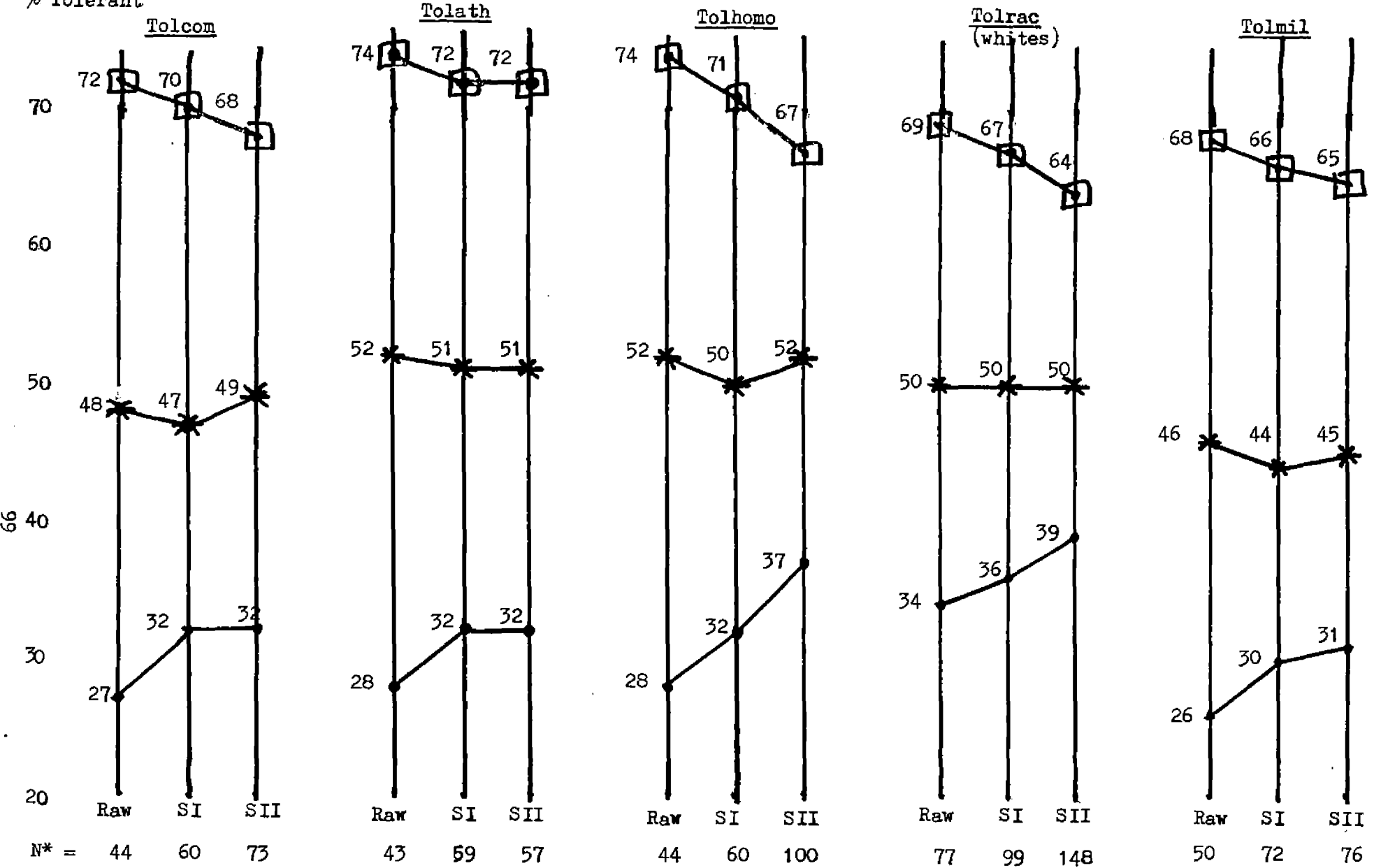|	Raw	SI	SII
Tolcom N* =	97	207	315
Tolath	85	186	247
Tolhomo	81	173	340
Tolrac	160	318	515
Tolmil	86	163	173

☐ = 1946–1968

✳ = 1925–1945

● = 1883–1924

* see text for explanation

Education and Tolerance, Raw and Standardized*(GSS72-85)

% Tolerant

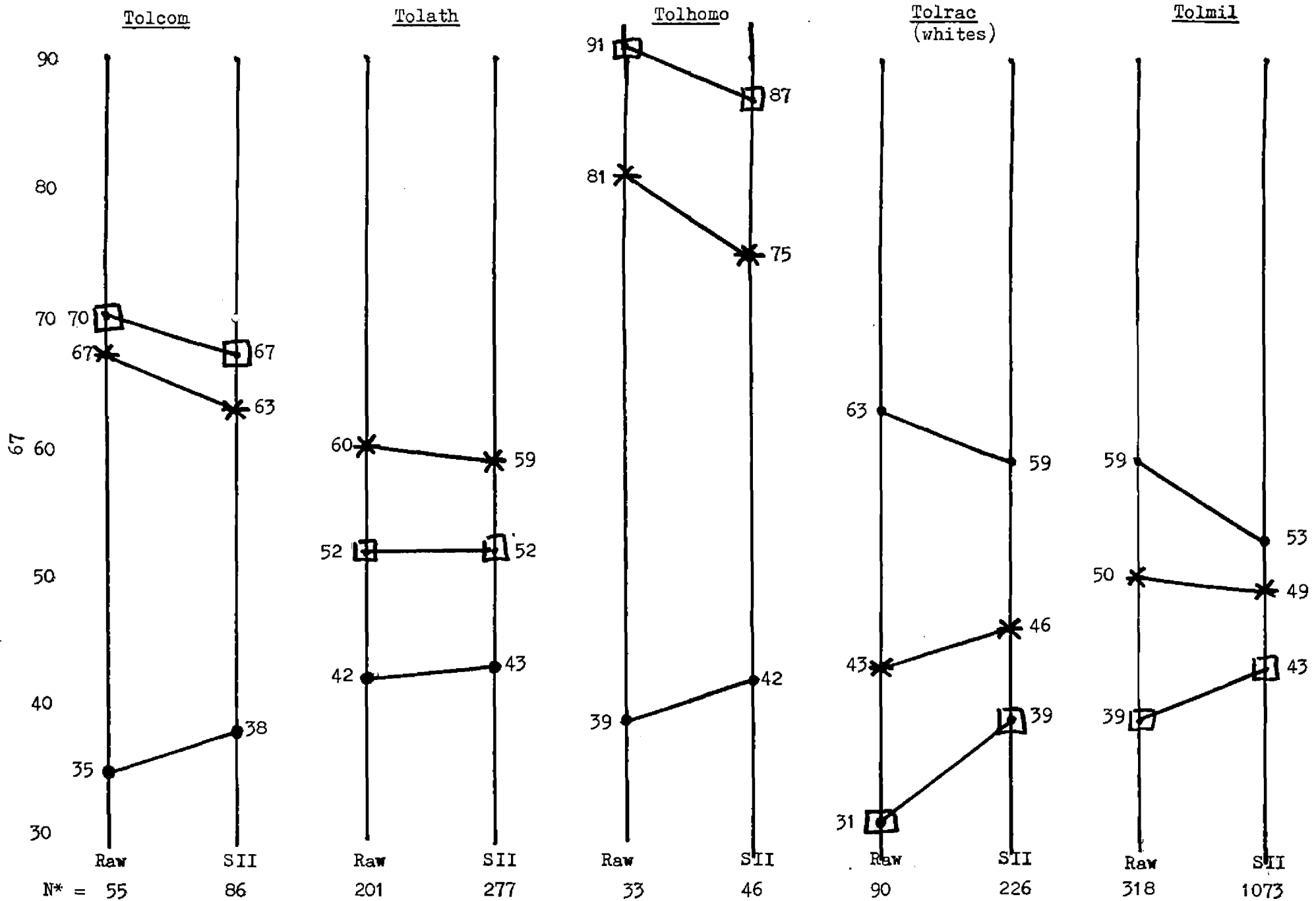Tolcom, Tolath, Tolhomo, Tolrac (whites), Tolmil

	Raw	SI	SII		Raw	SI	SII		Raw	SI	SII		Raw	SI	SII		Raw	SI	SII
N* =	44	60	73		43	59	57		44	60	100		77	99	148		50	72	76

▣ = 13-20

✳ = 12

● = 0-11

* see text for explanation

% Tolerant

Figure 7

"Threat" and Tolerance, Raw and Standardized* (GSS72-85)

	Tolcom	Tolath	Tolhomo	Tolrac (whites)	Tolmil
	Raw SII	Raw SII	Raw SII	Raw SII	Raw SII
N* =	55 86	201 277	33 46	90 226	318 1073

□ low threat

✳ medium threat   (See Table 17)

* See text for explanation

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