DETERMINANTS OF FEMALE FIRST MARRIAGE
IN SHIRAZ, IRAN

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Resumé — Les déterminants du premier mariage y son discutés. Parmi les déterminants mesurables du mariage précoce sont le niveau bas de la population active féminine, le rapport élevé de masculinité en conséquence de l'immigration sélective vers la région urbaine et le paiement de la dot. La structure de parenté et quelques pratiques culturelles influencent aussi la situation maritale. On a conclu que les actions législatives en Iran n'ont pas réussi à hausser l'âge au mariage ou à affecter la fécondité nationale d'une manière significative.

Abstract — The determinants of first marriage are discussed. Among the measurable determinants of early marriage are the low level of female labor force participation, the high sex ratio due to selective urban-ward migration and the payment of dower. The kinship structure and some cultural practices also influence the marriage situation. It is concluded that the legislative actions in Iran have not been successful in raising the actual age at marriage or to affect the national fertility significantly.

Keywords — **female age at first marriage, Iran, Shiraz**

I. Introduction

Ignoring the relatively small number of children born outside of legal marriage, child-bearing is intimately associated with marriage since it is regarded as both the aim and the consequence of conjugal relations. Therefore, the age at first marriage is an important determinant of fertility and the composition of a population. Busfield (1972), Bumpass (1969), Fernando (1972), Yaukey et al. (1972), Kim (1965), Martin (1970), Stiffman (1965), and Ryder (1960), to mention just a few, have reported on the negative correlation between the average age at marriage and the fertility level. Because of its practical and academic and/or theoretical values, the investigation into the determinants of changes in the age at marriage, and its policy implications, are of great importance.

Iran is one of the rapidly developing nations in the Middle East with an early age at first marriage and a high proportion of the population marrying. It is attempting to reduce its high rate of population growth from the current rate of about three per cent to one per cent by the end of this century. Along with other considerations, such as extending birth control and family planning programmes to all parts of the nation, and the recent legalization of abortion (*Kayhan*, 1977:1), since 1975 (Iran Ministry of Justice, 1975), the minimum age at first marriage has been raised from 15 to 18 years for girls, and from 18 to 20 years for boys as a means for fertility control, as well as for health purposes. No significant positive results were obtained from the first rounds of legislative action in 1935, when the minimum age at first marriage was set at 15 years for girls and at 18 years for boys. Many girls manage to bypass the law and get married before reaching the legal age. Using the effectiveness of the 1935 law as the basis for judgment, it is almost certain that the 1975 increase in the minimum age for first marriage may produce very few results. It is my hypothesis that there is no relationship between legislative

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means and the actual age at first marriage. The level of education and socio-economic variables are more crucial in determining the actual age at marriage than laws. One reason for the failure of the laws is that they are written by politicians who may not have adequate scientific knowledge regarding the socio-economic correlates of age at first marriage. Obviously, any objective and rational policy relative to changes in the age at marriage requires a minimum amount of information regarding the determinants of first marriage in that society.

With the exception of a few sample surveys in the city of Tehran, there is no comprehensive study of the determinants of first marriage in Iran. The purpose of this study is to examine the factors determining the age at first marriage, and to try to provide the policy makers with some basic, reliable data and knowledge they will need to form their decisions. In particular, this paper aims: (1) to assess the average age at first marriage in Shiraz, the fifth largest city in Iran;[1] (2) to assess the changes in the age at marriage since 1956, when the first nationwide census of Iran was taken, and to examine the effects of the recent socio-economic development in Iran on the age at first marriage; (3) to calculate the marriage rate for Shiraz and see how it differs from the rates in other nations; (4) to examine the demographic and socio-economic correlates determining first marriage in Shiraz; and finally, (5) to test the hypothesis concerning the relation between the actual age at first marriage and legislative action.

II. Method

A. Background

Because of unique circumstances in Iran, special methods have been used to collect the necessary data. Contrary to the registration of births and deaths, the registration of marriages (and of divorces) is quite complete in Iran. This is because marriage takes place between adults and it involves a contract with economic and legal implications which necessitates the accurate recording of the event. The registration takes place at a special bureau called *Mahzar*. A *Mahzar* is generally headed by a man who has some legal and religious training. This man is variously called or referred to as *Mulla, Agha, Syyed,* or *Shaikh*. The *Mulla* or *Agha* (or the keeper of the *Mahzar*) is always invited to perform the marriage which he registers in the book that is kept in the *Mahzar*. The exact terms of the marriage contract are written in these books. Data always includes the names of the marrying persons, their birth dates, the amount of dower, the type of the marriage (permanent or temporary), and any other special agreements between the couple. Some marriage contracts may carry additional information, such as the marriage order, place of birth, place of residence, occupation, and other demographic and socio-economic characteristics of the marrying couple. Though not quite adequate for demographic analyses, these documents still constitute the best and most reliable source of information regarding the event of marriage (and of divorce) in Iran. The city of Shiraz has some 30 such *Mahzars*.

B. Data Collection

This study utilizes three sets of data: the primary source of data consists of reading all the marriage contracts written during the Iranian years 1335, 1345, and 1352[2] (approximately, 1956, 1966, and 1973) and extracting all the relevant information. Because we have examined all the available marriage contracts,[3] I hereafter refer to them as the 1956, 1966, and 1973 marriage censuses for Shiraz. The years 1956 and 1966 were chosen because these are the years when the first and the second nationwide censuses of Iran were taken, and the year 1973 was chosen because it was the last completed year of registered

marriages at the time the data for this study were collected. A total of 8,034 marriage contracts were examined: 2,644 in 1335 (1956); 2,524 in 1345 (1966); and 2,866 contracts in 1352 (1973).

The second set of data consisted of a random interview of 400 newly married couples in Shiraz in 1974. And, the third set of data utilized in this study consisted of examining the premarital blood test records of 541 women, of whom 342 were marrying for the first time. The purpose of using the last two sets of data has been to supplement the first set, which constitutes the primary source of data.

Before going any further, however, it may be indicated that the reading of the marriage (and divorce) certificates took three or four research assistants three months. The data collected were relative to both husbands and wives, but in this paper we shall analyze only the data concerning the females.

III. Results

A. Age at First Marriage in Shiraz

The data in this paper relate to the time when the legal minimum age at first marriage was 15 years of age for women (Momeni, 1972). That is, it refers to the period when a woman below age 16 could not get married, except under special circumstances.[4] In the light of this legally set minimum age at marriage, let us look at the marriage statistics collected, the summary of which is presented here.

1. The Interview Data

The age distribution and the marriage order of the newly married women interviewed in Shiraz in 1974 are presented in Table 1. As may be noted from Table 1, of the 400 newly married women interviewed, 357 of them had married for the first time. The aver-

TABLE 1   AGE DISTRIBUTION OF THE NEWLY MARRIED WOMEN INTERVIEWED IN SHIRAZ, IRAN IN 1353 (1974), BY MARRIAGE ORDER

Age	First Marriages	Second Marriages	Third Marriages	All Marriages
14	7	0	0	7
15	37	0	0	37
16	56	0	0	56
17	45	0	0	45
18	50	4	0	54
19	31	2	0	33
20	34	3	0	37
21	16	3	0	19
22	19	4	0	23
23	21	4	0	24
24	10	2	0	12
25	14	0	0	14
26	6	1	0	7
27	6	2	0	8
28	2	5	0	7
29	0	1	0	1
30	3	2	0	5
31 plus	0	9	1*	10
Total	357	42	1	400
Mean	18.7	26.4	60	19.6

* At age sixty.

TABLE 2   MARRIAGE ORDER OF WOMEN MARRYING PERMANENTLY IN TEHRAN
DURING THE 1962-1971 DECADE

Year	% First Marriages	% Second Marriages	% Third or Higher Order Marriages
1962	78.2	18.3	3.5
1963	80.8	15.8	3.3
1964	79.6	17.0	3.4
1965	80.9	15.8	3.3
1966	82.0	14.6	3.4
1967	86.6	10.8	2.6
1968	88.8	9.3	1.9
1969	91.3	7.3	1.4
1970	91.4	6.9	1.7
1971	91.8	6.7	1.5
Average	85.7	11.8	2.5

Source: 1971 Iranian Statistical Yearbook, p. 42.

age age of these women was found to be 18.7 years; and for marriages of all orders (all marriages) it was 19.6 years; that is, the average age of those who had married for the first time was 0.9 years less than the average age of all marriages. Table 1 also shows that the *oldest* woman who had married for the first time was 30 years old, and the women who had married for the first time constituted 89.25 per cent of all marriages. And, of the remaining 10.75 per cent, 10.50 per cent were marriages of order two, and only 0.25 per cent were marriages of order three.

At this point in our discussion, let us briefly consider the marriage order for Tehran, the capital of Iran. Table 2 shows the marriage order of women marrying permanently in Tehran during the 1962-71 decade. As may be noted from Table 2, 78.2 per cent of women marrying in 1962 had married for the first time (order 1), 18.3 per cent were of order two, and 3.5 per cent were of order three or higher. A close examination of Table 2 reveals that there has been a steady decrease in the percentage of the marriages of order two or higher between 1962 and 1971. A sharp increase in the per cent of marriages of order one took place around 1967-68 when the proportion of first marriages reached about 89 per cent. In 1971 the proportion of first marriages in Tehran was reported to be 91.8 per cent with an average of 85.7 per cent first marriages for the 1962-71 decade. These statistics may show two things: (a) the proportion of first marriages in Shiraz is not too different from the proportion of first marriages in Tehran, the largest city in Iran; and, (b) that 90 to 92 per cent of all marriages in Shiraz and Tehran are of order one. In the following section this information, along with the average age at first marriage obtained from the interview data, are used to estimate the average age at first marriage from our marriage census data described above.

2.   Average Age at First Marriage From Marriage Census Data

As was pointed out earlier, one of the defects of our marriage census data is that they do not distinguish between the marriage orders. In this paper our primary interest is the average age at first marriage. Table 3 presents age distribution by single year, the cumulative percentage, and the cumulative mean age at marriage for all women marrying in Shiraz in 1956, 1966, and 1973. It may be noted from Table 3 that the average age of the five women in 1956 who had married at age 12 or less, was 11.8 years; for the 79 women

TABLE 3   AGE DISTRIBUTION AND THE CUMULATIVE AVERAGE AGE AT
MARRIAGE OF ALL WOMEN MARRYING IN 1956, 1966 and 1973 IN SHIRAZ, IRAN

	1956			1966			1973		
Age	No.	Cum %	Mean*	No.	Cum %	Mean*	No.	Cum %	Mean*
10	0	0.0	0.0	5	0.2	10.0	3	0.1	10.0
11	1	0.0	11.0	3	0.3	10.4	0	0.1	10.0
12	4	0.2	11.8	15	0.9	11.4	2	0.2	10.8
13	74	3.0	12.9	149	6.8	12.8	12	0.6	12.4
14	125	7.7	13.6	250	16.7	13.5	32	1.7	13.4
15	361	21.4	14.5	381	31.8	14.2	393	15.4	14.8
16	381	35.8	15.1	310	44.1	14.7	334	27.1	15.3
17	235	44.7	15.5	247	53.9	15.1	300	37.5	15.8
18	194	52.0	15.8	161	60.3	15.4	288	47.6	16.3
19	153	57.8	16.1	167	66.9	15.8	237	55.9	16.7
20	123	62.4	16.4	115	71.4	16.1	214	63.3	17.1
21	106	66.5	16.7	95	75.2	16.3	188	69.9	17.4
22	87	69.7	17.0	68	77.9	16.5	181	76.2	17.8
23	80	72.8	17.2	56	80.1	16.7	134	80.9	18.1
24	65	75.2	17.4	50	82.1	16.9	117	85.0	18.4
25	74	78.0	17.7	44	83.8	17.0	82	87.8	18.6
26	66	80.5	18.0	40	85.4	17.2	63	90.0	18.8
27	51	82.5	18.2	22	86.3	17.3	50	91.8	18.9
28	44	84.1	18.4	25	87.3	17.4	48	93.8	19.1
29	61	86.4	18.7	27	88.4	17.6	20	94.1	19.2
30	56	88.5	18.9	26	89.4	17.7	19	94.8	19.3
31	44	90.2	19.1	29	90.5	17.9	17	95.4	19.3
32	37	91.6	19.3	21	91.4	18.0	17	96.0	19.4
33	38	93.0	19.6	16	92.0	18.1	13	96.4	19.5
34	22	93.9	19.7	17	92.7	18.2	11	96.8	19.5
35	23	94.7	19.8	19	93.4	18.3	10	97.2	19.6
36	12	95.2	19.9	17	94.1	18.5	6	97.4	19.6
37	21	96.0	20.0	7	94.4	18.5	7	97.6	19.7
38	14	96.5	20.1	13	94.9	18.6	9	97.9	19.7
39	5	96.7	20.2	20	95.7	18.8	1	98.0	19.7
40	12	97.2	20.3	16	96.3	18.9	2	98.0	19.7
41	7	97.4	20.3	13	96.8	19.1	3	98.2	19.8
42	8	97.7	20.4	8	97.1	19.1	3	98.3	19.8
43	6	98.0	20.4	16	97.8	19.3	8	98.5	19.9
44	3	98.1	20.5	9	98.1	19.4	7	98.8	19.9
45+**	51	100.0	21.1	47	100.0	20.0	35	100.0	20.3

* Represents the cumulative mean age at marriage at age x and ages less than x; for
example, the mean age at marriage for those marrying at age 15 or less, is 14.5
years, and so on.

** The age at marriage, by single year, for those marrying at age 45+ is not shown
here, but the cumulative mean age is calculated on the basis of exact ages.

who had married at age 13 or less, the average was 12.9 years; the average age of the
women who had married at age 14 or less was found to be 13.6 years, and for those who
had married at age 15 or less it was 14.5 years in 1956, 14.2 years in 1966, and 14.8 years
in 1973, and so on. The last figure in the column labelled "mean" represents the average
age of all marriages for 1956, 1966, and 1973, respectively. Thus, as is evident from Table
3, the average age of all marriages was found to be 21.1 years in 1956, 20.0 in 1966, and
20.3 years in 1973.

From the interview data it was found that the average age at first marriage was 0.9

years less than the average age of all marriages. Therefore, if we subtract 0.9 years from each of the above averages we have an *estimate* of average age at first marriage for women in Shiraz as follows: 20.2 years in 1956; 19.1 years in 1966; and, 19.4 years in 1973.

According to these estimates it appears that the average age at first marriage has declined in Shiraz from 20.2 to 19.1 in 1966, and to 19.4 in 1973. An explanation for such decline shall be given elsewhere in the paper.

A second method of estimating the average age at first marriage in Shiraz is to utilize our knowledge that according to the interview data only 89.25 per cent of all marriages were first marriages, and these marriages were in the younger ages. Using this knowledge, the following may be extracted from Table 3:

Estimated Percent of First Marriages	Estimated Average Age at First Marriages
90.2% (1956)	19.1 years
90.5% (1966)	17.9 years
90.0% (1973)	18.8 years
91.6% (1956)	19.3 years
91.4% (1966)	18.0 years
91.8% (1973)	18.9 years

For instance, if we assume that 90.2 per cent of all marriages in 1956 were first marriages, the average age at first marriage is estimated to be 19.1; and, if it is assumed that 91.6 per cent of all marriages in 1956 were first marriages, the average age at first marriage is estimated to be 19.3 years.

A third method of *estimating* the average age at first marriage from the marriage census data is to use the knowledge, again from the interview data, that the oldest woman who had married for the first time was 30 years old. If we use this as an estimate of the cutting off point between the marriages of the first order and the marriages of the higher order, we note from Table 3, that the average age for all those marrying at age 30 or below 30 in 1956 was 18.9 years; 17.7 years in 1966; and, 19.3 years in 1973.

To summarize, the following estimates of the average age at first marriage are obtained using different methods:

Year	First Method	Second Method	Third Method
1956	20.2	19.2	18.9
1966	19.1	17.9	17.7
1973	19.4	18.9	19.3

Two things are evident from these estimates: (1) the average age at first marriage declined between 1956 and 1966; (2) the average age at first marriage (also of all marriages) was lowest in 1966, and the declining nature of the trend has changed between 1966 and 1973.

3. Premarital Blood Test Data

The age distribution of 541 women who had come for premarital blood test[5] seven, or less than seven, days before their marriage is shown in Table 4. The average age of these women, calculated from Table 4, was found to be 20.1 years — almost the same as the average obtained from the 1973 marriage census (20.3 years). If we use the above described method to estimate the age at first marriage for those who had come for blood

TABLE 4   AGE DISTRIBUTION OF WOMEN REFERRING FOR PREMARITAL BLOOD
TEST IN SHIRAZ, IRAN IN 1353 (1974)

Age*	No.	Cum. No.	Percent	Cum. %
14	7	7	1.3	1.3
15	48	55	8.9	10.2
16	75	130	13.9	24.0
17	58	188	10.7	34.8
18	66	254	12.2	47.0
19	41	295	7.6	54.5
20	43	338	7.9	62.5
21	41	379	7.6	70.1
22	40	419	7.4	77.4
23	26	445	4.8	82.2
24	19	464	3.5	85.8
25	19	383	3.5	89.3
26	11	494	2.0	91.3
27	10	504	1.8	93.2
28	3	507	0.6	93.7
29	12	519	2.2	95.9
30	6	525	1.1	97.0
32	4	529	0.7	97.8
33	2	531	0.4	98.2
35	4	535	0.7	98.9
37	1	536	0.2	99.1
40	2	538	0.4	99.4
45	1	539	0.2	99.6
48	1	540	0.2	99.8
52	1	541	0.2	100.0

test, we reach the conclusion that the average age of all women who had come for blood test for their first marriage was 19.1 years in 1974. Eftekhari and Khan (1974:10) found 19.0 as the average age at first marriage of 343 women who had referred for blood test. This finding is quite in agreement with the averages calculated from the other sets of data.

B. *Modal and Median Age at Marriage*

In addition to mean, the modal and the median ages are also used as summary statistics. In fact, in cases where the age at marriage distribution is skewed, as is the case here, the modal and the median ages are better measures of central tendency. Bogue (1969:316) categorized the nations of the world not on the basis of the mean, but the median age of women at first marriage into four groups: (1) "Child marriage" nations with the median age less than 18; (2) "Early marriage nations" with the median age of 18 or 19; (3) "Marriage at maturity" nations with the median age of 20 or 21; and, (4) "Late marriage nations" with median age of 22 or over. The modal and the median age for all marriages for women in Shiraz was found to be:

Source of Data	Modal Age	Median Age
1974 Interview Data		
First Marriages	16	17.7
All Marriages	16	18.0
1956 Marriage Census	16	17.7
1966 Marriage Census	15	16.6
1973 Marriage Census	15	18.3
1974 Blood Test Data	16	18.4

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There is no need to say that the median age of first marriages should be less than the median age for all marriages. Even if we use the median age of all marriages, instead of the median age of the first marriages, it is evident from the above data that according to Bogue's classification the pattern of female marriage in Shiraz falls in the "child marriage" category for 1956 and 1966. Regarding 1973 and 1974, the marriage census data for 1973 gives us the median age for all marriages as 18.3 years, and the premarital blood test data collected in 1974 gives a median age for all marriages as 18.4 years, which puts Shiraz in the "early marriage" category. But the 1974 interview data gives a median age at first marriage of 17.7 years which also puts Shiraz in 1974 in the "child marriage" category. If we use the modal age rather than the median age, as the basis for classification, Shiraz shall definitely be classified as a city with "child marriage" pattern. Before examining the determinants of female marriage at such young ages, it would be of significance to examine the marriage rates and the age at marriage structure in Shiraz.

C. Marriage Rates

As in the case of fertility rates, marriage rates may be computed specific for age, sex, socio-economic status, and other characteristics. As pointed out by Spiegelman (1970:223), marriage rates are sometimes based on the unmarried adult population, or they may be restricted to those within the marriageable age range, which Spiegelman takes to be ages 15 to 44 or to 54 years.

TABLE 5 FEMALE AGE-SPECIFIC AND CRUDE MARRIAGE RATES AND PROPORTIONS MARRIED IN SHIRAZ IN 1956 AND 1966*

	1956		1966		1966
Age	MR-1[a]	MR-2[b]	MR-1[a]	MR-2[b]	Percent Married
10–14	10.9	23.8	11.2	23.8	00.0
15–19	88.1	180.4	42.4	91.6	1.2
20–24	26.9	63.3	16.6	38.6	16.9
25–34	20.2	40.6	7.8	16.3	74.6
35–44	6.7	14.6	4.9	10.9	92.6
45–54	3.1	6.2	1.9	4.0	91.6
55–64	1.1	2.3	0.1	0.2	89.7
65 & over	0.3	0.6	0.3	0.7	85.3
All ages	15.5[c]	32.4	9.4[c]	19.9	52.8[d]

(a) Calculated by dividing the number of marriages in each age group by the corresponding number of people (both sexes) in the same age group and the result multiplied by 1000.

(b) Calculated by dividing the number of marriages in each age group by the corresponding number of female population in the same age group and the result multiplied by 1000.

(c) This is the crude marriage rate. It is obtained by dividing the total number of marriages in Shiraz by the total population (both sexes of all ages) of Shiraz.

(d) Proportion married of the population 10 years of age and over.

* The base population for the calculation of marriage rates were obtained from the 1956 and 1966 census reports.

Table 5 displays the age specific and crude marriage rates as well as the proportions married in Shiraz in 1966.

We see from Table 5: (a) the highest marriage rate occurred for the age group 15 to 19 in both 1956 and 1966; (b) the second highest rate occurred in age group 20 to 24; (c) the marriage rate in 1966 is less than the corresponding rate for 1956. This is contrary to the expectation. The lower marriage rate in 1966 may be attributed to either the errors in the 1966 population enumeration or an under-enumeration of marriages in Shiraz in 1966. Another explanation may be that in 1956 some of the villages and towns around the city of Shiraz did not have their own *Mahzars,* and the people from these areas registered their marriages in Shiraz. But by 1966, some towns around Shiraz got their own *Mahzars.* As a result, fewer out of town marriages were registered in Shiraz. However, even the 1966 marriage rates in Shiraz are very high as compared with the rates in some other countries. The crude marriage rate in Shiraz was found to be 15.5 in 1956 and 9.4 in 1966. While rates for Czechoslovakia, for example, ranged between 6.6 to 8.8 during the 1952-62 decade (Berelson, 1974:329). The marriage rate for Canada and the U.S. in 1965 are reported to be 7.4 and 9.2, respectively (Spiegelman, 1970:232), both of which are lower than the rate for Shiraz. Crude marriage rate for France in 1954 was 7.3 per 1,000 population, which is much less than the rate observed in Shiraz. In addition to the high marriage rate in Shiraz, Table 5 also reveals that marriage is universal in the city. In 1966 about 93 per cent of women in the age group 35 to 44 were reported to be married. This is one of the highest proportions in the age group 35 to 44 in the world.

D. Structure of the Age at Marriage

The mean and the median age at marriage are probably the most frequently used summary statistics for the frequency distribution of age at marriage (or any other distribution for that matter), but to have a complete picture of the marriage schedule, an analysis of the age at marriage structure should prove beneficial. This is especially true in situations where the age distribution is available but the data does not render itself to an accurate calculation of the mean, mode, and the median age at first marriage, as is the case here. An increase in the mean and/or the median age at first marriage may be a reflection of the changes in the age distribution caused by changes in the socio-economic situation in a society. Thus, a careful analysis of the structure of the age at marriage, especially of those in the age group 15 to 44, may reveal the same thing.

Relative to the age at marriage structure, a number of measures may be used to describe the distribution; measures of skewness, peakedness (kurtosis), and measure of spread are of special interest. The following are the values of S_p (Pearsonian coefficient of skewness, which is based on the deviation of the mode of the age distribution from its arithmetic mean);[6] a^3 (a-three, another measure of skewness, based on the third moment about the mean);[7] a^4 (a-four, a measure of kurtosis or peakedness which is based on the fourth moment about the mean);[8] CV (coefficient of variability, which is a measure of spread of the distribution).[9]

Measure		1956	1966	1973
S_p	(Skewness)	0.67	0.63	0.88
a^3	(Skewness)	1.94	2.21	2.75
a^4	(Peakedness)			
		8.55	8.66	16.08
CV	(Spread)	0.36	0.40	0.30

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The values of S_p, a^3, and a^4 for a normal distribution are 0, 0, and 3.0, respectively. The values for Shiraz indicate highly significant departure from normality, owing to the skewness and the leptokurtosis (peakedness) of the distributions. According to above measures, the 1973 distribution is more skewed and peaked than either the 1956 or the 1966 distributions, indicating a major shift in the age at marriage distribution between 1956 and 1973. Relative to skewness, whether measured by S_p or a^3, all three distributions were positively skewed. The examination of the above measures shows that there is little difference between the skewness, peakedness, and the spread of the 1956 distribution as compared with the 1966 distribution; in fact, a part of this minor change in the distribution, or the fact that no major difference is observed, may be due to the various statistical errors in the calculation of the measures themselves. But, the difference in the age at marriage structure of 1973 as compared with the 1956 and 1966 distributions cannot escape notice. For example, peakedness increased from 8.55 in 1956 or 8.66 in 1966 to 16.08 in 1973 — a substantial increase.

It may be remembered that the average age and the median age at marriage has fallen in Shiraz between 1956 and 1973. This decline in the average age at marriage is expected to be accompanied with an increase in peakedness, and of skewness. In other words, the increase peakedness from 1956 to 1973 indicates that the typical age at marriage has fallen but at the same time the concentration of age at marriage around this mean has increased. In spite of the fact that there has been a persistence of few first marriages at advance ages (that is, distant from this typical age), the trend toward an earlier age at marriage has been associated with an increase in conformity in the typical age at marriage. While in 1956, 21.4 per cent of all marriages were below the modal age (age 16), in 1966, 16.7 per cent were below the modal age, and in 1973 only 1.7 per cent of all marriges were below the modal age, which had fallen from 16 in 1956 to 15 in 1966 and 1973.

This tendency of more marriages conforming to the typical age at marriage is also evident from the value of the coefficient of variability, CV, shown above. It can be observed that in 1973 when measures of skewness and peakedness had the highest of the three values (of the three years), the value of CV was the lowest, pointing to the fact that the concentration of marriages around the typical age had risen. In other words, an increase in peakedness means concentration of observations (age in this case) in the centre of the distribution or one standard deviation away from the mean. Given that the proportion of marriages below the legal age has substantially declined between 1956 and 1973, and in view of the fact that the modal age for 1973 was found to be just the borderline between the legal and illegal age at marriage, it may be interpreted that the government's enforcement of the age at marriage law since the 1967 enactment of the Family Protection Act has been mainly responsible for the increased peakedness of the 1973 distribution.

The decline in the mean age at marriage between 1956 and 1966 is not unique to Shiraz. Several countries have also experienced a similar decline. In Ireland, the mean age at marriage for brides declined from 27.11 in 1957 to 25.44 in 1966 and to 25.03 in 1969 (Walsh, 1972:190). In Denmark, the female median age at marriage declined from 22.6 in 1945 to 21.7 in 1966 (Bogue, 1969:317). In the U.S. it declined from 21.5 in 1940 to 20.6 years in 1965, and in Canada it declined from 23.2 in 1940 to 21.2 in 1964 (Spiegelman, 1970:233). Easterlin (1967, 1968), has linked the decline in the age at marriage to economic cycle. Economic prosperity may be followed by a temporary increase in the number of marriages and a decline in the average age at first marriage. The rate of economic growth in Iran — due to the increased petro-dollar revenues — in the past decade or so has been one of the highest in the world. The observed decline in the average age at marriage in Shiraz could partly be explained as a response to increased economic

prosperity in Iran. This declining trend is not expected to continue for long, however. For one thing, the petro-dollar revenue and its impacts have already subsided; secondly, as the country passes through the transitional stage from developing to developed phase, it is expected that because of *complex* socio-economic changes taking place in the country, the age at marriage will change its course and assume an upward trend. Indeed, this upward trend can already be detected in Shiraz — the decline in the average age from 21.1 in 1956 to 20.0 in 1966 is followed by an increase to 20.3 in 1973.

The increased peakedness in the age at marriage distribution in 1973 as compared with those of 1956 and 1966 is not incidental, however. The 1967 Family Protection Act has played the major role in changing the age at marriage schedule. Prior to 1967 (i.e., in 1956 and 1966) the 1935 law concerning the minimum age at marriage was hardly enforced. But as a result of the new Family Protection Act, the law was more strongly enforced and, thus, a number of under-age marriages were prevented. However, those who could not get married before reaching the legal age married almost immediately after reaching the legal age. This is evident from an examination of Table 3, which shows that 16 per cent of the brides in 1956, and 16 per cent in 1966 were in the 17 to 18 age group, while in 1973 the proportion of brides of age 17 to 18 had risen to about 21 per cent of all brides, pointing to the fact that some marriages were postponed for one to three years to meet the legal age requirement.

E. *Relation Between the Legal and the Actual Age at Marriage*

Although the 1967 Family Protection Act has succeeded to postpone and/or prevent a relatively large number of very young marriages, as pointed out by Moezi (1967:977): "Law is rarely observed, and due to the lack of traditional and religious obstacles earlier marriages are frequently seen in rural and tribal areas, and even in small cities." This is confirmed by the data collected in Shiraz. In 1956, 21.4 per cent of all marriages in Shiraz were below the legal age; the corresponding figures for 1966 and 1973 were 31.8 and 15.4 per cent, respectively. That is, in all three years a substantial number of under-legal-age marriages had taken place. But the proportion of such marriages increased by 10.4 per cent between 1956 and 1966 and declined by 16.4 per cent between 1966 and 1973, and six per cent between 1956 and 1973. How can we explain this sudden increase followed by a sharp decline in the proportions of illegal marriages? A plausible explanation is as follows: usually there is a considerable time lapse between the time a bill is submitted and the time it is approved by the parliament. The 1967 Family Protection Act was submitted long before it was approved, during which time the press and the newspapers carried frequent headlines about the government trying to stop people from marrying, or marrying early. As a result, a number of girls being affected by the media married even earlier than they would have normally, so that the new law would not affect them. Consequently, the proportion of under-legal-age marriages suddenly increased in 1966 — the year before the law was passed. Therefore, the comparison of the under-legal-age marriages in 1973 with that of 1956 is a better measure of the effectiveness of the Family Protection Act in preventing the very young marriages. In Shiraz, we notice that the Act has decreased the proportion of under-legal-age marriages by six per cent: more recently, the Ministry of Justice has given a new instruction to the Family Courts not to issue any marriage license for the under-legal-age applicants except under very special circumstances.[4] In an informal talk with a Family Court judge in Shiraz, I was told that the new restrictions by the Ministry of Justice have further reduced the number of under-legal-age marriages.

In the foregoing section it is argued that all those *not* permitted to marry before

reaching the legal age try to get married immediately after reaching the age. This means a delay of one to three years for a number of women who would have had married before reaching the legal age if they were permitted to do so. This brings us to the conclusion that this delay, affecting a small proportion of the total marriages and only for one to three years, will not have any great effect in raising the national average age at marriage and on the level of fertility in Iran; for both the woman who gets married at 15 (under legal age) and the woman who gets married, say, at 16 or 17 (legal age) have enough re-productive time before them to have as many children as they may want. A change in the age at marriage will have an effect on the level of fertility when the *actual* minimum and the average age at marriage have risen at least to above 20. Such a large increase in the actual minimum age at marriage is hard to be accomplished by legislation, especially be-cause there is enough evidence to support the hypothesis that there is no direct relation-ship between legislative actions and the actual age at first marriage. In support of this hypothesis, this study and studies in other countries provide ample evidence, as indicat-ed by comparing the legal and the actual average age at marriage in various countries shown below:

Country	Legal Age at Marriage	Actual Average Age at Marriage
Iran, 1973	16	20.3
Belgium, 1965	18	24.3
Ireland, 1966	12	25.4
Ireland, 1957	12	27.1
Netherlands, 1955-64	16	25.6
Netherlands, 1970	16	23.9
Spain, 1901-1905	12	24.7
Spain, 1941-45	12	26.0
Spain, 1969	12	24.7
West Germany, 1970	16	23.0
West Germany, 1960	16	23.7
West Germany, 1950	16	24.5

By comparing the legal minimum age with the actual average age one cannot escape the conclusion that actual age at marriage is not determined by laws. As stated by Davis (1971:250): "Roman Catholic countries generally follow canon law in stipulating 12 years as the minimum legal age at which girls may marry, but the actual average age at mar-riage in these countries (at least in Europe) is characteristically more like 25 to 28 years. *The actual age is determined, not by law, but by social and economic conditions*" (em-phasis mine). This is not to say that laws have no affects at all, however. They do, but to a limited extent. The forces determining the average actual age at marriage must be sought, as suggested by Davis (1971:250) and Momeni (1972), among the social, eco-nomic, and cultural factors.

IV. Socio-economic and Cultural Factors Determining First Marriage

A. *Theoretical Framework*

Thibaut and Kelley (1959) and Homans (1961) have formulated the exchange theory, according to which an action is determined by the maximization of profit. That is, an action takes place if it represents (to the best judgment of the actor) the least undesirable

action from among all possible alternatives. Applied to marriage, this means that a decision to get married may either mean a promise for more satisfaction than the single state, or it is the less undesirable of the two alternatives. Reviewing the empirical research and examining some 23 propositions relative to the socio-economic correlates of early marriage, Bartz and Nye (1970) arrived at a general theoretical proposition that: "The greater the positive discrepancy between satisfactions anticipated from marriage and satisfactions received from currently occupied roles, the more likely early marriage will occur." Bartz and Nye (1970) point out that this is a substantively profit-and-loss-oriented proposition (thus, it is a special form of exchange theory), and that early marriage can be explained in the light of this theoretical formulation.

In view of this theoretical frame of reference, we shall now turn our attention to the discussion of some of the socio-economic and historical-cultural variables believed to be the important determinants of age at marriage in Iran.

B. *Education*

Mitchell (1971) and numerous other researchers have demonstrated the direct relationship between age at marriage and the level of education. Generally, those with a higher level of education get married at a later age. Not much is known concerning the relationship between education and age at marriage in Iran; and, as pointed out by Darabi (1976), the studies regarding literacy and fertility in Iran are inconclusive.

As shown in Table 1, 357 of the women interviewed had married for the first time. Of these, the average age at marriage of those with no education was found to be 17.2 years; 17.7 years for those with one to eight years of formal schooling; 17.8 years for those with nine to 12 years of schooling; 19.4 years for those with *Fogh Diploma* (i.e., those with 13 years of formal schooling); and, 21.1 years of those with more than 13 years of formal education.

Since it was difficult to know the exact number of years of schooling (as far as reliability is concerned) of each bride, our data were not suitable for regression/correlation analysis. But, in a separate tabulation, not shown here, dividing the level of education into four categories and age at marriage into four categories and cross-classifying level of education with age, a highly significant Chi-square $(x^2 = 79.6$, with 9 $df)$ was obtained, indicating the strong relationship between marriage schedule and the level of education. The examination of our third set of data showed that of the 342 women who had come for premarital blood test and were marrying for the first time, the average age at marriage for those with less than six years of education was 19.6 years, 19.4 years for those with six to 12 years of formal education, and 20.1 years for those with more than 12 years of formal education. In a different study, Eftekhari and Khan (1974:10), examining the files of some 343 women coming for premarital blood test in Shiraz in 1974, found an overall average age at first marriage of 19.0 years; 18.4 years for the illiterates; 18.1 years for those with one to six years of education; 18.8 years for those with seven to 10 years of education, 19.9 years for those with 11 or 12 years of education; and 22.2 years for those with more than 12 years of formal education, showing the increasing age at marriage with the increase in the number of years of formal schooling. Two features of these statistics are noteworthy: first, increased education is associated with postponing the marriage schedule; second, the impact of education is greatest after the woman has had a minimum of 12 years of education.

In Shiraz, based on the 1966 census reports, a total of 53,225 women age seven or higher could read and write. Of these, 69.5 per cent had one to six years of formal schooling; 23.3 per cent had seven to twelve years of schooling; and 1.5 per cent had more

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than 12 years of schooling (0.6 per cent had entered but had not finished college; 0.8 per cent had bachelor's degree; and 0.1 per cent were reported to be medical doctors).[10] As of today, the results of the 1976 census are not published. But, on the basis of a five per cent sample from the census data (Plan and Budget Organization: Statistical Centre of Iran, 1976), 58.8 per cent of women in the urban areas of Fars province could read and write in 1976. Being the capital and the largest urban centre of the Fars province, in the city of Shiraz this proportion is expected to be higher than 58.8 per cent. It must be emphasized, however, that this increase is mostly at the elementary and secondary school levels. As was just pointed out, the impact of education seem to be highest when the women have some education beyond the high-school level. Although the proportion of females attending school has increased significantly since 1966, the proportion of those who are attending the institutions of higher education has not changed equally. Thus, it may be concluded that the low age at marriage in Shiraz (and in Iran in general) is partly due to the low proportion of female population with an education beyond the high school level. In terms of our exchange theory, it may be said that when/where for most women, elementary to secondary education is a "dead end," to use Havighurst's words (1962), marriage may appear as an attractive alternative course.

C. Economic Factor

Lack of economic power and/or poverty, combined with large family size, encourages early marriage. The average age of the 400 newly married women interviewed in Shiraz was found to be 19.6 years for all marriages, and 18.7 for those marrying for the first time. Of the 357 who had married for the first time, the average age of those with no income at the time of marriage was found to be 18.2 years; 22.7 years for those with a monthly income of less than 1,500 rials (less than $22); while the average age for those with a monthly income of above 1,500 rials (above $22) was found to be 24.3 years, significantly higher than the average age of those with no outside income. In a separate tabulation, not shown here, dividing income into three categories (less than 1,000 rials; 1,000 to 1,499 rials; and 1,500 or more rials per month), and age at first marriage into three categories (under 21, 22 to 24 and 25 and over) and cross-classifying age with income, a highly significant Chi-square ($x^2 = 88.51$, 4 df) was obtained, pointing to the strong relationship between monthly income and the age at first marriage. Most females in the age group 15 to 24 in Shiraz do not have their own income, and often the family income is not sufficient to cover all the expenses, which places the family under severe economic strains. In such situations, "the most widely and socially accepted way of relieving the economic burden is to marry off the girls as soon as possible" (Momeni, 1972:548) thus contributing to an early average age at marriage.

D. Occupational and/or Non-familial Activities

Bumpass (1969), Kupinsky (1971), Knodel et al. (1974), and numerous other researchers have documented the negative association between non-familial activities, as measured by the extent of female labour-force participation, and fertility (nuptiality behaviour in general). Based on the well-known Davis and Blake (1965) analytical framework for the study of fertility, nuptiality patterns play a major role as intermediate variables through which social, economic, and cultural-historical forces must operate if they are to affect fertility. In particular, age at marriage is considered as the first intermediate variable affecting fertility. A decline in fertility due to increase non-familial activities may be partly the result of the non-familial role on the age at marriage schedule, or the rise in the age of entry into sexual union.

Of the 400 women interviewed in Shiraz, 288 were housewives and the remaining 112 had some kind of non-familial activity before and at the time of marriage. The average age for those who did not have any non-familial activities (that is, the housewives) was found to be 19.3 years, while the average age for those with non-familial activities was 21.6 years, clearly demonstrating the association between non-familial activity and postponement of marriage.

In 1966, in Shiraz only about seven per cent of women age 10 years or more were employed. Although the extent of women's participation in extra-familial activities is increasing, this proportion is still low as compared with some other countries — notably, the Latin American countries (Youssef, 1974). This low level of non-familial role played by the Shirazi women (Iranian women in general) is another factor encouraging familial activity and, thus, early marriage.

E. *Mehriah or Dower*

As stated by Momeni (1972:548), "the payment of dower (a unique feature of the Iranian marriage institution) is an institutional mechanism that simultaneously encourages early marriage and contributes to marriage instability." It is beyond the scope of this paper to deal with this topic in detail. Let it suffice to indicate that the amount of dower (or the "bride-price," as some may call it), which is a status symbol for a girl, decreases as the age of the girl advances. In order to have a large dower there is a tendency by the girls to get married at the earliest possible time, for the institution of dower clearly involves a gain or loss situation. The amount of dower in Shiraz for the periods investigated is shown below:

Amount of Dower	1956	1966	1973
Below Rls 150,000 (below $222)	96.5%	74.8%	38.4%
Rls 150,000-499,999 ($222-7,407)	2.8%	18.5%	32.4%
Rls 500,000-999,999 ($7,407-14,815)	0.4%	4.6%	17.3%
Rls over 1,000,000 (over $14,815)	0.3%	2.1%	11.8%

The amount of dower symbolizes the youthfulness, virginity, attractiveness, the family background, and the social class of the marrying girl. Girls generally compete for larger dower. Friends, relatives and neighbours gossip about a girl with a small dower as if there were something wrong with her.[11] In view of the economic exchange involved and the cultural importance of dower, it is no wonder that the institution of dower induces early marriage.

As can be seen from the above figures, based on the Iranian standards, the amount of dower is quite large in Shiraz; the proportion of the brides with a dower less than Rls 150,000 (less than $222) decreased from 96.5 per cent in 1956 to 38.4 per cent in 1973; and the proportion of those with Rls 1,000,000 or more ($14,815 or more) increased from 0.3 per cent in 1956 to 2.1 per cent in 1966 and 11.8 per cent in 1973. Although part of this increase results from inflation and the increase in the standards of living, having a large figure on the marriage certificate as dower is not without effect on encouraging early marriage.

F. *Sex Ratio and Migration Pattern*

Among the objective and tangible factors responsible for early marriage in Shiraz are the sex ratio and the special migration pattern in Iran, in general, and Shiraz, in particular. In contrast to the large Western cities where the sex ratio is below 100, the large

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Iranian cities are characterized by a shortage of females. The sex ratio in Iran in 1956 and 1966 were 103.6 and 106.6, respectively. According to a report by the Iranian Statistical Centre, the sex ratio for Iran was put at 109 — a shortage of two million women in Iran;[12] and, based on the 1976 census data, the sex ratio was 106.6 The sex ratio in the large Iranian cities is even more imbalanced than the national ratio. This is because the male migration to the cities is much heavier than the female migration because of the limited freedom of women in Iran. The sex ratio in Shiraz in 1956 was 109 for the total population, and 111 for the population 10 years of age and over. The corresponding ratios for 1966 were 112 and 115. No data regarding the present day sex ratio in Shiraz exist. But it is almost a truism that owing to rapid urbanization and increased industrialization, the sex ratio has become further imbalanced. The imbalance in sex ratio due to internal migration is even further exaggerated by the summer migration from the neighbouring Arab countries into Shiraz; some of these visitors, according to available information, marry to young Shirazi girls. Because of this excessive male population in Shiraz, the marriage market is very much in favour of the females. The demand for marriageable girls is high. That is, in terms of exchange theory, the supply and demand for marriageable girls is another determinant of the age at marriage.

    In addition to the above five rather easily measurable objective variables, there are some historical-cultural determinants of marriage. Three such factors are briefly considered here.

G. *Historical Practices*

    There are many historically and culturally rooted practices that contribute to early marriage in Shiraz. For instance, the ancient custom of *Naf-Boran* (cutting placenta) may be mentioned. According to this tradition, when a woman delivered a baby girl, they cut her placenta after the name of a one-month- to five-year old boy in the family, usually the first or the second cousin. The procedure is for the mother of the boy to come to the girl's mother with a box of sweets for her and some cookies for the audience, generally other relatives. They place the girl's placenta on the boy's foot and, while singing "May you live together for ever," cut the girl's placenta. In this way the baby girl becomes engaged to the little boy. Drinking tea and eating cookies and singing by the audience marks the ceremony and the official engagement. After the children were engaged, the families no longer had to worry about finding a suitable mate for their children (Homayoon, 1974:64). Although *Naf-Boran* is no longer practiced in Shariz, the attitude is very much alive. It is this very attitude that encourages early marriage.

H. *Religion*

    In contrast to the Christian religion, which buttresses customs and practices leading to late marriage, the Islamic religious system is highly conducive to an early marriage pattern; for it encourages the integration of the nuclear family into the extended kin unit and values, and the moral hold of the kin over the nuclear family. Another basic difference between the Islamic and most other religions is that in Islam, religious and social practices are so intertwined as to be virtually inseparable. This is because the Islamic church neither has the separate and celibate clergy nor has the bureaucratic organization of the church competing with the family unit. The effects of Islamic religious teachings on marriage behaviour is best summarized by Sklar (1974:237-238):

> Many elements of Islamic law and customs strengthen extended kinship ties. Cross-cousin marriage, for example, is a religious and practical ideal as a means to consolidate familial power and prestige. In addition, Islam generates strong kinship bonds through the legal subordination of a

woman to her nearest male. Islamic custom facilitates early wedlock because it places control of marriage partners in the hands of parents for whom early marriage of children is in their best interests. Parents are especially anxious for their daughters to marry young, because in Islamic culture, family honor and esteem depend largely on the sexual conduct of women in the household.... Parents are thus intensely concerned to seclude their daughters from possible contact with strange men before marriage, and to marry them off as early as possible.

I. *Kinship Structure*

Kinship structure is also important in influencing marriage behaviour. As indicated by Sklar (1974), the independence of the nuclear family from the larger kin group favours late marriage, while the integration of the nuclear family unit into the extended family system creates pressures favouring early marriage. According to Behnam (1973:17), about five per cent of urban families in Iran are still of the extended type; and, the nuclear families are not quite independent of the extended kinship network, which favours early age at marriage.

V. *Summary and Conclusions*

Utilizing three sets of data, this study provides a set of basic, reliable information on the age at marriage, examines the changing trends in the age of marriage, and discusses the major determinants of first marriage in Shiraz, Iran. Showing that many girls had married before reaching the legal age, this study also provides evidence in support of the hypothesis that there is no relationship between the legal and the actual age of marriage. This raises a question: should a government try to affect the age at marriage as a part of its overall efforts to control population? Not discounting the role of governmental intervention in reducing the proportion of the very young marriages (which has health consequences), it is the conclusion of this paper that at least as yet legislative actions in Iran have not been successful in raising the actual age at marriage to any significant degree as to have any substantial impact on the national fertility rate.

The low proportion of women with 12 or more years of education, the low rate of female labour-force participation, high sex ratio in Shiraz due to a heavy rural-to-urban migration differential by sex, the economic considerations, and the payment of dower are among the objective (measurable) determinants of early marriage; of the more subjective factors, cultural practices and/or attitudes such as *Nar-boran* (cutting placenta), religious factor, and kinship structure promote early marriage. With respect to almost all of these variables, the decision to marry is a substantively profit-and-loss-oriented action. Thus, it may also be concluded that this study provides support for Bartz's and Nye's version of the exchange theory, which states: "The greater the positive discrepancy between satisfactions anticipated from marriage and satisfactions received from currently occupied roles, the more likely early marriage will occur."

Technically speaking, the findings of this study can be generalized only for the city of Shiraz. However, given the fact that low level of female literacy, low female labour-force participation, above-100 sex ratio, similar kinship structure, and the same religion prevailing in the rest of the country, the findings in Shiraz may be applicable to similar areas in Iran.

Acknowledgements

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Footnotes

1. Shiraz is located in the southern part of Iran. The population of Shiraz increased from 170,659 in 1956 to 269,865 in 1966, with an annual rate of growth of 4.58 per cent. Based on the 1976 census, the population of Shiraz was 416,408.
2. The Iranian year begins on March 21 or 22. The year 1335, thus, would correspond to the period between March 21, 1956 and March 20, 1957. The Iranian solar year *(SY)* may be converted to the year of Christian era *(YCE)* by the formula: $SY + 621 = YCE$.
3. Data consist of a near-100 per cent coverage. Shirazi marriages registered outside of Shiraz are not included.
4. Exceptional cases include rape and premarital sex, especially if it leads to premarital pregnancy.
5. The couple is introduced to the health department by the *Mahzar*. This is done only after the couple has made a definite decision to marry and the preparation for marriage is well underway. Very rarely a marriage will be called off at this stage of the game.
6. $s_p = $ (Mean — Mode)$/S$, where S is the standard deviation.
7. $a^3 = m^3/s^3$, where $m^3 = \Sigma(x_i - $ Mean$)^3/N$, the third moment around the mean.
8. $a^4 = m^4/S^4$, where m^4 is the fourth moment around the mean.
9. $CV = S/$mean, where S is the standard deviation.
10. See: page 40 volume 34 of the 1966 census reports. The remaining 5.7 per cent includes those with no formal education plus those with educational certificates not reported.
11. In spite of the importance of dower, some marriages among educated couples with western ideals are performed without dower.
12. According to a report in the *Kayhan* newspaper (12 March 1974), in Rasht, the 10th largest city in Iran, the child delivery centre has reported a sex ratio of 112 at birth. It is believed that this may have contributed to the shortage of girls in Rasht.

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