Selective Migration from Samoa: A Longitudinal Study of Pre-migration Differences in Social and Psychological Characteristics

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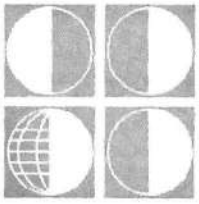

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ABSTRACT: In 1981 extensive questionnaire and interview data were collected on some 100 young Samoan adults. Five years later in 1986 we determined their whereabouts and divided the data in accordance with migration status. The answers of the 35 who had migrated in the intervening period were contrasted to those 65 who remained in Samoa. The migrants differed in several distinct areas. Migrants reported a higher degree of peer-reliance as a personal adaptive strategy. Migrants also reported larger numbers of individuals in social support networks, a higher quality of support and more community involvement. They also report less expressive display of anger. Those who did not migrate reported a slightly better view of life in Samoa and abroad, as well as better relations with their friends and neighbors. These findings support a hypothesis that migrants are pre-selected to fit into migrant communities and do not appear to be misfits who are unhappy with life in Samoa.

During the latter half of the twentieth century, American and Western Samoa have experienced a massive outmigration as native Samoans have participated in a worldwide migratory flow from rural island villages to urban centers. This movement has led to the establishment of a number of migrant communities outside of Samoa, especially in urban centers of the United States and New Zealand (Baker and Hanna, 1981). Recent census estimates for the United States (1980) identify some 41,948 resident Samoans, half living in California and another third living in Hawaii (Franco, 1985). The remainder have settled mostly in urban areas on the West Coast. While the absolute numbers of Samoan migrants are not impressive when compared to other ethnic migrations in the history of the United States, they actually represent a significant proportion of the Samoan population. Shankman (1978) estimates that up to a third of the population of Western Samoa permanently lives abroad, and census data indicate that there are more Samoans living within the United States than in American Samoa (Franco, 1985). Given the large numbers permanently living abroad, it is evident that emigration has become a critical demographic and economic necessity for Samoa (Shankman, 1978, p. 119).

There have been a variety of studies of migrant Samoan communities describing the life styles and adaptive problems associated with the migration process. Migrant Samoans are similar to other groups in many respects, but also show some unique characteristics. While the processes of social adaptation manifested by Samoan migrants paral-

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lel those of other ethnic groups (Hull, 1979), Samoans seem to rely on the support of kinsmen to an unusual degree (Graves and Graves, 1977, 1979). In all migrant communities studied—New Zealand (Graves and Graves, 1985), Hawaii (Hecht et al., 1986), Seattle (Kotchek, 1978), and California (Ablon, 1971; Janes, 1986)—there is a strong post-migration dependence on the extended family, usually coupled with participation in a Samoan church. New arrivals are readily accepted into existing networks which provide for their needs and aid their integration into the host community. The contributions of kin networks in migrant communities are pervasive and include providing funds for leaving Samoa, finding housing and employment in the new locale, and assisting with the ongoing processes of dealing with bureaucracies and meeting acute needs in times of shortage or stress (Graves and Graves, 1978; Ablon, 1973).

The migrant community may actually be involved in selection of who will migrate by virtue of their support through remittances. Nancy Graves (1984) provides data from New Zealand suggesting that two-thirds of Samoan migrants have their passage paid by the wider extended family. Indeed, MacPherson (1978) comments that without the extended family Samoan migration would be nearly impossible; certainly its volume would be greatly reduced. Graves and Graves (1977, 1978) have noted the preference of new Samoan migrants for a kin-reliant adaptive strategy, which they have described in some detail. They contrast it with the peer- and self-reliant strategies preferred by other ethnic groups. The latter strategies are more closely associated with individual initiative and are less frequently employed by Samoan migrants in the early stages. The combination of family affiliation, church membership, and group cohesiveness provide the migrant with a partial buffer against the stresses of a new and foreign environment. Adaptive success would be difficult without them.

While kin-based migration is generally beneficial, it is not without problems. Reciprocity within the migrant community is required for the system to function, so migrants must be prepared to give of themselves in the form of remittances to Samoa, hard work on the job, respect for the traditional hierarchy, and service to the local community (Janes, 1986; MacPherson, 1978). The material and emotional costs are potentially very high. Hanna and Baker (1979) and Pawson and Janes (1984) have suggested that the increment in blood pressure recorded among some Samoan migrants may result in part from burdensome social obligations. Similarly, Kincade and Yim (1987, p. 76) report that in Hawaii "Samoans as a group have the highest potential level of stress of all groups studied. Compared to other groups (Koreans, Filipinos, Japanese, and Caucasians) they experienced especially high incidences of death of spouses, relatives, and close friends, divorce, and marriage, and changes in health and behavior of family members." Some migrants are motivated to dissociate themselves from the Samoan community to take advantage of opportunities to accumulate capital resources for themselves or their immediate families, and for those who choose to remain within the community, demands are gradually reduced to the point that accumulation is possible. MacPherson (1978, pp. 11–16) estimates the process takes about five years. This is accompanied by a change in per-

sonal adaptive strategy toward either peer- or self-reliance.

Thus, many facets of the Samoan migration process are known. Some of the salient features are as follows: (*a*) a major portion of the Samoan community lives abroad; (*b*) the migration process relies heavily upon the extended family, and integration into an extant overseas community through church membership and adherence to traditional patterns of social obligation; (*c*) social networks are active in all stages of the migration process from the selection of migrants to their integration into the host community.

Given the large social investment in the migration process, there is an important question to be answered, the one we address in this report: Do those individuals who migrate abroad differ in any significant manner from those who remain in Samoa? There is reason to believe that they do. It is possible that migrants are primarily drawn from among those who are most disaffected at home. The argument would be that disaffected individuals—those least well-adjusted to the Samoan way of life—would be more motivated to leave their home communities than those who are well-adjusted. A case could also be made for the alternative possibility. Here the argument would be that those who were well-adjusted in Samoa would be more likely to migrate because they would be chosen more frequently by overseas sponsors. A corollary to the first argument would be that migrants are drawn from the most self-reliant individuals in Samoa; a corollary to the second argument is that they are drawn from individuals who are largely family- or kin-reliant. The research cited above would seem to favor the pre-selection of kin-reliant individuals. We found a unique opportunity to investigate this question as part of our continuing research concerning Samoan migration and health.

MATERIALS AND METHODS

In 1981 we undertook a survey of the seven villages in American Samoa which have provided the largest number of migrants to the State of Hawaii, as determined by our earlier surveys (Baker and Hanna, 1981). Some 102 young men and women living in those villages at that time were identified and interviewed in the hope that we could return in several years and compare the responses of those who migrated to those who did not. We were able to return in 1986—five years later—and establish the whereabouts of 100 of the original sample. During the intervening five years, 35 had migrated to the United States, New Zealand, or Western Samoa; 65 remained in American Samoa, and one was deceased. We could not determine the whereabouts of one individual. This report will contrast the responses of those who migrated with the responses of those who did not. Table 1 summarizes some of the social characteristics of the 87 individuals whose data was adequate for this analysis.

Our 1981 survey included body measurements, casual blood pressures, and extensive interviews. A urine analysis for determination of stress hormone excretion was also performed (described by Hanna et al. 1986). Pearson and Hanna (1989) have discussed the anthropometry, blood pressure and some of the demographics of the migrants as compared to non-migrants. They found that the migrants were younger, less fat, and had lower blood pressures prior to moving than non-migrants.

TABLE 1

SOME CHARACTERISTICS OF MIGRANTS AND NON-MIGRANTS

Characteristic	Non-migrants	Migrants
Sex[a]		
Male	34	17
Female	24	12
Mean age (years)	19.4	18.0
Married	8	1
Children	8	1
Years of schooling	11	11
Languages spoken		
English	all	all
Samoan	all	all
Church attendance		
Frequent	39	19
Seldom	14	5
Never	1	2
Scores on		
Tradition index	10	10
SCT	4.0	3.5
MCCT	6.7	7.5

[a]Numbers of informants who were included in the statistical analysis. This figure represents the numbers upon which complete data is available and is less than the 35 migrants and 65 non-migrants actually interviewed in 1981.

Among the instruments employed in 1981 were: (1) a brief individual and family health questionnaire eliciting information about chronic disease, smoking, drinking, and exercise patterns; (2) an inventory of Major Life Experiences (MLE) which included information on work and residential histories, religious affiliation, decision-making, involvement in Samoan cultural practices, financial arrangements for saving and remittance patterns, plans for migration, and aspirations for the future; (3) a structured interview examining aspects of Coronary Prone Behavior including feelings of pressure for achievement (Dembrowski et al., 1978); (4) a protocol dealing with anger that concerned stimulus conditions, intensity of feelings and subsequent coping behaviors; (5) a multiple choice test examining knowledge of American middle-class culture (MCCT) through recognition of institutions and concepts (adapted from Howard, 1974); (6) a Samoan Conceptual Test examining knowledge of Samoan cultural concepts (SCT); and (7) a protocol exploring views about life in Samoa, Hawaii, and California. This protocol focused primarily upon economic and social perceptions.

The questionnaires generated hundreds of responses to objective and open-ended questions, which were either coded or subjected to content analysis. To aid in the reduction of this vast array of information, we created a number of indices which combined data that were measures of the same variables. These indices are listed in Table 2.

Another of the indices concerned adaptive strategies. The specific questions and possible responses are presented in the Table 3. The approach follows that of Graves and Graves (1977, 1979), but some questions were altered to be more appropriate for the present sample. In their study of Samoan immigrants to New Zealand, Graves and Graves asked questions related to occupation, job-seeking behavior, and living arrangements. Our sample was younger, largely unemployed, and non-migrant, so we focused instead on daily life situations. Paralleling the Graves' study, the three categories of personal adaptive strategy were kin (family), peer (friends) and self. A score was derived in each category for each subject in the study. The potential range was different for each category, since some questions allowed only two alternatives while others permitted multiple responses. Thus some questions discriminated only between family and friends, while others discriminated only between

TABLE 2

INDICES AND COMPONENTS

Index	Composition
AMBITION	An index rating the individual's aspirations for future achievement. Scores from 0 to 4.
ANTISOCANG	Degree of antisocial behavior response to anger (0 to 4).
ASKHELPNO	Number of people named as supports from whom ego would not seek help (0 to 4).
ASKHELPYES	Number of people named as supports from whom ego would seek help (0 to 4).
BORROWNO	Number of people named as supports from whom ego would not borrow money (0 to 4).
CALVIEW	Index of perceptions of life in California. 24 points ranging from 12 (unfavorable) to 24 (favorable).
COMMUNITY	Index of involvement in local community, including number of organizations, position as officer, number of community-based activities (0 to 11).
COMPETE	Self report of competitiveness from CPB structured interview (0 to 8).
DENSITY	Sum of frequency (0 = yearly to 3 = daily) of interaction multiplied by number of named supports (range from 0 to 45).
DENYANG	Degree of denial affect response to anger (0 to 12).
DISCUSANG	Degree of discussion behavior response to anger (0 to 10).
DISPANG	Degree of displacement behavior response to anger (0 to 6).
EXPRESSANG	Degree of expressive affect response to anger (0 to 11).
FAMELYRELY	Index of the locus of reliance either family or self (0 to 16).
FEELPRES	Intensity of pressure felt during daily activities, a measure of coronary prone behavior from the CPB (0 to 7).
FINANCE	Index of financial arrangements describing giving and receiving of money between ego, family, and friends (0 to 4).
GIVEHELPNO	Number of individuals named as supports would not help (0 to 15).
GIVEHELPYES	Number of individuals named as supports would help (0 to 12).
HAWAIIVIEW	Index of perceptions of life in Hawaii (24 points ranging from 12 to 24).
INAFFECTANG	Degree of inhibitory affect response to anger (0 to 12).
INHIBANG	Degree of inhibition behavioral response to anger (0 to 11).
INTENANG	Intensity of anger—sum of the intensity of perceived anger resulting from several classes of situations indices (0 to 11).
JOBIND	Index of job seeking behavior including present employment status, expectations for future employment, working history, and parents' working history (0 to 4).
LENDNO	Number of listed supports ego would not lend money (0 to 15).
LENDYES	Number of listed supports ego would lend money (0 to 12).
MCCT	Sum of correct answers on Middle Class Conceptual Test (0 to 24).
MOVEIND	Sum of number of past moves, number of schools attended, travel abroad, attendance of schools abroad (12 to 32).
NUMFRSUP	Numbr of friends named as supports (0 to 12).
NUMHOUSE	Number of residents in ego's house (2 to 19).
NUMHSSUP	Number of household residents named as supports (0 to 8).
NUMRELSUP	Number of relatives named as supports (0 to 12).
NUMSUPP	Total number of individuals named as supports (1 to 15).
OTHERRELY	Index of reliance on others as opposed to self (0 to 4).
PAGOVIEW	Index of perceptions of life on Tutuila (24 points ranging from 12 to 24).
PROTESTANG	Degree of protest behavior response to anger (0 to 9).

TABLE 2 *(continued)*

RELFRIEND	Index of relations with friends and neighbors ranging from close (0 to 8).
REMITTANCE	Remittance pattern—no exchange (0), to receiving (1), to giving (2), to giving and receiving (3).
RESPPRESS	Index of intensity of response to feelings of pressure, from CPB structured interview (0 to 6).
RFAMILY	Index of relations with family minimal (0) as opposed to extensive (4).
SCT	Sum of correct answers on Samoan Conceptual Test (0 to 21).
SENSERESP	Feelings of a sense of responsibility toward others. Taken from the CPB structured interview (0 to 6).
SUMRELSHS	Sum of relations with supports living in the same household (6 to 47).
TIMEO	Index of time orientation from CPB structured interview (2 to 29).
TRADITION	Index of orientation toward Samoan tradition, sum of SCT score, belief in the power of traditional hierarchy, and membership in Samoan churches (1 to 40).
TYPEA	Sum of WORKO, TIMEO, COMPETE indices ranging from 3 to 40, representing a continuum from Type A to Type B.
VILLAGEVIEW	Index of perceptions of Samoan village life (12 to 24).
WORKO	Index of work orientation from CPB structured interview (0 to 9).

TABLE 3

CRITERIA FOR PERSONAL ADAPTIVE STRATEGY

	Answer Category		
Questions	Kin	Peer	Self
Who decides for you or with whom do you discuss decisions concerning			
Entertainment	parents/kin	friends	self
Chores	"	"	"
Who are friends	"	"	"
Education	"	"	"
Job	"	"	"
Where you live	"	"	"
Daily activities	"	"	"
Who do you try to please?	parents	. . .	self
Who do you prefer to live like?	kin	peers	. . .
Are relatives helpful?	yes	. . .	. . .
Are friends helpful?	. . .	yes	. . .
Who helps with problems[a]			
With relatives?	kin	friends	self
With friends?	kin	friends	self
With neighbors?	kin	friends	self
Persons you feel close to[b]	relatives	friends	none

[a]Some possible answers included "both friends and family," so one point was added to each class.

[b]Up to nine persons could be named. One point was given in the appropriate category for each kin or friend named. One point was given in the self category for each of the nine spaces which remained blank. The final number within each category was totaled and those in the top third of the category were given an index point. Thus, only those in the top of each category received an index point for answers on this item.

self and family. In contrast, the question concerning whom respondents "felt close to" could include some family, some friends, or no answer. In this question there was a total of nine possible responses. Some informants filled all spaces, naming nine individuals, while others filled in fewer than nine names. The blank spaces were counted as "none" (see Table 3 for details). The final number of responses in each category was summed yielding three category responses rather than one overall personal adaptive strategy as discussed by Graves and Graves.

The relationship between personal adaptive strategy categories was explored by correlational analysis. As might be anticipated, the self-reliant strategy showed a significant negative correlation with the other two categories (-0.65 with kin, -0.30 with peer, both $p < 0.05$), while peer- and kin-reliance did not significantly intercorrelate (0.05). Thus, those favoring a self-reliant strategy were likely to score low on the two other-oriented strategies; those empoying peer- and kin-reliant strategies were less likely to commit exclusively to one or the other.

We performed an analysis of variance on each of the three strategies, with migration status and gender as independent variables. Gender was included as an independent variable to account for possible gender differences in adaptive strategies (see Graves, 1984). There were no significant pre-migration differences in the self- or kin-reliant strategies; however, there were significant differences in peer-reliant strategies Migrants show statistically higher peer-reliant scores (mig $= 1.7$, non-mig $= 1.2$; $F = 5.6, 1,83$ d.f., $p < 0.01, 87$ cases). Thus, the premigration difference in personal adaptive strategies was a stronger peer-reliance by those who subsequently migrated, but no significant difference in self- or kin-reliant scores.

Additional analysis was performed using a discriminate function with the items listed in Table 2 employed as independent discriminating variables. Migration status was the dependent variable. The procedure used was SPSSPC + with the reduction in unexplained variance (MINRESID) as the criterion. The goal of the technique was to divide the two groups on the basis of the independent variables listed in Table 2 with the criterion being the reduction in unexplained variation (error). This procedure requires a complete set of variables for each individual. Because some protocols were incomplete, or some questions were not answered, a complete set of variables was not available for each individual. Complete data were available on 55 non-migrants and 23 migrants. The analysis was performed on this sample. The numerical loss from migrants and non-migrants was approximately equal.

The discriminant function employed a pooled data set including males and females. Table 4 summarizes the 12 variables which accounted for 53 per cent of the variation between migrants and non-migrants. These variables are derived from all protocols and discriminate in four areas—social support, social relations, anger and responses to anger, and perceptions of life in various sites. The migrants reported a greater number of individuals from whom they obtain social support and more interaction with them (NUMSUPP and DENSITY). They also reported better relations with their families (RFAMILY), and more involvement in their communities (COMMUNITY). Although

scoring higher on our competition index (COMPETE), migrants reported feeling less pressure to achieve (FEELPRES). When angry they reported a higher frequency of protesting (PROTESTANG) and displacement (DISPANG, taking anger out on someone other than the one who provoked it) responses than non-migrants. However, they reported being less emotionally expressive (EXPRESSANG) of their anger. Migrants also viewed life in both Samoa (PAGOVIEW) and in California (CALVIEW) slightly less favorably than non-migrants. They further reported less favorable relations with friends and neighbors (RFRIEND) The procedure distinguished migrants from non-migrants in 83.3 per cent of the cases.

We additionally examined responses to five questions specifically related to anticipated migration. One question directly addressed whether our respondents anticipated migrating or not. If they did anticipate migrating, they were asked how certain they were that they would move in the near future. They were also asked questions related to where they would migrate, with whom they would live, and why they wanted to migrate. No differences in expectations or certainty were found, nor were there appreciable differences in answers to the question concerning destinations. When predicting with whom they would live, should they leave Samoa, non-migrants favored parents' siblings, while migrants favored their own siblings. The migrants reported that they were motivated to move to further their own education; non-migrants more often reported wanting to travel abroad in order to visit relatives.

DISCUSSION

The most important single discriminator (Table 4) for distinguishing between migrants and non-migrants is the size of social support networks. That networking is a useful adaptive tool during acculturation and after migration has been demonstrated. Dressler (1982), for example, reported that a larger base of social resources favored individual coping and adaptation to culture change in the West Indies. Those without the benefit of larger networks were more predisposed to illness. Like-

TABLE 4

DISCRIMINATING VARIABLES LISTED IN ORDER OF IMPORTANCE

VARIABLE	RANK	RESIDUAL	MEAN	
			Migrants	Non-migrants
NUMSUPP	1	0.89	7.3	5.4
COMMUNITY	2	0.81	6.0	4.4
DENSITY	3	0.74	18.0	14.6
FEELPRES	4	0.70	2.6	3.3
CALVIEW	5	0.64	16.8	17.3
PAGOVIEW	6	0.62	18.2	18.4
RFAMILY	7	0.59	2.7	2.1
PROTESTANG	8	0.56	2.5	2.1
DISPANG	9	0.53	1.7	1.2
EXPRESSANG	10	0.51	3.1	3.4
RELFRIEND	11	0.50	3.9	4.4
COMPETE	12	0.47	4.0	3.7

wise, Ablon (1971) has emphasized the critical role played by social networks for migrant Samoans coping with a disaster in San Francisco. Both Janes and Pawson (1985) and DuBois (1987) found larger social networks negatively associated with health risks in migrant Samoan communities. The present observations add support and suggest that there may be a pre-migration selection criterion favoring the ability to network.

Migrants also apparently had a higher quality of network available, defined as the number of supports named multiplied by the frequency of interaction (DENSITY). Frequency codes ranged from 0 for yearly to 3 for daily interactions. The range of the index was from 2 to 45, the latter representing almost daily interaction with a large number of supports. Table 4 shows that the density of the networks is higher in those who migrated. Some of that quality may also be manifested in the higher degree of community involvement (COMMUNITY) by the migrants.

As pointed out above, kin-reliance has often been pointed to as an important requirement for successful adaptation within Samoan migrant communities, but it does not appear to be a selective criterion. While family relations (RFAMILY) is an important discriminator (Table 4), family reliance (FAMRELY) is not. A possible explanation is that individuals who are peer-reliant in Samoa are the best bets for making a successful adaptation to life in urban environments, even if they may become more kin-reliant in the new contexts. In Samoa, peer-reliance may signal the ability of individuals to form strategic relationships with non-kin, a skill that would have distinct payoffs in migrant communities. Thus, in the short term, peer-reliant individuals may be more successful obtaining employment and interacting with non-Samoans in a productive manner (Graves and Graves 1977). In the longer term, those who are successful in building non-kin networks may be less likely to return prematurely to Samoa.

It is also noteworthy that peer-reliance is independent from kin-reliance as seen by their low level of correlation ($r = 0.05$). This finding seems particularly significant since either over- or under-reliance on kin could prove unsatisfactory to the migrant community-at-large. Highly kin-reliant migrants could become a burden if their demands taxed already scarce resources, and they might also be seen as greater employment risks. That economics is an important criterion in selecting potential migrants among Samoans has been documented by several ethnographers (Shankman, 1977; Graves, 1984; MacPherson, 1978). MacPherson describes a typical dilemma: " 'There are three people waiting to come; we've got one work permit and one room to spare—who shall we sent it to?' They were looking for the person who was going to be the most obedient, the best risk. They were putting their money on the line and they wanted a return for their 'investment,' not trouble (p. 16)." In this context, obedience means getting a job, retaining a strong cultural identification, and remaining within the community. Selection for strong self-reliance, which is inversely correlated with kin- and peer-reliance, also involves risk. Self-reliant individuals might have difficulty fitting into the migrant community, since independence is counter to basic Samoan values. Furthermore, given the demands placed upon migrants for re-

ciprocal give and take, self-reliant individuals would be less likely to remain active in the community. Peer-reliance thus seems an optimal strategy for the individual and for the community.

There are several important limitations to this study which derive from the character of the sample. The sample cannot be considered representative of older or younger groups, or of migrants from Western Samoa. Children are more likely to migrate as part of a family and probably escape the individual selection criteria we have described. Middle-aged and elderly migrants are subject to other criteria with health, financial support, and family members living abroad as important components (Hull, 1979; Holmes, 1978).

An additional limitation results from the circular nature of Samoan migration (Janes, 1986; Franco, 1987). Samoans are extremely mobile and those living abroad often travel to Samoa (DuBois, 1987). Many migrants permanently return to Samoa after having lived abroad for several years. Wendt (1972) has described many aspects of this process. Hard-working couples often aim to retire in Samoa with adequate income to support a Western lifestyle. Children born abroad may be sent to Samoa to learn about Samoa. Finally, there are those migrants who become disenchanted with life abroad and are motivated to return home. Only the broadest outline of this process is known, and the numbers of circular migrants remain obscure (Janes, 1986). We do not believe that our results hold for all these categories of migrants.

In summary, our analysis supports the view that migration is a selective process among young Samoans, that it is not random for this age group. It further appears that the selection process may include kinsmen abroad and is based upon a number of social and psychological variables that favor adaptability after migration. These variables include selection for a stronger peer-reliant adaptive strategy, larger networks of social support, better relations with family, and a higher degree of community involvement. Although the migrants did report a slightly less favorable outlook on life in Samoa and abroad as well as less satisfying relations with friends and neighbors, they appear to have been the better socialized individuals and possibly were more socially adept. While not experiencing pressure to achieve, they nevertheless had personal ambitions fueled by competitiveness and saw migration abroad as a way to gain educational advantages. In dealing with anger, they were less likely to engage in expressive displays than to make direct protests or redirect (displace) their responses, presumably to more socially acceptable targets. In short, they appear to be a better-adjusted segment of this population. This finding, in turn, suggests that less well-adjusted individuals are more likely to remain at home, rather than to escape their plight through emigration.

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