SUICIDE IN MICRONESIA AND SAMOA: A CRITIQUE OF EXPLANATIONS

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The rapid and extraordinary increase in youth suicide rates in several Pacific countries during the past two decades has raised profound questions about social change in these societies, and the impact of these changes upon cultural integration, psychological adaptation, and mental health. Suicide--and assumptions about the causes--has become a common topic in writings on Micronesia, from articles in popular magazines to papers in technical social science journals. Researchers have contributed to the growing literature on suicide in the Pacific and have proposed differing theoretical explanations for the phenomenon. Challenged by the epidemic rates of suicide, social service workers and mental health practitioners have spearheaded various community responses, preventive intervention strategies, and regional networking efforts.

Regional workshops dealing with the suicide issue have been convened nearly annually in the Pacific over the past decade, and have provided a forum for cooperative efforts by researchers and service providers. Important new insights into the causal dynamics of the problem have emerged from several of these workshops. However, theoretical writers and practical workers in the area of suicide have understandably felt some impatience with each other's problem-solving approach and style of discourse at these workshops--hone approach based upon inductive analysis and the other based upon empathetic compassion. Recently, for example, a young social worker addressed a Micronesian regional powwow on substance abuse and suicide, and advised the

audience to abandon any attempt to find explanations or reasons for suicide in such things as "family change." The individual act of suicide, the counselor told his listeners, is always too complex to understand. The counselor then led the audience in several "thought exercises" intended to dramatize the need for counselors to be empathetic with suicidal clients and to be sensitive towards others' pain.

My disagreement with this position has prompted my own critical reflection on whether, and to what degree, the various explanations proposed over the past fifteen years have succeeded in elucidating the causes of suicide in the Pacific. This article critically examines the theoretical dialogue that has been taking place among a small group of researchers who have attempted to understand the reasons for the growing suicide rates in the Pacific.

My aim here is not simply to critically review ethnographic writing on Pacific suicide, but to contribute more generally to the logical analysis of ethnographic arguments. By concentrating on differing theoretical positions and perspectives, I do not mean to imply that researchers have espoused single-cause theories of suicide. In all of the articles concerning Pacific suicide cited here, the writers have considered multiple causal factors that influence suicide and self-destructive behavior. However, we are better able to judge the logical structure and adequacy of these theoretical arguments if we extract particular lines of reasoning from their more general contexts.

The suicide phenomenon in Micronesia and Western Samoa is very nearly unique in cross-cultural comparison, owing to the extremely high incidence among adolescent men, the enormous disproportion of male suicides over female suicides, the rapid onset of high suicide rates that occurred in the 1970s, and the tight cultural patterning in method and motive and other characteristics of suicide acts and typical actors. Epidemiological characteristics and social patterns of Pacific suicides and relevant cultural particulars of Micronesian and Samoan society have been described in detail in a number of published articles, but for the sake of brevity and focus they will be reviewed here only as they bear on particular theoretical arguments.

Family Change, Version 1: Loss of Traditional Family Functions

The relationship between family change and youth suicide in Micronesia was first suggested by Hezel (1976) in an important early paper, which was also the first article to call attention to increasingly high rates of suicide among Micronesian adolescents. Hezel summarized

information from twenty-three cases of suicide that had occurred throughout Micronesia between mid-1975 and mid-1976. Despite the small sample of cases, and the rather haphazard case-finding method (students and staff at Xavier High School compiled a list of suicide cases known to them, which was checked and corrected by informants outside the school), the suicides revealed some clear patterns. Male suicides predominated over female by a ratio of 10.5 to 1, and nearly 80 percent of the suicides were among young people, aged 16-26. Outer-island communities were not experiencing suicides at anywhere near the rate found in the communities closer to the urban centers and port towns. Chuuk had "the unenviable title of the suicide capital of Micronesia" (Hezel 1976:9). And virtually all the suicides "were precipitated by an argument or misunderstanding between the victim and someone very close to him: in some cases his wife or girlfriend, occasionally his friends or drinking companions, but more often members of his own family" (Hezel 1976:11). Although the data on Micronesian suicides have expanded from Hezel's initial sample of twenty-three in 1976 to over seven hundred in 1990, the very general patterns revealed in the initial sample have proven remarkably representative of the larger population of suicide cases (Rubinstein n.d.).2

Hezel suggested that the increase in suicides was a result of the loss of community cohesiveness, especially at the level of the family. His reasoning was well founded upon sociological theories of suicide first proposed in 1897 by Durkheim, who maintained that national rates of suicide are correlated with the strength and stability of social bonds linking individuals to their families and communities. In particular, Durkheim proposed one type, "egoistic suicide," that results when social integration weakens and individuals are under less control by society (1951: 208-216).

Hezel hypothesized that "over the years the Micronesian family has gradually relinquished to other agencies many of the roles that it once exercised on behalf of its members," such as providing education, enforcing community rules, punishing violators of these rules, caring for the ill, and offering recreation and entertainment (1976: 12). As a consequence, he suggested, families have become largely impotent, lacking the necessary cohesiveness to give love and affective support to the young and to exercise effective control over them. The weakening of the mutual love and respect that bonds youth to their families and communities results in their lowered self-esteem, anger at those who refuse to accept them, shame at their own feelings of worthlessness, and profound self-pity--all of which predispose them to suicide (Hezel 1976: 12-13).

Family Change, Version 2: Structural Change towards the Nuclear Family

Since Hezel's initial, tentative explanation of Micronesian suicides in terms of changes in family function, he has substantially revised and extended his argument in two important regards. First, he modified his position that Micronesian families have suffered a global loss of traditional functions due to new governmental agencies, and instead he focused on a more specific aspect of family change: a shift from lineage structure to nuclear household structure. Indeed, the current theoretical formulation reverses the argument of the earlier one: families have not *lost* their traditional roles, but rather have *gained* new functions and responsibilities. Second, Hezel inferred that the catalyst for this structural shift "seems to have been the increasing availability of cash income to the father of the family" (1987:289). This line of reasoning is elaborated in two articles (Hezel 1987, 1989a), and incorporated into other writing (Hezel 1989b).

Starting with an analysis of social structural change and suicide in Chuuk, Hezel expanded his scope to include Palau, Yap, Pohnpei, and the Marshall Islands (1987, 1989a). He argued that there is an underlying general similarity in family organization and in the structure of parental authority over children within these five Micronesian societies, which he described as one of "delicate balances" between the maternal and paternal kin (Hezel 1989a:59). Anthropologists have used the term "complementary filiation" or "bilaterality" in describing this feature of kinship systems, in which there are balanced and complementary functions between the male and female lines (Fortes 1953; Ritchie and Ritchie 1989:104-105). In Chuuk, for example, a matrilineal society in which men traditionally resided and worked on their wife's land after marriage, the authority of a man over his sister's children acted as a counterweight to the authority of the sister's husband, that is, the children's father. The roles and authority of the maternal uncle and father were complementary (Hezel 1989a:60). This produced a system in which authority over children and adolescents was shared between two groups of kin, those of the mother and those of the father.³

In practice, this system provided a good deal of flexibility in parentchild relations. On the child's side the flexibility allowed multiple kin options and supports for children. As Hezel infers, "If a young man experienced what he felt was harsh treatment at the hand of one [individual], he could usually find another to plead his cause" (1989a60). The distribution of supervisory control over children tended to prevent the abuse of authority by providing children with other kin as advocates to mediate the conflict or to offer temporary refuge. On the parent's side the system provided the advantage of multiple "fathers" and "mothers" to assume the responsibility for nurturing and disciplining the children. The full responsibility for the children did not fall upon the parents alone.

As Hezel points out, the principal rationale for this lineage system was not to control children but to control land resources. Land in Micronesian societies was traditionally the basic means of production. Social structure and family organization were grounded in the corporate ownership of land by a group of people (generally a lineage or clan), their residence on that land, and their transmission of land rights through the male or female lines. As the monetization of the Micronesian economy proceeded in the 1960s and 1970s, the primary household resource increasingly became cash rather than land. Money, especially in the form of income from salaried jobs--the main source of household capital in Micronesia--tended to weaken the land-based social system of lineages and clans.

Hezel indicates how the traditional family system in Micronesia has changed during the past two or three decades. As lineages lost their importance, the role of the lineage head declined, both in supervising food production and distribution as well as in exercising authority over adolescents. "Consequently, the father of the family has assumed the principal responsibility for feeding his own household . . . [and] has assumed final authority over his own children" (Hezel 1989a:61). According to Hezel, parents now find themselves burdened with new and unfamiliar responsibilities, which traditionally had been shared with the wife's lineage, such as disciplining their children, overseeing their children's schooling, and advising on their children's choice of companions and marriage partners. The most onerous of these new responsibilities for parents is managing their postadolescent sons. Hezel infers that the concentration of familial authority has created an unprecedented potential for serious conflict in the family circle, and that the adolescent suicides result from this conflict (1987:289-290; 1989a:67).

Hezel's argument, reduced to its logical skeleton, takes the form of the following four-step causal sequence:

- (1) monetization \rightarrow (2) nuclearization of family structure \rightarrow
- (3) increased authority of parents over children \rightarrow (4) parent-adolescent conflict \rightarrow adolescent male suicide.

Although this diagram risks oversimplifying an explanatory model of considerable complexity, it facilitates a critical examination of each causal link in the line of reasoning.

We can begin with the immediate antecedent of suicide in this model: term (4), parent-adolescent conflict. Overall, the data strongly support the conclusion that the etiology of Micronesian suicides lies in intergenerational conflict between adolescents and their parents. This link is substantiated in a number of articles summarizing the reasons attributed to suicides by friends, family members, and suicide attempters themselves (e.g., Hezel 1984a; Rubinstein 1985). Typically, the scenario preceding suicide in Micronesia is a quarrel between a young man and his parents. The young man feels that his parents have failed in their love and support of him, usually because they have refused a request-often for something as minor as a few dollars or a late-night plate of food--or because they are making unjustly harsh demands upon him and disciplining him unfairly. His suicide is an extreme expression of his anger and sense of acute rejection by his parents. This situation characterizes about 52 percent of the 620 Micronesian suicides between 1960 and 1989. Any explanatory model of Micronesian suicides must account for these parent-adolescent conflicts as the triggering events for suicide. The strength of the "family structural change" model under review is its attempt to locate these typical situations of intergenerational conflict in a recent historical process of social structural change that gives these events their psychological significance.

Although the majority of Micronesian suicides follow the culturally patterned scenario of parent-adolescent conflict described above, there are significant variations in the etiology of suicide from one cultural area to another in Micronesia. Parent-adolescent conflict is the predominant triggering event for suicide in Chuuk (50 percent of the cases) and Pohnpei (59 percent), but less so among Palauans (28 percent) and Marshallese (39 percent). In the Marshall Islands, scenarios of sexual jealousy or anger between spouses or lovers are the predominant occasions for suicide (42 percent). The "family structural change" model is more adequate as an explanation of the recent onset of intergenerational conflict in Micronesian families than it is in explaining an increase in gender conflict. Consequently the model has more value for understanding the increase in suicides in the central Caroline Islands than in the eastern and western peripheries of Micronesia.

We can consider terms (2) and (3) together: the nuclearization of family structure leading to an increased or concentrated authority of parents over children. Both of these terms are highly abstracted descrip-

tions of a complex shift in Micronesian family structure and function. "Nuclearization of family structure" implies a wide set of changes in behaviors, cultural norms, and values. This includes changes in the ownership of and usufruct rights to resources such as land and buildings, the distribution of goods such as food and cash, the circulation of children through adoption and fosterage, the lateral extent of kinship rights and obligations, and the corresponding attitudes and beliefs regarding kinship relations. From the earliest years of the American period in Micronesia, anthropologists have commented generally on the shift from a "cooperative" or "collective" orientation to a more "individualistic" society (e.g., Fischer 1950:17). There are also some observations of the narrowing of food redistributive networks under the impact of monetization (e.g., Dahlquist 1972:241-246). Although the "nuclearization" hypothesis seems plausible, however, the data are still anecdotal and incomplete, and there has not yet been a systematic study showing the extent to which traditional lineage and clan organization have been replaced by a nuclear family organization in Micronesia.⁴

Likewise, systematic ethnographic data are lacking on the extent to which authority over children has become concentrated increasingly in the hands of the parents, rather than being shared more diffusely among the senior individuals of the mother's as well as the father's lineage. Hezel(1989a) has summarized some of the ethnographic data that bears on parental authority. Complicating the picture of parental authority are cultural differences from one area to another in Micronesia and shifts in authority over the course of life-span stages within a single culture (Hezel 1989a:59-61).

Generally, however, the ethnographic literature points to the central role of the parents rather than the lineage head as authority figures over children, and the primary claim of the father even in so thoroughly matrilineal and matrilocal an area as Chuuk (Fischer 1950:35; Gladwin and Sarason 1953:52, 73). The prerogative of the mother's brother in preventing the father's mistreatment of his children is also well documented (e.g., Gladwin and Sarason 1953:86). But the ethnographic record is not very helpful in determining whether "complementary" kinship figures functioned mainly in times of emergency--such as when a parent died or became abusive-- or whether these people also had important everyday roles and responsibilities in supporting children and adolescents.

If the mother's brother and other extraparental figures wielded authority mainly in times of emergency--as a sort of "safety net" when parents failed or died--then their diminished importance should not be a reason for suicide. Very few, if any, of the suicides are occasioned by a family crisis or the death of a parent. Typically the situations leading to suicide, as described briefly above, are rather minor rejections and disappointments experienced by adolescents.

Primary authority over children and adolescents generally in Micro nesia is vested in the head of the household in which the child or adolescent resides (e.g., Rubinstein 1979:245). Thus a more detailed understanding of changes in family structure and residence patterns would shed considerable light on the shifts in the dynamics and distribution of authority over children. For this reason, terms (2) and (3) in the explanatory model are closely linked. It is fair to say that the ethnographic data are inadequate to verify these inferred changes, and the terms remain as conjectural links in a causal chain leading to suicide.

From a psychological standpoint, this explanatory model appears focused more upon the parents, who have assumed "new and awesome responsibilities" (Hezel 1989a:67), than upon the male adolescents, who are at the greatest risk for suicide. One might ask, therefore, whether today's generation of the parents of adolescents--and especially the fathers--are displaying symptoms of stress analogous to their sons' epidemic of suicides. If the adolescent suicides are truly a result of increased expectations and demands upon the parents, leading to sharply increased conflicts between the generations, one would expect this conflict to take some toll upon the parents as well as the adolescent children.

Finally, we can consider term (1): the monetization of the Micronesian economy. Despite some influx of trade goods in the nineteenth century, Micronesian families remained nearly entirely self-sufficient until shortly after World War I, relying upon their own subsistence gardening and fishing (Hezel 1984b). Per capita income did not begin to increase significantly until 1950. Between 1950 and 1977 real per capita income quadrupled in Micronesia, with the most rapid increase occurring in the mid-1960s (Hezel 1989a:65). This point is well substantiated. However, Hezel's inference that Micronesian social structure changed in tandem with the rise of monetization is debatable, and he has probably underestimated the extent of change in lineage and clan functions that ensued well before the postwar onset of monetization. Family structures and lineage structures serve functions other than economic, and economic changes are not necessarily in lock-step with social structural changes.

We need to distinguish two levels of social structure, one being the domestic household level or residential-commensal group (those people who regularly live and eat together) and the other, at a more inclusive

level, the lineage or village. At the beginning of the postwar period, domestic households evidently still functioned in a largely traditional manner, and "traditional family structure remained very much intact" (Hezel 1989a:64). On the other hand, the lineages and clans had already lost significant aspects of their corporate functions and political integration. The social disruption caused by the Japanese occupation and wartime conscription of male labor in Micronesia, coupled with depopulation and other cultural changes, led to the erosion of clan and lineage functions well before household economies experienced significant monetization. By the end of World War II much of the material cultural embodiments of the clans and villages--especially the large meetinghouses traditionally maintained by descent groups or villages in Palau, Yap, and Chuuk--had fallen into disrepair and had been abandoned (Barnett 1949:164-166; Lingenfelter 1975:185-186; Fischer and Fischer 1957:101-102). This loss is relevant to an understanding of adolescent male suicide, since these meetinghouses were a social focus of senior male activities and of adolescent male residence and socialization. In other island communities, such as Ulithi (Lessa 1964), the accumulation of substantial social changes at the lineage and village level has been documented well before there was significant monetization of household economies.

What can we conclude about the explanatory model under review? The typical situational precursors of suicide in Micronesia clearly require an explanation grounded in family sociology. The model of family structural change at hand is sociologically plausible and historically specific. It has an appealing logical-causal form that links macroeconomic changes to family structural changes, to authority-dependency conflicts between parents and adolescent children, and finally to suicidal outcomes. The analysis may also be useful for understanding suicides in Western Samoa and other Pacific societies (Hezel 1989a:70). However, the model is based on several assumptions for which the evidence is ambiguous or absent, especially the impact of monetization on family structure and the change in parental authority over adolescents. The model deals with family structural change on too general a level to explain why young men in particular should be at such greater risk for suicide than women or older men. On the other hand, its focus on intergenerational conflict in the family is too specific to explain other types of suicide in Micronesia, most notably the suicides committed (predominantly by Marshallese men) out of sexual jealousy and anger towards spouses and lovers.

Blocked Opportunity

A quite different explanation of suicide has been proposed in regard to Western Samoa (Macpherson 1984; Macpherson and Macpherson 1985, 1987). If valid, this explanation may be usefully applied towards understanding Micronesian suicides. Numerous parallels have been shown in the suicides in these two areas, such as the emotional underpinnings of anger and shame and the dynamics of family conflict resolution (White 1985), the recent rates of increase (Hezel 1989a:46), and the epidemic focus among young males (Macpherson and Macpherson 1987: 305-306).

The Macphersons distinguish two different types of suicide in Western Samoa, which they label "altruistic" and "anomic" following Durkheim's (1951) proposed ideal types. "Altruistic suicides are committed by individuals discovered . . . in violation of certain moral norms, or legal proscriptions" (Macpherson and Macpherson 1987:311). According to this argument, public shame over one's misconduct and distress over its effect upon one's kin group lead the individual to commit suicide. Intense shame can become intolerable in Samoa: the emotion acts as a powerful social sanction owing to the authoritarian nature of the society, the marked dependence of individuals upon their kin group or aiga, and the strength of external controls on individual behavior, "Death is better than shame," as one Samoan proverb states (Macpherson and Macpherson 1987:311). In other Polynesian societies, such as Tikopia (Firth 1967), shame also appears to be the predominant emotional precursor to suicide. "Altruistic" suicides described in Samoa appear quite similar to "shame suicides" described in Micronesia (Hezel 1984a:202-203). In both societies, they appear to typify a traditional form of suicide, and may account for a residual rate (Macpherson and Macpherson 1987:311).

"Anomic" suicide--the second type proposed by the Macphersons-has evidently become increasingly dominant, and has taken place "against a background of change which has limited opportunities" for upward mobility and out-migration available to Samoan adolescents (1987:317). Among a number of factors, the authors first discuss demographic ones: population density and dependency ratio. Increased population density creates greater pressure on land resources, which influences the "life chances" of youth, especially in agricultural areas. However, the population density factor is complicated by significant regional variations in Western Samoa: while national population density increased in the 1970s, some rural villages actually experienced pop-

ulation decreases, as residents left the region for more urban areas. Population density alone is not a very useful indicator of the changing situation of youth (Macpherson and Macpherson 1987:318).

The dependency ratio measures the burden on economically productive members of society, by relating the number of dependents (those too young or too old to work) to the number of working-age individuals. Theoretically this factor should affect the situation of Samoan youth, who play an important role in food production and village agricultural labor. An increasing dependency ratio in a nongrowth economy leads to greater pressure on the economically active, and consequently to a lower standard of living. However, dependency ratio is also complicated by regional and subregional variations, by the effect of out-migration, and by certain technical demographic assumptions about age at marriage and age at which people enter and leave the productive labor pool. Calculations of the dependency ratio normally include all individuals aged 15-64 as potentially economically productive, and very different ratios can be calculated when narrower age brackets are used, These factors limit the usefulness of the dependency ratio as an indication of the situation of youth. As the Macphersons point out, people's perception of demographic facts may be more significant than the facts themselves (1987:320). Also, the national dependency ratio in Western Samoa actually declined in the 1970s, which suggests an improvement in the situation of the economically active (Macpherson and Macpherson 1987:318).

Social factors--education and the media--also contribute to suicide in Western Samoa, according to the blocked-opportunity model. Both have the effect of raising the aspirations and expectations of youth. During the 1970s in Western Samoa the number of students receiving secondary education more than doubled, and those receiving tertiary education more than tripled, while the population increased by only 6.6 percent (Macpherson and Macpherson 1987:320). Radios, newspapers, television sets, cinema houses, and mobile cinemas all increased dramatically in the 1970s. Both education and the media have introduced and glamorized images of alternative life-styles, and promoted higher expectations for wage employment to support these life-styles.

The Macphersons argue that aspirations of young Samoans are being raised by these social factors while at the same time their opportunities are being eroded. The usual routes to power and privileged life-style in Samoa have been to become a chief, a pastor, a wage earner or entrepreneur, or to emigrate. Because the number of chiefly *(matai)* titles is more or less fixed and current titleholders enjoy a steadily increasing life

expectancy, the road to chiefly power for young people is long and uncertain. Likewise, pastors make up a small, privileged group; successful completion of theological college is not a goal that many young people can realistically achieve. Wage employment and entrepreneurial activity are also becoming more difficult to attain; the slow growth of the Western Samoan economy is not keeping pace with the growing numbers of school-leavers and the surplus of educated labor has depressed the wage structure (Macpherson and Macpherson 1987: 322-323).

During the 1960s and 1970s the frequency of travel to New Zealand and American Samoa led Western Samoan youth to consider out-migration as a rite of passage, part of the anticipated life cycle. Opportunities rapidly declined, however, as the New Zealand economy slowed and immigration barriers were raised against Western Samoans entering Australia, American Samoa, and the United States. The Macphersons note that "it is significant that the decline coincides with the increases in the rate of suicide among those who under normal circumstances might have been offered opportunities to live and work outside of Western Samoa" (1987: 323).

Frustrated by the limited opportunities for upward mobility and for achieving culturally desirable goals, youth respond in a culturally characteristic manner, a retreatist anger known as *musu* in Samoan. The state of *musu* is marked by a withdrawn and sullen behavior, a stubborn refusal to communicate with others, and an apparent lack of interest in social life. Normally this prompts others to try to restore the relationship. In situations perceived as especially frustrating or anger-provoking, a youth might run away to another village. If the young person's sense of injury is intense, he or she might respond with rage, lashing out and breaking things, or, in extreme situations, the individual may commit suicide during or shortly after the episode of rage (Macpherson and Macpherson 1987:323).

The blocked-opportunity model may be seen in its essence as two opposed structural factors causing frustration and anger, which lead to suicide.

(1) increasing aspirations
 (education, media)
 (2) decreasing opportunities
 (demographic and economic factors, out-migration
 restrictions)

→ (3) frustration, anger → suicide

The structural factors proposed in this model apply especially to the situation of youth, and thus the model focuses more specifically on the group at risk for suicide than does the alternative model of family structural change reviewed above. However, the data do not consistently support the conclusion that demographic factors have led to decreased opportunities for youth in Western Samoa. Other Pacific countries have experienced similar combinations of social and demographic phenomena but have not experienced the same rise in youth suicide rates, The Macphersons point out that "these factors do not alone constitute a satisfactory explanation" and that "it is useful to look beyond these factors for those things which seem peculiar to Western Samoan society and might explain the unusually high rate found in Western Samoa" (1987:323).⁵

It is difficult to assess the validity of this explanatory model, because so few descriptions of actual suicide cases in Western Samoa are presented by the authors or published elsewhere. How many suicides fall into the "altruistic" type versus the "anomic" type? Of the six suicide cases presented as brief vignettes in an appendix (Macpherson and Macpherson 1985:67-68), two--a double suicide of two brothers who disputed with their *matai* father over the proceeds of their crop sale--fit the above model. Another case is the suicide of a rejected suitor. The remaining three cases seem to fit more or less closely the pattern of shame suicides. As an explanation of suicide, the blocked-opportunity model does not provide adequate linkage between the macrostructural factors (such as education and migration opportunities) and the situational patterns and particulars of the suicide cases.

Given the many parallels between the youth suicides in Western Samoa and in Micronesia, it may be instructive to assess the blocked-opportunity model against the recent changes in migration opportunities that have occurred in Micronesia. In November 1986 the United States ratified a Compact of Free Association with the Federated States of Micronesia (FSM) and the Republic of the Marshall Islands (RMI). Citizens of those two Micronesian countries acquired the right to freely enter the United States and its territories. Immediately after the compact was signed, Micronesian migrants, especially young men between the ages of 20 and 40, began taking advantage of the work opportunities in Guam, Hawaii, and the U.S. west coast (Hezel and McGrath 1989). Owing to labor shortages and low rates of unemployment in Hawaii and especially Guam, even those Micronesian immigrants without education or skills can readily find jobs in construction, service, and visitor industries. In the three years following the signing of the compact, the

number of FSM citizens on Guam increased nearly tenfold (Rubinstein 1990), and similar increases of RMI citizens on the U.S. west coast occurred (Karen Nero, pers. com., 1990).

The compact thus provided a "natural experiment" to test the blocked-opportunity model. Although other factors are certainly operating to limit economic opportunities for youth at home, the compact radically changed the life chances of those who chose to join the growing communities of Micronesian emigrants in Guam and the United States. Based upon the blocked-opportunity model, one would predict that the suicide rate would have dropped after the compact opened the door for emigration and new economic opportunities. On the contrary, the suicide rate in Micronesia, after leveling or perhaps declining in the early 1980s, began to rise again by the mid-1980s; and this rise has not been slowed perceptibly to date by the opportunities afforded by the compact.

In sum, the blocked-opportunity model may be "useful in explaining a general disaffection . . . which happens to coincide with particular structural changes in Western Samoa" (Macpherson and Macpherson 1987:326), but it has not provided a satisfactory explanation of suicide in the Pacific. The demographic factors are ambiguous and do not correlate well with the suicide rates, the macroeconomic and structural factors are not effectively linked to actual suicide situations, and the model's predictive adequacy fails when applied to the recent Micronesian situation.

Adolescent Socialization: Changes in Structures and Goals

I have described the relationship between youth suicide and recent structural changes in the stage of adolescent socialization in Micronesia in several papers (Rubinstein 1980, 1983, 1985, 1987). The explanation I have offered is based upon a specific conceptual model of Micronesian childhood and socialization, and combines elements from the "family structural change" explanation with a sociological theory of anomie. The explanation addresses particular features of the epidemiology of suicide: the onset of the "epidemic" in the mid-1960s and the shape of the suicide trend that followed, the concentration of suicides among males aged 15-24, the geographic differences in suicide rates, and the family conflicts that typically motivate suicidal actions.

In order to review the "adolescent socialization" explanation of youth suicide, it is necessary first to consider the conceptual model of childhood and socialization upon which my explanation rests. Socialization may be envisioned as a set of "goals" and "stages." Each society has its own socialization goals, the cultural values and behaviors that are desired and instilled in children. Societies have many ways of communicating these desired goals to children and of pushing children along the stages towards these goals. Formal ceremonies for children, formal instruction and institutions for learning, as well as the continuous informal interactions of children with their parents and caretakers, are all culturally aimed at producing "proper" behavior and attitudes.

Cultural differences among Micronesian societies make it difficult to generalize about socialization goals and stages. There may, however, be broad commonalities in patterns of childrearing and adolescence that underlie the rising suicide rates of the past two decades. Based upon research on socialization in Fais island, I concluded that a central cultural message of Micronesian socialization, which is reiterated in many social contexts, is the importance of developing and maintaining a wide circle of social ties (Rubinstein 1979). Fais parents teach their children that "it is good to have kinsfolk." A primary parental goal of socialization in Fais is to produce children who are highly affiliative, socially sensitive, and group-oriented. Many cultural practices in Micronesia reinforce this message, especially the widespread institution of child adoption and fosterage, residential shifting of children among kin, and the frequent use of multiple caretakers.

Socialization moves the child through several stages of expanding affiliations with wider social groups. Strong attachments to relatives and others outside the circle of the child's biological parents and nuclear family are encouraged (Rubinstein 1978). We can distinguish four general stages in Micronesian socialization. First is a period of infancy, from birth to weaning. In Micronesia this stage traditionally was indulgent and often prolonged, as it is generally throughout Oceania (Gussler 1985:323-324; Ritchie and Ritchie 1979). Second is childhood, from weaning to sexual maturity at the age of fifteen or so. Third is adolescence, from sexual maturity to marriage in the mid-twenties. And fourth is adulthood, the onset of which is marked by marriage and the assumption of childrearing responsibilities.

The model of socialization proposed here as an explanation of adolescent suicide includes a structural tension between child and parent, generated at each stage and resolved at the next stage by incorporating the child into a wider social circle. This structural tension first appears in late infancy, when the child's mother becomes increasingly impatient and inattentive towards the child's demands, and the period of indulgence ends rather abruptly. At this point many other relatives may

become active as the child's primary or supplementary caretakers, such as adoptive or fostering parents, grandparents, and older siblings. Often the child moves into another household. In this way the cultural solution to the strain between mother and child is to involve the child with other caretakers. The goal of socialization here is not to produce a child who is socially independent but rather one who is socially dependent upon a widening circle of kin.

In late childhood, as the child approaches puberty, another structural tension develops. Throughout Micronesia, and especially in the central Carolines, a relationship of avoidance and reserve develops between brothers and sisters at sexual maturity. Likewise, the style of interaction between parents and their sexually mature sons becomes increasingly disengaged. The cultural solution to this structural tension was different for boys and girls. Traditionally, in most Micronesian societies boys moved out of their domestic household and took up residence in bachelor clubhouses, lineage-owned meetinghouses, or with other relatives, such as grandparents or parents' siblings in whose households the boys had no classificatory sisters. Girls, on the other hand, typically remained in their own households and maintained closer domestic relations with their parents than did their adolescent brothers. Boys went through an adolescent period characterized by more social and economic insecurity than that of their sisters (Gladwin and Sarason 1953). While the young women's economic roles centered around household chores--mainly gathering and preparing food and caring for children-the young men's roles were tied more to lineage-level labor activities, including planting and maintaining the lineage-owned gardens, harvesting food and catching fish, and building and repairing houses and canoes and other lineage property. At marriage, young men became reincorporated into a domestic household and regained a measure of domestic security and residential stability.

This model of socialization proposes that traditional Micronesian societies had ways of compensating and alleviating the structural tensions that were experienced in infancy, childhood, and adolescence. The model also implies that such compensatory mechanisms were especially important during the stage of adolescence for males. Lineage-level and wider kinship ties provided young men with residential options, social supports, and productive roles to compensate for the semidetachment from their own domestic families.

World War II marked a critical period of change for adolescent socialization in Micronesia. The disruption of island communities during the late prewar years and the wartime period had already brought about the abandonment and destruction of most of the men's clubhouses and lineage meetinghouses in Palau, Yap, and Chuuk, and the weakening of other village-level and lineage-level functions. Consequently, there was a loss of cultural supports for male adolescent socialization in Micronesia, and the various and multiple options for young men to reside away from their domestic household narrowed considerably. After 1960, rapid increases in financial aid to Micronesia accelerated the growth of a wage economy. As described earlier in this article, the monetization of the Micronesian economy further altered lineage structure and caused a decline in subsistence activities. The productive role of young men in lineage-based subsistence activities became much less important to the village economy.

Children born after 1950 in Micronesia were thus the first generation to enter the stage of adolescence at a time when significant erosion had occurred in the cultural activities and social structures that traditionally gave support to adolescent socialization, especially for the young men. This first postwar generation reached sexual maturity and entered adolescence around the mid-1960s, at the same time that the youth suicide rates in Micronesia began to increase. During the next fifteen years, through the late 1970s, the suicide rates surged, as a swelling number of children born after the war moved into the stage of adolescence.

I earlier attributed this increase in suicide rates to the loss of traditional socialization supports for male adolescents (Rubinstein 1983, 1985). With disappearing opportunities for young men to gain independence from their parents and take a productive role in wider lineage activities, postwar youth remained dependent upon their parents to an unprecedented degree. The more traditional, prewar generation of parents, who grew up in a very different cultural environment, had quite different expectations for their adolescent sons. There was no cultural "script" in postwar Micronesia for continuing, close relations and communication between parents and their adolescent sons. Parents experienced a growing dissatisfaction over the continuing dependency of their late-adolescent sons. This tension between father and son, sharpened by the cultural differences between the two generations, found outlets in innumerable small incidents of conflict, such as a young man demanding favors of food and money from his parents, or parents demanding more obedience and housework from their son. As described above. these are the minor domestic conflicts that typically result in young men's acts of suicide.

In its basic logical form the adolescent socialization explanation appears as a four-step causal sequence:

(1) political/economic change (including monetization) \rightarrow (2) weakening of lineage- and village-level organization \rightarrow (3) loss of socialization supports for male adolescents \rightarrow (4) authority-dependency conflicts between parents and late-adolescent sons \rightarrow adolescent male suicides.

This explanation of youth suicide is generally similar to Hezel's family change explanation described above. Both are concerned with the same overall structural changes in Micronesian society, but focus on different organizational levels. While Hezel's explanation emphasizes the growing burden of responsibility on the nuclear family and the increasing authority of the father and parents, my own explanation features the diminishing lineage- and village-level supports for young men and the lengthening of adolescent dependency. The adolescent socialization explanation deals with social structural changes that specifically affect young men, during the stage from sexual maturity to marriage. The high suicide rate among young men aged 15-24 accords well with an explanation based on changes in adolescent male socialization. As discussed above, a weakness of the family change explanation is that it does not account for the concentration of suicide among young men rather than women or older men.

The initial increase in Micronesian suicide rates in the mid-1960s, and the accelerating rates over the next fifteen years, also conform to an explanation based upon the first postwar cohort of children entering an adolescent stage of increased suicide risk in their mid-teens. On the basis of the adolescent socialization model, I predicted that the suicide rates would level off and begin to decline in the early 1980s, as the first postwar generation entered adulthood (Rubinstein 1981:81). I also suggested that the suicide epidemic was a one-generation cohort effect of adolescent socialization change and the sharp intergenerational conflicts that resulted, and reasoned that the second postwar generation of children would experience less conflict with their parents than those parents as adolescents had encountered with their own, prewar generation of parents. Indeed, youth suicide rates in Micronesia peaked in the early 1980s and then fell off significantly, appearing to confirm my "cohort effect" predictions (Rubinstein 1985:107). By the mid-1980s, however, youth suicide rates in Micronesia again moved sharply upward, and by 1990 the rates reached new highs (see Figure 1). It has become apparent that the rising suicide rates among young Micronesian men is more than a single-generation transitional phase between two different styles of male adolescent socialization. Although there may be

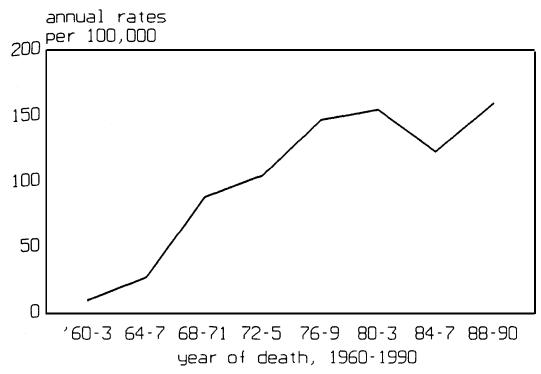


FIGURE 1. Micronesian Suicide Rates, Males Aged 15-24 (N = 343).

cohort effects underlying the unusual trends in Micronesian suicide rates since 1960, these effects are more complex and recurring than I originally predicted.

Another trend that requires explanation is the geographic distribution of suicide rates. In both Micronesia (Rubinstein 1987:136-137) and Western Samoa (Oliver 1985:76), suicide rates are highest in the periurban communities outside the town centers. The most urbanized town areas have somewhat lower rates of suicide, while the most rural areas and outer-island communities have the lowest rates. Suicides in Fiji appear to follow a similar geographic distribution; rates in the urbanized Viti Levu area are lower than rates in Vanua Levu, a more rural area (Deoki 1987:17). Thus suicide rates do not correlate in a linear way with urbanization and monetization of the economy. The highest rates are found in geographic areas of intermediate urban and economic development.

It is difficult to account for the geographic distribution of suicide rates on the basis of the family change explanation, unless one can show that the nuclearization of family structure is compensated for by alternative kinship ties that develop in the urban areas. Hezel has alluded to the geographic trends in suicide rates and has suggested that suicide is

linked to the *transition* to modernization rather than the end point of modernization in Micronesia (1989a54). However, a consideration of changes in adolescent socialization seems to provide a better explanation of the geographic trends in suicide rates than an emphasis on family structure. The development of an urban subculture for male youth-centering around pool halls, basketball courts, and drinking circles-has replaced some of the former functions of men's clubs, village gardening activities, and lineage houses, and has provided young men with specific places and pursuits with which they can identify. The reason that urban youth are at lower risk of suicide may lie in the new forms of adolescent socialization and social relations developing in urban areas.

Although an explanation for suicide based on the loss of traditional supports for male adolescent socialization corresponds more closely to the epidemiology of the phenomenon than an explanation based on the nuclearization of the family, both explanations suffer from a lack of good ethnographic supporting data. Earlier descriptions of Micronesian societies do not provide a clear picture of the sense of security and social identity that young men may have derived from their incorporation into men's house activities and lineage subsistence routines. My explanation is grounded largely on comparative observations of adolescence in two societies: Fais and Uman islands. Although these two sites typify the contrast between "traditional" and "peri-urban" communities, they are also representative of different cultural traditions--Yap Outer Islands and Chuuk Lagoon--which complicates the comparison.

The adolescent socialization explanation, like the family change explanation, fits the data from the central areas of Micronesia--Kosrae, Pohnpei, Chuuk, and to some extent Yap--better than from the peripheral areas, Palau and the Marshall Islands. In particular, the predominant pattern of Marshallese suicides triggered by conflicts with spouses and lovers is difficult to explain according to proposed changes in adolescent socialization. The Palau suicide situation is also unique in several respects that run counter to the explanatory models discussed here. Suicide rates in Palau have been moderately high and surprisingly stable since 1960, and do not follow the epidemic-like increase that other areas of Micronesia and Western Samoa experienced. The median age of Palauan suicides is significantly higher than elsewhere in Micronesia, and there is a much stronger correlation between mental illness and suicide than among other Micronesian cultural groups. Conflicts with parents in Palau are only slightly more frequent as occasioning events for suicide than conflicts with spouse or lover. By comparison with Chuuk,

Pohnpei, and the Marshall Islands, an unusual number of suicides in Palau are occasioned by conflicts with nonfamily members. These features confound attempts to fit the Palau suicide situation into explanatory models based on changes in family sociology or adolescent socialization.

Conclusion

The three explanatory models reviewed here are not the only ones that have been proposed for understanding the high rates of youth suicide in Micronesia and Samoa, but they have received a good deal more elaboration as causal factors than others that have been suggested. Writers concerned mostly with other subjects have proposed a variety of influences associated with suicides in Micronesia and Samoa, such as the increase in alcohol use among young men (Marshall 1990:91), the rapid increase in population (Connell 1991), changes in early child training (Murphy, cited in Hezel 1984a:197), or general aspects of cultural change and modernization.

Obviously, no theoretical framework can provide an explanation for all behaviors that fall under the category of "suicide," even within a single small and fairly homogeneous society such as the Micronesian islands considered in this article. Also, any particular act of suicide is the result of a complex social and psychological calculus of causes. The closer one looks at a single case, the more one becomes overwhelmed by the unique details of personal life history, At the level of the individual, suicide may appear as an unfathomable act. We need not be surprised, then, that a young social worker advises an audience against searching for general reasons for suicide. At the broader level of a social group, however, there are discernible patterns in suicidal behavior; this point was Durkheim's lasting contribution.

Suicides in central Micronesia and Western Samoa show a number of rather tightly patterned characteristics that appear quite distinctive. Researchers have sought to link these patterns to particular historical circumstances, social structures, and cultural values. Of the three models reviewed here, the more adequate are those that focus on changes in family structure from lineage to nuclear household and the loss of cultural supports for adolescent socialization, rather than on macroeconomic changes and opportunities for youth to gain high-status positions and international migration.

The search for deeper understanding of the tragic loss of young lives

in Micronesia and Samoa has focused attention on family structure and the traditional role and socialization of youth in these societies. Cornmonalities and differences in suicide patterns from one island society to another have stimulated closer attention to cultural comparisons among different social structures, and especially to differences in intergenerational and male-female conflicts and relations. Intensive research on the epidemiology of suicide has led to a wider appreciation of the social patterning of other mental health pathologies (Hezel 1989b) and to critical evaluations of priorities for mental health services in Micronesia (Rubinstein 1984). Because suicide is the leading cause of death for young men aged 15-29 in parts of Micronesia and Samoa, there is a continuing need for prevention efforts that are based upon a well-informed analysis of the social and cultural dynamics of this problem.

NOTES

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- 2. The data cited in this article were collected by Hezel and Rubinstein, and are maintained at the Micronesian Seminar in Chuuk and the Micronesian Area Research Center at the University of Guam.
- 3. My use of the past tense in this description of traditional Micronesian social organization is not meant to imply that all or even most aspects of this system have disappeared.
- 4. A three-year study (1990-1992) is currently under way, designed to describe the structure and functions of the Micronesian family c. 1950 and to chronicle the transformations that the family has undergone between then and now. The project is under the direction of Francis Hezel, with funding from a German Catholic organization. Three field sites are involved: Palau, Chuuk Lagoon, and Pohnpei. This is the first time that a multisite research project has been conducted in Micronesia in which there is a similar theoretical approach, topical focus, and methodology, and in which the fieldworkers are linked by common supervision and training.
- 5. It should be noted here that I am focusing on the logical structure of the blocked-opportunity model alone, and not trying to evaluate the full explanation presented by the Macphersons, which is considerably more nuanced and inclusive than the blocked-opportunity model. I am grateful to anonymous reviewers for pointing out that I appear to caricature the Macphersons' model here. I emphasize that my purpose in this article is not to evaluate various authors' writing, but to extract explanatory arguments from those writings and critique the logical structure of those explanations.

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