FISHING AND FIESTAS IN GUAM: AN EXPLORATORY NOTE ON THE REINFORCEMENT OF CULTURAL TRADITIONS

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USING SURVEY DATA FROM A PURPOSIVE SAMPLE OF GUAM FISHERS ($n = 100$), we explored the association between ethnicity and providing fish for fiestas in Guam. The results of the analysis suggested that Chamorro fishers are more likely than fishers of other ethnic subpopulations to contribute the fish they catch for fiestas and that Caucasian fishers are more likely to sell the fish they catch. Household income did not influence traditional patterns of fish distribution among Guam's indigenous Chamorro population, but the number of years an individual lived in a village was significantly associated with giving fish to annual family fiestas.

This exploratory note describes the patterns of fish distribution for Guam's extensive Asian-Pacific population and elaborates the relevance of the distribution of fish for the retention and maintenance of long-standing cultural traditions. A review of the literature in this general area of study reveals several reports commenting on the lack of social and cultural analyses of fishing practices in Guam (Amesbury and Callaghan 1981; Guam Coastal Management Program 1978; Polovian et al. 1985), to include the absence of

Pacific Studies, Vol. 29, Nos. 3/4—Sept./Dec. 2006

studies focusing on contemporary Chamorros' normative practices of fish distribution (see Vaughn, Rubinstein, and Pinhey 2000:24). Drawing on an early account by Amesbury and Callaghan (1979:11), one perspective concerning the distribution of fish in Guam supports the argument that the cultural tradition of providing fish for family fiestas has been maintained:

> Although subsistence fishing is not as prevalent in Guam as it once was, it can be said with some certainty that the majority of fish caught by local fishermen does not enter the monetary market. The funerals, marriages, christenings, and fiestas still exist much as they have for hundreds of years. For large segments of the population, fishing still provides supplementary income, family nutrition, recreation, and an integral part of family and community life and reinforcement of cultural traditions.

To be sure, there are nineteen villages in Guam and each of these villages hosts at least one annual fiesta where families prepare food that is available to the entire island community (see Crumrine 1982). Thus, one hypothesis is that the distribution of fish remains an important aspect of the long-standing cultural tradition of fiesta and that members of the Chamorro fishing community continue to catch and distribute fish to family members who host these annual celebrations, thus reinforcing and maintaining Chamorro cultural traditions.

The alternate perspective is that the Westernization of Guam and the accompanying change from a subsistence economy to a wage-based system has disrupted several traditional cultural patterns and that fish are now more likely to be sold rather than given to family fiestas. There is strong evidence supporting the argument that the Westernization of Guam has disrupted several traditional cultural patterns. For example, some traditional Chamorro funerary customs are being supplanted by Westernized funeral practices (see Pinhey and Ellison 1997), and the shift to a wage-based system has contributed to dramatic changes in eating patterns, resulting in significantly higher rates of obesity (Pinhey, Rubinstein, and Colfax 1997) and a greater prevalence of diabetes mellitus among Guam's indigenous Chamorros (Pinhey, Heathcote, and Craig 1997).

The Westernization of Guam and the shift to a wage-based economy should also influence the effects of income on whether or not individuals would give the fish they caught to those hosting fiestas. On one hand, if a person's household had a high average income, that individual might be more disposed to providing fish for fiestas. On the other hand, if an individual's household income is relatively low, that person might be more likely to keep and consume the fish or sell them.

Another potential influence on whether individuals would give fish for fiestas possibly centers on the length of time an individual or family had resided in a particular village in Guam. If an individual or family lived in a village for several years, it is likely that they would experience social integration into the normative expectations of that village. Thus, they may be more likely to participate in fiestas and to contribute fish they caught to their neighbors or to family members who were hosting fiestas.

The competing perspectives described above form the bases for the exploratory hypotheses of this brief study. In summary, if the maintenance of traditional Chamorro cultural patterns remains for fish distribution, we should anticipate that Chamorro fishers would continue to contribute the fish they caught to family fiestas. We also suspect that individuals residing in a village over a period of time would be more likely than others to provide fish to family fiestas. Alternately, if Westernization has disrupted Chamorro cultural patterns, we should anticipate that Chamorro fishers would be more likely to sell the fish they caught rather than distribute them to family members who were hosting annual fiestas. As well, when contrasted with Chamorro residents, it seems likely that Westerners living in Guam would be inclined to sell their fish rather than give them to fiestas, unless they had lived in a village for a particularly long time.

The study begins with a description of the sampling techniques and the measures used for the analysis, and continues with a discussion of the analytical strategy. We then present the results of the study, and then discuss the findings of the analysis as they may pertain to theory and future research.

Methods

We conducted a purposive sampling of subsistence and sports fishers between December 1997 and June 1999. Purposive sampling is an appropriate method for selecting difficult-to-reach and specialized populations, such as fishers (see Babbie 2004, 183). This kind of sampling selects cases with specific purposes in mind and is appropriate when investigators must select respondents who are especially informative about particular behaviors and topics. Three trained interviewers administered and completed structured interviews with 100 fishers at one of the four boat ramps located about the island. Table 1 presents a summary of the characteristics of the individuals responding to the survey.

Among other questions, interviewers asked respondents whether they ever gave the fish they caught to specific individuals, organizations, or events. This was an open-ended question, and the final categories that emerged from the answers given by respondents included: *i)* for fiestas (37.6%); *ii)* to friends

TABLE 1. **Socioeconomic and Demographic Characteristics of Fishers in Guam***

Variable	Number of Cases	Percent
Ethnicity		
Chamorro	40	41.2
Filipino	7	7.2
Asian	3	3.1
Micronesian	17	17.5
White	23	23.7
Other ethnicity	7	7.2
Total	97	100.0
Age (years)		
30 or younger	19	19.2
31–35	18	18.2
36–40	13	13.1
41–45	16	16.2
46 or older	33	33.3
Total	99	100.0
Marital status		
Married	62	62.6
Consensual	5	5.1
Never married	17	17.2
Divorced/separated	15	15.2
Total	99	100.0
Education		
Less than high school	7	7.6
High school graduate	44	47.8
College graduate	41	44.6
Total	99	100.0
Household income**		
35,000 or less	22	30.1
36,000–50,000	19	26.0
51,000–65,000	9	12.3
66,000 or greater	23	31.5
Total	73	100.0

*Fishers in Guam tend to be somewhat older, reporting a modal age of 46 years and greater. The mean age of fishers in Guam is 41.42 years (not shown in Table 1). The mean years for education for fishers in Guam is 13.23 years (not shown in Table 1), and their average annual household income is thus relatively high. The mean average annual household income for fishers in Guam is US$62,227.40 (not shown in Table 1).
**Amounts shown in US dollars.

as gifts (4.3%); *iii)* to the Church (8.6%); and *iv)* do not give fish to others (38.3%). The "gives fish to fiestas" response was binary coded (gives fish = 1, all others = 0) for later use in statistical analyses.

We also asked respondents whether they ever sold the fish they caught. This was a fixed-choice question with response categories of "yes" and "no."

Approximately 40% of the sample said that they did not sell the fish that they caught. This response was binary coded for later statistical analyses.

Interviewers asked respondents how many years they had lived in their current village. The mean number of years for the sample was 17.5 years with a standard deviation of 15.6 years. We anticipated that the longer an individual reported having lived in a particular village, the more likely that individual would be to contribute fish to fiestas.

We also asked respondents to indicate the total annual income of their households. The mean income for households was US$62,227.40, with a standard deviation of US$55,564.98. As noted previously, we anticipated that family income might influence an individual's choice concerning selling or giving fish for a fiesta.

Ethnicity is self-reported. Final ethnic categories include Chamorros (41.2%), Filipinos (7.2%), Asians (3.1%), Micronesians (17.5%), whites (23.7%), and others (7.2%). Each ethnic category was binary coded for the analysis (i.e., specific ethnic group = 1, all others = 0).

We used Cramer's V to assess associations for giving and selling fish by the ethnicity of respondents. Note that for 2 × 2 tables, Cramer's V is equivalent to ϕ (see Kerlinger and Lee 2000, 235), which achieves positive and negative values. Finally, we report Pearson's coefficient of correlation for giving and selling fish with self-reported total income of households and length of time living in a particular village during the year before the survey.

Results

As shown in Table 2, Chamorro ethnicity is associated with giving fish to fiestas ($V = .362$, $p < 0.05$). However, Filipino ethnicity ($V = -.301$, $p < 0.05$) and Micronesian ethnicity ($-.246$, $p < 0.10$) were each significantly less likely to give fish to family fiestas. As anticipated, white respondents were more likely to sell their fish ($V = .307$, $p < 0.05$). Since white respondents may have not resided in Guam over a long period, their integration into village life is not likely to be complete. Thus, they may be less likely to contribute fish to family fiestas and may be more likely to sell the fish they catch.

Presented in Table 3 are Pearson's correlation coefficients that assess associations between household income, years lived in a village in Guam, and giving fish to fiestas and selling fish. As may be seen, the longer individuals have lived in a village, the greater the likelihood that they will give fish to fiestas ($r = .252$, $p < 0.05$). Household income was not significantly associated with giving fish or selling fish. As well, the number of years an individual lived in a village was not significantly associated with selling fish.

TABLE 2. **Cramer's V for Giving Fish to Fiestas and Selling Fish by Ethnicity ($n = 48$)**

Ethnicity	Gives Fish	Sells Fish
Chamorro	.362*	−.080
Filipino	−.301*	.120
Micronesian	−.246†	−.155
White	.231	.307*
Asian	−.184	.024
Others	−.114	−.122

*$p < 0.05$; †$p < 0.10$.

TABLE 3. **Bivariate Pearson Correlations for Giving Fish to Fiestas, Selling Fish, Years Lived in Village, and Household Income**

Variable	Gives Fish	Sells Fish
Household income	.202 (36)	.026 (70)
Years in village	.252* (50)	.028 (94)

*$p < 0.05$ (one-tailed tests)

Finally, we sought to examine the relationship between ethnicity and household income and the time individual fishers had lived in a village on Guam. As may be seen in Table 4, Micronesian fishers had relatively lower household incomes ($r = -.266$, $p < 0.05$) and white respondents had relatively higher household incomes ($r = .299$, $p < 0.05$). As might be predicted, Chamorro ethnicity was associated with longer residence in a village on Guam ($r = .471$, $p < 0.01$), whereas white fishers indicated significantly less time living in a village ($r = -.257$, $p < 0.05$).

TABLE 4. **Pearson's Correlations for Household Income and Length of Time Lived in a Village by Ethnicity**

Variable	Household Income	Time Lived in Village
Chamorro	−.077 (71)	.471** (96)
Filipino	.006 (71)	−.051 (96)
Asian	−.039 (71)	−.157 (96)
Micronesian	−.266* (71)	−.142 (96)
White	.299* (71)	−.257* (96)
Others	.020 (71)	−.113 (96)

*$p < 0.05$; **$p < 0.01$

Discussion and Conclusion

We began this exploratory note by remarking on the dearth of research on fishing practices in Guam. This study makes a modest contribution to the literature by using data from a purposive sampling of Guam fishers to explore the relationship between ethnicity and patterns of fish distribution. Drawing from previous reports, we investigated the possibility that traditional cultural patterns associated with providing fish for annual fiestas in Guam had diminished because of the shift to Westernization and a wage-based economy. However, the results of the analysis suggest that the traditional cultural patterns associated with providing fish for annual fiestas remained relatively strong within Guam's extensive Chamorro community.

We found that Chamorro fishers were more likely to report giving fish for fiestas and that Micronesian and Filipino respondents were significantly less likely to report that they provided fish for fiestas. In that Micronesian fishers reported significantly lower household earnings than did other ethnic groupings, it is possible that the fish they catch are consumed within their families. We also discovered that Caucasian fishers, who are presumably Western in their orientation, were more likely to say they sold the fish they caught.

Our finding that household income did not influence traditional patterns of fish distribution among Guam's indigenous Chamorro population is particularly remarkable. This finding suggests that the strength of the traditional Chamorro practice of giving fish for fiestas may be greater than the influence of earnings. Thus, the patterns associated with giving fish for fiestas may be similar to the strength of the exchange patterns (*chenchuli*) that are associated with traditional Chamorro funerary customs (see Pinhey and Ellison 1997 and Rogers 1995 for review).[1] To be sure, Fafchamps (1992, 147) notes that solidarity mechanisms typically result in the "principle of reciprocity." Thus, providing fish to fiesta celebrations ultimately results in a process of exchange, which enhances solidarity among villages and families.

What are the implications of these findings for future research and theory? First, our findings provide support for the conjecture that some traditional Chamorro cultural patterns remain strong in Guam. The particular pattern revealed here—the distribution of fish for fiestas—also suggests an interaction pattern where fishing and fiestas reinforce the ongoing cultural custom of exchange within villages, thus strengthening social ties and mutual obligations, which are known to influence participants positively (Pinhey and Ellison 1997). Future researchers may wish to more thoroughly examine these potential patterns using larger and more extensive data sets.

Finally, the potential limitations of the study deserve mention. The data analyzed here are from a small purposive sample, and larger probability samples might have yielded different relationships and results. Future

researchers may wish to devise a means for generating large probability samples that are representative of all individuals who fish in Guam. This limitation aside, the results of the present analysis support the contention that some traditional Chamorro cultural practices remain strong in Guam. In summary, our findings suggest that Chamorro fishers continue to provide fish for annual fiestas, thus retaining a long-standing cultural tradition.

NOTES

The data used for this study are from a project funded by Cooperative Agreement Number NA67RJ0154 from the National Oceanic and Atmospheric Administration. The views expressed herein are those of the authors and do not necessarily reflect the views of the NOAA or any of its subagencies. We wish to thank Donna Lewis Pinhey and Craig Severance for their assistance and comments on earlier versions of the manuscript.

1. Rogers (1995, 38) defines *chenchule'* as a mandatory obligation between individuals, which may be understood as the giving of gifts or services that obligates the recipient to reciprocate to the giver.

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