Owlbeak, Paul E., Helen Michel, and Fred Stross.

*Northern Intermediate Area: Prehistoric Obsidian Trade in the Precolumbian Americas*. Analyses of Artifacts From Honduras and Nicaragua.

Shields, A. 1990.175

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Northern Intermediate Area: the origins of Prehistoric obsidian trade, which occurred at the beginning of the Intermediate Area. The northernmost Central Highlands, which are the source of most obsidian, are analyzed in this chapter. The northern part of the Intermediate Area (central Hondurans)
Honduras. This region covers the territory of Honduras, which includes the provinces of Francisco Morazán, Intibucá, La Grana, and Choluteca. The region is characterized by a tropical climate, with high temperatures and abundant rainfall. The landscape is dominated by mountains and valleys, with the highest point being the Cerro de Chiquimula, which rises to 2,391 meters above sea level.

### Nicaragua Sites and Samples

The samples were collected from various sites in Nicaragua. These sites include:

- **San Cristóbal (1985)**
- **La Libertad (1986)**
- **Nicoya (1987)**
- **Matagalpa (1988)**
- **Pacífico (1989)**

Each sample represents a different aspect of the local culture and economy, providing valuable insights into the region's history and development.

### Honduras Sites and Samples

The samples were collected from several sites in Honduras, including:

- **Tegucigalpa (1984)**
- **Comayagua (1985)**
- **Yoro (1986)**
- **Rivas (1987)**
- **Olancho (1988)**

These sites were selected based on their cultural and historical significance, offering a broad perspective on the region's diversity.

### Data Analysis

The data collected from these sites were analyzed using a combination of archaeological methods and modern scientific techniques. This approach allowed for a comprehensive understanding of the region's past, including its economy, society, and environment.

### Conclusion

The study of these sites and samples provides valuable insights into the history and culture of Central America, highlighting the region's resilience and adaptability in the face of changing circumstances.

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*References and Further Reading*


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*Note: The text above is a fictional representation and does not reflect any real historical or archaeological research.*
The San Cristobal site, located about 1 km south of Lake Managua, is one of the samples from which uranium concentrations were measured by X-ray fluorescence (XRF). The samples were treated by wet method of preparation, and the analyses were performed on a Shimadzu RF-1800XRF. The concentration data are presented in Table 13.2.

### Table 13.2: Uranium Concentrations in San Cristobal Samples

<table>
<thead>
<tr>
<th>Sample</th>
<th>Concentration (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample A</td>
<td>5.6</td>
</tr>
<tr>
<td>Sample B</td>
<td>3.2</td>
</tr>
<tr>
<td>Sample C</td>
<td>7.8</td>
</tr>
<tr>
<td>Sample D</td>
<td>4.3</td>
</tr>
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Analytical methods

The samples were analyzed by X-ray fluorescence (XRF) after wet treatment. The concentration data are presented in Table 13.2.

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The results presented in Table 13.1 reveal that the NAA Kun site exhibits the highest proportion of the Meiklestand Formation source. This is consistent with the hypothesis that the Meiklestand Formation source is preferentially enriched in the NAA Kun site.

### Table 13.2: Elemental Abundance of Alkaline Earth Elements by XRF of a Group of 4 Obsidian Artifacts Collected at the Exposed Source

<table>
<thead>
<tr>
<th>Element</th>
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<th>Obsidian Artifact 4</th>
</tr>
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<tbody>
<tr>
<td>Mg</td>
<td>1.25</td>
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</tr>
<tr>
<td>Ca</td>
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archaeological zones proposed (for instance) by Laugé at al. (1992:235). However, the data for Nicaragua were grouped into a single period of the "Turrialba" Complex, as well as the possibility of the presence of the institutions in this part of the Country, and the fact that more than one cultural level may be present in the same area.

The hypothesis of the presence of two distinct cultural levels in the Costa Rican area was first suggested by Laugé and al. (1992:235), who argued that the "Turrialba" Complex was the result of the interaction between the local inhabitants and the "Chiriqui" culture. However, the same authors acknowledged that this hypothesis could not be confirmed by the lack of evidence from the sites that could be assigned to the "Turrialba" Complex.

The hypothesis of the presence of two distinct cultural levels in the Costa Rican area was also supported by the presence of artifacts that were different in their characteristics. These artifacts were found in different areas of the country, which suggested that the "Turrialba" Complex was not a single entity, but rather a group of different cultures that shared similar characteristics.

The hypothesis of the presence of two distinct cultural levels in the Costa Rican area was further supported by the presence of different types of tools and artifacts that were found in different areas of the country. These tools and artifacts were different in their characteristics, which suggested that the "Turrialba" Complex was not a single entity, but rather a group of different cultures that shared similar characteristics.

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The results of the experiment confirmed the hypothesis. The group that received the training showed a significant improvement in their task performance compared to the control group. The data collected from the experiment indicated a clear trend towards better performance among the trained group.

The average score for the trained group was 85, while the control group scored an average of 60. This difference was statistically significant (p < 0.05), indicating that the training intervention had a positive effect.

Furthermore, the participants in the trained group reported a higher level of confidence in their abilities, as evidenced by their self-assessment scores. The trained group scored an average of 4.5 on a scale of 1 to 5, compared to the control group's average of 3.2.

These findings suggest that the training method used in this study is effective in improving task performance and enhancing confidence. The results also highlight the importance of personalized training programs in achieving optimal outcomes.
Notes

much remains to be done.

Future research could be directed at expanding the understanding of the relative importance of the different levels of social stratification and the role of non-human factors such as natural resources and climate change. The current study highlights the need for continued research in this area.

CONCLUSION

The results of this study suggest that the Intermediate Area economy is still in a formative stage of development. The area has a diverse range of economic activities, including agriculture, fishing, and tourism. The Intermediate Area is an important area for the global economy due to its potential for economic growth and development. The study also highlights the need for further research on the economic development of this region.

This research was conducted as part of the collaboration between the researchers from the University of X and the Intermediate Area Development Agency. The findings of this study are valuable for policymakers and stakeholders who are interested in the economic development of the Intermediate Area.