ECONOMIES OF INTERDEPENDENCE
Subsistence Salmon Harvests & Risk Sharing in Kamchatka

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Overview

• Salmon Harvests in Kamchatka
• Risk & Resilience
• Institutional Legacies
• Comparative Research Across the North Pacific
Kamchatka Peninsula, Russia

Kamchatka Krai

- **Area:** 472,300 km$^2$
- **Population:** 402,500
- **Regional Capitol:** Petropavlovsk-Kamchatskii

Koryak Okrug

- **Area:** 301,500 km$^2$
- **Population:** 25,157
  - 40% Indigenous

Alexander King  www.koryaks.net
Traditional Economic Activities

- Salmon Fishing
- Reindeer Herding
- Hunting & Foraging
- Gardening
Legacies of Change - A brief history...

• 1930s-1980s → Soviet Collectivization & Cultural Construction
• 1990s-Present → Post-Soviet Privatization & New Markets
Institutional Collapse & Importance of Subsistence

• Soviet Collectives Collapse → Under-employment
• Perestroika → Decline in Public Goods & Services
• Transition to Markets → Mixed Cash/Subsistence Economy
• Return to Subsistence → Reliance on Social Networks
Cooperation & Collective Action in Three Contexts

- **Networks of Social Support** → Surveys of households
- **Institutions** → Participant observation & qualitative interviews
- **Social dilemma experiments** → Public goods games

Mixed-method approach
Risk & Resilience

- **Subsistence Harvests** → Food sharing as risk pooling
- **Institutions** → Formal & Informal
- **Global Change** → Environmental, Economic, Political, Cultural
Risk Pooling

- Risks affect production success
- Redistribution compensates for consumption deficits
“Here in Khailino, we all know each other. We know what kind of person he is.

Every person is plainly visible like an open palm. We know him from his childhood, how he grew up, how he was born here.”

“We live like a big family here in Khailino. A common family. Everyone roots for each other, survives. If someone has misfortunes, you try to support them, so the person isn’t let loose. That is, reciprocity here is a very good, necessary thing.”
Risk Pooling

Surveys of Household Production and Social Networks of Support

- Long-term
- Short-term

<table>
<thead>
<tr>
<th></th>
<th>Long</th>
<th>Short</th>
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<tbody>
<tr>
<td>Acts Observed</td>
<td>435</td>
<td>247</td>
</tr>
<tr>
<td>Given</td>
<td>5.7</td>
<td>0-19</td>
</tr>
<tr>
<td>Received</td>
<td>4</td>
<td>0-18</td>
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</tbody>
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Salmon | Reindeer | Meals | Potatoes | Berries | Tea
Risk Pooling

Frequency

Among Kin = 64%

Among Kin = 61%

potatoes  salmon  reindeer  berries

meals  tea
Risk Pooling

Amount

<table>
<thead>
<tr>
<th></th>
<th>Stranger</th>
<th>Acquaintance</th>
<th>Friend</th>
<th>Kin</th>
<th>Neighbor</th>
<th>Organization</th>
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<tr>
<td>potatoes</td>
<td>35</td>
<td>24</td>
<td>42</td>
<td>55</td>
<td>35</td>
<td>35</td>
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<tr>
<td>salmon</td>
<td>20</td>
<td>18</td>
<td>17</td>
<td>22</td>
<td>8.4</td>
<td>7.6</td>
</tr>
<tr>
<td>reindeer</td>
<td>3</td>
<td>3</td>
<td>6.4</td>
<td>11</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>berries</td>
<td>2.4</td>
<td>3.3</td>
<td>4</td>
<td>9.1</td>
<td>18</td>
<td></td>
</tr>
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</table>
Risk Pooling

Asymmetries of Need

Frequency

Amount

<table>
<thead>
<tr>
<th>Resource</th>
<th>Reciprocity</th>
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<tbody>
<tr>
<td>Subsistence Foods</td>
<td>57% in kind</td>
</tr>
<tr>
<td>Meals &amp; Tea</td>
<td>73% in kind</td>
</tr>
<tr>
<td>Combined</td>
<td>68% over all</td>
</tr>
</tbody>
</table>
Institutions
Emergence of Institutional Diversity

- Soviet Era Collectives
- Privatized Collectives
- Obshchina Collectives
- Informal Collectives

OPPORTUNITY TO UNDERSTAND:
emergence of institutions & importance of contexts
Salmon Quotas: Formal Regulations & Informal Entitlements

• **Soviet Era Collectives** → None*
• **Privatized Collectives** → 200-900 tons
• **Obshchina Collectives** → 10-100 tons
• **Informal Collectives** → 35-375 kg/person
How do individuals & communities respond to global change?

**CHANGE IS...**

...Environmental
...Economic
...Political
...Cultural
Methodological Challenge of Comparative Research

Complexity we can’t control...

...Research design we can.
Combining Ethnography with Field Experiments

**Salmon Harvests in Arctic Communities:**
Local institutions, risk & resilience

James Murphy – Economics
Lance Howe – Economics
Colin West – Anthropology

NSF Human and Social Dynamics

[Map showing Arctic regions and salmon harvest sites]
Acknowledgements

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