

Making a living: foraging

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- **Subsistence**
 - “How people get their groceries”
 - subsistence is fundamental to understanding everything else about a culture
 - in cultural materialists’ terms, because subsistence is a major part of the infrastructure of any society
 - as such, it influences or determines much of the rest of society
 - in more general anthropological terms, because culture is integrated
 - subsistence is inextricably linked to everything else
 - as a result, anthropologists can rarely, if ever, discuss subsistence without bringing in other aspects of culture
 - the reading by Lee illustrate this
 - he has to address gender roles, because the tools and activities of men and women are different
 - he discusses sharing of food, exchange of arrows, ownership of meat, etc.
 - he can’t discuss hunting practices without dealing with “insulting the meat” and Ju/’hoansi ideas about young people, aggression, and status
 - studying subsistence leads to broader questions
 - why do different societies use such different subsistence strategies?
 - why have subsistence strategies changed over time?
 - how does using a given subsistence strategy affect other aspects of society?
 - what are the effects of shifting from one subsistence strategy to another?
- General types of subsistence strategies
 - **Foraging = hunting and gathering**
 - living on wild resources without intentionally altering the landscape
 - includes maritime foragers: people who depend on fish and shellfish
 - **Agriculture = farming**
 - Activities to artificially increase plant food yields (sowing seeds, clearing forest, weeding, diverting water, fertilizing, etc.)
 - some people distinguish between agriculture and horticulture, but we won’t bother with that here
 - **Pastoralism = herding**
 - depending primarily on herds of domesticated animals
 - pastoralists travel with their herds to pasture areas, rather than bringing food to them
 - **Agropastoralism**
 - depending on a mix of agriculture and pastoralism
 - typically with one or more fixed settlements
 - often plus pastures to which the animals are sent with some group members seasonally
- our subsistence base is really none of the above
 - strictly speaking, it still rests on agropastoralism

- but the practices are so different from subsistence agropastoralism that it would be misleading to use the same term
- and besides, most people get their own subsistence in ways far removed from agropastoral production
- **Wage labor system**
 - people work for pay, rather than producing their own subsistence goods
 - many are paid for tasks that do not produce subsistence goods at all
 - then exchange that income for subsistence goods produced by others for exchange
- These types oversimplify reality
 - people mix and vary these strategies
 - most societies don't fit perfectly into these clear, well-defined types
 - but these types give us a shorthand for the general ways people live
- Each subsistence strategy tends to be associated with specific other features of society
 - group size, mobility, social stratification, etc.
- Foraging is the way that people have lived for the vast majority of the time that humans have existed
 - we have been foragers since the first members of our genus *Homo*
 - roughly two million years ago
 - farming only appeared about 11,000 years ago
 - 99.5% of our time on Earth, we have been foragers
 - Yet very few foragers remain today
 - arguably none
 - since even the Ju/'hoansi have been resettled into permanent camps
 - and the few other examples all interact so extensively with surrounding groups that they may not be considered purely foragers
 - exchanging meat for farmed food
 - buying guns and ammunition, snowmobiles, etc.
 - living on farmed or pastoral resources part of the year, and only foraging on seasonal expeditions
- What happened?
 - why did we change?
 - how did this ongoing change in subsistence strategies affect people and societies?
 - Is this “progress”, or just “change”?
 - progress implies
 - improvement
 - due largely to increasingly complex technology
 - a tendency to move in only one direction: towards ever more complex technology
 - since science and technology do build on previous discoveries and inventions, there really is an aspect of directionality to technological change
 - “progress” can be an ethnocentric concept
 - it assumes that “progress” leads to a society more like our own
 - therefore that this process is good

- but that assumes that our society is clearly better than societies that have “progressed” less
- as you saw in the reading by Lee, that may be true in some ways, but may be incorrect in others
- we should take care to think in culturally relativist, non-judgmental terms of “change”, rather than “progress”
 - then we can evaluate what aspects of the change have been positive, and what aspects have been negative
- Example of a foraging society: The Ju/'hoansi, in the readings by Lee
 - Background
 - The Ju/'hoansi often serve as an example of foragers, to help us visualize what a foraging lifestyle is like
 - studied by Richard Lee and many others
 - and filmed by John Marshall, starting in the 1950s
 - We are reading about the recent past here – mostly the 1960s.
 - in a later chapter, Lee updates us on how virtually all of the !Kung have been settled in permanent camps
 - Even in the 1960s, these were modern people, not fossils
 - They knew about the industrialized world, but it was remote
 - They knew farmers and pastoral people who lived around them, traded with them, intermarried, etc.
 - look closely at the pictures: they did have pots, cans, etc. produced by modern industry; they had a song for riding in a truck
 - What is distinctive about the foraging lifestyle?
 - Subsistence by foraging
 - gathering
 - most of the food is plants (70% of calories for Ju/'hoansi)
 - hunting
 - occasional meat (30% of calories for Ju/'hoansi)
 - these proportions have probably varied a lot for different groups, places, and times
 - Small groups
 - one or a few families, typically 10-50 people
 - group membership changes over time: groups split, merge, individuals shift from group to group
 - groups can't be big, or preferred foods around the camp would get depleted too fast
 - Very mobile
 - use up the preferred food in one place, then move to another
 - moves may be irregular or in a seasonal round
 - camps are typically set up in a few hours or days
 - in the wet season, camps are occupied for a short stay of a few weeks
 - because water and resources are plentiful and widespread
 - people have the luxury of moving on to another water source when their favorite foods are used up nearby

- in the dry season, camps are occupied for longer stays
 - when everyone has to congregate around the few permanent waterholes
 - there is nowhere else to go, so they have to walk further and eat less-preferred foods
- Few possessions
 - because anything you want to keep, you have to carry to your next camp
 - many things can be made as you need them
 - so no hoarding, long-term storage, or accumulation of wealth
 - so there are few differences in wealth
 - everyone has roughly the same kinds and amount of stuff
 - no one “owns” the land or the water,
 - although people do have recognized rights to certain territories that are associated with their families or bands
 - they can try to control access to it (although in practice access is almost always granted)
 - but they can’t sell or trade it
 - their connection to it is inherent in their family identity: it is “inalienable”
- division of labor or specialization is minimal, mostly by age and sex
 - women handle most child care, since men can’t breast feed
 - men do most of the hunting, since women are usually burdened by children
 - little kids and old people gather but don’t hunt
 - but not much:
 - young people are not expected to contribute much until they are reaching marriageable age, around 20 for boys
 - and people over 60 are understood to be more sedentary and are expected to work less
 - some limited specialization: skilled people may make and fix tools more than others do, or perform curing ceremonies
 - but this only amounts to a small part of their time
 - their reward is personal satisfaction, some respect or prestige, occasionally gifts, etc.
 - but overall, with minor exceptions, everyone has basically the same roles, determined by sex and age
 - no careers, jobs, positions that strongly differentiate one person from another
 - every family includes people who do all the things that are necessary to survive
- families are economically equivalent
 - yet families do depend on each other to share things, especially meat
 - all families can get meat and other necessities
 - but a good kill is relatively rare and produces a lot of meat
 - so sharing...
 - reduces the risk of not getting enough meat during a spell of bad luck
 - while not hurting the family of a hunter that temporarily has more than it can use
 - Lee describes how the meat belongs to the owner of the arrow that killed it, as well as to the hunter

- this diffuses responsibility for dividing the meat, during which people can easily be offended
- meat is frequently sun-dried into biltong
- one purpose of this is so that meat can be saved and given to the owner of the arrow if he (or she) was not in the camp at the time of the kill
- Minimal social hierarchy (no powerful leaders)
 - no chiefs or other people with special power (according to Lee)
 - although some are more respected than others
 - and some have special skills (curing, making arrows, etc.)
 - Ju/'hoansi society is essentially egalitarian
- “Simple” social organization based on kinship
 - everyone is related to everyone else
 - so you deal with others according to your relationship with them
 - you know how to treat them, what their obligations are to you, and yours to them
 - social dynamics are like going on a trip with your extended family and a few friends
 - except that the Ju/'hoansi have much more practice at getting along with each other
 - and they really depend on each other much more than we do
 - another analogy is to a small town, where everyone knows everyone else
 - everyone knows what everyone else is doing, and talks about it
 - almost nothing is private
 - interactions are on a personal level
 - foragers like the Ju/'hoansi tend to be very aware of interpersonal matters like jealousy, pride, trustworthiness
 - take elaborate steps to prevent social problems
 - “insulting the meat”
 - the full, amusing story is in Appendix A in Lee, which you will read later in the semester
 - thus little room for anyone to take advantage
 - one can defuse a conflict by just leaving to hang out with another band, usually with a kin connection
 - just as you might go to stay with your grandparents you had problems with your parents
 - occasional violence, but only at a personal or family level (no warfare).
 - Very rarely, group violence by general consent
 - Lee covers this for the Ju/'hoansi in a later chapter
- although the kinship system is extremely complex (much more complex than ours), this is often called “simple” social organization.
 - Because some kind of kinship system exists in all societies
 - “Kinship-only”, is a minimal kind of organization, “simple” in the sense of there being just one system for categorizing people and relating to them
 - in more “complex” societies, additional layers of organization like social class, educational status, family prestige, inherited titles, etc. are added
 - “complex” social organization, in the sense of having many parts, refers to society organized by kinship *plus* other, cross-cutting systems

- also called a “**band**” society, in reference to the size and the nature of the groups in which people live
- Exceptions: some foragers in particularly good environments do not fit these generalizations
 - specifically, in places with resources that are either plentiful year-round, or can be stored for a year or more
 - ex: northwest coast of North America: rich salmon runs, and the fact that salmon can be preserved for over a year by smoking or packing in oil, allowed for sedentary, complex societies based on foraging
 - Kwakwaka’waku (Kwakiutl), Tlingit, Haida, etc.
 - ex: Central California sierra foothills: reliable, productive acorns that can be stored year-round allowed for semi-sedentary foragers
 - Maidu, Miwok, etc.
- life expectancy of foragers, using the Ju/’hoansi as an example
 - figures as of 1968, when Lee did the research in the reading
 - since people die at different rates at different ages, this is a harder concept to express that you might think
 - life expectancy at birth was 30 years
 - but this includes high mortality during childhood
 - 20% of babies died in their first year
 - 50% of children died before age 15
 - those who make it to age 15 survived, on average, to 55
 - about 10% of the population was over 60
 - compared to 16% in the US
 - this was actually fairly good life expectancy for a society without modern medicine, including our own just a century or two ago
 - and again, we are looking at foragers in a tough environment, not a favorable one
 - foragers in rich environments might presumably had even better life expectancies than the Ju/’hoansi
 - this supports Lee’s point that foraging is actually not a bad lifestyle
 - only with modern medical technology have farmers finally surpassed foragers in life expectancy
 - so people did not switch to farming because it provided a longer, healthier life
 - as we will see, quite the opposite...
- Lee revised our image of the foraging lifestyle
 - people, including anthropologists, had assumed that
 - hunting was the key source of food
 - males’ activities were the most important influence on survival, social organization, etc.
 - most importantly, foraging was thought to be a precarious struggle for survival
 - so people would naturally opt for the more productive and dependable farming or pastoralist strategies as soon as they were figured out
 - all of this turned out to be wrong
 - Main conclusions:
 - contrary to earlier belief, foragers do not depend primarily on hunting
 - plant foods provide 70% of the Ju/’hoansi’s calories

- women provide more than half of the food
 - women provided 2-3 times more weight of food than do men
 - virtually all of it is plant food
 - men gather for themselves while in the bush, but don't bring home nearly as much
 - what the men do provide sometimes is meat
 - which is relatively scarce and highly prized
- so hunting is only one of many influences on society
- contrary to earlier belief, foraging is a reliable, rich, and low-effort subsistence strategy, not a precarious struggle for survival
- background to Lee's larger study (some of this was not specifically discussed in the assigned reading)
 - 14 camps, each at a waterhole
 - each surrounded by an exploitable hinterland
 - minimal storage of food
 - lots of sharing within camps
- plant foods provided 60-80% of total diet by weight
- evidence that foraging is not precarious, but reliable and efficient:
 - diet study: they get enough food
 - they typically eat a bit above the US recommended daily allowance for people of their size and activity level
 - that is, they get enough food by our standards
 - averaging over a whole year, Ju/'hoansi ate over half a pound (9 oz) of meat a day
 - that is like having two quarter-pound burgers, or a medium-small steak every day
 - (typical US restaurant steaks range from 4 to 22 oz; nutritionists recommend 3.5 oz)
 - actually not spread evenly, but this gives an idea
 - they ate as much meat as average Americans did in the 1980s
 - (our meat consumption has gone up over 10% since then, though)
 - they were certainly not struggling to survive!
- food is available year-round
 - it just requires more walking in the drier parts of the year
 - even their favorite mongongo nuts are never used up
 - plentiful, reliable, nutritious
 - 50% of the plant food consumed
 - nor do they use up many of the other plant foods
 - their foraged food sources were *more* dependable than those used by agropastoralists
 - the study was done during a drought, and neighboring Herero agropastoralists were forced to join the Ju/'hoansi on foraging trips
 - not vice versa!
- more evidence that they have plenty of food: the Ju/'hoansi can afford to be picky about what they choose to eat
 - of all the plants they know to be edible, they usually pick among only 25% of them
 - they can afford to neglect the rest
 - of all the animals they know to be edible, they regularly hunt only 31% of them

- subsistence can't be too precarious, because they tend to live to an old age
 - 46 out of 466 (10%) of Dobe Ju/'hoansi were over 60 years old
 - compare to 16% for US society today
 - more, but not as much more as you might think compared to people living in the bush with effectively no medical care
- another indication that subsistence can't be too difficult: young people don't regularly provide food until they marry, around age 20 for boys
 - nor do old people over 60
 - so only 40% of the people are providing the food for the whole group
 - there is no pressure to have young and old people help
- they can get all the food they want in relatively little time
 - time allocation study
 - they average only 12-19 hours/week getting food
 - add in "chores" like getting water, gathering firewood, making tools, cooking, etc.,
 - still only 42.3 hours/week of work, total
 - compare to US, where we work at least 40 hours/week to earn money, then add another 40+ in commuting, buying food, cooking, cleaning, buying or fixing things, etc.
 - and all this data was collected in the third year of a drought!
- Foragers have free time
 - Details on how little foragers have to work, based on Lee's time allocation study, and corroborated by others
 - 2.5 hours/day getting food (17.5 hours/week)
 - 0.9 hours/day making and fixing tools
 - 2.7 hours/day cooking, cleaning, getting water and firewood, etc.
 - Total: about 6 hours/day of work (42 hours per week)
 - versus the US, with 40 hours of wage labor plus a typical additional 40 or more hours for other chores
 - this leaves a lot of free time
 - Lee describes his surprise at how much time the Ju/'hoansi spend lounging around camp, sleeping during the day, talking, playing with the kids, gambling, etc.
 - and the Ju/'hoansi probably have to work harder than did foragers in richer environments
 - before those were taken over by farmers and pastoralists
- Lee's conclusion: foraging isn't such a bad subsistence strategy
 - so the fact that humans were foragers for most of our history is not surprising
 - it works, and is relatively easy
 - instead, the question is, why did people change? Why did our ancestors adopt agriculture, herding, etc.?