



McDONALD INSTITUTE CONVERSATIONS

# Towards a Broader View of Hunter-Gatherer Sharing

Edited by Noa Lavi & David E. Friesem



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Edited by Noa Lavi & David E. Friesem

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Noa Lavi & David E. Friesem,  
Cambridge, October 2019





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## Chapter 13

### Foragers with limited shared knowledge

Peter M. Gardner

Last year marked the centennial of Malinowski's keen observation that [on tiny Kiriwina Island] '...no "natives" (in the plural) have ever any belief or any idea; each one has his own ideas and his own beliefs' (1916, 420). Actual field research and theorizing about diversity of beliefs and concepts within groups eventually followed (e.g. Gardner 1966, 1976; Sankoff 1971; Sanjek 1972; Barth 1987; Kelly 1995, 59; etc.),<sup>1</sup> Kelly and I participating in this with foragers in mind.

There is a cluster of foraging cultures in South India and a second one in the American Subarctic in which people speak sparingly and there is clearly highly limited sharing of knowledge. The mere existence of these cultures invites questions (a) about how learning takes place, (b) about how they handle cognitive diversity, and (c) about how claims to knowledge are established. Do we overestimate the amount of knowledge to be acquired and transmitted for a culture to function effectively? Is the oral tradition less essential for foragers than many claim (e.g. Winterhalder 1981, 17; Bieseke 1986, 17; Fowler & Turner 1999, 424; etc.)?

Having done almost a year-and-a-half of fieldwork among Paliyar, South Indian foragers, then a similar length of time (jointly with anthropological linguist Jane Christian) among Dehcho Dene foragers in Northern Canada, I can applaud Malinowski's stance. Today I will review what we are finding about a person's apparent limited exposure to the knowledge of his or her fellows among such taciturn foragers.

Anthropologists have traditionally thought of foragers' culture as consisting of substantial bodies of well-cultivated knowledge on behaviour of game and predators, seasonal traits of useful and dangerous plants, emergency water sources, medicines, materials for tool making, etc. Knowledge, to be collective, requires communication. Possibly we find it natural to regard elders as repositories of environmental knowledge, who can teach youths orally what they

need to know. While it was easy to assume that, it does not in fact account for the full range of our data on knowledge and learning. After all, according to Smith (1981, 44), we have a paucity of accounts of foragers actually engaged in sharing and teaching descriptive knowledge.

What we are now finding is that many foraging peoples use little formal verbal instruction; a few among them view that kind of instruction negatively. Some of them exhibit substantial interpersonal variation of environmental knowledge and understandings within their communities. And some of them weigh knowledge in terms of whether it has been established personally by direct perception, not whether an elder merely claims it to be valid. As those treated in this paper have all been professionally studied, because they hail from different continents and at latitudes ranging from 8°N to the Arctic Circle, and because their reliance on gathering, hunting, or fishing varies greatly (Murdock 1967), it would be a mistake to write them off cavalierly as being a certain kind of anomalous case that we can afford to disregard.

Data to be examined are from seven cultures – in two clusters. From South India there are Paliyar<sup>2</sup> (Gardner 1966, 1972, 2000a, 2000b), Malaipaṇḍāram (Morris 1982, 2014), and Nāyaka (Naveh 2007, 2014). From North America, there are Dehcho Dene<sup>3</sup> along the west side of Canada's Northwest Territories (Christian 1977a, 1977b, 1977c, 1977d; Gardner 1976, 1977a, 1977b, 1977c; Gardner & Christian 1977), Tlicho Dene to the east in the Northwest Territories (Walsh 2017a, 2017b), Dene Tha in Northern Alberta (Goulet 1998, 2000), and Gwich'in<sup>2</sup> in northeastern Alaska (Nelson 1973).

How might we understand the ways of life of these particular foraging peoples? How do communication and learning take place among them? Lee Thayer, a specialist in the subject, has defined communication as 'the operation of converting raw

*sensory data into information'* (italics in the original) (1967, 71). Thus, the deriving of information from experience would be an individual, private, and potentially idiosyncratic process, liberating us from the conceptual constraints inherent in so-called 'replication of uniformity' models and from the equally problematic stance that teaching is a mere transfer of knowledge. Thayer's definition, echoed in Goodenough (1971, 19–20, 1981, 51–4), invites us to ask important questions such as how, why, in what domains, and to what extent individuals can achieve operational understandings of one another. This could be a helpful way of proceeding for anyone wishing to examine knowledge in its social and situational contexts. If we begin with the idea that each individual has a distinctive history, knowledge then becomes a phenomenon that we cannot write off as simply the superorganic property of a group; we are obliged instead to consider it as something that can vary in diverse ways across the community and through the stages of any given person's life.

I will take up three broad topics: learning processes, interpersonal cognitive diversity, and peoples' evidentiary criteria for knowledge claims. These will be dealt with one at a time in a review of the data that utilizes fairly extensive quotations. One will see that there are significant similarities between the cultures in our sample. The materials ought to be enough to provoke new questions about our subject.

### Actual learning processes

Teaching, especially of subsistence knowledge, is a quiet business in the foraging societies I wish to treat. In some instances, it is possible to document the peoples' own explicit statements as to why they exercise such verbal restraint.

Pałiyar:<sup>4</sup> These are a starkly taciturn people – tied with the Dehcho Dene as being the quietest I have encountered anywhere. In keeping with this, verbal instruction is minimal, especially after early childhood. For much of each day during the first two years, a child is carried on its mother's left hip, spelled only by brief periods of similar attention from a grandmother, father, or older sibling (and, during short periods of strenuous work, the mother may suspend her sleeping baby nearby in a sling). By the time a child is one, some mothers make a regular practice of lingering a minute or two in front of objects, drawing them to the child's attention. This happens within Pałiyan settlements and while going to and from work along forest trails. Such mothers point to both familiar objects and alien ones and murmur a few words so softly that they are virtually inaudible. These

initial lessons taper off quickly after age two, but they probably provide the child with both stimulation and extremely elementary labelling lessons.

After age four, social learning – by observing others – is more prominent than verbal learning. Four year olds tend to play somewhat separately but within a meter or two of each other, in small, loose, heterogeneous groups. They glance about frequently and often repeat an approximation of social and technical actions they see around them. By five or six, they engage in more integrated play in slightly larger, more mobile groups and their opportunities for social learning begin to widen. Even so, parents remain fairly central to them in early morning and after the big evening meal, when most children under six either keep to nuclear family clusters, or accompany their parents as they visit others. Fathers commonly carry their toddlers on these evening visits, exposing them to the community's muted conversational peak of the day.

In groups of two or three, 10 to 12 year olds accompany adult foraging parties with increasing frequency,<sup>5</sup> but they tend to keep to an age-specific subgroup, alternating all day between ever varying play<sup>6</sup> and subsistence tasks in the proximity of adults. By 13 or 14 they become full participants in adult work groups. While youths themselves talk, the level of conversation within the adult work parties and between adults and youths is low. No one has the authority to direct the activities of youths or request work of them. Explicit verbal lessons are distinctly absent.

Two principles constrain instruction. (1) Apparently, telling even one's own child, what to do is unacceptable. Perhaps it violates the right of the child to make autonomous decisions. Such instruction *should* be ignored. A child of six or seven, for example, will not be stopped by its parent from using a cooking fire, moving to an aunt's house, or seeking a part-time job in a plantation. Even four year olds are allowed to play with fires, climb high in trees, or run about holding a sharp, machete-like *arivāl* without so much as a word of caution. (2) Any show of expertise stands to offend all who witness it. To have experts is to create the possibility of dependence. Pałiyar maintain that all reliance of one person on another is improper – exceptions being possible only for the very young, those seriously ill or disabled with age, and between the somewhat cooperative husband and wife (Gardner 2000a, 101); I have seen but one lone malingerer (Gardner 2000b, 220). Everyone firmly and uniformly denies the existence of experts (other than those who use wit or diplomacy to conciliate) (Gardner 2000a, 89–93). These two principles do much to dampen explicit teaching. When eliciting basic plant, animal, and col-

our terms (Gardner 1992) from a diverse sample of Paliyar, I ascertained that rudimentary competence in subsistence terminology is seldom witnessed before age 14. Such competence is only acquired slowly and its timing suggests that it is an eventual result of full participation in adult activities.

Their much-enjoyed accounts of hunts could amount to a form of teaching. Yet only certain hunting experiences get this treatment. People tend to keep their individual or family hunts of small game and root collecting private. Although it was difficult to ascertain by surveys that personal hunts had so much as taken place, I eventually learned through participation that they were much more common than group hunts. What is more, others never mentioned incidental, private, but often well-observed capture of a small animal, such as a tiny chevrotain or mouse deer (*Tragulus meminna*) by a participant in a group hunt (Gardner 2000a, 43). The private catch is not mentioned in summary accounts of the hunt. Yet hunters enjoy reciting in detail the sequence of what they have done collectively. Hunters freely name those involved and may tease the fellow who made the first blow – as when they told how, when a dying but still feisty boar was surrounded, Cadayan, who had struck it first, had to scramble into a tree to avoid its tusks.

Nāyaka: Naveh did much of his Nāyaka fieldwork with children of nine to 12. He described in detail how and why they refrain from asking questions and take responsibility for teaching themselves mainly by experimentation. By using trial and error, rather than by relying on what someone else has to say, they develop deep personal understanding, their term for which best translates as ‘wise’ (2007, 86–97, 2014, 346–52).

Initially, inexperienced boys do not do this wholly alone. One evening ‘Rajan’, age ten, went out with his father to set four traps.

‘Neither of them exchanged a single word throughout the time they were placing the traps. Rajan was highly alert while observing his father placing the first two traps. When they placed the third trap Rajan took the initiative and started to assemble the trap, tying the looped string to the [bent] twig by himself. Sundaren observed his son patiently and allowed him to finish what he had started. Then with a soft smile and without a word, he dismantled what had to be re-done and reassembled it so that the trap would work properly’ (Naveh 2014, 348–9).

Naveh’s tightly focused research is unique and powerful. He makes clear that, far from leaving youths without help (as teachers from the outside world might claim), the child rearing system has set them on a path toward achieving understanding on their own.

Malaipaṇḍāram: Morris’ general ethnography sketches succinctly a broad picture of social learning. Malaipaṇḍāram, as Paliyar, are comfortable with four to six year olds finding their own way across swarms of soldier ants, making cooking fires, and using sharp *arivāls*. Indeed, six year olds may collect and cook their own roots, fruit, small mammals, and fish. They are granted independence, but are still expected, like Paliyan children, to respect others and refrain from violence (1982, 146–9). They soon spend hours cutting steps in trees, fastening bamboo to trees, or blowing smoke into crevices in the wood – as in honey collecting. Then, play turning into ‘realistic pursuits’, they move on quickly to actual collecting (1982, 149). One difference from Paliyar is that they do not avoid cooperation (1982, 150). Moreover, in all-male forest camps, younger members ‘fetch and carry water, prepare root vegetables and wash dishes’ (1982, 151).

*Dehcho Dene*:<sup>7</sup> The linguistic anthropologist, Jane Christian, and I documented one-on-one teaching of indispensable skills for hunting, trapping, fishing, preserving fish, tanning moose hides, etc., including first lessons. Female and male approaches were similar, although the former did entail a bit more talking.

In tanning, the teacher tended to be the girl’s mother (Christian 1977c, 293). The ‘older woman would demonstrate, perhaps elucidate a fine point, then hand over the tool and step back. She would observe the girl’s work closely and offer advice and corrections’ (Christian 1977c, 292). Training began at about nine or 10, as girls watched and asked to participate. They tried each of the tanning processes, using moose bone and stone scrapers. ‘By about fourteen, girls take over tanning for longer stretches, with greater autonomy and responsibility for the results’ (Christian 1977c, 291).

In trapping

‘much of the teaching consists of visual demonstrations (framed only very informally as such, but often of slightly idealized form). . . . the learner watches as good sites for traps and snares are selected [and] as trap sets are built . . . Eventually, the suggestion is made to the learner, ‘now you do it.’ Little correction is offered even if minor mistakes appear to be obvious. What correction there is may be nonverbal – the

teacher trimming up the product of the task or redoing parts of the procedure' (Gardner 1976, 463).

Boys begin trapline lessons between seven and 11 (Gardner and Christian 1977, 397). Most teachers are parents or older brothers, but some are uncles or grandfathers (Gardner 1976, 463). 'There may be a several-year-long association of teacher and learner, a winter spent together on the trapline, or just sporadic trapping and hunting trips' (Gardner 1976, 463).

For both sexes, teacher and student

'must actively and consistently . . . continue in [the relationship] for appreciable or successful learning to take place. This means a minimum of a season for techniques like tanning, fish processing, trap setting, etc. For proficiency, exposure over several seasons is required, not all of it with the same intensity of teacher-learner relationship, and not all necessarily with the same teacher' (Christian 1977b, 119).

As with Pałiyar and Malaipaṇḍāram, 'even one's children . . . are allowed, to a great extent to govern their own lives . . . even though they may be endangering themselves or destroying property.' For both young and old, each is his 'own boss' (Helm 1961, 87).

Indeed, Christian even found no explicit teaching of language *per se* (1977b, 121). But Dehcho Dene certainly had speech-related ideas about learning. Essential to learning is a certain responsive posture: Those who seek knowledge need 'to listen (*etitθi*)', as they put it (1977b, 118). This refers to an attentive frame of mind, not auditory perception, and it should be in evidence by about age seven (1977b, 118).

In keeping with their customary taciturnity, Dehcho Dene believe one should not interrupt someone dealing with a task or, even a person who is lost in thought or deliberately silent (Christian 1977a, 25).

Despite their customary taciturnity, and although technical teaching is usually accomplished with few words, Dehcho Dene have a rich story-telling tradition. They are interested in stories about unusual events in the bush and funny, exciting, or tragic happenings of other sorts (Christian 1977a, 82, 88). Descriptions of 'one's own experiences, true stories about known persons, histories, hero tales, legends and myths are recounted dramatically with great flair.' They believe, though, that telling stories before age 30 can lead to forgetfulness; waiting and maturing allows one to understand and remember (Christian 1977a, 97–8).

Good storytellers are respected and appreciated. 'Mainly older women and some men tend to be excellent raconteurs' (Christian 1977a, 98). But people accord even a modest narrator their rapt attention: one man with little gift for words kept three fellow cabin builders and me enthralled with the first story below. In the course of 16 months, I was present for the telling of many such stories; three of them concerned:

- Finding evidence that a wolf chewed off its own paw in order to escape a steel trap.
- An otherwise shy American coot waddling right up to Old C'olo<sup>2</sup> in his bush camp – a meeting he interprets to be a sign of spiritual protection.
- A perennial young troublemaker leaping his way across over what may have been two or three hundred meters of huge tossing and tumbling blocks of ice during the climactic hours of spring break up of a river, in order to deliver a bottle of medicine to a critically ill child [I witnessed this and later heard it described].

Many elders 'work, if not in solitude, at least in relative verbal isolation' (Christian 1977a, 99) and hold that excessive talk, especially by youths, is not only undesirable, it 'can lead to forgetfulness' (Gardner 1976, 464). Christian concluded that

' . . . one should listen to tales as a young person but must not recount them until real maturity. Especially if a person under about thirty tells stories he will forget his knowledge. If he prudently waits and considers his knowledge only in a sort of internal dialog, then everything will be remembered, understood, and can be told in full maturity' (Christian 1977a, 98).

Notwithstanding the storytelling tradition then, 'Speaking should be the result of successful listening. One who bandies words about lightly in serious situations, or who lies, will fail in the bush' (Christian 1977a, 99).

Taken together, Dehcho Dene beliefs and practices regarding speaking, keeping silent, and listening do much to shape the overall system. Ironically, the general taciturnity of the aged means that much of their mature knowledge might never get shared with others when, at last, they are old enough that it would be thought suitable for them to pass on what they know.

Dene Tha: They are similar in that they

'expect learning to occur through observation rather than instruction, an expectation consistent with their view that true knowl-



edge is personal knowledge. The Dene [Tha] prefer this kind of knowledge since it is the form that has the most secure claim to being accepted as true and valid' (Goulet 1998, 27).

'Because [they] consider true knowledge to be personal, firsthand knowledge, they learn in a manner that emphasizes the non-verbal over the verbal, the experiential over the exposition of principles. In this way they foster one another's ability to learn and live competently. They promote the sense of one's autonomy and competence over the sense of one's dependence and incompetence.' The 'ability to learn through observation and imitation and the power to accomplish one's own choices by oneself are nurtured and respected throughout one's entire life. We have seen Dene [Tha] interact with their children, elderly individuals, and non-Dene in this fashion' (Goulet 1998, 58) and 'respect as far as possible each other's autonomy' (Goulet 2000, 72).

On principle, and on the same bases as Paḷiyar or Malai-panḍāram, they do not stop a child from approaching a dangerous broken window pane or chainsaw (2000, 60).

Gwich'in: The distant Gwich'in have broad cultural similarities. They

...take an extremely individualistic approach to the realm of knowledge and belief . . . and there is also a broad realm of idiosyncratic knowledge that is not universally known or accepted (Nelson 1973, 304).

As for being taught on the trapline,

Young men are not given verbal instruction; they watch, try for themselves, then are corrected for their mistakes. . . . [Nelson, himself,] was almost never given explicit instruction beyond being told how to carry out a specific operation: 'Stand here and watch for moose to come out'. . . . Procedures were never outlined before they were undertaken (1973, 9).

One never realizes how little he knows until someone says 'Now you try it' (1973, 10).

Nelson's summary thoughts on learning amongst Gwich'in are that 'A partial understanding comes through verbal accounts, a fuller understanding

comes through observation, and the most "complete" understanding comes through participation' (1973, 10). Like Dehcho Dene, they exhibit 'a broad realm of idiosyncratic knowledge that is not universally known or accepted' (Nelson 1973, 304).

Tlicho Dene: David Walsh, a specialist on indigenous religion, is engaged at present in ethnographic study of a fourth Dene culture, Tlicho Dene (Dogrib Dene), northeast of Dehcho Dene. He has told me that he often hears it said that to learn 'one must watch and then do, and the doing teaches' (Walsh 2017a). But, these 'are not direct quotes' of his consultants, because 'they would not talk quite so bluntly.' Rather, this is his summation of what consultants tell him and his own observation 'of how youth are engaged and expected to work themselves.' He has found that this is a subtle matter, for he has been told that 'being too attentive when watching was considered disrespectful.' Because outright staring is offensive one 'should watch but not over-see' (Walsh 2017b).

### The challenge of cognitive diversity

Given the very similar teaching methods that we have found in these seven cultures, entailing nothing explicit being said, it is easy to appreciate the likelihood that there will be considerable interpersonal variation in how people frame and express what they know. This deserves a close look.

Paḷiyar: Their taciturnity and informality foster individuality and they tend to manage problems in a personal and ad hoc manner, rather than conventionally. Although I did no systematic, person-by-person study of cognition among, it was research with Paḷiyar that alerted me to the possibility of there being interpersonal cognitive diversity amongst them. When a healthy jasmine bush providing one of the five main Paḷiyar digging stick woods was given three different names by a mature husband and wife, and an adult cousin of one of them, with whom I was sitting at the time, they seemed undisturbed and one laughed and said 'well, we all know how to use it!' (Gardner 1966, 397). In retrospect, I concluded that, some of their knowledge, in having been derived from personal experience, was comparable to what Scandinavian folklorists have long called 'memorates' in narratives (von Sydow 1934, 1937; Honko 1965).

Dehcho Dene: Honigmann (1946, 40) and Helm (1961, 55–66) had both reported interpersonal variation in limited sets of terms among their main Dehcho Dene consultants, but we sought to examine such variation more systematically. My elicitation of terms for parts of a moose skeleton, bird species, and trap parts from large stratified samples, and Christian's

elicitation of terms for aspects of moose hide processing and fishing technology yielded significant findings (Gardner 1976, 1977b, 203–61, 262–84, 1977c; Christian 1977c, 286–307, 1977d, 308–85).

In preparation for studying moose anatomy with 32 adults, I did a pilot run with six mature adults from one close-knit extended family. They told me that were amused to discover, from comparing notes with each other *after* my interviews, that three of them viewed the meat-rich hind leg as having two well-defined, named segments and showed me the boundary, and three of them viewed it as having three such segments. They had been unaware of their differences. In their view, neither of these could be deemed ‘correct’, they simply differed (Gardner 2006, 147). Moose being one of the main sources of meat, it was far from trivial in the full study that there were four modal ways, plus others, of labelling the moose spine and its parts, varied length of each named part of the spine, and greatly varied ways of handling the lumbar section that ‘connects’ fore and hind parts of the moose (Gardner 1977c, 270–84). Curiously, only one person out of 32 gave me a set consisting of what turned out statistically to be the most common term for each part of the spine (Gardner 1977c, 280).

I have comparable data on trap part names (Gardner 1977b). The Dehcho Dene we studied have had steel traps since the early nineteenth century, when the fur trade first reached them, and even seven or eight year olds could set a so-called ‘number 1’ trap competently. Terminology is just as varied for parts of a trap as it is for parts of a moose. Some labelled trap parts using the terms for spine, pelvis, and femur; others employed the terms for neck, jawbone, and tongue. Let it be said though that, whether or not they knew any English, they used only Dene terms. Variation was even greater in procedures than it was in terminology, individuals differing strikingly as to how they thought the trap should face an approaching animal (Gardner 1977a, 147).

They paid much attention to birds. Even though few birds were of practical utility, people tended to notice and watch them and it may be significant that birds were commonly spirit helpers (Gardner 2006, 140). I found that terms for bird species were highly varied (Gardner 1976).

Christian and I ascertained that, amongst other variables, age might underlie some interpersonal differences, as people not only tended to mature in silence, but they

‘frequently spent their later years under circumstances in which feedback was diminished and in which the impress of continuing

personal experience provided a basis for slight divergence’ in the dimensions and phrasing of knowledge (Gardner 1976, 464).

Given such interpersonal differences, especially in terms for critical subsistence items, it is important to establish how people comprehend one another’s speech. We found institutionalization of two practices: checking on labels used by others and periphrasis. Checking labels with others is a regular practice between trapping partners and newly-weds. The common form was by asking ‘What do you call this?’ In trapping partnerships it might continue from months to more than a year. Marriage partners in virtually every family studied did it regularly (Gardner 1976, 463–4). We ascertained that they sought to understand one another, not to converge in their terminology.

‘Speakers are responsive and appear to assess the effects of what they are saying. One frequently notices speakers rephrasing thoughts in descriptive language or employing other kinds of periphrasis. In one of many observed cases, in a conversation . . . about a trap line incident, one man referred to a trap part by [what I already knew to be] a relatively unusual term. A listener appeared to frown and, without pausing or faltering, the speaker used a stick in his hand to illustrate which piece with a drawing in the dust, as he kept on with his verbal account’ (Gardner and Christian 1977, 399).

Tlicho Dene: As for variable procedures, Walsh reports that, among Tlicho Dene, ‘different ways of doing something are not wrong.’ They are the result of people learning other methods (Walsh 2017a).

No comparable data appear to be available on the Dene Tha or Gwich’in.

### Evidentiary criteria for knowledge claims

Pałiyar: I found adults openly weighing everyone’s hunches about some matter, particularly on hunts and in crises. If individuals theorized about what was happening, then they and others in the group might seek and systematically examine facts bearing on each theory that had been put forward. On a boar hunt, people occasionally theorized about what the pig was doing. We changed course *only* if facts justified it.

‘In keeping with this . . . , realizing there was a puddle of blood each time the pig crossed

a low obstacle, I mentioned the possibility that it was dragging one leg. Two or three people asked me about the evidence for this. They heard me out, but admitted to skepticism' (2000a, 41–3).

After the chase ended, all wounds were examined and discussed. My theory would not have altered the path of our hunt, but, when my fellows noted the mauled, dangling hind leg, several did flash me smiles (2000a, 43).

Dehcho Dene Christian observed that people cannot judge the emotional state of another person; it is simply 'not known' (1977a, 72) and they talk similarly about other peoples' motives and future actions (1977a, 82, 96). They make a clear distinction between what can and cannot be known. When I tried to elicit a rough equivalent of family-level taxa for birds – such as owls, hawks and eagles, or geese and ducks, some of my subjects balked and fell silent, but two told me that general terms were only used in cases of ignorance, or what we might call 'empirical' uncertainty (Gardner 1976, 463). An example: 'If from far you see him you can't tell, so you call him... [by using a general term]' (Gardner 1976, 449).

### Closing thoughts

There was a point, of course, to my concentrating in this paper mainly on cultures having highly limited sharing of general and specific terms, even those terms central to subsistence. This promised to provide a long overdue challenge to the common assumption that shared terminology is normal and perhaps even necessary. I hope to have made it clear that there actually can be successfully functioning of a system in which there are (a) an explicit aversion to direct instruction, (b) limited oral transmission of information, (c) denial that experts exist, and (d) high levels of resulting cognitive diversity. Although Christian's and my research focused on establishing the degree to which Dehcho Dene had only limited shared knowledge and terminology, we made a point of looking at this in its behavioural context. There was plentiful sharing in other aspects of their culture. Individuals were certainly not disaffected from one other and did not resemble the Ik, as once characterized by Turnbull (1972).

Much could be said, for instance, about shared and coordinated activities of Paliyar and Dehcho Dene in their work, social interaction, ritual, and play. Both peoples appeared comfortable when interacting with other peoples who shared a language or dialect and manner of living with them. It was not just that

individuals 'made do,' there was evidence of social warmth. What is more, life in such individualized systems was anything but chaotic. Despite the idiosyncratic manner in which people learned and spoke, their venues for joint activity at work and recreation were many. Sharing could be significant. By participating in all male and mixed-sex Paliyar work parties and in male Dehcho Dene work parties, I found them quiet yet cheerful, cooperative, and spiced now and then by wordplay by even the most taciturn individuals. I saw this too in women's work parties. If there was light jesting, it seemed never to be taken the wrong way. Even I had to learn to take light, inclusive Paliyar teasing. In a Paliyar group hunt, spirits were high, most were active in tracking, all happily cooperated in butchering or portioning out the meat, and each hunter cheerfully took home a share precisely identical with the others in size and composition.<sup>8</sup> Since the 1896 Yukon gold rush, Dehcho Dene co-workers have put interpersonal problems to rest by drinking home brew heavily together, thrashing out what was on their minds, then claiming afterwards, 'I don't remember.' Trapping partners did it prophylactically when they returned home in case some problem needed airing; trappers who allowed me to accompany them sought to draw me, too, into this licensed venting afterwards; and I faked memory loss once when drinking with a man who was upset by how we sampled our research subjects. A smile resulted. I even watched a courting couple do it (Gardner 2007, 22–5). As for recreation, on full moon evenings many Paliyar (some couples wearing each other's garb) danced joyfully in a circle to song and a beating drum. This drew the rapt attention of smiling onlookers as well (Gardner 2006, 53–4). On grassy riverbanks on long summer evenings, mature Dehcho Dene men and women, with locked arms and calmly focused faces, danced in synchrony to a drumbeat, as they followed a circling singer who had a dream song to share with them, about the trail we must follow after death (Gardner 2007, 30). In both cultures faces spoke loudly; fleeting though they were, such moments of coordinated action appeared to give unity to more than just participating dancers. Both peoples, too, enjoyed moments of improvised play by someone skilful with words or rhyming couplets (Gardner 2000, 184–5, 2006, 150).

While Paliyar and Dehcho Dene had limited access to the thoughts of those around them, they valued the resulting privacy, and they acted as though they had little interest in what was on others' minds. Familiarity with each other's usual routines gave social life as much predictability as they seemed to need. Except in Dehcho Dene marriages, contracts were unnecessary and, even between spouses, there was no



evidence of people chafing over what someone else had failed to do. Relaxed interpersonal relations and ready smiles tended to be what one usually saw. The primary shared value of the Paliyar and Dehcho Dene, as well as Malaipaṇḍāram and Dene Tha, seemed to be that one must respect others – meaning *all* others, children included (Gardner 2004, 55–6; 2006, 120; Morris 2014, 310; Goulet 2000, 72). Honouring this expectation was normal. In the Paliyar case, permissive South Indian weather being no impediment, even light disrespect (such as bluntly telling one's spouse what to do) could lead to the offended spouse promptly moving out (Gardner 2004, 62–5). This was surely an incentive to act with restraint, give others the space they needed, and, in so doing, tie people together in peaceful communities (Gardner 2000b, 218–21).

A predictable consequence of pure egalitarianism and absence of formal authorities is that people are obliged to resolve interpersonal difficulties on their own. During my time in the field, I heard claims that three Paliyar resorted to using sorcery in response to provocations (2000, 156–7). This being done in secrecy, of course, was beyond further inquiry. During our work with Dehcho Dene, two families rather openly took turns ritually attacking one another in anger, following a seemingly accidental injury.<sup>9</sup> It was hard to miss six young men suffering broken legs, back and forth between family A and family B, especially when the first victim's mother cried out 'My son will not be the only one to break his leg!' (Gardner 2007, 31–2). Even so, these ritual attacks took place without unduly disrupting otherwise relatively peaceful communities – presumably because respect for all others was a central and very explicit ideal.

Paliyar seldom met other hunter-gatherers, but they drew no firm line between themselves and others when they did meet them, even if there were minor dialect differences. I have also seen unproblematic intermarriage of Paliyar with plains people. How one acted was a personal matter and there was no prejudice against children of mixed birth. What really counted was respectful behaviour. Once more, such openness was seen when Dehcho Dene encountered Dene from adjacent regions. There appeared to be friendly, open boundaries. In Canada, speech differences within their own communities may have prepared them to be tolerant of linguistically similar, kindred peoples, for in gatherings I have seen (e.g. at a region-wide pipeline hearing) openness and trust of distant peoples were apparent. I also learned that I, an outsider, could approach a log cabin owned by people with whom I had never before exchanged a word, scrape off my boots on the door step, open the door, enter, sit down with my back against the wall, and

wait five minutes before saying why I had dropped by. Their response: relaxed smiles and interest in what I had to say.

Returning now to the rationale for our research, for Dehcho Dene to hold that one truly knows only what one has personally witnessed undoubtedly contributes to their interpersonally diverse (or diversely phrased) knowledge, yet that appears not to be automatically problematic. Indeed, in the other individualized foraging cultures I have treated here, field data of professionals make it clear that visually derived information alone can play a significant role in adaptations and in perpetuating ways of life, even under the harshest conditions. The notion that perpetuation of culture 'depends' mainly on speech is flatly incorrect. We chatty outside observers have to face the fact that it is ethnocentric of us to suppose that *our* manner of perpetuating culture is *the* manner of doing so. Foragers such as those described here have provided us with diverse and humbling lessons.

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### Notes

1. As Fredrik Barth puts it 'all views are singular and positioned' and 'differences between persons in knowledge, values, concepts, and perspectives animate a great deal of the action and interaction that takes place' (1994, 357). In addition, Robert Kelly not only acknowledges interpersonal differences in knowledge among foragers, he recognizes too the importance of variation in information in the course of transmission (1995, 59–64).
2. In accord with Dravidian languages, 'Paliyar' is used as a singular noun or an adjective and 'Paliyar' as a plural noun. A subscript dot beneath a Paliyar consonant indicates retroflexion, the tongue being curled back, and an apostrophe indicates that the preceeding Dehcho Dene consonant is tense and plosive.
3. I urge avoiding use of the deliberately pejorative exonym, 'Slavey', imposed on Dehcho Dene by insensitive outsiders (Asch 1981, 348). Scholars were slow picking

- up on this (e.g. Asch 1981, Helm 1981, *passim*, 2000, 7), but, by 1974, people along the Mackenzie and Liard Rivers had already begun to call themselves by their own fully appropriate term, meaning 'Big river people.'
4. As I had studied colloquial Tamil for two years and had become acquainted with their dialect, language problems did not generally arise.
  5. Settlements being small, such groups necessarily include youths of differing age.
  6. Games are as diverse as swimming in forest pools, making propellers with reed blades and thorn axles, and playing a non-competitive version of prisoner's base – emphasis being on dancing rather than capture of opponents.
  7. Only a third of the adults had much facility with English. Preliminary training by linguist Marshall Durbin plus work on language during a 1973 pilot project allowed me to conduct some later sub-projects entirely in Dene. Jane Christian built on her previous Athapaskan linguistic research.
  8. One extra share went to the person who moved in and struck the first blow, but it appears ultimately to have been distributed to those in special need.
  9. One occurred when a youth accidentally re-broke his own leg when demonstrating a karate chop to a friend. Another was the result of a drunken, snowmobiling teenager careening into a tree. The series was ended by a famous Cree shaman whom the two families flew in from southern Alberta.
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