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JOURNEY TO PULYKARA

In an era marked by moonshots and urban blight,
wars and dissent, ten Australian Aborigines peaceably
subsist as hunters and gatherers with time to spare

by Richard A. Gould



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In November, 1969, I received a report of a small group of Australian Aborigines who had never seen Europeans. They were said to be living in the heart of the Gibson Desert, at a place called Pulykara, near Mount Madley, about 330 miles northwest of the Warburton Ranges Mission. They were discovered by Bob Verburgt, then a patrol officer for the Weapons Research Establishment at Woomera. This was four months after the astronauts had made their first moon landing, and it seemed to me then, as I am sure it did to many others, that there was no place left on earth that Western technology had not penetrated. It was ironic to think that while the rest of the world fought wars, built and destroyed cities, created art and literature, the ancestors of these people and the people themselves—as recent archeological evidence suggests—re-

mained completely unaware and unaffected by it all.

At the time of their discovery, my wife and I were organizing an archeological field camp at the Warburton Ranges in Western Australia, and could not visit these Aborigines until our own project was well under way. Five months later, in April, 1970, we set out from Warburton in search of them.

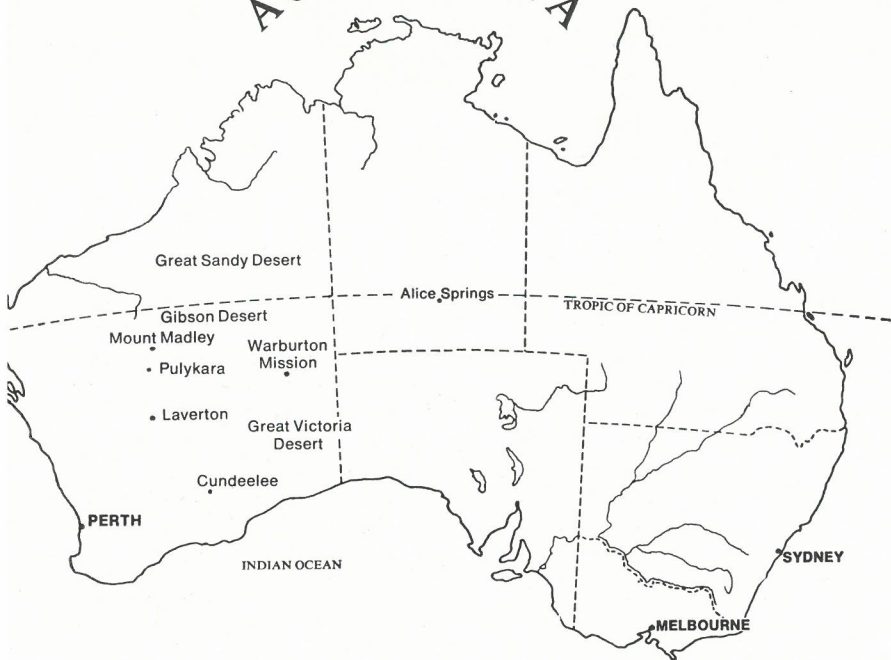
Although our previous visit to this area in 1966-67 had provided the opportunity for us to live with and study a group of Aborigines who had formerly been to white settlements and had subsequently returned to the desert and resumed their nomadic existence, we had never before encountered anyone so isolated from, or untouched by, Western culture. The Aborigines living at Warburton, many of whom came from areas adjacent to the Mount Madley region, admitted

that they, too, did not know who these people were—a remarkable admission from people whose network of kin relationships often extends over hundreds of miles.

During the five-month interval, a Western Australian Native Welfare patrol had contacted them briefly and brought a young man named Yutungka into Warburton to be circumcised. He was accompanied by an elderly man named Tjitjinanya. The group had been isolated for so long that Yutungka was well past the age when men normally are circumcised, and he was anxious to have it done as soon as possible. For many years his group had not met with other groups of Aborigines to form a gathering large enough for the precircumcision ceremonies to take place.

The operation was performed early in April, and we offered to transport the two men back to their

AUSTRALIA



country as soon as Yutungka was well enough to go. We also took with us an elderly Aborigine named Minmara, an intelligent man of outstanding good humor, whom we had come to know well during our previous stay in the desert. We had been with him many times in his own country, about 150 miles northwest of Warburton, and by now he was familiar with the nature of our work. We brought him with us in the hope that, in his own way, he would be able to explain to the others what we were doing. With small, unacculturated groups there is always the danger that the anthropologist's presence will disrupt their activities. We wanted to observe as much as possible of their normal daily routine, but we also wanted to record what we saw with photographs, maps of their camp, tape recordings, and ordinary field notes. Minmara, already familiar with our equipment, could reassure the others.

We outfitted two vehicles for the trip, a Land Rover and a two-wheel drive truck. Because of the distance, supplies were a problem and limited us from the start. We had to be completely self-sufficient. The truck was loaded with drums of fuel and water and we intended to drive it as far into the desert as possible. For two days we drove up a deserted rocket range access road, locally called the "Gunbarrel Highway," to

a point about 80 miles from where the Aborigines were said to be camped. Then we refueled the Land Rover and left the truck where it would serve as a gas station for us on our return trip.

During the trip out, Minmara did several things that seemed odd and unlike him. On one occasion he asked me for some cigarettes. Because I want to avoid having to feed the people we are with, I always try to be generous with tobacco instead. For anthropologists, feeding the people is a never-ending problem. If we are to observe their normal food-getting behavior, we cannot always feed them. This leaves us open to accusations of stinginess. On this trip, however, I had brought only plugs of chewing tobacco. Minmara had never before asked me for cigarettes and, in truth, I had never seen him smoke them. Nevertheless, he seemed disappointed when I offered him some chewing-plugs. Later he came to me again and asked for my rifle and one bullet. Minmara had borrowed my rifle many times before to go kangaroo hunting, but he had always asked for as many bullets as he could get. When I asked him

why he wanted only one bullet this time, he seemed genuinely at a loss to explain. After I gave him the gun and the single bullet, he walked to the edge of our camp where the other two men could see him, loaded the rifle, and fired it off into the air. Then he returned the gun to me and in a low voice explained that these were ignorant men who did not know about such things. This really floored me, since I could remember when, not so very long ago, Minmara himself had been a desert Aborigine just like these men. He obviously had meant to smoke the cigarettes in front of them as well, to impress them with his newfound sophistication.

We continued our cross-country trip to the west, skirting several sandhills and wide stretches of burned-over country. Yutungka excitedly pointed out places where he himself had set the fires. As we were traveling in a time of drought, the wind was shifting the sand in many burned-over places. At Warburton, less than an inch of rain had fallen in two years, and conditions looked similar here. I was particularly anxious to observe these Aborigines under drought conditions, since our previous trip to the Gibson Desert had been during a period of exceptionally good rains, with a corresponding abundance of plant and animal foods. Eventually we saw Mount Madley—two tiny rock knobs standing about 25 feet above the surrounding sand plain, yet appearing highly significant in comparison with the relatively flat terrain. Claypans and salt lakes provide the few landmarks in this region, which on the whole is among the most featureless and unfriendly looking country we have ever seen in the Australian desert. The spinifex, a spiny grass that grows in clumps of varying size and density throughout the Gibson Desert, appeared parched and yellow. There were some signs of recent rain on several claypans we crossed, but rain in this region is notoriously fickle and often falls only in localized patches. The mulga scrub we passed also looked dry and brittle. On our previous trips in the Gibson Desert, we had



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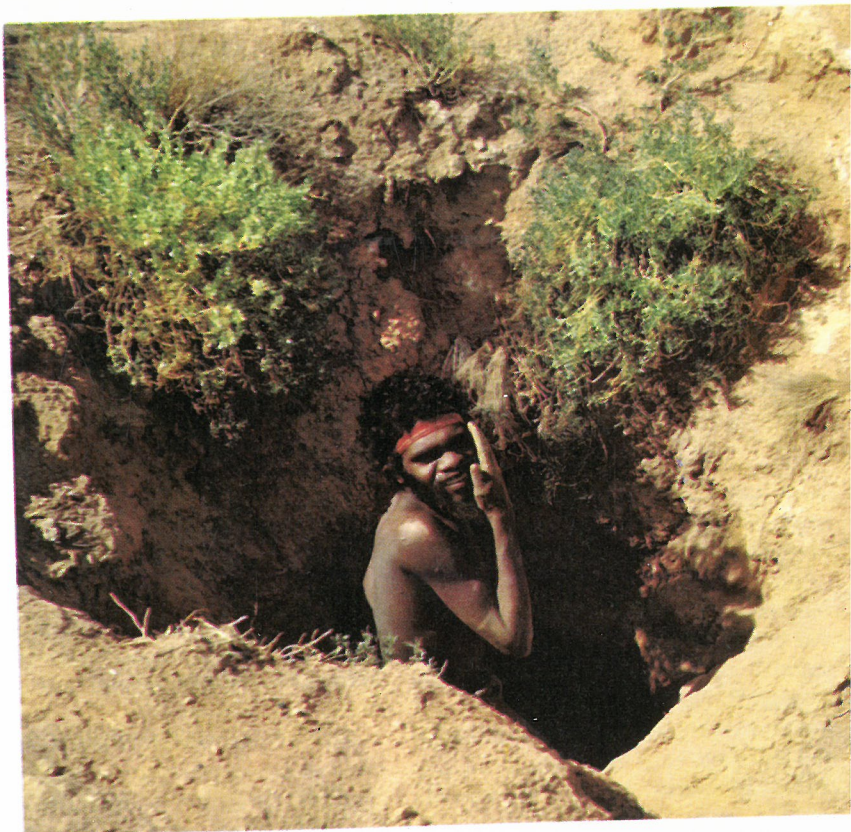
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Yutungka's mother huddles with her dogs on an early winter morning at the camp at Pulykara. At right, Yutungka stands halfway down a 15-foot-deep native well.

seen the country at its best; now it seemed we were seeing it at its worst.

Arriving at Pulykara on the morning of April 20, we found that the Aboriginal camp consisted of three small clusters of hearths, each surrounded by cleared patches of sand—the sleeping and sitting areas—and a low brush windbreak. The arrangement was typical of the winter campsites of Gibson Desert Aborigines, which we had observed on previous occasions. Situated on the slope of a sandhill at the edge of a dry lake bed, it was sur-





At the claypan of Walaluka, fifty miles from Pulykara, Yutungkā tests the water, and finds it potable.

rounded by a profusion of flies, an inevitable feature of Aboriginal camps. The wind was blowing fairly hard when we arrived, and it was apparent that there was little natural cover here or anywhere nearby. Burned acacia bushes and a few low clumps of ti tree, spinifex, and saltbush gave the whole place a rather cheerless look. The water hole, a so-called native well dug

about 15 feet in the lake bed to the water table, lay about 425 feet southwest of the camp. These native wells are, in most cases, nothing more than soakages into which the Aborigines dig for water. Often they get deeper as the water table retreats downward. Pulykara, a classic example of this type of well, had a flow at that time of about a gallon in ten minutes. We had already been told that Pulykara was one of the most dependable water sources in the region and was virtually permanent.

No one was visible when we arrived at the camp, but on top of the sandhill there were several emaciated, howling dingoes, dogs kept

by the Aborigines and sometimes found wild. Yutunka set fire to some ti trees as a smoke signal to indicate our presence, while Tjitjinanya and Minmara went on foot over the sandhill to look for the people. A few minutes later they returned with Tjitjinanya's wife, a tiny woman with a greatly distended stomach. She had heard us approaching—the whine of a Land Rover's gears can be heard for miles—and was frightened, so she ran off into the sandhills to hide. The others, she said, had left earlier to look for food.

This timidity was apparently one reason why this group had not been contacted earlier. Later on, Yu-



tungka told us that when he was a small boy, a truck (probably another Land Rover) had passed this way with one man driving it. Everyone had run into the sandhills and watched the white man from behind some bushes. The vehicle missed the camp by about a quarter of a mile, passing on the far side of a sandhill to the north, where the man had stopped and spent the night before continuing his journey in the morning. The Aborigines stayed awake all that night watching him, but they never revealed themselves. This, no doubt, must have happened many times to government patrols sent out to locate desert Aborigines.

After the others arrived, there were nine people, comprising three small families, present: Yutungka's mother and father, Tjitjinanya and his wife, and finally a third couple and their two daughters—a six-year-old named Pannyi and an infant. While talking with them we quickly discovered several words derived from English, and learned that the young couple had previously spent some time at the Carnegie Homestead, a remote sheep station a little more than 100 miles southwest of Mount Madley. Also, Yutungka's father said he had once spent a few days at Jiggalong, a mission and Aboriginal reserve about 200 miles northwest of

Mount Madley. Aside from these instances and Yutungka and Tjitjinanya's recent trip to Warburton, these people had lived all their lives in this area of the desert. As Betsy was the first white woman that most of them had seen, the women could not stop touching her arms and hair and discussing her appearance. Some of them had a few scraps of clothing given them by the preceding patrols, and they possessed a steel axhead. The tenth member of the group, a young man named Yiwa, had gone off to the west by himself to look for some spearwood. We missed seeing him, since he still had not returned when we departed for Warburton. These

While carrying a dog around her waist, Tjitjinanya's wife sympathetically covers its eyes so it will not see her eat a piece of candy.

people spoke a dialect, which they called Ngatjara, one of the many mutually intelligible dialects spoken by Aborigines throughout the Gibson Desert.

Yutungka was clearly delighted to see his parents and other relatives again. They greeted him by wailing loudly, while his mother flailed herself on the head with a wooden bowl until the blood ran freely from her scalp. This was out of sorrow for the pain he had undergone while being initiated at Warburton and in recognition of the death-rebirth symbolism of the whole initiation ceremony. Once these formalities were over, the group settled down to discuss their recent activities and, no doubt, us, while we set up our own camp about 100 yards away. Yutungka kept everyone up late that night with his dramatic and highly animated account of his experiences at Warburton.

The Gibson Desert Aborigines live entirely by hunting and gathering wild foods. They do so in what is probably the poorest environment, in terms of food resources, of any in the world where people have lived by foraging directly off the land. In our earlier studies we found that the Aborigines in this area subsist on 38 edible plant species, called *mirka*, and 47 named varieties of meat and fleshy foods, called *kuka*. *Kuka* is always preferred over *mirka*, but our studies indicated that *mirka* is almost always more important in the over-all diet. As there are no large game animals, the kangaroo, which rarely exceeds 100 pounds, is the largest animal hunted, although they are uncommon in the Gibson Desert. Herds of game animals, such as one finds in Africa today, do not exist

in this area. Most of the protein obtained by these people comes primarily from two species of goanna lizard found in the sandhill and sand plain country. With the exception of rare occasions when heavy rains have fallen for two or more consecutive seasons in one spot, providing abundant vegetation and therefore attracting game, the diet is almost entirely vegetarian, revolving around at least seven staple plant foods. I have defined a staple here as any plant species that, singly or in combination with another, accounted for at least 50 percent of the total diet by weight during the period it was collected and consumed. Other edible plants act to supplement and vary the diet. Although men hunt regularly for kangaroos, emus, wallabies, and other game, it is the women who are the mainstay of the economy and who provide virtually all of the vegetable foods, as well as much of the small game.

Compared with other hunting-and-gathering societies, the Gibson Desert Aborigines fare poorly even in the best of seasons. For example, the !Kung Bushmen of the Kalahari Desert of Africa, a group recently studied in detail by anthropologist Richard Lee, distinguish 54 edible species of animals (including some, such as giraffes and various antelopes, that are larger than anything found in the Australian desert) and 85 edible plant species, one of which, the mongongo nut, accounts for one-half to two-thirds of the total vegetable diet by weight. The Bushmen, therefore, can afford to pass up such small game as rodents, snakes, lizards, termites and other insects, all of which are eagerly sought by the desert Aborigines.

Any anthropological discussions about the material culture, social organization, and religion of the desert Aborigines must be seen in terms of the basic ecological considerations. Not only is the Gibson

Desert generally impoverished in edible plant and animal species, it is also unreliable in terms of the ripening and availability of these species. There are no regular wet and dry seasons, such as one finds in the Kalahari or even in tropical Australia. Rainfall, generally low to begin with, fluctuates tremendously with time and place. The table shown here for vegetable staples for 1966-67 represents a foraging season under optimum conditions of rainfall for this region: a kind of Aboriginal woman's "shopping list" at a time when there was plenty of rain to stimulate plant growth. The table for 1969-70, although complete for only eight months, shows the plants collected by these same people as staples during a drought year.

It was with this general background of information in mind that we began our visit with the desert Aborigines at Pulykara. On the day we arrived, Yutungka's mother appeared carrying a wooden bowl containing ten grubs and a piece of backbone from a feral cat, which she had evidently taken with her as a snack to eat while out looking for grubs. The young woman, named Yutungka, arrived in camp shortly afterward with a wooden bowl filled with about ten pounds of sundried quandong, a native fruit with a large kernel, of which only the outer husk is eaten. I was immediately interested, because neither woman had been out collecting for more than a couple of hours that day. Also, the people seemed in good condition. Things might be hard at Pulykara during the drought, but certainly no one was starving or even close to it.

In the days that followed we settled into a routine of steady, low-key observation as the Aborigines went about their daily affairs. Or most days I went out hunting with Yutungka and one or more of the other men, while Betsy either stayed in camp or went foraging with the women. Although we traveled as much as ten to fifteen miles a day in search of game, the result of the hunt were poor. At no time did we see any fresh kangaroo or emu tracks and, after four days o

behind blinds of brush or rock or, sometimes, by careful stalking when an animal is encountered in the open. In either case, dogs are not wanted. Nevertheless, I noticed that Yutungka's favorite dog, Pitji-pitji, would continue with us, lurking cautiously about a quarter of a mile behind us or off to one side. Its presence was tolerated as long as it did not get too close to us or otherwise interfere with the hunt.

We counted nineteen dingoes in

and around the camp, all of whom would join in piercing choruses of howling in the morning or at night. They were often fondled but rarely fed, although the people expressed sympathy for their hunger. Once, after I had given a piece of candy to Tjitjinanya's wife, she covered the eyes of the dog she was carrying. When I asked about this, she said the dog was *ngaltutjara*, "the one to feel sorry for," because it could not have the food, so she was

enough to drive them away for a while, but it was a never-ending battle in which the dingoes' perseverance inevitably won out.

Most Aborigines, both men and women, have their favorite dogs, but we noticed from the start that Yutungka's mother behaved very strangely toward her dogs. She carried this behavior to a fanatical extreme, and we christened her the "Dog Lady" because of it. She cared for about a dozen dogs, which formed a seething pack around her whenever she was seated in her camp. She seldom fed them but fussed over them constantly in other ways. When they were asleep she built little shade-shelters of twigs and boughs for them, which she moved periodically as the sun's shadow shifted, being careful all the while not to disturb the sleeping dogs. Like most of the others, she was naked when we met her on the first day, but Tjitjinanya had given her some tattered dresses and other clothing he had acquired during his brief stay at Warburton. Instead of wearing these herself she laid them over the dogs while they slept during the day. At this time the days were warm, about 80 degrees Fahrenheit in the shade, but at night it was close to freezing. On chilly nights the desert Aborigines always sleep next to a fire with their dogs huddled around them to keep warm; Yutungka's mother, of course, had most of the pack wrapped around her. One night I tried taking flash photographs showing how the people sleep with their dogs. No one minded the picture-taking except the dogs: I had not reckoned on their reaction to the flash. After my first photograph, they ran off into the sandhills while the people lay shivering by their little fires, bereft of their doggy "blankets." I apologized, but it was a while before the dogs came back.

The Gibson Desert Aborigines are among the last people anywhere who still make and use stone tools as a regular part of their culture. On our previous trips into the desert we learned that these people possess a limited variety of stone tools used for cutting meat and sin-

Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	April	Mar.	Feb.	Jan.	
												VEGETABLE STAPLES (1966-67)
												yawalyuru -edible berries (<i>Canthium latifolium</i>)
												kalpaŋi -edible seeds (<i>Chenopodium rhadinostachyum</i>)
												wanguŋu -edible seeds (<i>Eragrostis eriopoda</i>)
												kampurarpa (fresh) -edible fruit (native tomato- <i>Solanum</i> sp.)
												wayaru -edible fruit (quandong- <i>Santalum acuminatum</i>)
												yili -edible fruit (wild fig- <i>Ficus</i> sp.)
												ngaru -edible fruit (<i>Solanum eremophilum</i>)
												kampurarpa (dry) -edible fruit (native tomato- <i>Solanum</i> sp.)

Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	April	Mar.	Feb.	Jan.	
												VEGETABLE STAPLES (1969-70)
												ngaru -edible fruit (<i>Solanum eremophilum</i>)
												yili -edible fruit (wild fig- <i>Ficus</i> sp.)
												wayanu -edible fruit (quandong- <i>Santalum acuminatum</i>)

INADEQUATE OPPORTUNITY TO OBSERVE

INADEQUATE OPPORTUNITY TO OBSERVE

covering its eyes in the hope that it would not see her eating.

Not only were these the skinniest dogs I have ever seen, but they were also compulsive cringers and skulkers. Throughout our stay we had to be on guard against their getting into our belongings, since we found that they will eat almost anything. Despite our efforts, one of them consumed the electric plug and three feet of heavy-duty electric wiring from our portable generator. On past occasions dingoes have devoured boots, entire boxes of detergent, and magazines; occasionally, they have even pierced tin cans with their teeth and extracted the contents with their incredibly prehensile tongues. One glance and a hissing shout of *payi* was always

ew, as well as for scraping or adz-ing wooden tools (see NATURAL HISTORY, February, 1968). They classify these tools as *tjimari* and *purpunpa*, respectively. For archeologists in particular this is useful information, since they are concerned much of the time with the ways in which ancient stone artifacts were made and used. Since this activity rapidly declines once the Aborigines obtain metal tools, we were fortunate to see as much of this skill in action as we did. But there were still some unanswered questions; the most important of these was the role of hand axes and hand-held stone scrapers.

All of the groups we had previously observed had already obtained enough steel axes for their needs. Aboriginal stone axes had been seen in use by earlier scholars such as anthropologists Norman Tindale and Donald Thomson, but their classification within the native system remained uncertain, along with other details concerning their manufacture and use. As I had hoped for some time to find a group of desert Aborigines who had not yet transferred to the use of steel axes, the group at Pulykara proved ideal. The single steel ax they possessed was not sufficient for their needs as its large size made it awkward to handle and limited its usefulness; therefore, they continued to make and use large, hand-held stone tools along with other kinds.

The people at Pulykara classified all hand-held scrapers and hand axes as *purpunpa*, regardless of size. Always trimmed on one edge only, they were used exclusively for cutting and shaping wooden objects. In general, hand axes and large stone scrapers were trimmed by chipping just enough to provide a steep working edge suitable for woodworking. These observations are of particular interest to Australian archeologists, since recently accumulated evidence points to the persistence of a hand-held, stone flake tool tradition in some parts of Australia for over 30,000 years. Although various hafted stone tools, some of them quite delicately made, appeared at least 6,800 years ago in the Gibson Desert, they never dis-

placed the tradition of making large, hand-held tools. Further analysis of the tools will be needed before this pattern can be described in detail, but preliminary studies indicate that we are dealing here with one of the most dramatic and well-documented examples of cultural conservatism in the world.

By our fifth day at Pulykara our supplies were dwindling and it was obvious that we had to leave before we consumed our reserves. In the Australian desert one always keeps enough extra food and water for a possible breakdown or emergency en route. The evening before we left there was an intense discussion in camp. Tjitjinanya wanted to return to Warburton with us—he craved the excitement of other people. The women countered him, saying they liked the things he had brought for them from the mission but they wanted him to remain at Pulykara with them. The argument went on late into the night, and in the end Tjitjinanya agreed to stay. Betsy and I did not interfere, but we both knew that it was far better at that time for Tjitjinanya and his wife to stay in the desert. For one thing, the two older men at Pulykara address Tjitjinanya as *kamuŕu* and regard him as a mother's brother—an obligatory sharing relationship in which most of the goods and services flow from the sister's son to the mother's brother. Tjitjinanya and his wife have no children of their own, and since they are both getting old and one of them is infirm much of the time, they must consider who will support them in their old age. Even under the harsh conditions of desert existence, the Gibson Desert Aborigines do feed and look after old or sick people—but only if a sharing relationship based on kin ties exists between the people involved. Tjitjinanya and his wife had no close kin at Warburton and might suffer privation there. On the other hand, because of Tjitjinanya's *kamuŕu* relationship to the oldest man in each of the other families at Pulykara, they had, in effect, two families working for them, gathering food, firewood, and other necessities. It was undoubtedly wiser for them to

remain at Pulykara, and I was relieved when the ladies finally won out. We left for Warburton the next morning, accompanied by Minmara, while the others remained at Pulykara.

What had we achieved by making this trip? Certainly we made no startling or fantastic discoveries; we found no "vanished tribes." Essentially, these people at Pulykara were like those we had encountered in our earlier work in the Gibson Desert. Although they live in a poor and undependable physical environment, they have survived and developed rich oral traditions and ceremonies along with a social system of amazing subtlety and complexity. Further research must inquire into how these systems are supported by the economy and how, in turn, they serve to maintain the economy. Our trip to Pulykara offered us another glimpse of the day-to-day economy of a nomadic group of Aborigines, and increased our understanding of how these people have adapted to their desert existence. However, there still are things we do not know. For example, how do people like this support themselves in a drought of ten or twelve years duration?

Like many anthropological expeditions, we obtained scientifically useful results without undue hardship or excessive fanfare. And from a personal point of view, there was something esthetically satisfying about this trip. We met these people on their own terms, in their own country. It was indeed a pleasant change from meeting Aborigines, as we have so often, living on the fringes of white settlements where they are increasingly dependent on the white man's culture. The friendliness, independence, and pride of this small community provided a rare and rewarding experience.

After several hours in the bush, Yatungka and her daughter Pannyi return with about ten pounds of sun-dried quandong.