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# MAKING MEDICINE CULTURAL IN RAPA

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**ABSTRACT:** The effectiveness of herbal medicines that are used to treat ordinary or naturalistic diseases in Rapa, French Polynesia, is not subject to supernatural explanation or to any known biochemical agent in the medicines themselves. Nor are the Rapans themselves able to explain the efficacy of their medicines. This raises the theoretical issue of how anthropologists may identify meanings of which the members of the culture are unaware. After addressing that issue, the three major types of diseases Rapans recognise are described. It is proposed that in Rapan culture the efficacy of herbal medicines to cure ordinary diseases is found in the many rules regulating medicine preparation and treatment.

*Keywords:* Rapa, indigenous medicine, culture-nature dichotomy, supernatural, religion, cultural rules

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Doing fieldwork in Rapa in 1964, one of my questions was how an indigenous medicine cures disease. Rapans could not answer the question, saying: “We do not know what goes on inside our bodies. Only God knows that.” The aims of this paper are two. The first is to give some ethnographic understanding of disease as it was conceived in Rapa at the time of my fieldwork and the medicines that are used to treat it.<sup>1</sup> The second is to investigate how, from the perspective of Rapan culture, herbal medicines cure disease—especially naturalistic or ordinary diseases. Note well that this is not to raise the question of whether Rapan medicines really cure disease. That question—the one of efficacy—is seriously vexed. It raises the questions of what counts culturally as a cure, whether it is appropriate to use tests derived from the western biomedical system to assess the effectiveness of Rapan medicine and many others (Waldram 2000). We will simply accept the Rapan conviction that their medicines do indeed cure disease, leaving aside issues such as what they mean by “cure” and how they prove it. The question remains: how do they think their herbal remedies contribute to a cure? Since they profess ignorance of that, this in turn raises the question of how the anthropologist can attribute an explanation to Rapan culture when Rapans themselves cannot articulate it.

To begin with that question, the alternatives seem to be to posit culture as a level of reality unto itself or to reduce culture to psychological and even biological characteristics of its native members as individuals. The first alternative, proposed by founding figures such as Comte ([1830]

2000) and Kroeber (1917: 210–12; 1919), enjoys relatively little currency in contemporary social science. It does, however, offer an answer to our problem by holding that even native members of a culture may be unaware of some of the “superorganic” characteristics of that culture.

The second alternative is gaining ground in contemporary social science, partly because it has the advantage of seeming “scientific” and is therefore more attractive to funding agencies (Duster 2006). It is consistent with the general shift in contemporary thought from collective theories such as socialism to the more individualistic neoliberalism (Kapferer 2004: 155) and is reflected in the current assumption that society is a ground for agents to contest, negotiate, dispute and even create social rules with the aim of advancing their own strategic pursuits (Just 2004: 186, see also 190). If we stop at psychological reductionism it initially seems that there is nothing in culture of which members are not aware, but Freud and other psychologists have stressed that we are not conscious of all, or even most, of our drives and inhibitions. And, of course, if we go beyond psychological reductionism to attribute customs and beliefs to genetic and other biological roots, there is much of which the individual is unaware.

In any event, my own way of dealing with the issue is that both of these views are mistaken (Hanson 1975: 1–13). Culture is not something that is reducible to psychology nor is it a level of reality transcending psychology. Instead, the difference reflects two perspectives on the *same* reality of ideas and meanings. The psychological perspective is concerned with how ideas and meanings relate to the individual’s motives, desires and inhibitions, while the cultural asks how those same ideas and meanings relate to each other. The latter is of concern here. The individual may not grasp how his or her actions or ideas relate to each other to form a system or coherent whole. This is obvious in linguistics, where a native speaker is able to form proper words and sentences but may not be capable of articulating the phonology or grammar of his or her language. This point is important to the present argument in several ways. First, ideas and meanings may form coherent wholes of which the individual is unaware. In the present case, this enables us to seek a theory of healing of which individual Rapans are ignorant. Second, ideas and meanings are not necessarily expressed in the form of verbal propositions. They can also be regularities of speech or behaviour. The relevance to the present case is that in the absence of Rapan explanations of how and why their medicines heal, we must turn to their behaviour with reference to the medicines. Third, we cannot simply make up the coherent whole we are seeking, nor the ideas and meanings pertinent to it. We must reason from public regularities in *their* behaviour. In the present case, we must develop the Rapan cultural theory of why healing is efficacious on the basis of overt Rapan behaviour. Then it is up to other scholars to judge if the public evidence is sufficient to sustain that theory.

## THE ISLAND AND ITS MEDICINES

Rapa sits about 1,100 km south-southeast of Tahiti and 480 km south of Ra'ivavae, its nearest inhabited neighbour. Below the Tropic of Capricorn, it is the most southern of all Polynesian islands except New Zealand. Rapa is some 37.5 km<sup>2</sup> in area, consisting of mountains circling the large bay that was the ancient volcanic crater. The population of something over 500 today lives almost entirely in two villages on either side of the bay.

The typical Rapan medicine consists of one or more plants crushed and mixed with water. This may be drunk and/or a bag containing the medicine stroked over the body, as is common with skin diseases. Nearly all medicines are classified as being hot or cold in temperature, and they are administered with a distinctive massage. The recipes of several medicines and the method of administering them will be described later in this paper.

With a few exceptions where a medicine is named for its main ingredient, each medicine is named for the illness it is used to treat. In 1964 Rapans spoke mainly Tahitian. The term for medicine in that language is *ra'au*, and the word for illness is *ma'i*. *Ra'au 'otu'i*, for example, is the medicine used to treat the *ma'i 'otu'i*. The set of symptoms they recognise as marking a disease is usually not congruent with those identifying a western disease. Rapans and Tahitians both distinguish between *ma'i Tahiti* 'Tahitian diseases' and *ma'i pōpa'a* 'white man's diseases',<sup>2</sup> and they may think that some of the illnesses they recognise afflict only Polynesians. Some of Mathilde Grand's sources in Tahiti were of that opinion (Grand 2004: 302–3).

Bernice P. Bishop Museum ethnographer John Stokes spent nine months in Rapa in 1921, some 40 years before my wife's and my research. He recorded that Rapan understandings of disease and medicine were poorly developed and that illness was primarily caused by ghosts. He wrote: "[A]t the present time the natives are generally a *varua* ['spirit']-ridden people. Nearly all their ailments and misfortunes are attributed to possession by these demons" (Stokes 1930: 872).<sup>3</sup> And further: "The present generation has no real knowledge of medicine or surgery. Everyone is his own doctor and the doctor for his friends ... In medicine, the method as explained is to try one thing after another until the cure is accomplished" (p. 809).

Whistler is in agreement with the idea both that in Polynesia most diseases are caused by spirits and that Polynesians try several medicines and reach their diagnosis on the basis of the medicine that cured the illness (1992: 20–27, 84). My findings, however, differed on both of these points. In 1964 I found that naturally caused diseases were more prevalent in Rapa than supernaturally caused ones. Moreover, Rapans did not try one medicine after another until they hit on a cure. They would do that only if they were unsure of the diagnosis. For the most part Rapans clearly diagnosed a plurality of illnesses from their symptoms and had herbal remedies that they were quite confident would cure them.

French ethnographer Christian Ghasarian carried out extensive fieldwork in Rapa 40 years after our work, making numerous trips to the island between 2001 and 2012. By that time western medicine had largely overcome the traditional system. Persons who were ill with a life-threatening disease were evacuated to Tahiti by helicopter, and from 1995 all pregnant women were expected to travel to Tahiti before the seventh month to give birth there (Ghasarian 2014: 175–78). Rapans in 1964 did recognise the merits of western medicine and would make use of the infirmary on the island (or anthropologists, who had aspirin, etc.). But, in common with Leeward Society Islanders (Hooper 1985: 161), their general opinion of western medicine was not high. They eschewed the infirmary and western-trained nurse stationed on the island to give birth at home attended by a local midwife, and they treated most illnesses with their native medicines. Even at the time of Ghasarian's more recent research, Rapans often used their traditional remedies before going to the western-oriented infirmary available on the island (Ghasarian 2014: 174, 181). His fieldwork is now 10 or 20 years old, and it is possible that increasing westernisation may have eroded the traditional medical system even further since the time he observed it.

While medicine was not a focus of his study, Ghasarian noted that the remnants of the indigenous medical system at the time of his research were similar, if greatly diminished, to what we observed. Both in 1964 and in the early twenty-first century medicines were owned by individuals, inherited usually from mother to daughter, and new ones were revealed in dreams (pp. 180–81). Most importantly, he describes a protective sentiment that Rapans feel toward their island which is fuelled, among other things, by a deep-seated fear of epidemic diseases introduced from the outside (pp. 434–44). Doubtless this is one of the reasons—together with a desire to keep the French from interfering with their communal land tenure system and opposition to the necessity of modifying the mountainscape of their island—why in the early twenty-first century most Rapans opposed the idea of building an airport on the island (pp. 436–39). If the arrival of a ship every two months brings the possibility of an epidemic, one can imagine the far greater concern evoked by an airplane arriving from the outside world much more frequently than that.

Of course, the fact that Rapans in 1964 did not know how their medicines heal does not mean they never knew. Rapa has a small population which was seriously devastated by epidemics, was converted to Christianity and has been subjected to colonial rule and European trade beginning in the nineteenth century and continuing to this day. It is possible that in the face of these forces against it an aboriginal theory that explained disease and curing has been lost. However, those forces themselves mitigate against

any attempt to excavate past meanings, and the lack of a theory in other Polynesian islands or in Rapa itself in the 1920s leaves us with no choice but to work with the data we do have.

#### TYPES OF DISEASE

Before turning specific attention to naturally caused diseases and the herbal medicines used to treat them, a brief account of disease in general as it is understood in Rapa will be helpful.<sup>4</sup> Rapans identify diseases of three major types.

##### *Epidemics*

First is the deadly diseases brought by outsiders against which they have poor immunity: smallpox, dysentery, dengue fever and the like (McArthur 1967: 307–9). Again and again in the nineteenth century diseases brought by visiting ships ravaged this remote Polynesian island. Again and again visitors remarked about the number of deaths and how the population was shrinking (Barff 1846; Darling 1836; Davies 1827: 331; Lucett 1851; Moerenhout 1837: 139). From European discovery in 1791 the population fell an estimated 90 percent to 120 in 1867. From there it began a slow growth to 362 at the time of our fieldwork in 1964, and 512 in 2012 (Ghasarian 2014: 246; Hanson 1970b: 30).

Visiting ships bring disease to this day (Ghasarian 2014: 334). There were several epidemics in the early 1960s; the last one that caused major deaths was measles that occurred in 1965, killing 14, of which half were children (p. 182). At the beginning of July 1964 we were witnesses to an epidemic that struck the island. It appeared to be a respiratory disorder and it occurred, as all epidemics do, in the wake of a visiting ship. Two children died, and many others were seriously ill. The Rapans were literally paralysed with fear. They isolated themselves in their houses, they did not prepare food, they did no work. My wife and I had never seen the daily routine grind to a halt as it did during those rainy first days of July.

Twentieth-century epidemics do not kill large numbers, but they remain an overload for the medical system. Rapans often do not even try to treat them, and there is little they can do for protection beyond secluding themselves and trying to minimise contact with the outside world.<sup>5</sup> Other diseases tend to strike people individually rather than as an epidemic, and people think they can successfully combat most of them.

##### *Supernatural Diseases*

The second type of Rapan disease is those caused by supernatural forces and beings. These include unspecified powers, probably the ghosts of the ancestors, that mete out punishment for a serious offence against the social

order. These powers are implacable, and their vengeance is swift. If one should attempt to move a boundary stone demarcating property lines—an act that virtually never occurs and is utterly unacceptable—the person will fall down, unable to move his or her limbs but still able to talk, and death occurs within half an hour of touching the stone. Illness of this sort is very rare; I encountered only one example in 11 months of fieldwork. The man confessed his crime, and died.

Disease might also be the result of the Christian God's punishment for sinful behaviour, often of a sexual nature. One example is a man who became utterly rigid after having seduced a young woman on the porch of the church. Another is how, a number of years before our fieldwork, a woman fell ill because she had been going to a place that visiting sailors frequented, ostensibly to do their laundry but actually to practise prostitution. Her illness was such that her stomach swelled alarmingly. She had recently taken communion, in conflict with the Rapan practice of refusing communion if one was carrying a grudge against another islander or had not confessed a sin. The cause of her illness, the pastor thundered, was God making the communion bread she had eaten swell inside her stomach. Illnesses caused by sin, while severe, are, however, amenable to cure, for God forgives. Normally sincere repentance and a treatment with a local medicine, often bolstered by a gift to the church, will suffice.

The final type of supernatural illness is caused by *tūpāpa'u* 'ghosts' who may possess and sicken individuals, either from a desire for revenge or because the ghost loves someone living to the point of wanting him or her to join them in death. *Tūpāpa'u* diseases are treated by a special category of healer called *tahu'a* 'expert'. In 1964 there was one *tahu'a* on Rapa, a woman.<sup>6</sup> She had a spirit familiar, itself a *tūpāpa'u* who died in Tahiti when she and her brother disappeared and their bodies never found. The Rapan *tahu'a* was related to the siblings by descent, and she inherited the *tūpāpa'u* from her father. The spirit familiar was essential to the *tahu'a*'s treatments. Her technique was to visit the patient, discuss the symptoms, and then go to sleep. Her spirit familiar would appear to her in a dream and tell her the medicine to use. It was prepared and administered, and according to the *tahu'a* the patient invariably recovered. The *tahu'a* was not entirely benign; she also said that her spirit familiar would kill someone if she ordered her to. She assured me that she had never done so and doubted whether *tahu'a* in Tahiti do so either.

The *tahu'a*'s medicines tended to feature western ingredients, or those not grown in Rapa. One was pancakes cooked in pork grease, which was used to expel a disease-causing *tūpāpa'u*. This may be effective during the preparation, before the patient even eats the pancake. Another medicine she owns uses scented coconut oil (which must be imported because coconuts do

not mature in Rapa's cooler climate). Other medicines were based on flour or sugar, or treating a headache by simply putting one's head under a flowing faucet. My closest informants had little confidence in the tahu'a in Rapa, and they tended to dismiss her cures. This is not to say that there was no respect for tahu'a in general. A famous one in Tahiti from the turn of the twentieth century was named Tiurai (July), and stories circulated among Tahitians, Rapans and others elsewhere about his miraculous exploits (Walker 1925). But there is no one like Tiurai in Tahiti now, and certainly no one in Rapa.

In Tahiti a dead body may be exhumed and burnt to stop a *tūpāpa'u* from attacking its relatives (Hanson 1961). In 1921 Rapans told Stokes that this was common in their own island but secret because it is against French law and hidden from the local gendarme. Stokes knew of four cases "within recent years" (1930: 962–63). In 1964 I was told it rarely if ever happens because they fear the consequences under French law.

Supernatural illnesses are readily intelligible. Like people, supernatural beings such as God and ghosts get angry, they seek vengeance, they can be driven away, they love and they might forgive. The illness is the manifestation of their anger, desire for vengeance or other human motive. The treatment—to drive out the offending ghost or to seek forgiveness—is also intelligible in human terms. Thus from an analytic point of view the causation and cure of these diseases is not very challenging. It is different with ordinary diseases, to which we now turn.

### *Ordinary Diseases*

Ordinary diseases are caused by the events of daily life, such as getting chilled just before menstruation is due, or they just happen, such as rashes on the skin of young children. These are what Society Islanders call *ma'i mau*, or "true sickness" (Hooper 1985: 163). Rapans include most injuries in this category of disorders. These illnesses and injuries are treated with a variety of herbal medicines described briefly above and examined now in more detail. After that I will attempt to discern how, from the point of view of Rapan culture, the herbal medicines bring about a cure.<sup>7</sup>

Informants could tell me something of the pathology of one (but only one) ordinary illness, although they did not fully know how the appropriate medicine cures it. That illness is 'otu'i.<sup>8</sup> Women regularly wade in cold water in everyday tasks such as working in an irrigated taro terrace or gathering shellfish in the water near shore. But if tasks such as these are undertaken immediately before menstruation is expected, a woman may be chilled and come down with 'otu'i. Her menstrual period does not come as expected, and she develops a serious pain in her abdomen. It slowly rises to her chest. Bedridden and in terrible pain, in the advanced stage she may retch or cough and blood may be produced. The Rapan explanation is that the blood



normally expelled in menstruation has clotted. The clot is the source of the pain, and by some anatomical route not explained to me it rises into her lungs, oesophagus or heart. The blood produced by her retching or coughing is really the menstrual blood, and when she gets to that state, she may die. Or, if it reaches the heart it may stop it, with equally dire results.

A word about Rapan beliefs regarding menstruation is in order. They believe blood is harboured in the uterus in liquid state. The uterus is an organ that opens and closes. Closed for most of the time, it opens for a brief period each month to allow blood to be expelled as menstrual flow.<sup>9</sup> In 'otu'i the chill before her menstrual period causes the blood to clot, and it cannot be expelled in the ordinary fashion.

The medicine used to treat 'otu'i is based on the *maire tutae moa*. This is a fern (*maire*) with a greyish excrescence that resembles chicken (*moa*) excrement (*tutae*).<sup>10</sup> Ra'au 'otu'i is a hot medicine. The fern is boiled in water and the patient drinks the hot concoction. Rapans could not explain the curative properties of the fern, but they did say that the sheer heat of the medicine is effective. They used the analogy of the beef or goat grease they use for cooking, which is stored in wine bottles. The grease solidifies in the bottle and they twirl it over a fire, causing some of the grease to melt and enabling them to pour it through the narrow neck. So it is, they said, with 'otu'i. Like solidified grease in a bottle, clotted menstrual blood cannot escape through the narrow vaginal passage. And again like grease in a bottle over the fire, the heat of the ra'au 'otu'i melts the menstrual blood and enables it to be expelled in the normal way.

While I could not discover a native explanation for how the *maire tutae moa* cures the disease, it may not be amiss to state that the same medicine is used to induce abortion. Indeed, some Rapan women who do not want to continue their pregnancies may ask the owner of the ra'au 'otu'i to administer it, claiming they have 'otu'i.

It is possible to give a historical dimension to a medicine for *hī* 'dysentery', for it is described by Stokes from his research in 1921, when he knew it as "Faaora's cure". Around 1895, during an epidemic of dysentery, a man named Faaora had a dream in which a deceased man, Akuore,<sup>11</sup> led him to an irrigated taro garden not far from the village of Ha'urei and showed him how to stir up the water from a spring feeding the garden. The water, mixed with red dirt, should then be drunk to cure dysentery. Faaora did not act upon the dream until later, when he himself fell ill and was cured by drinking the red dirt solution. Others with the same complaint would apply to Faaora to prepare the medicine for them, with good results. When Stokes himself fell ill with dysentery the Rapans urged him to take it (whether he did so is not recorded). It was a cold medicine, and hot food was forbidden while taking it (Stokes 1930: 883–85).

In 1964 ra'au hī was also a solution of the red dirt taken from an irrigated taro garden, drunk cold. My informant says it belongs to her sister, who was given it by their brother. She did not know if the brother dreamed it or was given it by someone else. Probably the brother was a descendant of the Faaora described by Stokes. Stressing that the dream featured a deceased person, Stokes assumed this medicine was a cure for ghost disease. But there is no evidence that the dysentery in question is caused by a tūpāpa'u intent on harming someone, and therefore I consider it to be an ordinary disease for which, as for others, the medicine was dreamed.

The presence of the same medicine in Stokes's work and my own allows some comparison between them. Then as in 1964, a new medicine is dreamed. But interestingly the deceased man in Faaora's dream was not related to Faaora, nor was theirs a particularly close relationship. And despite the fact that there was a dysentery epidemic at the time of the dream, it was only later (Stokes does not specify how much later), when Faaora himself fell ill, that he tried the medicine. Finally, at various times when he made it for others he did not follow his dream's directions exactly, taking the water from other taro gardens in the vicinity, and the results were still successful. Stokes attributes this to the fact that Faaora was less superstitious than most Rapans but does say that according to "strict Polynesian procedure Faaora should have followed instructions most rigidly" (1930: 884).

These facts contrast with the situation in 1964. To be sure, at both times the expectation was that a dream's instructions should be followed strictly, but in 1964 I found no cases where that was not the actual practice. Nor did I find cases where the dreamer was unrelated to the deceased individual of the dream, nor of the dreamer taking no immediate action. Indeed, it was stressed to me that someone was not only ill but literally at death's door when the dream took place. The medicine demonstrated in the dream by a beloved, deceased relative was prepared the next day and the cure was achieved.

An informant said hī was brought by visiting ships and could be lethal. In addition to drinking muddy water from a taro garden, one recipe is to pound three *ti* leaf stems (*Cordyline fruticosa*, known in Rapa as *karokaro*) in a cloth bag and squeeze into a glass. Mix that with two knuckles of water (they measure the depth of water by finger knuckles),<sup>12</sup> add a little sugar, strain and drink cold. The massage is done with the hands only. My informant guessed that in hī waste materials do not enter properly into the large intestine. She described this as *tāviri* 'ōpū 'the stomach twists and turns'.

Some medicines are given preventively as well as for a present illness. *He'a* and *īra* are widely recognised in Polynesia (Whistler 1992: 76). They are both illnesses that tend to affect nursing children; in Rapa the former is a rash and the latter produces fever and frequent, watery bowel movements. *He'a* may also affect breast milk, and lactating women may drink ra'au he'a

to clean their milk. Medicines for each of these illnesses take the form of herbs soaked in water. The water is then drunk and the child is stroked with a poultice of the medicine from head to toe until he or she is drenched. Both are classed as hot medicines, but ra'au he'a may be given lukewarm while ra'au ĩra is heated to boiling. Both are given preventively at the full or new moon or both, as is the case in the Cook Islands (Whistler 1992: 102). They both taste very bad, and children resist them, especially ra'au ĩra, perhaps because it is so hot. In one case I observed two adult women were required to hold a small child while ra'au ĩra was being administered.

Both he'a and ĩra are especially puzzling diseases because they have a variety of presentations that do not seem to be single diseases from our perspective. Hooper's expert informant listed four kinds of he'a in the Society Islands (Hooper 1985: 194–96), and there are two in Rapa. The rash may be similar to one of the four in the Societies, but the other is quite different. It affects adults rather than children, especially young women among whom it is a menstrual disorder caused by the uterus not opening properly to expel menstrual blood. It differs from 'otu'i in that there is no pain in the chest and apparently it is not fatal. The medicine for this variety of he'a is apparently owned by a woman who is not resident in Rapa, so no one there is allowed to make it.

As for ĩra, Whistler identifies seven kinds of ĩra in the Cook Islands (1992: 102), while Hooper's expert informant listed eight varieties of ĩra for the Society Islands, each with its specific name and symptoms ranging from a pain in one side of the face to swelling of the penis (Hooper 1985: 187–89). Both ĩra and hea (without the glottal stop) are mentioned for Tubuai, although Aitken makes no reference to soaking the child with the medicine (Aitken 1930: 86). Ra'au ĩra is also designated as a medicine in Rarotonga (Baddeley 1985: 137–38), although the recipe includes plants that do not grow in Rapa. In 1964 he'a and ĩra were probably the most common diseases treated with local medicines in Rapa.

*Fati* (*fasi* in Tonga) is the term when something is broken, either a bone or ligament or something inside the body (Whistler 1992: 41–44, 76). In Rapa two versions are identified. One is difficulty urinating, and the other is brought on by falling or otherwise injuring the body. Often the latter causes backache, and at least two medicines exist to ease this, one for the upper back and the other for the lower back. One is a topical analgesic made from the *kōpōro* (*Solanum anthropophagorum*), which warms the back. It can be made very hot by adding more *kōpōro* berries. It has certain anomalies that were not explained to me: unlike other medicines, this one is not owned, anyone can make it, and despite its heat-producing effect it is neither a hot nor a cold medicine. As with the application of the term ĩra to a variety of what appear to us to be disparate illnesses, I was unable to identify why the

term *fati* is applied to both difficulty urinating and a sore back. In both cases Rapans, who did not share my western compulsion to classify diseases by their symptoms and biochemical nature, did not consider the question as pressing as I did.<sup>13</sup>

Rapans, perhaps more than inhabitants of other islands, have a particular massage for each illness.<sup>14</sup> If the medicine is a poultice, that poultice is used in the massage. Both *he'a* and *īra*, as we have seen, feature a bag of the medicine stroked down from the head to the feet, very wet and, in the case of *ra'au īra*, very hot. *Ra'au tua mure* 'treatment for a bad back' involves a massage with the poultice applied in circular movements to the back. The medicine for earache has a poultice of chewed candlenut and another ingredient rubbed around the painful ear in a clockwise direction. *Ra'au 'otu'i* (treatment for when menstrual blood rises in the body) includes a massage of strong downward strokes using the hands only (no poultice of the medication) on the abdomen. This assists the menstrual clot to return to the uterus to be expelled in the normal way. One massage for *hī* is done with the hands only on the chest, arms and legs but never the abdomen. Stokes reports that Rapans would manipulate a baby for about a week to smooth out discrepancies in the head and limbs (1930: 755, 757), and Whistler reports the same thing for Polynesia in general (1992: 35). We did not witness that when we were in Rapa.

#### HOW DO HERBAL MEDICINES CURE?

Like Society Islanders (Hooper 1985: 163), Rapans were not inclined to speculate on causes, and they openly acknowledged that when it comes to an ordinary disease they do not know how the appropriate medicine cures it. Unlike supernatural diseases, they are not explicable by human emotions such as vengeance or forgiveness. The idea that the plants used have some biochemical effect did not come up: it seems not to be of interest to them, and my opinion is that the answer to our question does not lie there. They expected a medicine, if it is the correct one for the disease, to work immediately. Indeed, the cure might take place before the medicine is even taken, being achieved while the ingredients are being collected. (The patient will take the medicine anyway.) This could be possible, of course, only if it is assumed that the curing power of a medicine is something other than its biochemical effect. Moreover, Whistler reports that in different archipelagos the plants used in medicines change over time, and there is no consistency between medicinal plants and the diseases they are used to treat (1992: 40). Of the 59 plants he recorded as used as medicines in Sāmoa, two-thirds were also used in Tonga, but only a little over half were used in the same way (p. 64). Although one informant told me that a team of French scientists was analysing plants used in medicines in an effort of ascertain

their active ingredients, I think any such effort is likely to prove fruitless. It is a misguided effort to assess the curative powers of plants in the Rapan system of medicine by the standards of bioscientific medicine (Waldram 2000: 616). The power of herbal medicines in Rapan culture lies in something quite different than their pharmaceutical properties. Nonetheless, they have particular medicines for particular illnesses, and they are confident that the medicine will be efficacious. The question is why, and how.

Whistler states that in the Societies, the Cooks and elsewhere in Polynesia emphasis is placed on the treatment—the remedy or the medicine—rather than on the disease (1992: 45, 84, 92). On the basis of my material from Rapa, I think he is entirely right. But I think he is wrong in what I take his reason to be: that Polynesians are reduced to treating symptoms (rather than disease itself) as best they can with remedies revealed in dreams or used successfully by someone else because they are poor diagnosticians and experimentalists. This sounds ethnocentric. Our job is not to decide whether their approach is the most effective one according to our scientific criteria but to try to make sense of Rapan behaviour in its own terms.

If pressed, virtually every Rapan would give a religious explanation for how their medicines work. They are devout Protestant Christians, and they believe that they are in the hands of a loving God. They pray constantly: in the many church services that take place each week, before going deep-sea fishing every Saturday, before any communal activity such as meetings of the District Council, with cohabiting couples that church deacons wish would get married, with sick persons the deacons visit, and so on indefinitely. They discuss the implications of one or another biblical passage for their daily lives in *tuāro* 'i: sessions held several times a week in the church meeting house devoted to singing hymns and encouraging anyone in the audience to give his or her interpretation of the selected verse.<sup>15</sup> They know much more about the history of the ancient Israelites than they do about their own Polynesian ancestors. One man told me, “In Rapa we spend more time discussing the Bible than cultivating taro” (Hanson 1970b: 162–74). Omniscient and omnipotent, God backs the efficacy of their medicines.

For Rapans everything having to do with God is permeated with propriety: rules, a right way and a wrong way of doing things. God in that sense is precisely opposite from animals, the weather, disease and other workings of nature. God not only follows rules; Rapans would say that God is the source of rules. As with most humans they follow the rules because they believe God has ordained them. But, to take a Durkheimian turn, everything happens as if the rules come first and God is defined by them. God is brought into it to personify cultural rules and give them ultimate authority.

I stated above that people are not always able to articulate the structure of their language or of their culture. This does not mean that there is no structure;

it means that the linguist or the anthropologist must seek elsewhere to find that structure. In the present case, we must scrutinise regularities in their behaviour pertaining to illness and medicine. Rapans were unanimous that to work, a medicine must be prepared properly. It must use the same ingredients in the same proportions as the dream that revealed it or, for existing remedies, the recipe for it. It must be administered with the permission of its owner, and often by its owner. It must follow all the rules to be described below. In the light of this, I think the efficacy of medicines from the point of view of Rapan culture is due not to any curative agent in their herbal cures or to any supernatural reason but to the many cultural rules that surround treatment that must be followed.

Why are cultural rules so important to the efficacy of Rapan medicines? Rapan culture, as any human culture, gives a sense of order and intelligibility to life and the world, whether people fully understand it or not. Especially for those things they do not fully understand, human beings appreciate the eminently cultural quality of ritual sameness. This gives some predictability to the future: if things are done exactly as they have been done in the past, the likelihood is that the outcome will be similar to the past. If a medicine has been effective in curing in the past, it is likely that to prepare and apply it exactly like it has always been done will result again in a cure, even if people do not understand how the cure is effected. The rules, rather than any curative properties of a particular plant, are what gives Rapan medicines their power.

Medicines, as I have said, are entirely cultural. Ordinary diseases, on the other hand, are natural.<sup>16</sup> They strike randomly and for no reason; they conform to no rules. Lenore Manderson (1986: 140–43) applied the nature/culture opposition to hold that Malays understand disease, childhood and old age, menstruation, childbirth and puberty to be in the realm of nature, but that by classifying them according to their hot/cold theory Malays extend the realm of culture to include them. In this way Malays believe they exercise some control over these elements of nature. As with the Malays, but perhaps even more pronounced in Rapa, by clothing the medicines that treat them with rules, Rapans bring ordinary diseases into the realm governed by culture where they can be controlled and cured.

To enumerate the many ways in which cultural rules govern the preparation and use of medicines:

(i) New medicines are brought under the aegis of culture, as has been noted above, by being literally dreamed.<sup>17</sup> I was told numerous times about how an individual was seriously sick, near death, and no existing medicine was effective. Then someone close to the patient would dream that a deceased relative such as a grandmother showed him or (usually) her how to make a hitherto unknown medicine by gathering plants of certain sorts and preparing them in a certain manner. Upon waking the individual would make that

medicine and administer it to the patient. Immediately he or she would recover, and henceforth that medicine was known as effective for others who might contract that disease. Kinship and the ancestors figure prominently in these dreams in that they always come to a close relative of the patient, and the person in the dream is another close relative who is deceased. In making the medicine the dreamer must use the plants and procedures exactly as demonstrated in the dream, both the first time it is used and subsequently.<sup>18</sup> The idea that the ingredients are therapeutic in themselves does not come up at all. Instead the medicine's efficacy stems from the fact that it is imbued with culture by its near-ritual preparation and the critical place of kinship in the dream that revealed it.

(ii) Of course, medicines are not dreamed every time someone falls ill. Many have been in Rapa longer than anyone's memory, and some were brought from other islands when people married and moved to Rapa. The second cluster of evidence of their cultural quality relates to the fact that they are *owned*. Every medicine on Rapa has an owner, and it generally will be effective only if administered with the permission of the owner.<sup>19</sup> One manifestation of he'a is a menstrual disorder. The woman who owned the medicine for it was not resident in Rapa. The ingredients were known but her permission was necessary for the medicine to be effective. Often the owner not only gives permission but also responds to the request by personally preparing and administering the medicine. There is never a charge for this; it is a gift to the community. One woman in Rapa who was physically disabled and mentally limited owns the medicine for earache. It is made of the candlenut, two nuts of which must be chewed together with leaves of another plant and the juice spit in a cloth and squeezed into both ears (the good one as well as the aching one). Candlenut is nauseating and very few people can chew it. This woman was among those who can, and despite her disability she made a unique contribution to the Rapan community through her medicine. I was told that debts even out because everyone shares the medicines they own with the entire community. Rules regarding the ownership of medicines and the gratis sharing of them are both marks of their cultural quality.

(iii) Property may last longer than a single owner, and again medicine is imbued with culture by transmitting it through inheritance. In a society strongly marked by joint inheritance and communal ownership of lands, gardens and houses (see Hanson 1970b), interestingly the heir to a medicine is an individual, usually a female. Normally the transfer is made when the owner gets older and formally gives the medicine to one of her daughters. Most women on Rapa owned at least one medicine, and a few owned several.<sup>20</sup> Individuals, that is to say, are vehicles for the circulation of medicines in society and through the generations, but they are not the

source of them. Some are dreamed, the origin of others is unspecified or unknown, but all are owned,<sup>21</sup> and I have never heard of a medicine being invented by a human being.

(iv) If a medicine is to be effective, when the request for it comes the owner must drop everything and immediately go about preparing it. Sometimes instead of going her- or himself, the owner will ask a younger person (often a daughter) to gather the ingredients. The rules governing medicines decree that if the child dawdles or is distracted in the process, the medicine will not be effective. A child who goes immediately and allows nothing to distract her from gathering the ingredients will often be chosen to inherit the medicine.

(v) On occasion the owner of a medicine will become *fiu* 'tired, fed up' with preparing it, especially if numerous requests for it are made. In that case, the owner would make an announcement at a church meeting setting out the recipe and officially giving the medicine to anyone who wishes to make and use it. This is principally the case with medicines such as *ra'au he'a* and *ra'au ĩra* that were frequently administered to young children as preventive rather than curative. It is not common for Rapan medicines in general; only a few medicines are communally owned.

(vi) Linking the application of medicines for *ĩra* and *he'a* to the new and full moons is another rule that contributes to their cultural quality. This brings the medicines within the recognition of time and regularity, which is an expression of culture as opposed to the obliviousness to time that is characteristic of nature.

(vii) Rapan medicines are further brought into the realm of culture by being classified as hot or cold. This distinction is found in medical systems spread throughout the world. In Rapa it generates several rules that pertain to medicines. An individual should avoid anything of the opposite temperature when treated with a medicine. Thus one should not put one's hand in hot water when under treatment with a cold medicine. Nor should one smoke a cigarette, a hot activity, if treated by a cold medicine (although the addiction to tobacco was strong enough that this rule was often broken).

Most important is the rule that when under treatment with a medicine one should not eat food of the opposite temperature, apparently to avoid compromising the effectiveness of the medicine. Moreover, if a woman is lactating and her nursing child is being treated with a hot medicine, the mother as well as the child must eat only hot food. Temperature alone determines if a food or a medicine is hot or cold. For example, taro (the Rapan staple) is classed as a hot food if it is eaten hot, and as a cold food if it is eaten cold as with the ubiquitous *popoi* 'taro paste'.

(viii) A few other food prohibitions exist. Eating lobster was prohibited to lactating women, and some Rapans imagined that it may affect the nursing child's navel. Some informants said fish caught from the deep sea, lobster



and octopus constitute a trinity that is prohibited to people being treated with a cold medicine, others said the prohibition is for hot medicines, and still others said it applies to people taking any medicine at all. One woman opined that these foods are bitter, causing them to clog the uterus and thus prevent menstruation. Tahiti may provide a further clue, although the list of forbidden foods is somewhat different. There red meat, fish from the deep sea and crustaceans are thought by healers to irritate the internal organs because they are hot. They are prohibited to persons who suffer such irritations, and also to patients with a fever (Grand 2004: 305). As with medicines in general, however, Rapans followed the rule because it is a rule, but most of them frankly admit that they are at a loss when it comes to explaining why this trinity of foods is prohibited.

(ix) Their very susceptibility to contamination demonstrates that medicines belong uniquely to the realm of culture. One might vent one's anger by contaminating a medicine that an enemy owns. The recipes of most medicines are generally known, even if they were effective only when given with permission of the owner.<sup>22</sup> One way to contaminate a medicine was to prepare it in the proper way and then give it to a dog or a pig. A medicine is purely human, just as culture is purely human, and any use of it outside the human/cultural realm is antithetical and contaminating to it. Another method was to urinate on the medicine. Natural functions such as urination and defecation must be done far away from the medicine to avoid contaminating it. Again, as something entirely cultural, to associate it with anything natural is to destroy it.

Informants were of mixed opinion regarding sex and medicines, agreeing that one must not engage in intercourse while going to get ingredients, but disagreeing as to whether a patient being treated with a medicine could have intercourse. Their equivocal attitude toward sex is interesting. On the one hand, sexual intercourse is an act that belongs to nature, something we have in common with animals. On the other, culture domesticates sex, identifying when and where it may be practised and strictly limiting it to certain categories of people. This makes it something different from and more than animal sex. The disagreement among informants regarding sexual intercourse while being treated with a medicine mirrors this equivocation about whether sexual intercourse is a natural or a cultural act.

Tūpāpa'u diseases have already been discussed as being intelligible in terms of human sentiments and motivations. That said, they have much in common with the cultural aspects of ordinary medicines. The tahu'a's procedure of being told what medicine to use by her familiar tūpāpa'u in a dream is consistent with the notion that medicines for ordinary diseases are revealed in dreams. Dreams are even more important than with ordinary medicines in one sense, in that they were part of her standard practice rather

than being limited to the source of a new medicine. On the other hand, the ritualistic character of an ordinary medicine is cemented by it having been dreamed once and then prepared in exactly the same way in subsequent applications. The idea that medicines for *tūpāpa‘u* diseases are individually owned and inherited also fits with the cultural quality of medicine that we have been describing. Indeed, spirit familiars may themselves be inherited by individuals through kinship ties. Although the ingredients may be different, *tūpāpa‘u* medicine was still thought to be hot or cold and to be effective only if prescribed with the permission of the owner. It might even work, as with ordinary medicines, while the ingredients are being assembled and before the patient takes it. And finally, as with ordinary medicines, the *tahu‘a* was at a loss when asked to explain why her medicines drive out an offending *tūpāpa‘u* or otherwise bring about a cure.

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One of the most penetrating analyses of Polynesian medicine I have read is that by Hooper (1985: 179–83). He holds that illness and its healing has a moral aspect that is specifically tuned to the complex array of social relations that engulf rural Society Islanders, ranging from joint ownership of property to relations between relatives, friends and spouses. Sometimes people are offended, and the offender is liable to get sick. This applies especially to illnesses caused by avenging ghosts, who may be called upon by the injured party to punish the offender. These supernatural illnesses are explained by eminently human reasons such as the anger of God or the vengeance of a ghost. This interpretation fits personal relationships in Rapa, as well as most of Polynesia generally. However, given the facts that ghost diseases were relatively rare in Rapa when I was there and that I was more interested in ordinary diseases, my analysis is oriented toward how herbal medicines are thought to cure them.

This essay has stressed the many cultural rules governing medicines. Those rules include beliefs that they are revealed in dreams featuring beloved ancestors who demonstrate how relatives should be treated; their near-ritual preparation; their ownership, inheritance and occasionally being given as gifts to the entire community; their classification as either hot or cold; the foods that may and may not be eaten in conjunction with a medicine; and their contamination by exposing them to natural beings or functions. The argument has been that the eminently cultural quality of medicines, demonstrated by the many rules and conventions associated with them, is the source of their curative powers.

Ordinary diseases are representatives of nature. They do not happen because of a moral failing; they can strike anyone at any time, for no apparent

reason. In their effort to cope with the workings of arbitrary nature, Rapans place their faith in something that is knowable and reassuring, and that can even bring nature under their control. The cultural quality of medicines encourages such confidence. But for them, as for us, it is not fail-safe. Human beings wander in a natural world full of dangers, and nature is not entirely overcome by science or culture. A shark may kill a skin diver, a hurricane may strike, disease can cripple. But just as we think that the threat of disease is lessened by science, in Rapan culture its virulence is lessened by the many rules associated with medicine. This analysis has been that their medicines are indicative of the power of the rule-governed social order—of culture—to tame or domesticate naturalistic diseases and, often, to cure them.

## NOTES

1. Although this paper is mainly about Rapa in 1964, I will often use the present tense (the “ethnographic present”) to describe it. The context will make it clear when I am discussing Rapa of the early twenty-first century or of a time before my fieldwork.
2. Sāmoans make the same distinction between *ma'i sāmōa* ‘Sāmoan diseases’ and *ma'i pālāngi* ‘foreign diseases’ (Macpherson and Macpherson 1990: 89) and Tongans distinguish between *mahaki faka-Tonga* and *mahaki faka-Pālāngi* (Parsons 1985: 91–93).
3. The Stokes manuscript is maddening in that each page bears several numbers. I have used the numeration that seems to be the most consistent.
4. If not otherwise noted, the source of what is given below is my field journal.
5. The latter of course is and always has been impossible. Ghasarian’s book, as the title indicates, is precisely about the networks that make Rapa remote from the outside world but still part of it.
6. Actually there were two, but the second one was entirely inactive.
7. In Sāmoa an ordinary disease that does not respond to treatment might come to be thought to have a supernatural cause (Macpherson, pers. comm.). In Rapa the symptoms of supernatural diseases are quite different from ordinary diseases and I did not find this situation.
8. The closest I have been able to come to ‘otu’i in the literature on other islands is from a medical expert in the Leeward Society Islands (Hooper 1985). One of the illnesses he describes is *māriri ‘otu’i ate* (p. 189). This has symptoms of fever and pain inside the trunk of the body and the patient wanting to drink a great deal of water. The notion of internal pain seems to be the main link with ‘otu’i in Rapa. But menstruation is not mentioned in the description of the disease in the Leeward Societies while it is central to the Rapan case, and the medicines to treat the disease in the two places have nothing in common.
9. This has interesting implications for the Rapan theory of conception. See Hanson (1970a).
10. Maire tutae moa is known in Tahiti as *maire metua pua’a*, which is defined by Jaussen as *Polydium nigrescens* (1949: 152) and Papy (1951–1954: 367)

as *Polypodium nigrescens*. Margaret Stokes identified some plants used as medicines. She identifies *mairi* (her spelling; *Polypodium phymatodes*) as a fern which is crushed, mixed with water and drunk cold as a purgative or as a hot bath for an aching body. She also identifies *mairituae* as *Polypodium phlegmaria*, which is the basis of a cold poultice for backache or headache (Stokes 1930: 812).

11. Or Ahuore; Stokes spells it both ways (1930: 883, 884).
12. This is the only utterly irrational notion I have ever encountered. The size of the container doesn't matter, be it a glass, a cooking pot or an oil drum. Two knuckles is two knuckles, and that's the end of it.
13. Hooper encountered a similar lack of concern among his informants when he tried to understand why a number of disparate illnesses were all called *ira* (1985: 172–73).
14. Whistler states that massage was universal in pre-European Polynesia and is commonly used today (1992: 35).
15. Prayers and Bible discussions continue to be common in Rapa today (Ghasarian 2014: 151).
16. The nature/culture distinction is not universal (Descola 2006, 2013), and Saura has claimed that it is unknown in French Polynesia (2008: 165, 201–6). Support for that view may be that certain natural species are said to act as protectors for the island, or for particular groups in it. Rapans do not kill or eat the large eels that live in their taro terraces and streams because “local people have a legend about a guardian spirit in the form of a blonde-haired woman who changes into an eel” (Anderson 2012: 42). This is presumably a *tāura* ‘animal protector’, which according to Saura is a vestige of ancient totemism (2008: 204–5). Ghasarian states that the Rapans knew of *tāura* when he conducted research there in the early twenty-first century (2014: 161–63), but I must admit that while I was aware that freshwater eels were not killed or eaten, I heard nothing in 1964 of the legend about the blond-haired woman nor did I encounter a belief in *tāura*.
17. Dreaming new medicines occurs in Rarotonga (Baddeley 1985: 137), Tubuai (Aitken 1930: 85), Tahiti (Grand 2004: 319) and Hawai'i (Whistler 1992: 114–15). In Rapa dreaming as a means of learning cultural skills is not limited to medicines. Elaborately woven hats are a Rapan specialty, and Christian Ghasarian tells me that the best hat maker in Rapa today was actually taught by a deceased aunt who demonstrated the craft to her in dreams (pers. comm.).
18. As described by Stokes (1930: 883–85), Faaora's cure is an exception to all these requirements.
19. Medicines are owned in the Society Islands (Hooper 1985: 170–71; Whistler 1992: 75, 84). Whistler also states that medicines are owned in the Cooks (p. 91), Sāmoa (p. 60) and possibly elsewhere in Polynesia (pp. 18, 101).
20. Women were owners of medicines in twenty-first century Rapa (Ghasarian 2014: 180), as elsewhere in Polynesia (Whistler 1992: 35).
21. The one exception is the analgesic medicine made from the *kōpōro* berry, described above.
22. In Sāmoa medicines, while owned, are often made by others who know the recipe (Whistler 1992: 61). This seems not to be the case in Rapa.

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