WILDERNESS NO WILDERNESS

Norman Newton

> *We have had to wait until the middle of this century for the crossing of long separated paths: that which arrives at the physical world by the detour of communication, and that which, as we have recently come to know, arrives at the world of communication by the detour of the physical. The entire process of human knowledge thus assumes the character of a closed system. And we therefore remain faithful to the inspiration of the savage mind when we recognise that, by an encounter it alone could have foreseen, the scientific spirit in its most modern form will have contributed to legitimise the principles of savage thought and to re-establish it in its rightful place.*
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> *The Savage Mind*, Claude Lévi-Strauss

In his *Mythologiques*, Claude Lévi-Strauss presents a revolutionary but deeply satisfying analysis of the formal principles of that class of Amerindian myth which depends on the symmetrical balancing and transformation of fictive events. Meanwhile, Giorgio de Santillana and Hertha von Dechend, in their *Hamlet's Mill*, show the origin of a great many mythological motives, including some very important Amerindian ones, in an early but systematic form of astronomy. The result is an earthquake. A tremendous corpus of theory about myth disappears from intellectual view: Frazer, Jung and Freud (though Lévi-Strauss reaches out a hand, Freud misses it) go clattering into the abyss. Robert Graves manages to grab the branch of an oracular tree on the way down, but his Muse, pierced by a sharp twig of the same tree, deflates with a hissing sound and rockets erratically away. Several lesser poets and literary critics disappear, never to be heard of again.

Simultaneously a revolution is taking place in literary criticism which is bound in time to affect poetic practice. Structuralist critics, fascinated by interlocked symmetries, are putting forward a view of poetry which is likely to pull it out of

the post-Symbolist phase in which, with decreasing profit and despite countless minor excursions, it has remained for several decades. The result is a sort of geometrodynamics of the imagination, which derives thought from mathematical operations implicit in the structure of the mind. If the making of poetry is to remain an intellectually respectable activity, it will probably move into an area of close calculation of a mathematical or pseudo-mathematical kind: we can expect the poetic equivalent of the serial revolution which Schönberg initiated in music so long ago. If the semiologists have their way the image, up to now recalcitrant to absolute intellectual control, may well become a completely manipulable construct, like the tone-row in music. We may expect something like that combination of emotional brutality or vacuity and sensuous ugliness with intense, and in its way very rewarding, intellectual excitement which distinguished the music of a few years ago. Certainly the present state of English poetry, in which an art once as formally complex and learned as traditional music lies crushed and smothered under the spreading buttocks of half-dead amateurs and "professors of Creative Writing" who would be hard put to it to scan a line of verse correctly, seems to point to the advent of new forms of technical rigour. A vacillation between chaos and formalism, between ignorant violence and frigid intellection seems typical of the art of this century. I would suggest that contemporary poetry can only escape this horrible seesawing between rotten flesh and dead bones by seeking intellectual excitement in imitation of the patterns found in nature. The immediate alternative is a secular scholasticism more deadening than any found in the medieval period, with no prospect of a Renaissance at its end: Lévi-Strauss's "closed system". Indeed, the discoveries of Lévi-Strauss are of great importance: taken in one way, they spell out death to the imagination, taken in another, they signify its release.

Certainly the implications of such discoveries, which seem to remove the "mystery" from myth, appear at first to be disastrous, so far as the poetic imagination is concerned. But only dilettantes and charlatans will inevitably suffer; I mean those who have for years uttered such vaguely sonorous phrases as "the myth-making imagination", "primitive spontaneity" and "archetypal images", without ever bothering to tell us what they meant. It is not likely that any real poet will reject insights which make it possible to unite the poetic and scientific imaginations in a manner which has been almost impossible since the days of Milton. Structuralism itself may be profoundly anti-poetic, but one is not obliged to accept Lévi-Strauss's total theory of man, which is full of inconsistencies, as is the whole structuralist position.

To Canadian writers, such discoveries are of special importance. Up to now we have never really come to terms with the intellectual history of our country, which is preponderantly the intellectual history of the Indians. Instead, we have invented the idea of "wilderness", simply to avoid facing it. The "wilderness" never existed.

At last we may enter into the mythical past of the continent; indeed, we cannot avoid doing so. It is now clear to any rational person that Amerindian thought was, on its highest level, fully comparable to that of the pre-Socratic Greeks. Thus it forces itself into our tradition, not only because it is part of the history of the country we or our ancestors chose to settle in, but by sheer authority. Not to know it, that is, is to be ignorant.

One must first, however, know how to read Amerindian myth. In order to derive an æsthetic from mythical tales we must first determine their non-literary uses. Otherwise we are likely to consider a form of esoteric "tech talk", to use a phrase of de Santillana's and von Dechend's, as resulting from the free play of the imagination. Northwest Coast myths — our present concern — look very strange when they are regarded as works of the purely literary imagination and there is a temptation to believe that we are dealing with mental processes of impenetrable obscurity.

One does not have to be professionally skilled in mathematics or the physical sciences to understand the cosmological aspects of Northwest Coast myth. Amerindian cosmological thought might legitimately be said to organize the directly observable phenomena of nature into vast coherent structures comparable to those of music, an analogy found, by the way, both in de Santillana and von Dechend and in Lévi-Strauss. For that matter, the German musicologist, Marius Schneider, has shown in his remarkable *El Origen Musical de los Animoles Simbolos en la Mitologia y la Escultura Antiguas* (Barcelona, 1946) that the musical analogy was completely and consciously applied in several cultures around the world. Certainly the process was analogous to mathematics, even higher mathematics, but if we were to express this aspect of mythical thought in a form of notation we would have to use quasi-musical not mathematical symbols, the clusters of myth-concepts dissolving into each other in the manner of clusters of notes rather than mathematical functions. The reason for this is that mythical language is built up from an accepted set of cultural symbols, just as musical scales themselves and indeed all systems of musical construction including the most recent are; it is not built up from "pure" mathematical relations. Nevertheless, some idea of mathematical relations helps to sharpen

one's sense of the intellectual subtleties in myth-patterns, just as it can in the analysis of works of art: think of the interest of Greek and Renaissance artists in geometry, of composers of all ages in acoustic theory and its mathematical implications, and of poets in the art of time measurement and the geometry of symbolic worlds.

OBVIOUSLY this article can neither be exhaustive nor profound. The intellectual world of the coast Indians was a very complex and reasoned one (the incoherence of its reflection in most anthropological literature is hardly the fault of the Indians) and it would take several books to lay out even its main outlines.

We will take the briefest of looks at three stories recounted to the anthropologist John R. Swanton (one of the most responsible of the researchers in this area) by the Haida, Walter McGregor, in 1900-01. McGregor, I have been informed by Mr. Solomon Wilson of Skidegate, was very knowledgeable in the Haida calendrical tradition, a fact which is also clear from the stories themselves. They are to be found in Swanton's *Haida Texts and Myths: Skidegate Dialect.*

The first of these is the story of Shining Heavens.

Shining Heavens, who begins life as a tiny creature found by a princess in a clam-shell, shoots certain birds and learns to fly in their skins. In time he becomes a sky-god.

First he catches two varieties of sea-bird, a cormorant and a goose. His mother, Fine Feather Woman, who is presumably a sea-goddess in one of her aspects, eats them. He then shoots and dries the skins of a wren, a doubtful bird which is perhaps the red-winged blackbird, a bluejay and a woodpecker.

In the wren skin "he sat as broad, high cumulus clouds over the ocean." In the bluejay skin he sat "blue, broad and high over the sea." In the woodpecker skin "he sat over the sea, the upper part of him being red". For some reason he does not fly upward in the skin of the (presumed) red-winged blackbird.

The symbolism of the birds in this story is part of a network of bird-imagery which extends over most of the northern hemisphere. The naturalist Edward A. Armstrong has examined these linked metaphors in his *The Folklore of Birds.* Such resemblances are satisfactorily explained by a theory of Lévi-Strauss (referred to in his *Tristes Tropiques*), which would have Scandinavian, Celtic,

aboriginal Siberian, Eskimo and Canadian Indian cultures linked in a cultural continuum extending around the Arctic Circle.

Armstrong suggests a relationship between the wren and the thunderbird, the latter being related, in his argument, to Zu, the stormbird of Sumeria. This gives us a clue as to why the wren is identified with clouds. In this case, because of the benign nature of Shining Heavens, it is not stated whether the clouds are fair-weather or storm clouds: "cumulus" is suitably ambiguous.

The bluejay (actually it is Steller's jay) is a fairly obvious image of blue skies. But the jay is a member of the crow family and indeed appears in Chinookan myth as the Transformer, performing the same function that Raven performs among the Tsimshian, Tlinglit and Haida. As the bird of the clear sky, it reminds us of the tremendous authority attached to the figure of Raven who has, as Armstrong points out, solar connotations in China, Japan and Northeast Asia as well as in Northwest America.

In the Old World the woodpecker is usually thought of as a harbinger of rain, thunder and lightning. Here Shining Heavens in his woodpecker-skin robe is associated with clouds but not rain ("red sky at night, sailor's delight"), a choice of the "positive" aspect of the function over the "negative" one. This is also true of him in his wren-aspect and his bluejay-aspect.

Thus the birds in whose skins Shining Heavens appears represent three stages of the day.

The wren is the morning. More specifically, perhaps, he is associated with the clouds of early morning, when the sea is still warmer than the land. He also represents the sun's position near the horizon: the wren, of course, is a ground-dwelling bird, living in brush-piles and among tangled roots; it is rather like a mouse in its habit of disappearing down one hole and suddenly appearing from another. By extrapolation of the kind common in pre-literate astronomical systems, the wren also stands for the dawn of the year, which may be thought of as beginning just after the winter solstice. In this sense, the wren is the sun as troglodyte, emerging from the ground to climb into the heavens.

The bluejay (Steller's jay) represents the sun at noon position, also the cloudless sky of an idealised noon. By extrapolation, the bluejay also represents the noon of the year, the summer; bluejays are most easily seen in British Columbia in June and July when family groups forage along the edge of the woods. As the noon the bluejay would also represent the sun at the zenith.

The woodpecker, with its bright red head markings, its body black or spotted black and white, would represent the western sky at sunset, with its bright red

clouds (the head) and the darkness creeping up from beneath the horizon (the body). By extrapolation, it would represent the autumn or winter. The woodpecker is a rain and thunder bird in both the Old World and "on Vancouver Island", as Armstrong points out. Autumn and winter, in the mild wet climate of the coast, are the "rainy season".

At first sight these interpretations may seem somewhat fanciful, but "Sin", the Haida word Swanton translates as "Shining Heavens", is the ordinary word for day as distinguished from night and also for an entire period of twenty-four hours. It applies as well to the sky vault when it is illuminated by sunshine. Thus "Shining Heavens" is not strictly a sun-god, but stands for a more abstract concept: he represents the day in its three stages, in which the sun only serves as a marker. The story of Shining Heavens is a kind of imaginary clock in which the qualities of the year and day are combined. It might be thought of as an analogue of the simple but ingenious and effective mechanical devices which were part of the stagecraft of the coastal theatrical tradition: the coastal peoples were fascinated by moving models and the technology of illusion.

The calendar was regulated by close observation both of celestial bodies and of seasonal phenomena. Observations of seasonal phenomena — the behaviour of birds, fish and animals and the growth cycles of plants — are recognized as having been detailed and accurate. Anthropologists, unfortunately, have consistently underplayed the practical astronomical knowledge of the coastal peoples. Yet much of the material they have themselves collected proves them wrong. For example, the Bella Coola "model" of the physical heavens, as described in both Boas' and McIlwraith's books on this people, could only have arisen out of a fairly elaborate and systematic astronomy, based on naked-eye observations and on "common-sense" deductions as to the relative distances of celestial bodies. A similar model is implicit in most coastal cosmologies. It is true, however, that by the time most anthropologists began to collect such material, Indians had become completely dependent on the European calendar and compass, and most star names had been forgotten. Indians have told me that their ancestors did have specialists in astronomy and the calendar but that their knowledge is now lost. Only a few star names survive and it takes the utmost patience and much trial-and-error to work from these to a broader understanding of the system. It seems that this knowledge was a secret, the possession of certain guilds or initiation-groups. According to the Haisla Gordon Robinson, who has published a small book on the folklore of the Kitimat region, it extended to the ability to

foretell eclipses. Unfortunately, our knowledge of observational methods, while it indicates a high level of competence, is incomplete in several vital areas.

FEW STORIES are so enigmatic as *Canoe People Who Wear Headdresses*. I quote it verbatim, as told by Walter McGregor to J. R. Swanton. I hope the reader will bear with this apparently boring and incomprehensible tale: it will repay his attention.

There were ten of them, and they went to hunt with dogs. After they had gone along for some time it became misty about them and they came to a steep mountain and sat there. Their dogs walked about on the ground below. They yelped up at them.

Then they started a fire on top of the mountain, and one among them who was full of mischief put his bow into the fire. But, when it was consumed, it lay on the level ground below. Then he also put himself in. After he had burned for a while and was consumed, lo, he stood on the level ground below. Then he told his elder brothers to do the same thing. "Come, do the same thing. I did not feel it." So they threw themselves into the fire. They were consumed and stood at once on the level ground.

And when they put the next to the eldest in, his skin drew together as he burned. His eyes were also swollen by the fire. That happened to him because he was afraid to be put in. When he was consumed he also stood below. The same thing happened to the eldest. This mountain was called "Slender-rock."

Then they left it. After they had travelled about for a while a wren made a noise near them. They saw a blue hole in the heart of the one who was travelling nearest to it. And after they had gone on a while longer they came to the inner end of Masset inlet. When they had travelled on still farther (they found) a hawk feather floated ashore. This they tied in the hair of the youngest. He put feathers from the neck of a mallard around the lower part of it. It was pretty.

Now they came to a temporary village. They camped in a house in the middle which had a roof. They began eating mussels which were to be found at one end of the town. He who was mischievous made fun of the mussels. He kept spitting them out upward. By and by they set out to see who could blow them highest (through the smoke hole). One went up on the top of the house and held out his blanket, which was over his shoulder. By and by he looked at it. His blanket was covered with feathers. They did not know that this was caused by their having broken their fast.

And after they had walked about for a while in the town they found an old canoe. Moss grew on it. Nettles were also on it. They pulled these off, threw them away, and repaired it. Then the mischievous one made a bark bailer for it. On the handle he carved a figure like a bird. He carved it in a sitting posture. They

tied a bunch of feathers in the hair of one of their number, and he got in forward with a pole. Another went in and lay on his back in the stern. They poled along.

After they had gone along for a while they came to a village where a drum was sounding. A shaman was performing there. The glow (of the fire) shone out as far as the beach. Then they landed in front of the place, bow first, and the bow man got off to look. When he got near (the shaman said): "Now, the chief Supernatural Being Who Keeps the Bow Off is going to get off." He was made ashamed and went directly back.

And the next one got off to look. When he got near (the shaman said): "Chief Hawk-hole is going to get off." And he looked at himself. There was a blue hole in him. He became ashamed and went back.

The next one also got off to look. When he got near he heard the shaman say again: "Now the chief Supernatural Being on Whom the Daylight Rests is going to get off." And he went back.

The next one got off. He (the shaman) said, as before: "Now the chief Supernatural Being on the Water on Whom is Sunshine is going to get off."

And another got off to look. When he got near (he said): "Now the chief Supernatural Puffin on the Water is going to get off." He was also ashamed and went back.

And another got off. He (the shaman) said to him: "Now the chief Hawk with One Feather Sticking out of the Water is going to get off." He looked at the shaman from near. He had a costume like his own. Then he also went back.

Still another got off. When he, too, got near (the shaman said): "Now the chief Wearing Clouds around His Neck is going to get off." He remembered that he had been thus.

And yet another got off. When he, too, came near the door (the shaman said): "Now the chief Supernatural Being Lying on His Back in the Canoe is going to get off."

Then he got on again, and the oldest got off to look. When he came near (the shaman said): "Now the chief who owns the canoe, Supernatural Being Half of Whose Words are Raven, is going to get off."

Then the eldest brother said: "Truly, we have become supernatural beings. Now, brothers, arrange yourselves in the canoe." Then they took on board some boys who were playing about the town. They put them in a crack in the bottom of the canoe. And they pulled up grass growing at one end of the town for nests. They arranged it around themselves where they sat.

Then they started around the west coast. When the one who had a pole slipped his hands along it, its surface became red. He alone pushed the canoe along with his staff.

As they floated along, when they found any feathers floating about, they put them into a small box. If they found flicker feathers floating about, they were particularly pleased and kept them.

Then they came to a town. A woman went about crying near it. They took her

in with them. When this woman's husband came from fishing with a net (he thought) some man had his arms around his wife. Then he put burning coals on the arms about her. But it was his wife who got up crying. It was she who was going about crying, whom they took in.

[It should be noted, parenthetically, that the husband mistook his wife's hands, which she held clasped about herself, for those of some man.]

Then they made a crack in the bottom of the canoe for her and put her hand into it, whereupon it ceased paining her. They made her their sister. They placed her above the bailing hole.

Then they came in front of Kaisun. And the woman at the head of Dju (*a stream near Kaisun*), Fine Weather Woman, came to them. (She said): "Come near, my brothers, while I give you directions. The eldest brother in the middle will own the canoe. His name shall be Supernatural Being Half of Whose Words are Raven. Part of the canoe shall be Eagle, part of it shall be Raven. Part of the dancing hats shall be black; part of them shall be white. The next one's name shall be Supernatural Being with the Big Eyes. The one next to him will be called Hawk-hole. The next one will be called Supernatural Being on Whom the Daylight Rests. The next one will be called Supernatural Being on the Water on Whom is Sunshine. The next one will be called Puffin Putting His Head out of the Water. The next will be called Wearing Clouds Around his Neck. The next will be called Supernatural Being Lying on his Back in the Canoe. The next will be called Supernatural Being Who Keeps the Bow Off. He will give orders. Wherever you give people supernatural power he will push the canoe. And the next younger brother will be called Hawk with One Feather Sticking Out of the Water. And the sister sitting in the stern will be called Supernatural Woman Who Does the Bailing. Now, brothers, set yourselves in the canoe. Paddle to Stangwai. It is he who paints up those who are going to be supernatural beings. He will paint you up. Dance four short nights in your canoe. Then you will be finished." That was how she spoke of four years.

Immediately, he (*Stangwai, the spirit of an island a short distance south of Kaisun*) dressed them up. He dressed them up with dancing hats, dancing skirts, and puffins'-beak rattles. He pulled a skin of cloud around the outside of the canoe. He arranged them inside of it. Where they sat he arranged their nests. All was finished.

This is the end.

Certain motives in this story occur again and again in a group of Haida myths which, it seems to me, are clearly related to astronomy, the calendar, and the supernatural celestial beings presiding over certain forms of shamanism and magic. They are the stories of *Sacred One Standing and Moving, Supernatural Being Who Went Naked, He Who Had Panther Woman for His Mother, Laguadjina, The Story About Him Who Destroyed His Nine Nephews, He*

Who Was Abandoned by His Nine Uncles and *How a Red Feather Pulled Up Some People in the Town of Gunwa*, all of which may be found in Swanton's *Haida Texts and Myths, Skidegate Dialect.* These stories usually concern themselves with eight or nine brothers and a varying number of female relatives.

There are ten brothers in *Canoe People Who Wear Headdresses*:

1. Chief Supernatural Being Who Keeps the Bow Off
2. Chief Hawk-hole
3. Chief Supernatural Being On Whom the Daylight Rests
4. Chief Supernatural Being On the Water On Whom Is Sunshine
5. Chief Supernatural Puffin On the Water
6. Chief Hawk With One Feather Sticking Out Of The Water
7. Chief Wearing Clouds Around His Neck
8. Chief Supernatural Being With The Big Eyes
9. Chief Supernatural Being Lying on His Back in the Canoe
10. Chief Supernatural Being Half of Whose Words are Raven.

The woman in the set, and the eleventh person, is Supernatural Woman Who Does the Bailing.

It is clear from the story that much importance is placed on the order in which they sit in their canoe. There are two seating arrangements. The first is that shown in their order of disembarkation at the village in which the shaman is performing: this is the order indicated above. The second is the order they take on the instructions of Fine Weather Woman. Admittedly her use of the word "next" may be interpreted in more than one way, but since she begins with the man who is to sit in the middle, Chief Supernatural Being Half of Whose Words are Raven (Number 10), the most obvious interpretation of her instructions is that she is counting off from the middle. Thus Supernatural Being with the Big Eyes (Number 8) is next to the middle man on one side, Hawk-hole (Number 2) is next to him on the other side and so on respectively to the bow and the stern. Fine Weather Woman's seating arrangement would thus be —

1 7 4 2 10 8 3 5 9 6 (11 sits in the stern)

Let us assume the ten brothers represent ten thirty-six day months of a year. This is not entirely arbitrary. In one Tsimshian story (*Sun and Moon* in Boas's *Tsimshian Myths*, pp. 113-116) an artificial year of forty-day months is referred to; the ancient Mediterranean system of decans divided the year into thirty-six ten-day periods; the Aztec year was divided into eighteen solar months. Supernatural Woman Who Does the Bailing may be the five intercalary days, but since we do not know where they came in this form of the year we must leave her out for the moment. But we do know that among the Haida the year was

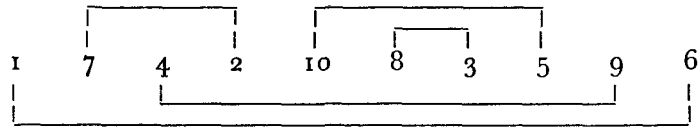
thought of as beginning in March or April, so the spring equinox, March 21st, may be taken as the beginning of our hypothetical year, as follows —

1. March 21st
2. April 26th
3. June 1st
4. July 6th
5. August 11th
6. September 16th
7. October 16th
8. November 28th
9. January 3rd
10. February 8th

This would correspond to the order of the supernatural beings as seen by the village shaman. Of course these dates are arbitrary, in the sense that they are not based on astronomical observations, or on any specific information from a native source, but on successive counts of thirty-six days from the spring equinox. However, I do believe that at one time there did exist an "astronomer's calendar" divided into intervals roughly similar to the above. It must have been based on the dawn rising, or evening setting, of prominent ecliptic or near-ecliptic stars or constellations at intervals of thirty-six days.

The former existence of an "astronomer's calendar", which was used to correct the rough popular calendar based on lunations, is the best way of accounting for the extraordinary confusion as to month-names found in the anthropological records. Lists differed and still differ from informant to informant, even in the same village, and there was much confusion as to the times when the great festivals were supposed to begin and end. Several informants expressed sadness over the dying-out of calendrical experts and the resultant loss of knowledge. It is clear that only a complex calendar, based on stellar observation, could fall into such disarray. A calendar in which the months simply ran from new moon to new moon, and which was corrected by observing the point of the horizon where the sun rose at the solstices, would have remained more or less intact during a period of cultural breakdown. Many family heads would have been able to keep track of it themselves. Some such elementary calendar did in fact survive, as we know from the anthropologists. The fact that these simple observations did not suffice to keep the total calendrical system in order indicates that it must have been based on more complicated principles of observation, probably both stellar and lunar.

We revert to Fine Weather Woman's arrangement. This time, though, we connect the figures which would be in opposition if we were to place them at equal distances around the rim of a circle



Months 3 (June 1st to July 5th) and 8 (November 28th to January 2nd) are closest together in this scheme. These are the months in which the summer and winter solstices occur. Months 1 (March 21st to April 25th) and 6 (September 16th to October 22nd) are farthest apart. These are the months in which the spring and fall equinoxes occur. Months 2 and 7 are, after the pair 8-3, the next closest together: these precede or "announce" the solstitial months. Then follow 5 and 10, which precede or "announce" the equinoctial months. Finally we have 9 and 4, which precede 5 and 10. Since we do not know which is bow and which is stern in Fine Weather Woman's arrangement (either 1 or 6 could be at the bow: spirits sometimes act "in reverse.") we do not know whether to place Supernatural Woman Who Does The Bailing next to the spring or the fall equinox, but we know she must be one of the two. Thus there is a clear indication that the intercalary days are associated with the equinoxes. This is also indicated in the month-names of a calendar which is known to have been in use at Masset. March in the Masset series is referred to as "russet-backed thrush" month, and the great Haida goddess, Dzilaqons, is involved in a scandal with Swimming Russet-backed Thrush in the related story of *Sacred One Standing and Moving.*

There is another significant element in the story which tells us that the arrangement in the canoe as seen by the village shaman is meant to be carefully distinguished from the arrangement set out by Fine Weather Woman. When the brothers leave the village in which the shaman is dancing they take some of the village boys on board and pull up grass from the village for "nests" (as celestial bodies, they have the characteristics of birds). They are thus placing themselves in the lower regions of the air, those closest to the earth. But when they have been allocated their places by Fine Weather Woman — a very exalted goddess, the mother of Shining Heavens — they are given a skin of cloud, which the island-god Stangwai pulls "round the outside of the canoe". They are then placing themselves in the higher regions of the sky, thus closer to the timeless realm of the gods and overseeing spirits, and the realm of secret knowledge.

The bark bailer carved by "the mischievous one" must be a constellation, since one of the very few constellation-names we have from the Haida is that which refers to the Pleiades as a "canoe bailer". "The mischievous one" is identified by Swanton as "Chief Supernatural Puffin on the Water", whom I have tentatively and approximately identified with the month from August 16th to September 18th. It is therefore of some interest that the inhabitants of Kodiak Island name the month of August as "the Pleiades begin to rise", even though this constellation is only prominent after midnight in this month.

Nobody could pretend that the mathematical operations involved in this story are very complicated. It is something like a "farmer's almanac" and embodies the kind of calendrical and meteorological knowledge one would expect to find in an illiterate village society. What is fascinating, "elegant" indeed, is the manner in which it finds verbal counterparts of ideas which we can only express in diagrams. Poets were at one time masters of the calendar, as Robert Graves points out in his highly valuable if extravagant studies of myth; they have been trying to reclaim it ever since. But only stories such as those of Walter McGregor can take us back to the time when poetry and science were one and the poetic fiction was not a mere commentary on the scientific "fact", the possession of the professional astronomer, but a verbal model of it.

It can be seen that this story is only a little more complicated than the story of Shining Heavens. Walter McGregor no doubt thought of it as elementary stuff. For this remarkable man also told Swanton one of the most intricately constructed stories I have ever come across.

IN THIS STORY, which is called *Laguadjina* in the Swanton collection, many of the images from the Canoe Beings and Shining Heavens stories reoccur, but in a totally new context and subject to an entirely different set of transformations. It is as if one had passed from arithmetic to calculus, or, to use a perhaps more valid image, from elementary harmony to advanced counterpoint.

Obviously I cannot analyse it here: properly to spell out the implications of this story, with its dizzyingly rapid succession of "shorthand" images, would (and this is not hyperbole) require a small book. In it, nine brothers and their sister, creatures half-dog and half-human, travel through a number of very strange adventures in a totally improbable landscape. It seems clear from the context

that the children, seemingly children of the sun and the moon, are abstract entities of calendrical-astronomical significance.

The behaviour of these beings is utterly incomprehensible in human terms. They offer their sister as bait to catch a supernatural sea monster; their sister commits incest with one of the brothers (the trickster Pitch, who seems to represent the fall equinox) and is later caught lying with "North", a sort of Cold Giant associated here with the winter solstice. Certain passages occur which are obviously intended to be taken "in reverse": Heron, who talks entirely in contradictory and nonsensical terms, offers them three canoes, those of a bird, a rainbow trout and a jellyfish: they choose Jellyfish's canoe as the fastest. There is an utterly obscure and puzzling (puzzling even on second or third reading) adventure in which one of the brothers, hunting groundhogs, becomes a groundhog himself and is caught in a deadfall by the others. Yet, by means of a breathtakingly ingenious use of doubledged and ambiguous imagery, it turns out that he has at the same time ("thinking himself to be a human", so to speak) caught his brothers, who have themselves been turned into groundhogs, in his own deadfall.

The use of "reverse language" seems to arise out of the necessity to consider two sides of the year-circle at once, to establish, for example, that the sun is in constellation A when the full moon appears in constellation B, which is opposite to A on the year-circle. The necessity of keeping the movements of the sun and moon in the mind at the same time, which we would treat as a mathematical problem, is handled here by inventing two contradictory actions which are presented as a sort of paradoxical single action. I know of no precise analogy in literature, outside of Mallarmé's *Un Coup de Dés*, which Octavio Paz has, in his *Claude Lévi-Strauss, an Introduction*, compared to Lévi-Strauss's *Le Cru et le Cuit*; the nearest analogy is in music, in that form of counterpoint in which a cantus firmus and its mirror image are played at the same time. But here it is an episode in a very complicated fugue.

The story is a sort of verbal planetarium whose chief purpose seems to have been the regulation of the calendar. It also identifies constellations presiding over intermediate periods of the solar year. It seems to concern itself with reconciling an "astronomer's year", based on the rising of the sun in certain key constellations, with the "popular" lunar year, based on the phases of the moon. In its simultaneous concern with "opposite points" of the year-circle and the relative positions of the sun and full moon it would indeed seem to make it possible for the adept to predict at least some eclipses, something which, accord-

ing to tradition, native astronomers could do. Such a statement could not be proved, however, until sites known to be used for celestial observation had been surveyed according to methods similar to that established by A. Thom for the study of British megalithic observatories.

One such site was the hill named Andimaul, near Kitsegeucla. In his book, *From Potlatch to Pulpit*, the Tsimshian clergyman, W. H. Pierce, described how native astronomers belonging to different tribes would gather on this hill, whose name means "Seat of Astronomers", to observe the setting of the sun, the spring and the fall being particularly significant times. They had done this so long, he said, that certain observation points, used as seats, were worn away from constant use. After consulting among themselves, they would send out messengers to the different tribes with their predictions of events for the following season — weather, the size of the salmon run or the berry harvest, and possible epidemics. Astrology of this kind, pseudoscience though it was, must have depended upon an elaborate form of astronomical symbolism.

THE READER may have been asking himself what relationship such matters, interesting enough in themselves, bear to literature. The answer must be that the imitation of the abstract rhythms of nature, temporal or geometrical, has in most ages been considered as much the work of the artist as the imitation of the patterns of human life or the depiction of plants and animals. Ovid's *Fasti* and its congeners in classical and Asian cultures are more than mere aids to scientific memory; they are true poems, and if we cannot enjoy them as such, it is our loss. Yet these are already far removed from the tradition: they are discursive poems about astronomy and the calendar. In *Laguadjina* we have a much older form, a story which is, so to speak, a set of astronomical formulas, in which the movements of the heavenly bodies dealt with are imitated as literally as possible, in the form of a fictional adventure. The result, even when the story is only partially understood (and we cannot hope to interpret it in full), affords keen æsthetic satisfaction.

The interesting thing is that a good deal of the high verbal art of the great period of European literature did much the same thing, though in the context of pure art. Recent investigations into the use of numerical symbolism in the English poetic tradition have uncovered the frequent use, as formal skeletons, of astronomical-calendrical cycles and sequences of significant numbers. Alastair Fowler and A. Kent Hieatt have examined Spenser in this light with astonishing

results: the works of Chapman, Milton and others have also been examined, though in less detail. The existence of Chaucer's work on the astrolabe would make one suspect similar patterns in his work. This great tradition seems to have died out, at least among the poets during the late seventeenth and early eighteenth centuries, though Tennyson, a more intellectual poet than is usually realized, returned to it to some extent in his now stupidly underrated *Idylls of the King*. Lowry rediscovered it in part in *Under the Volcano* by an agonizing process of trial and error, but he had composed a great work of counterpoint "by ear" and the effort so exhausted him that he could never repeat it. Its death must be related to the disappearance of the ability to write effective and shapely long poems and verse plays: it was no longer understood that the very skeleton of the work must be a kind of abstract image, and would-be epic poets merely constructed a plot and draped imagery over it. Only in music was the great work still possible: elaborate forms such as the fugue and the sonata arose out of the decay of major poetic form and took over many of its devices. The final collapse of traditional harmony and counterpoint (with their double roots in ancient acoustical symbolism and post-Renaissance acoustical science) has now brought the age of the musical masterwork to an end as well.

In our day, however, the literary stream seems to be seeking its old channel, assisted by strange and perhaps unknowing engineers. Structuralist critics such as Roland Barthes, searching for a model which will best represent the manner in which artistic form may govern the use of words, have found themselves using an image of a vertical systematic axis crossing a horizontal syntagmatic one, which is very similar to the basic Amerindian "model" of the structure of the universe. The most interesting current researches into poetic form, therefore, are discovering structures similar to those which Lévi-Strauss has found in Amerindian myth.

One can even say, staggering though the claim may seem, that close study of the native tradition makes it possible to reconcile international culture at its most abstract and "universalist" with local culture at its most concrete, to find, so to speak, that Parnassus where local wild-flowers grow and on whose slopes one may find such homely Canadian animals as beaver, porcupine and black bear. One may find, for example, links between such an apparently wild British Columbian tale as *Laguadjina*, Ovid's *Fasti* and *The Faery Queen*, a link which is not arbitrary, but is based on the survival of a very ancient calendrical tradition in all three works. In such intellectual adventures we may follow the Romans who, in a spirit of syncretism, discovered the faces of their own gods in

the gods of the European tribes they conquered — a process which at first intuitively impresses one as right, which further study seems to condemn as naive, superficial and unworthy of a modern mind, and which yet further study restores to its first position, though vastly enriched. The process appears as the humanisation of the wilderness, though this too would be a superficial description, since it is really the discovery of the humanity of what was not wilderness at all.

Could not one of the missions of Canadian literature in both English and French — if the two may be allowed a common mission — be that of showing a certain absurdity in the split which one finds in both United States and Spanish-American literatures, and which is caused by conflict between a European tradition and a native one? To show that the conflict is not inevitable, though, one must dig deep enough to find the common root. The point of conjunction, I would suggest, is to be found in the most local tradition of all — Indian mythology — and in that mythology at its apparently most strange and alien, the cosmological myths.

FINCHES FEEDING

P. K. Page

They fall like feathered cones from the tree above
sumi the painted grass where the birdseed is
skirl like a boiling pot
or a shallow within a river —
a bar of gravel breaking the water up.

Having said that, what have I said?
Not much.
Neither my delight nor the length of my watching is conveyed
and nothing profound recorded, yet these birds
as I observe them
stir such feelings up —
such yearnings for weightlessness, for hollow bones,
rapider heartbeat, east/west eyes
and such wonder — seemingly half-remembered — as they rise
spontaneously into air, like feathered cones.