

**THE DRY AND THE WET : ASTRONOMY, AGRICULTURE
AND CEREMONIAL LIFE IN WESTERN AMAZONIA**

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The existence of priests in the Amuesha' society mainly explained the richness of cosmology and astrónomicas knowledge. Astronomical configurations are linked to others systems of reference (zoological, botanical, musical or agricultural...). Thus the Amuesha apprehend their cosmos as an integrated whole through associations beween different codes...

Le sec et l'humide : astronomie, agriculture et vie cérémonielle en Amazonie occidentale.

L'existence d'une prêtrise dans la société amuesha a contribué au développement important de la cosmologie et de l'astronomie. Les connaissances acquises en ce domaine s'entrelacent avec celles portant sur les domaines zoologiques, botaniques, musicaux, agricoles, etc... Ainsi émerge un système interprétatif complexe qui révèle comment une société amérindienne conçoit le cosmos comme un tout intégré.

Lo seco y lo humedo : astronomia, agricultura y vida ceremonial en Amazonia occidental.

La existencia de sacerdotes en la sociedad Amuesha ha contribuido a un desarrollo considerable de la cosmología y de la astronomía. Los conocimientos adquiridos en estos campos se entrelazan con conocimientos que corresponden a otros sistemas de referencia : zoológico botánico, musical, agrícola... Así aparece un sistema interpretativo complejo que muestra como una sociedad amerindia concibe el cosmos como un conjunto integrado...

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“ Throughout its history the Game was closely allied with music, and usually proceeded according to musical or mathematical rules. One theme, two themes, or three themes were stated, elaborated, varied, and underwent a development quite similar to that of the theme in a Bach fugue or a concerto movement. A Game, for example, might start from a given *astronomical configuration*, or from the actual theme of a Bach fugue, or from a sentence out of Leibniz or the Upanishads, and from this theme, depending on the intentions and talents of the player, it could either further explore and elaborate the initial motif or else enrich its expressiveness by allusion to kindred concepts ”.

The Glass Bead Game

(Herman Hesse 1980 (1943) : 40-1 ; my emphasis)

Little is known about the cosmologies and astronomical knowledge of Amazonian priestly societies such as the Amuesha. Located on the eastern slopes of the Peruvian Andes, the Amuesha were at the crossroads of two of the most important Indian cultural traditions of South America. The existence, until very recently, of priests, ceremonial centres, and a messianic and millenaristic religious tradition based on the hope of salvation and the attainment of immortality betrays the cultural influence of the prehispanic highland civilizations and of later Christian evangelization (Santos Granero 1991). However, these influences have been incorporated into a corpus of knowledge whose structure and motifs are clearly embedded in the cultural tradition of South American lowlands. Astronomical knowledge does not escape to this rule. Some constellations are directly linked to Andean mythical themes, while others are associated to Christian symbolism and beliefs.

What surprises the most is the richness of the astronomical knowledge accumulated by the Amuesha as well as the complexity of associations between the astronomical code and other codes. While this may be partly explained as the result of Andean and European influence, I would contend that it is mainly explained due to the existence of a group of priestly leaders devoted to meditation and the acquisition of mystical knowledge. Such a quest included long ritual vigils and the careful observation of natural events that could be interpreted as signs of messages from the divinities. It is a well known fact that in the Central and South American civilizations astronomical knowledge and records were kept by corporate groups of priests. Though the Amuesha priests had not yet developed such a corporate organization they did meet periodically and consult each other on several religious and non-religious matters. It would not be unreasonable to think that astronomical observations were amongst the matters discussed.

As for many Amerindian societies (see Hugh-Jones 1988 : 65-6 for the Barasana), the observation of the movements of the celestial bodies is for the Amuesha one of the most important means to determine the annual calendar of agricultural and ceremonial activities. However, for the Amuesha — as for the ‘glass bead game players’ — astronomical configurations constitute only one among other possible systems of reference to determine calendrical periodicities.

Thus, the Amuesha link the particular position of a star at a particular time of the year with the migratory habits of birds, the flowering and fructification of certain wild or domesticated trees, or the different stages of the biological cycle of wild animals. The highly systematic way in which all of these phenomena have been 'assembled' demonstrates, firstly, that as the result of centuries of empirical observations — in which priests seem to have played an important role —, the Amuesha have an extremely detailed knowledge of the natural processes that take place in their environment; and, secondly, that they have an integrated conception of their cosmos based on the premise that any 'event' in any one sphere of reality (the realm of dreams included) is related to equivalent 'events' in other spheres.

Establishing the cause-and-effect nexus between these 'events' is part of the appeal of the 'game' — a game which the players must win in order to guarantee the survival of the collectivity. The elements that the Amuesha take into consideration for tracing links between different events are variegated: colour, sound, movement, etc. A multiple world of symbols is put into play, the result being an explanatory system composed of several layers of symbolic associations all of which convey the same message. Thus, for instance, the Amuesha associate the different positions of *Chemuellem* — the red Antares of the constellation of Scorpius — with the arrival of the vermilion flycatchers, the ripening of the red peach palm fruit, the burning of new clearings, the maize growing cycle, and the end of the performance of 'wet season music'. All of these events refer to the same natural process: the start, the height, and the termination of the dry season.

Again, like in the 'glass bead game', the Amuesha establish multiple connections between different phenomena in such a way that any one sub-system (astronomical, botanical, zoological, musical or agricultural) can be transformed or 'translated' into any other. According to the theoretical premises of Lévi-Strauss' structuralism when dealing with such systems, this possibility of 'jumping' from one type of code to another is due to the fact that all of them are constructed on the basis of binary oppositions — a fact that would be determined by the particular way in which the human mind operates (1970).

This could well be true, but what I would rather contend is that this possibility is fundamentally the outcome of the particular way in which societies such as the Amerindian conceive of their cosmos as an integrated whole. Basically, the issue is a distinct type of knowledge. Rather than apprehending the world by means of dividing it into 'fragments of reality', the Amuesha apprehend it as a whole, assuming — as the masters of the Renaissance — a pluridisciplinary attitude. This is only possible through a constant — and frequently conscious — effort towards associating the results of the empirical observation of a variety of natural phenomena. Thus, if in the Amuesha case different codes can convey similar messages, this is not necessarily due to the biological determinism of the functioning of the human brain, but because the events purported by these codes are in fact empirically associated.

This is why it is unimportant for the Amuesha whether the change from the wet to the dry season is expressed as an opposition between *Chemuellem's* (Antares) and *Oncoy's* (Pleiades) location in the zenith at dawn, or as an opposition between the appearance of *shellmemĩ* and *maĩ* (two varieties of swallows). At the level of the

seasonal cycle the meaning of these two pairs of oppositions is equivalent, having identical empirical strength. Therefore, if for the purpose of the present paper I have privileged the astronomical code, it should remain clear that I have done so in the spirit of a 'glass bead game player'; and that, paraphrasing Lévi-Strauss in his introduction to *The raw and the cooked* (1968 : 14), one could probably arrive at the same conclusions selecting some other code as a starting point, say, the migratory habits of certain birds.

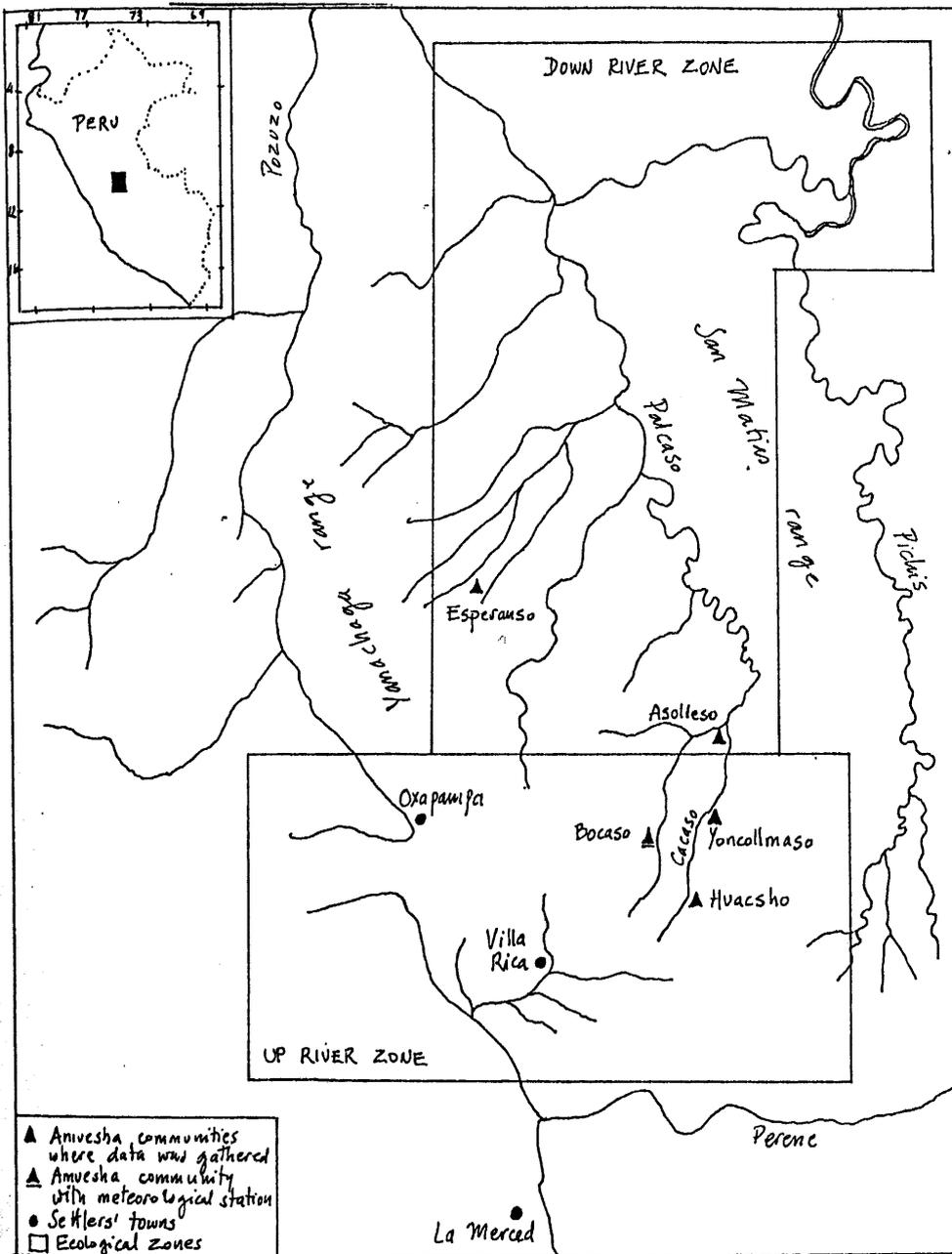
However, there is an important difference between Lévi-Strauss' stance and the conclusions one may reach through the analysis of Amuesha star lore. Lévi-Strauss confines his studies of myth to the realm of symbols, stressing the multiple connections that exist — and can be revealed — between symbols of different levels, but making no attempt to link Amerindian thought systems with Amerindian practice. According to Lévi-Strauss' stance in his *Mythologiques*, the world of symbols present in mythical discourse would make sense in itself, making it unnecessary to resort to the realm of human activity and human relations in order to explain it (1968 : 21). The systematic character of the world of symbols would be the outcome of a neurological fact rather than of the accumulation and sorting out of innumerable empirical observations. The analysis of the Amuesha star knowledge demonstrates that thought systems cannot be extricated from practice, and that practice — the relation between human beings and their environment — is not only an 'object of thought' (Lévi-Strauss 1970 : 142), but most fundamentally the 'aim of thought'.

SOME ETHNOGRAPHIC AND METHODOLOGICAL POINTS

In the following paragraphs I shall present some geographic and ethnographic data, and discuss certain methodological aspects which normally would be confined to footnotes. However, I believe that this information — arid as it is — is indispensable for the understanding of my later discussion of the associations established by the Amuesha between the positions of the celestial bodies and the annual seasonal, agricultural and ceremonial cycles.

The Amuesha, with a total population of around 6,000, are slash-and-burn agriculturalists living in around 30 'native communities' dispersed throughout a large territory in Central Peru, located between 74° 45' and 75° 45' W. Long., and between 9° 45' and 10° 45' S. Lat (see Map 1). The Amuesha environment is a combination of 'humid tropical forest' and 'very humid subtropical forest' areas. Altitudes range from 300 to 1,000 meters above sea level. Hunting, fishing and gathering are activities which contribute in different degrees to Amuesha subsistence according to ecological variations (up or down river areas, valley bottoms or mountain slopes), land availability, and the pressures of colonization over forest resources.

In the past decades the Amuesha have been increasingly incorporated into the national market economy. This has produced numerous changes in their economic and social patterns of organization. New crops (e. g. coffee and rice) and new productive activities (e. g. cattle raising) have been recently adopted. The



MAP 1. — Amuesha communities where data was gathered and ecological zones.

agricultural cycle, however, has not experienced substantial changes, and the tendency has been to accommodate the new crops into the traditional sequence of agricultural activities.

The data for this paper have been collected in four different settlements from some ten informants whose ages ranged from 12 to 80 years. The most detailed and reliable information was provided by the elder informants, but it should be pointed out that my youngest informant knew the names, and could sometimes locate, 12 out of the approximately 29 constellations recognized by the Amuesha. The four communities in which I lived — Huacsho, Yoncollmaso, Asolleso and Esperanso — are located between 75° 10'-75° 15' W. Long. and 10° 15'-10° 38' S. Lat. Two of them are located along the Cacaso river in what the Amuesha define as the 'up river area', while the other two are located in the 'down river area' along the Palcaso valley. In spite of some variations between these two areas with respect to rainfall volume, temperature and agricultural practices, these four settlements can be considered — because of their proximity — as pertaining to the same ecological sub-system.

Although I have twice done fieldwork amongst the Amuesha (1977 and 1983-4), I only started making systematic astronomical observations late during my second fieldwork and only in four occasions : November 1983, and March, May and June 1984. This was due both to the fact that not many people were prepared to wake up several times every night to show me the relevant constellations, and that ethnoastronomy was at that time as far as possible from my academic interests. Thus, I have not been able to confirm with my own observations all of the information I was given. This became a problem when I attempted to compare my informants' data on the position of particular stars at particular times of the year with the positions given for those same stars by a 'star finder chart' for southern latitudes : I found to my surprise that these did not coincide.

This led me to question such concepts as 'dusk' and 'dawn', those moments of the day when, according to the Amuesha, astronomical observations are carried out. Looking through my fieldnotes on Amuesha conceptions of time I found the answer to my problem. The Amuesha divide the nocturnal period into six sub-periods (see Table 1). The 6-8 PM and 4-6 AM sub-periods are considered to be transitional between light and darkness and viceversa. The sub-period between 8 and 11 PM, known as *rantaren*, indicates proper darkness and the beginning of

TABLE 1. — The division of the nocturnal time

Time	Name of sub-period
6-8 PM	tsapuen
8-11 PM	rantaren
11-12 PM	po'cto'tsentsap
12-2 AM	ñarenen
2-4 AM	puetarenmoch
4-6 AM	shocshocaren

'true' night. The root of the name of this sub-period is *ranto* = 'star', therefore indicating that this is the time when stars are more visible. The sub-period between 2 and 4 AM, known as *puetarenmoch*, is also a time of proper darkness, but it contains in itself the 'seeds' of the morning. This is expressed by its name — the root of which is *puetaren* = 'morning' — that can be translated as the 'prefiguration of the morning'. When informants say that a particular star is in such a position 'when it is dark' or 'when it is about to grow light', they are not referring to our Western concepts of dusk (around 6 PM) and dawn (around 6 AM), but to observations made at 8 PM and 4 AM. When once more I compared the Amuesha data with that provided by the star finder on the basis of this different conception of time they matched with only a small margin of error. Therefore, for the purpose of this paper and when it is not otherwise specified, 'dawn' is at 4 AM and 'dusk' at 8 PM. Consequently, the heliacal rise of a star is the point in time in which a star appears in the eastern horizon at 4 AM, and the heliacal set is the time of the year when a star sets in the western horizon at 4 AM.

The Amuesha recognize at least 29 celestial bodies apart from the sun and the moon. These include single stars and planets, star-to-star constellations, bright nebulae, and dark clouds. In Table 2 I list the Amuesha names of all these celestial configurations, their translation into English, their equivalent in Western astronomy, and the degree of reliability of the identification. The Amuesha constellations can be classified into two broad categories: 'associated' and 'non-associated' bodies. At least 20 out of the 29 constellations recognized by my informants fall into the first category (see Table 3). As we shall see, the association between different celestial bodies is provided by mythical discourse, though it is frequently grounded on empirical considerations, e. g. proximity to the Milky Way, location along the Ecliptic, etc.

TABLE 2. — Catalogue of Amuesha stars and constellations.

Amuesha name	English translation	Identification	Reliability of information
Single stars and planets			
Chemuellem	red star	Antares of Scorpius	+
Chemuellem pueyochresha'	Chemullem's followers	claws of scorpius	+/-
Charem	summer star	Canopus	+
Puetarem	morning star	Venus/Mercury	+
Atarrem	large star	unidentified	
Ranto' aspentó'	high star	unidentified	
Yompor Oresem	Our Father Oresem	unidentified	

Table 2 : follow.

Amuesha name	English translation	Identification	Reliability of information
Yachor Huoraresyac	Our Mother Huoraresyac	unidentified	
Yachor Shopsheresyac	Our Mother Shopsheresyac	unidentified	
Star-to-star constellations			
Corsoch or Coros de Mayo	cross or May cross	Southern Cross	+
Corsoch pobnahuor	Corsoch's second in command	α and β Centauri	+
Coros panteón	cemetery's cross	ϵ , β and a third star of Carina, and δ Velorum	+
Oncoy		Pleiades	+
Ato' pocherret	tapir's jaw	Hiades	+
Yompor Pencoll	Our Father the three finger-hole flute	Orion's belt	+
Pencoll pueyochresha'	Pencoll's followers	Orion's shield	+
Oshcollerrem	the ocelot's testicles	a. Delphinus ¹ b. ϵ and its neighbor of Scorpius	- +
Cochllema' t̄	small knife	a. Altair of Aquila and Sagitta b. Scorpius' tail	- +
Contor	condor	Altair, β and γ Aquilae	+
Contor pueyochresha'	the condor's followers	sinuous line of stars uniting Aquila's head and tail	+/-
Contor pocllellor	the condor's medal	small cluster of stars close to Altair	+
Epuesquer	twisted arms	Albireo of Cygnus, α Sagittae and a third star between these two constellations	+/-
Muerrat	maize mortar	Corona borealis	+
Ma'yarro	jaguar's paw	unidentified	
Tse'mpue	vulture's wing	Cassiopeia	+/-
Bright nebulae			
Yompor A'penerr	Our Father A'penerr	Milky Way	+

Table 2 : end.

Amuesha name	English translation	Identification	Reliability of information
Apampaña	cemeteries	Small and Large Magellanic Clouds	+
Payaf	fire fan	Large Orion's nebula	+/-
Dark clouds			
Yatesha'	old jaguar	Coalsack	+

1. In cases in which two different identifications were made I list them as a and b pointing out which one is the more reliable.

TABLE 3. — Star mythical associations

Group	Amuesha stars
1	A'penerr Payaf Oshcollerrem Cochllema' ĩ Tse'mpue
2	A'penerr Corsoch Coros panteon Apampaña
3	Corsoch Corsoch pobnahur
4	Oncoy Ato' pocherret Pencoll Pencoll pueyochresha'
5	Contor Contor pocllellor Contor pueyochresha' Epuesquer
6	Chemuellem Chemuellem pueyochresha'
7	Oresem Huoraresyac Shopsheresyac

1. See Table 2 for Western equivalents.

AMUESHA STAR MYTHOLOGY

Among the Amuesha astronomical knowledge cannot be extricated from star mythology and religious beliefs. For the Amuesha, a star is not just a star : all of them were divinities or human essences of animals and material objects that people the earth in ancient eras. Some have a direct — beneficent or maleficent — influence in nowadays affairs, and many are associated with the hope for immortality that characterized Amuesha religion in the past and that characterizes it today through conversion to Adventist or Evangelical churches. It is for this reason that in the following pages I shall summarize the Amuesha mythical accounts that deal with the origin of stars, as well as analyze their place in the all pervasive Amuesha theology of salvation.

The Amuesha divide their history into three eras : a primordial era of creation characterized by the rivalry between *Yato' Yos*, the celestial supreme divinity, and *Yosoper*, his evil classificatory brother and chthonic ruler ; a second era dominated by *Yompor Rref*, an evil solar divinity ; and the present era ruled by *Yompor Ror*, Our Father the Sun, and his twin sister and wife *Yachor Arrorr*, Our Mother the Moon. This latter era began with the ascension to heaven of *Ror* and *Arrorr*. The saga relating the deeds of these two deities and their siblings constitute the central core of Amuesha mythology. The birth of the sun and the moon inaugurated an era of normal childbirths ; before that time women gave birth to rotten wood, monkeys or lizards. In contrast, their ascension to heaven marked the beginning of an era characterized by illness and death (Santos Granero 1991). Since then the Amuesha lost their immortality and started experiencing the pains and sorrows of the human condition. This loss constitutes the cornerstone of the millenaristic beliefs of the Amuesha.

The myth of *Yompor A'penerr*, Our Father the Milky Way, contains the fundamental features of this theology. According to tradition, just before *Ror* and *Arrorr's* ascension to heaven the divinities — who up until then lived on this earth together with the Amuesha — organized a large feast. *Yompor A'penerr* told the people that if they wanted to become immortal like the divinities they should join him in the singing and dancing of *etseñets* men's vocal music — one of the four styles of *coshamñats* sacred music —, so that arm in arm they could ascend to *yomporesho'*, the Sun's celestial abode. *A'penerr* made the night cold to test the faith and religiosity of the Amuesha. The latter could stand neither the cold nor the sleepiness, so very few followed him.

Three times the divinity started his ascension, but nobody could or would follow him. *A'penerr* begged the people to allow at least one of their children to follow him, so that the latter could become as powerful as the divinities and redeem humanity in due time. But the people were afraid of losing their children and would not accept *A'penerr's* offer. Finally, the divinity became angry at the Amuesha and told them : “ My love and compassion have reached their limit. Now, my children, you shall be forgotten for ever. You shall never become like one of us ”. With these words *A'penerr* left this earth, which from then onwards became *rromue patsro*, ‘the land where death reigns’.

In one version of the myth we are told that the white people answered the divinity's plea and joined him in his singing and followed him to his celestial mansion. This would explain, according to the Amuesha, why the white people have extraordinary creative powers. According to this version, the brighter stars in the night sky are the white people who followed *A'penerr*. In another version we are told that in spite of the cold many Amuesha accompanied the divinity. With their arms intelocked, singing and dancing to *etseñets* sacred music, they all ascended to heaven as a long and sinuous row of people which are now visible as the Milky Way.

A'penerr was also followed by numerous divine or semi-divine beings. *Yompor Pencoll* played his transverse flute (*pencoll*) and became Orion's belt. The three stars of this constellation represent the three fingerholes of his flute. *Pencoll's* followers became Orion's shield. *Oncoy*, the warlike divinity and *Pencoll's* father-in-law, started playing *conareñets* drum music. He and his group of drum players became the Pleiades. When *Oncoy* was ascending he realized he had forgotten his tapir's jaw (which hunters keep as a charm to ensure the future success of their hunt). He came back to this earth, picked it up and ascended with it. *Ato' počherret*, The tapir's jaw, became the V-shaped *Hiades*.

During *A'penerr's* ascension he was also joined by *Cochllema' t* who carried with him his short knife (*cochell*) and became the tail of Scorpius. *Tse'm*, the vulture, also followed the divinity. He is now known as *Tse'mpue*, and can be seen with his arched wings as Cassiopeia. Later on, *Contor*, the condor, joined the ascending divinities. When he arrived to the celestial abode the solar divinity asked him whether he had led a correct and moral life while on earth. *Contor* answered positively, but told the divinity that his brother *Epuesquer* was a tyrant who maltreated his followers by twisting their arms back. The solar divinity punished *Epuesquer* by twisting the latter's own arms back. Now *Contor* and *Epuesquer* can be seen close to each other.

The last one to ascend was *Corsoch* who carried with him his small cross and became the Southern Cross. According to myth, when *A'penerr* left this earth in sorrow due to the fallibility of the Amuesha, he drew two crosses in the sky on top of two tombs. He then told those whom he had left behind and had become mortal creatures (*pa'rromñáter*) that from then onwards they should always place a cross on top of the tombs of their dead. The smaller one is the Southern Cross, which is visible above the Small Magellanic Cloud; the larger cross, *Coros Panteon*, is formed by four stars of the constellations of Carina and Vela, and can be seen above the Large Magellanic Cloud. These two bright nebulae are known by the Amuesha as *Apampaña*, the 'cemeteries'. According to tradition, when they appear over the horizon in a vertical position they announce the imminent death of a member of the settlement.

The two crosses and their respective cemeteries 'go together with' or 'follow' *A'penerr*. However, the Southern Cross has its own followers known as *Corsoch pobnahuor* (α and β Centauri). *Pobnahuor* is a term that designated the 'seconds in command' of the Amuesha traditional priestly leaders (*cornesha*). Most of the brightest Amuesha constellations identified with powerful and benevolent divinities have their 'seconds in command', or their *pueyochresha*, a term which in the strict

sense means 'classificatory children' and more broadly can be translated as 'followers'.

In *A'penerr's* case his followers include, apart from the group of the crosses, the constellations of *Payat*, *Oshcollerrem*, *Cochllema't* and *Tse'mpue*. All of these constellations share the characteristic of being located in the proximity of the Milky Way, and are considered to follow *A'penerr* in his eternal performance of men's vocal music (*etseñets*). The apparent movement of the Milky Way throughout the night (see Figure 1) reproduces, as I shall attempt to demonstrate, the movements of a group of people dancing to the rythm of this style of sacred music (see Figure 2).

An *etseñets* group of dancers is led by two male singers followed by a row of alternated men and women holding hands with their arms interlocked. At the beginning the dancers are in line facing outwardly along one of the four sides of the dancing area. The two leaders start sharply pulling the row of dancers in such a way that it undulates and ends up in a straight line along the next side of the dancing area. These movements are repeated several times. Each time that the row of dancers undulates it is located along an axis that crosses diagonally the dancing area. After one turn around the whole of the dancing area the undulating row of dancers have reproduced the apparent X-patterned movement of the Milky Way in a 24-hour period. This would explain why the Amuesha assert that *A'penerr* and his followers can still be seen dancing eternally to *etseñets* sacred music.

Some of the Amuesha stars do not appear in the mythical narratives relating the ascension of the solar and lunar divinities. Among these are three constellations associated with felines: *Ma'yarrot* (jaguar's paw), *Oshcollerrem* (ocelot's testicles) and *Yatesha'* (the old one — irreverent way in which mystical jaguars are referred to by the Amuesha). Some other stars or planets mentioned by the Amuesha which are absent from the mythical account of *A'penerr's* ascension are *Puetarem*, *Atarrem* and *Ranto' aspento'*. These three names seem to refer to categories of stars rather than to a particular star or planet. *Puetarem* means 'morning star' and could refer

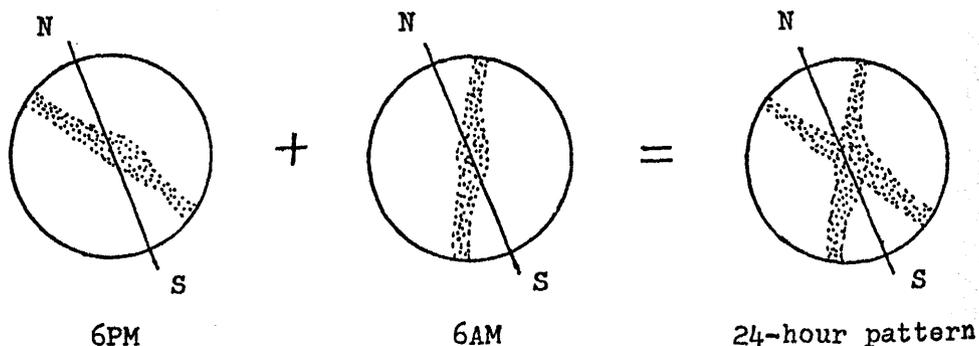
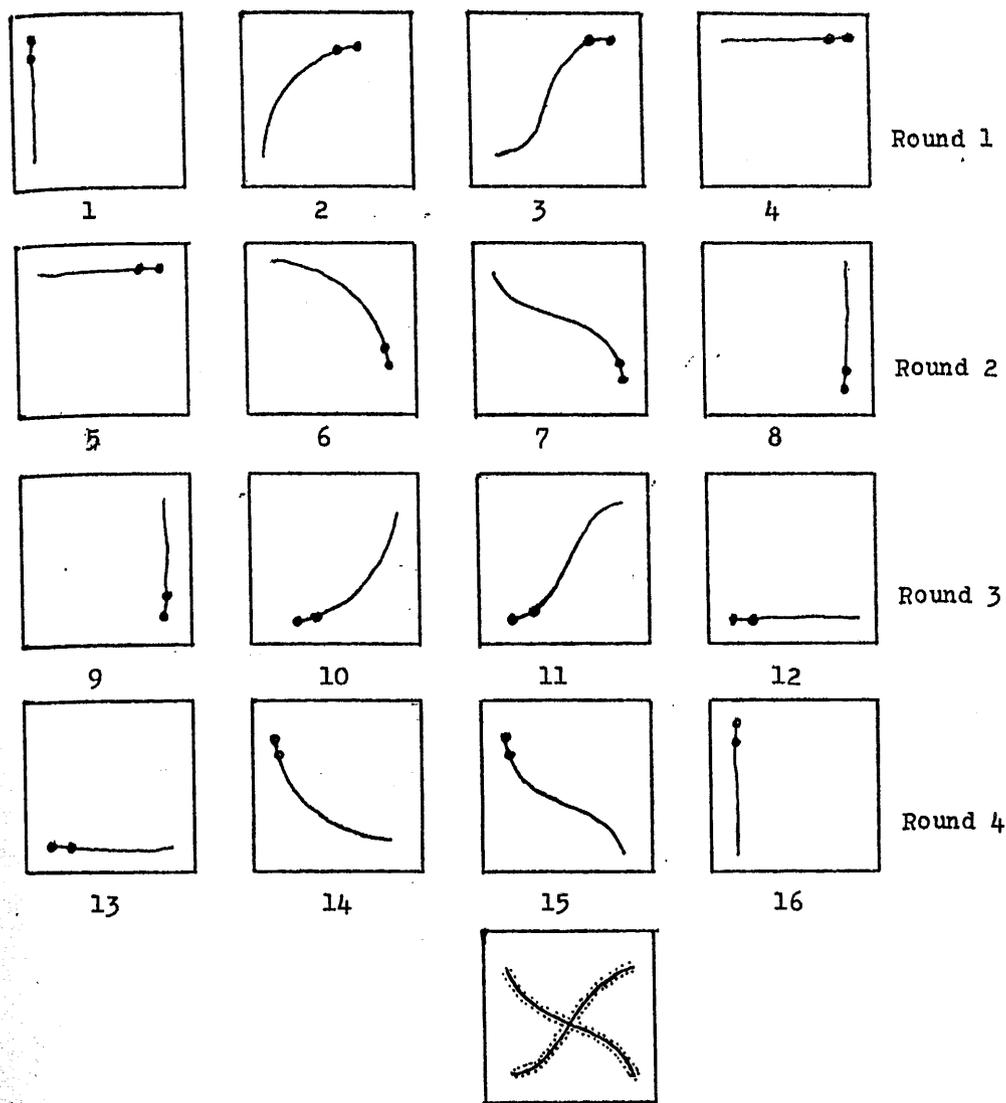


FIGURE 1. — Twelve-hour and twenty-four-hour orientations of the Milky Way in the zenith.



•• = dance leaders
 — = row of dancers
 □ = dancing area

FIGURE 2. — Sequence of movements of a row of *etsenets* dancers.

to any bright body only visible at dawn. Venus and Mercury are the most plausible candidates to fill in this category. *Atarrem* can be translated as 'large star' and it could very well be a general label to designate any of the first magnitude stars or planets. In effect, *Atarrem* has been alternatively identified by my informants as Sirius, Arcturus, and Spica. Finally, *Ranto' aspeno'*, which literally means 'high star', could also be a general category that includes any bright star located in the zenith at dawn or dusk.

The Amuesha star mythology is completed by the myth of *Yompor Oresem* and his two wives, *Huoraresyac* and *Shopsheresyac*. I have been unable to obtain a reliable identification for any of these three stars. However, as the myth of *Oresem* is relevant for the present paper, inasmuch as it appears as the ideological counterpart of that of *A'penerr*, I shall give a very brief account of it.

Oresem was married to two sisters. One of them made fun of her husband telling him that he looked like *Chactasonc*, the ugly bat who had been brought up by *Oresem*. Angry at that, *Oresem* sent the bat disguised as himself to sleep with his wives. When the latter discovered the deception they in turn deceived *Oresem* by sending two ugly step-daughters in disguise to sleep with him. Humiliated by this *Oresem* ascended to heaven where he became a bright star. His wives also ascended to heaven going in opposite directions.

According to the Amuesha, both sisters appear as bright stars, one over the western, the other over the eastern horizon. As the months go by they get closer to each other until the height of the dry season (July), when they can be seen close to each other around the zenith. The Amuesha say that the two sisters will finally meet when the present solar divinity decides to put an end to this world (*mellapo*). That day *Yompor Ror* shall come back to this earth and shall resurrect the dead of all times, even those who were murdered and burnt. Those who led a moral life shall be redeemed and shall become immortal. From then onwards they shall lead a joyful life on this earth performing *coshamñats* sacred music amidst the divinities. The loss of immortality and the attainment of salvation are the two chronological extremes that bracket the life of the Amuesha in the present era. With *A'penerr's* ascension the Amuesha lost immortality; with the conjunction of *Oresem's* wives they have the hope of regaining it.

THE CALENDRIAL ORDERING OF ACTIVITIES

Of the 29 Amuesha constellations four have special cosmological and calendrical significance: *Oncoy* (Pleiades), *Pencoll* (Orion's belt), *Chemuellem* (Antares) and *Charem* (Canopus). The different positions of these constellations constitute the meaningful 'skymarks' which, together with other empirical phenomena, are closely watched by the Amuesha to determine the beginning and end of the seasons, the time for certain subsistence activities, and the performance of their ritual festivals. There are five key star positions carefully observed by the Amuesha: 1. when a star 'appears for the first time' (heliacal rise); 2. when it is 'visible all night long' (heliacal set); 3. when it is 'in the centre of the sky' (culmination at dawn);

4. when it is 'full' (culmination at dusk); and 5. the period when a star 'disappears' and it is not visible at all in the night sky.

The Amuesha consider that the movements of a star along the year resemble the monthly phases of the moon. From their point of view, a star 'grows fuller' since its 'appearance'; it is 'full' when it can be seen in the zenith at dusk; and from then onwards it starts 'waning' until it finally 'disappears'. As we shall see, the Amuesha introduce time divisions in the annual cycle by relating the different key positions of the above mentioned four stars. These relations may be based on contrast, opposition or complementarity. Of all these relations the opposition of Antares and the Pleiades is the most important.

The Amuesha divide the year into two long periods: the dry and the rainy seasons, *charo* and *huapo* respectively. The term for 'year' is *char* which has the same root as that of the term for 'dry season'. For the Amuesha the core of the year is this latter season, when the most important productive activities take place, food is abundant, and people celebrate singing and dancing to the sound of the *coshamñats* sacred music. In fact, very frequently the Amuesha measure time in terms of how many dry seasons ('summers') have gone by. The dry season in a broad sense coincides with what could be called the 'extended agricultural period', i. e. a period that begins with the clearing of new gardens and ends with the last sowing. It opens by mid-February when *Pencoll* (Orion's belt) and *Charem* (Canopus), the 'dry season star', can be seen in the zenith at dusk. This announces that it is time to start cutting the undergrowth in order to open the new gardens. The dry season in a broad sense ends by mid-October when *Pencoll* and *Charem* can be seen in the zenith at dawn. By that time all of the year's sowing should be finished.

The right ascension (celestial longitude) of these two constellations is very similar (Orion's belt = RA 5h. 42m.; Canopus RA 6h. 22m.). This means that they are located in almost the same celestial meridian. For this reason, and because they delimit the 'extended' dry season, the Amuesha associate both of them as 'dry stars'. In fact, if observations are made at 6 AM and 6 PM (instead of 4 AM and 8 PM as the Amuesha do), we would find that *Charem* appears in the zenith at dawn around the 18 March — almost coinciding with the autumn equinox (21 March) —, while it appears in the zenith at dusk around the 21 September — close to the vernal equinox (23 September).

The dry season in a broad sense is basically defined in terms of productive tasks and does not coincide with the 'true' dry season or dry season in strict sense. The latter is marked by *Chemuellem's* (Antares) position in the zenith at dawn by the end of March, coinciding with the vernal equinox, and by *Oncoy's* (Pleiades) similar position around mid-September, two weeks before the autumn equinox. The association that the Amuesha trace between Antares and the Pleiades is not gratuitous: both constellations are located along the plane of the ecliptic — the imaginary line that marks the path of the sun and the moon among the stars. Furthermore, the difference between their right ascension is of 12h. 43m. This means that they are in almost total opposition and that if both are visible in the sky one would be rising while the other would be setting. The opposition between Scorpius and the Pleiades is also taken into consideration in several places in the Andes in order to make crop and weather predictions (Urton 1981 : 116).

In Amuesha symbolic terms the red Antares appears as the 'dry star' par excellence, while the Pleiades appear as a 'wet constellation' associated with rain and storms. The opposition between *Chemuellem* and *Oncoy* also appears as an opposition between *mañ* and *shellmenñ*, two varieties of swallows. The *mañ* swallows (unidentified) appear in the land of the Amuesha in April coinciding with *Chemuellem*'s position in the zenith at dawn. They spend the whole of the dry season there and leave sometime in September after *Oncoy* is visible in the zenith at dawn. Shortly after, the *shellmenñ* swallows (probably the 'white-thighed swallow' = *Neochelidon tibialis*) arrive announcing the 'true' rainy season. While the *mañ* swallows build their nests in open spaces, the *shellmenñ* swallows build them in the forest and scrub. Thus, the former are associated with dryness, clear skies and open spaces, while the latter are associated with rain, cloudy skies and closed intricate spaces.

The Amuesha conceive of Antares as a benevolent star. From their point of view, this is confirmed by his many followers : *Chemuellem pueyochresha*', the undulating line of stars that unites Aquila's head and tail. The *mañ* swallows share the auspicious character of *Chemuellem*. On the contrary, *Oncoy* is considered to be a malignant divinity. Unlike *Yompor Pencoll* and *Yompor Oresem*, from whom the Amuesha may ask favours when they appear in the night sky for the first time, nothing can be asked from *Oncoy*. It is believed that if they do so they may fall ill — their bodies covered with abscesses — and they may eventually die. Furthermore, the Amuesha say that if they sow taro in September — when *Oncoy* is visible in the zenith at dawn — the evil divinity throws his arrows at the growing tubers and ruins the crop : when the taro is harvested the tubers are rotten and look as if they have been pierced by numberless tiny arrows.

The character of *Oncoy*, as well as its main traits, seem to have been borrowed from Andean culture. In the Quichua dialect spoken in the neighbouring Andean areas of Junín the term '*unquy*' also designates the constellation of the Pleiades, while the term '*unkulaay*' refers to someone who has been ill for a long time (Cerrón Palomino 1976 : 139). In the Quichua dialect of Ayacucho '*onqoy*' means illness (Soto Ruiz 1976 : 81). This is related to the '*moro oncoy*' or '*murú onqoy*', a crisis cult that emerged in the Andean region in 1589. According to Curatola (1978), '*moro oncoy*' can be translated as 'the multicolour illness', and is associated to an unidentified epidemics that swept the Andes in that year producing 'coloured' spots on the bodies of those affected. In the astronomical tradition of the Amuesha both these Andean references have been fused in such a way that the mythical character of *Oncoy* represents simultaneously the constellation of the Pleiades and a malevolent divinity that produces an illness very similar to smallpox.

Among the Amuesha *Oncoy* seems to be associated not only with rains, storms, rottenness and illness, but also with lightning and thunder. Although I have not been able to confirm this latter association, the data suggest that *Oncoy*'s arrows are manifested under the form of thunderbolts, while the thunder that announces imminent rains is linked to the performance of sacred drum music by *Oncoy* and his followers (cf. myth of *Yompor A'penerr*).

Shellmenñ, the white-thighed swallow, is associated with *Oncoy* as herald of the rainy season and share with this latter constellation a maleficent character. In illo tempore,

when *shellmenĩ* (as well as all the other animals) was still visible in a human guise, he was considered to be a powerful sorcerer. In the myth that relates the deeds of the messianic divinity *Yompor Santo*, *Shellmenĩ* appears as his evil classificatory brother. He ordered the death of many of *Yompor Santo's* followers, and through his evil practices he finally managed to kill his divine brother. It was *Shellmenĩ* who introduced the knowledge of sorcery into Amuesha society. The white-thighed swallow's habit of nesting in intricate and inaccessible scrub-lands is seen as a confirmation of their evil character.

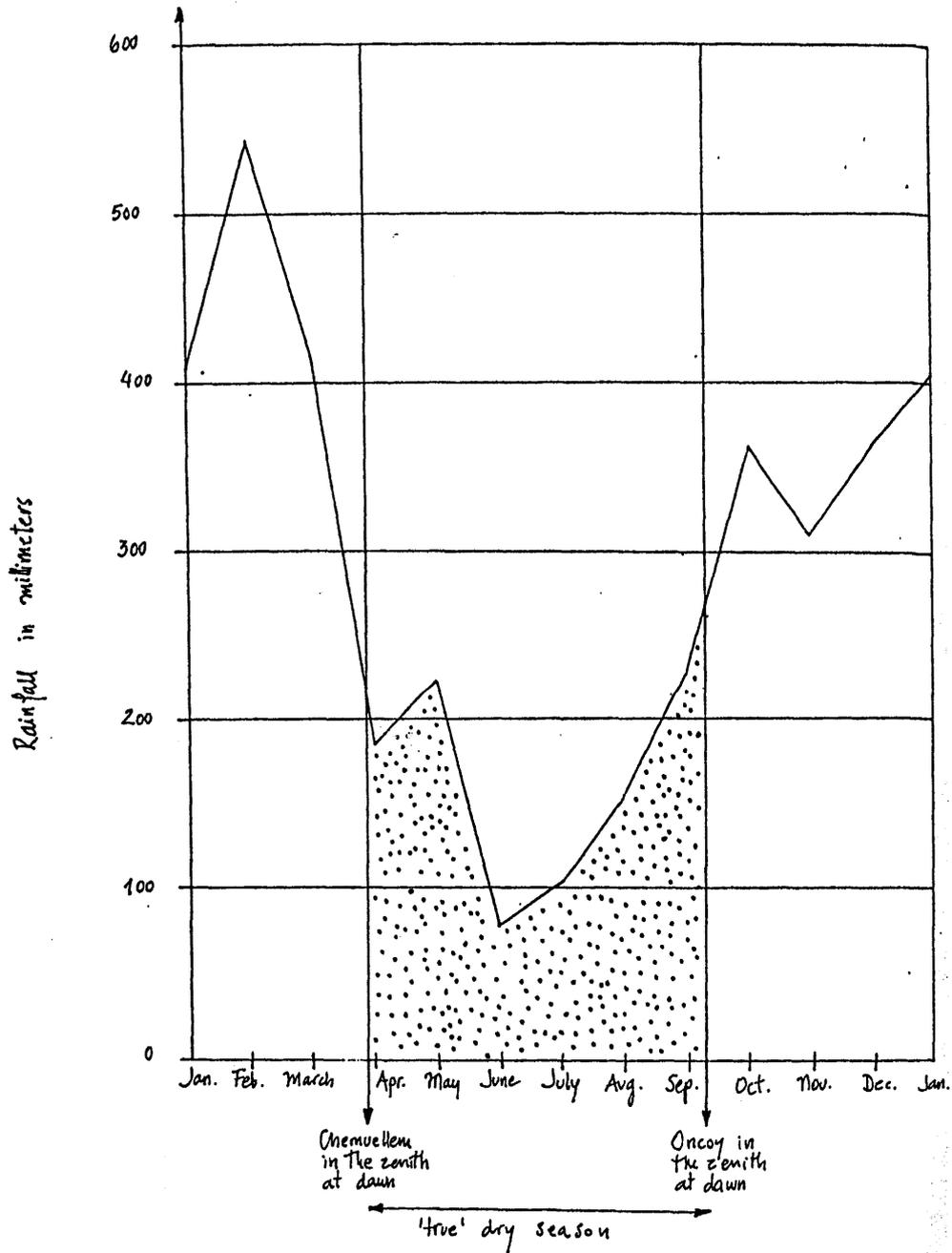
The dry season period delimited by *Chemuellem* and *Oncoy* can be considered the 'true' dry season. This is confirmed by local rainfall measurements. According to data collected during four years at the meteorological station of Bocaso (10° 38' S. Lat. ; 75° 09' W. Long.) — which is close to the settlements of Cacaso and Yoncollmaso — the monthly standard rainfall between April and September appears as the lowest of the year (see figure 3). The standard rainfall for the whole of the dry season is 162 millimeters per month, in contrast with the 401 millimeters per month registered for the whole of the rainy season.

Apart from the 'extended' and 'true' dry seasons, the Amuesha seem to recognize a shorter dry season or dry season in a narrow sense. This period is marked by *Chemuellem's* position in the zenith at dawn (end of March) and dusk (end of July), and is associated with high temperatures. As I have already said, in the astronomical symbolism of the Amuesha *Antares* appears as a 'dry star'. Its intense red brilliance is associated with dryness, heat and fire. These characteristics are expressed in its Amuesha name. In effect, the root *chemuell* also appears in the term *chemuellerrem* which designates the dried red hot peppers that the Amuesha burn in order to fend off evil beings. The Amuesha consider that no evil spirit can resist the pungent smoke produced by the burning of these hot peppers. The red and fiery *Antares* also shares this benevolent character.

In the ornithological code, the culmination of *Chemuellem* at dawn is associated with the arrival of *champeĩ*, the vermilion flycatcher (*Pyrocephalus rubinus*), and *sheřořo* (unidentified), who migrate to the land of the Amuesha from Bolivia and Brazil. Both these birds are characterized by their bright red plumage. The Amuesha consider both of them to be companions of *mař*, the 'dry season swallow', that also arrives in April.

The Amuesha consider that a star 'grows' since its first appearance until it can be seen in the zenith at dawn. The period between this moment and that when it is 'full' (i. e. when it is visible in the zenith at dusk) is a period in which a star achieves its 'maximum growth'. The dry season in a narrow sense corresponds to the period of maximum growth of *Antares*. The Amuesha say that when *Chemuellem* rules the night sky in July it indicates that it is time to burn the new clearings.

This has an empirical base. *Antares's* heliacal set takes place during the first days of July. The standard maximum temperature registered for this month is the highest of the year : 29.6° centigrades in contrast with the annual standard of 21° C. *Chemuellem's* heliacal set not only announces the hottest month of the year, but takes place in the midst of the two driest months of the year : June with 79mm. and July with 103mm. of monthly standard rainfall. The higher temperatures and lesser rains makes July — the month ruled by *Chemuellem* — the most appropriate month to ensure the successful bruning of the new clearings.



Source: República del Perú 1970: 33

FIGURE 3. — Monthly standard rainfall in Amuesha territory.

Chemuellem's heliacal set follows *Oncoy's* heliacal rise after a one month period in which the latter is not visible in the night sky. This reinforces the symbolical opposition between the fiery Antares and the wet Pleiades, as well as underlines the idea that in the height of the dry season we may find the seeds of the coming rainy season. In figure 4 I depict the astronomical events that the Amuesha take into consideration to delimit the dry season in its three senses.

THE PRODUCTIVE AND RITUAL CYCLE

In Table 4, I depict the Amuesha annual calendar of subsistence and ceremonial activities. As we shall see, the different positions of the Amuesha constellations are conceived of as being intimately linked with these activities. In other words, there is a strong association between practice and symbolic codes. This does not necessarily mean a functional, materialistic relation between symbol and symbolized as Malinowski contended in his study of Trobriand agricultural linguistics (1966 : Vol. 2, Part IV). Although the symbolic codes used by the Amuesha to order their subsistence activities are grounded on empirical observations, the meanings they convey go further beyond their material basis. In the following pages I shall analyze the relation between the astronomical code and these other

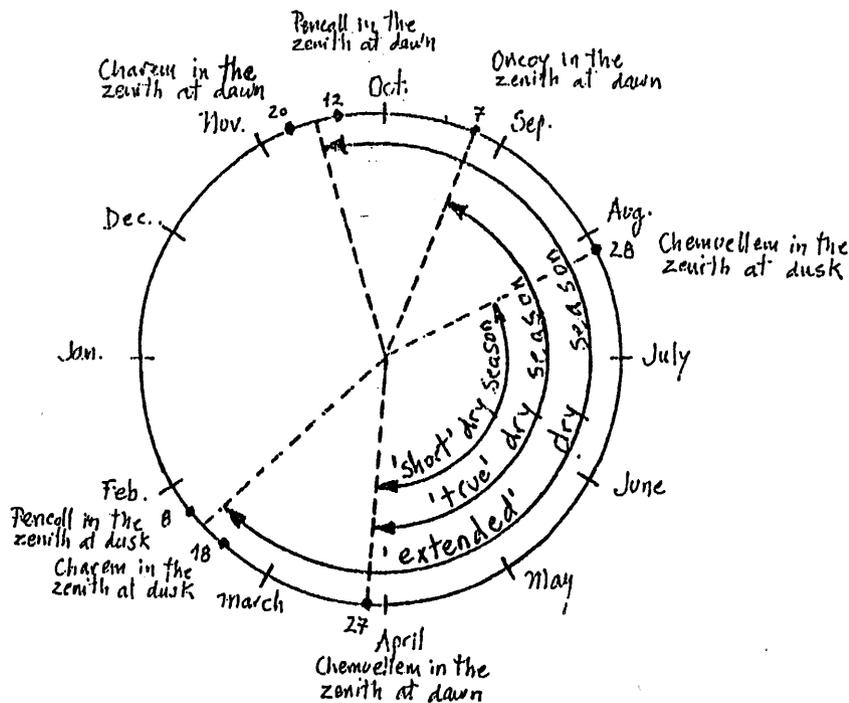


FIGURE 4. — The limits of the dry season in its three senses.

TABLE 4. — Annual calendar of subsistence and ceremonial activities.

<p style="text-align: center;">MAY</p> <ul style="list-style-type: none"> — men & women continue weeding last year's gardens — the cut undergrowth of new clearings is drying — <i>ots</i> monkeys are fat on wild fruit — peanuts are harvested 	<p style="text-align: center;">JUNE</p> <ul style="list-style-type: none"> — beans are harvested — the bean plot is burnt and manioc sown — fish are fat and for 3 months are caught with fish poison — peanuts are sown for the second time — <i>shomasher</i> tree blossoms indicating wild animals are fat 	<p style="text-align: center;">JULY</p> <ul style="list-style-type: none"> — new clearings are burnt once or twice — if they have finished weeding last year's gardens, women start sowing new clearings — wild animals bring forth their young — height of the dry season 	<p style="text-align: center;">AUGUST</p> <ul style="list-style-type: none"> — men and women sow maize & plant manioc & plantains — second peanut harvest — the smaller streams dry out — armadillos and coatis are fat
<p style="text-align: center;">APRIL</p> <ul style="list-style-type: none"> — <i>maí</i> swallows arrive announcing summer time — women start weeding last year's gardens — it is possible to hunt at night again — fish go down river and people set traps — by end of the month men should have finished clearing new gardens 	<p>CHARO (dry season)</p>		<p style="text-align: center;">SEPTEMBER</p> <ul style="list-style-type: none"> — by the end of this month all sowing should be finished — small clearings are opened by men — agouti are fat on wild fruit — <i>maí</i> swallows leave Amuesha land
<p style="text-align: center;">MARCH</p> <ul style="list-style-type: none"> — men sow beans in unburnt portion of new clearings — <i>to'ch</i> monkeys are fat — <i>poporr</i> palm tree ripens — some men have finished cutting undergrowth and start felling trees — peanuts are sown in sandy areas close to river 	<p>HUAPO (rainy season)</p>		<p style="text-align: center;">OCTOBER</p> <ul style="list-style-type: none"> — women carry out first weeding of new gardens — men burn small garden cleared the month before — fish go up river — <i>shellmeri</i> swallows arrive announcing rainy season
<p style="text-align: center;">FEBRUARY</p> <ul style="list-style-type: none"> — <i>huellashēñets</i> celebration — <i>yetspuemēch</i> still bears fruit and some animals fat on it — men & women spend much time at home — men start cutting undergrowth to open new clearings 	<p style="text-align: center;">JANUARY</p> <ul style="list-style-type: none"> — <i>elleñets</i> celebration — women spin and weave cotton — men manufacture arrows, canoes, & musical instr. — time of rains & floods — fish are thin — bad time for children to be born 	<p style="text-align: center;">DECEMBER</p> <ul style="list-style-type: none"> — <i>po'neshareñets</i> celebr. — game birds are fat on <i>yetspuemēch</i> fruit — Dec. & Jan. are bad times for hunting large game — maize is harvested for wet season celebrations — men can only hunt during daytime 	<p style="text-align: center;">NOVEMBER</p> <ul style="list-style-type: none"> — small garden cleared in September is sown — <i>isoñech</i> tree blossoms indicating people are fat — women continue weeding new gardens — fish start spawning — <i>patorech</i> tree blossoms indicating pacas are fat

codes — that include the sowing of staples, the flowering and fructifying of wild and domesticated trees, the availability of game, and the performance of music in different ritual celebrations — all of which introduce divisions into, and order the annual seasonal cycle.

The Amuesha garden cycle follows a sequence of beans, peanuts, maize, manioc, taro, yam and plantains (Salick 1989). Of these the first three are of particular importance for they are short-term crops, while the latter can be sown and harvested at almost any time of the year. Beans and peanuts are sown in March when *Chemuellem* is in the zenith at dawn marking the beginning of the 'true' dry season. Maize can be sown at any time between the beginning of April and the end of July, i. e. during the dry season in a narrow sense. Maize, and especially maize beer, are central to the 'wet season celebrations' that start in December. As it takes six months for maize to ripen, in order to have plenty of maize beer in December the Amuesha make sure to sow a maize plot sometimes in July-August. The sowing of this 'ritual maize' coincides with *Chemuellem's* heliacal set and reinforces the association between the red Antares and the redish Amuesha variety of maize. Accordingly, the harvest of maize for the wet season celebrations coincides with *Chemuellem's* heliacal rise and the summer solstice — which marks the beginning of the heavy rains. Thus, the ritual maize cycle goes from winter to summer solstice, from dry to wet, and from hot to cold.

The abundance of the maize harvested and consumed in the height of the rainy season — the season of scarcity — recalls the plenty of the dry season. The harvest of the ritual maize is also associated with the heliacal rise of *Muerrat* (*Corona borealis*) by mid-December. *Muerrat* is the round and flat wooden mortar used by the Amuesha women to pound maize in order to prepare maize beer. Although I was not explicitly told so, the appearance of the celestial mortar seems to remind the Amuesha women that it is time to prepare the ceremonial maize beer for the wet season celebrations.

The Amuesha associate the ritual maize growing cycle and the movements of Antares with the fructifying cycle of *poporr*, the peach palm (*Bactris*). According to myth, *Poporr*, the 'peach palm person', was a malevolent personage who enjoyed transforming the Amuesha into animals.

The Amuesha of mythical times decided to kill *Poporr* and pursued him downriver. Along his flight *Poporr* cleared and sowed several maize gardens. Before finally capturing him, his pursuers found six of these gardens showing different stages of the maize growing cycle: ripe, fully fructified, fructifying, flowering, young and just sown maize. The myth reproduces in a reverse fashion the six month growing period of maize which starts in July and ends in December. When *Poporr* was finally captured and killed, he became a peach palm heavy with fruit. The peach palm fruit — rich in fat — is considered a delicacy by the Amuesha, who consume it boiled or elaborate it into a fermented beer.

The fructifying of the peach palm in December coincides with the harvest of the ritual maize and *Chemuellem's* heliacal rise. The orange-red fruits of the peach palm become ripe by the end of March when the red Antares can be seen in the zenith at dawn. Thus, the fructifying and ripening of the peach palm brackets what might be called the wet season in a narrow sense. While the harvest of the ritual

maize opens the cycle of the wet season celebrations, the harvest of the peach palm fruit closes it. A similar association between stars, fruit trees and rituals has been reported by S. Hugh-Jones in his exhaustive analysis of the Yurupary rites of the Barasana of Northwest Amazonia (1988). In this case the appearance and setting of the Pleiades at dusk, together with the two fruiting seasons of ingá, bracket the dry season and the period in which the He House ritual cycle should be held (1988 : 65).

According to R. Ch. Smith, among the Amuesha the wet season celebration :

“ is thought of as a person who arrives each year in December, remains for four months, and then is bidden farewell until the following year. The celebration itself passes through two cyclical phases : it opens in December with the music of *po'neshareteñets* which makes way for the *elleñets* music, which is performed at the same time. These two continue to be performed together until the full moon during the month of February. At that time the music called *huellesheñets* (or *huellashesñets*, F.S.) replaces them both and continues another month ” (1978 : 121).

Different music, dances and costumes characterize each of these three celebrations. Although I never participated in this ceremonial cycle, and in spite of the fact that none of my informants have explicitly associated these celebrations with particular astronomical events, there seems to be a link between, on the one hand, the sequence of wet season rituals (*po'neshareteñets*, *elleñets*, and *huellashesñets*) and, on the other, the heliacal set of *Oncoy*, *Pencoll* and *Charem*.

Oncoy (Pleiades) is visible all night long around the 30 November, at the beginning of the wet season in a narrow sense, and when the Amuesha start playing the first of the wet season music styles. According to Smith (1978 : 121), the dance leader “ wears a wig made of the tassels of a wild cane plant, a grotesque mask covering his face, and a white cloth covering his body ”, representing an old man who symbolizes the cold and rainy season. The Pleiades which, as we have seen, are conceived of as a ‘wet constellation’ seems to be associated to the ‘winter person’ that leads the *po'neshareteñets* dances.

The celebration of *elleñets*, the second of the wet season music styles, starts at the beginning of January coinciding with the heliacal set of Orion's belt, the benevolent *Pencoll*. According to R. Ch. Smith, the performance of this music varies only slightly with respect to the first style. *Pencoll* is a transitional constellation, sharing traits of the wet and the dry. It is sometimes contrasted with the wet Pleiades and sometimes to the fiery Antares. The *elleñets* music also has this transitional character, mediating the first and third wet season music styles.

The third music style is performed in February coinciding with the heliacal set of Canopus (*Charem*). This style betrays the influence of the Franciscan missionaries of the XVIIIth. century, and has the traits of a carnival festival. The *huellashesñets* dance is also known by the Amuesha as the ‘blackmen's dance’, and is probably associated with the African slaves employes as foremen by the Franciscan missionaries. The celebrants wear feather masks and costumes embroidered with tiny belles with which they mark the rythm of the dance. When it is about to grow light the celebrants change these costumes for ones embroidered with tiny fragments of mirror. I would suggest that this change of costumes symbolizes the passage from the rainy to the dry season : the tinkling of the bells

could be associated with the sound of the rain, while the reflections of the mirrors could be linked with the dry season and the ruling of *Charem*, the 'summer star' (Canopus). We may therefore conclude that the development of the rainy season is expressed as a cycle which correlates a musical (ritual) and an astronomical code (see Table 5). Similar associations between constellations, music, crops and seasons have been reported by Urton (1981 : 32) for the Andean communities of the Cuzco area.

TABLE 5. — Musical and astronomical sequence of wet season celebrations.

Month	Music	Constellation	Heliacal set	Symbol
December	Po'neshareteñets	Pleiades	30/11	wet
January	Elleñets	Orion's belt	10/1	wet/dry
February	Huellasheñets	Canopus	13/2	dry

The botanical code is also important in the organization of the Amuesha calendar. Thus, for instance, the *yetspuemech* wild tree (unidentified) blossoms by mid-October coinciding with *Pencoll's* and *Charem's* culmination at dawn and the beginning of the 'true' rainy season. It fructifies in November and ripens in December at the beginning of the wet season in a narrow sense. Throughout December and January young and adult males hunt the game birds that feed on the *yetspuem* fruit. In February this fruit begins to disappear. This takes place when *Pencoll* and *Charem* are visible in the zenith at dusk indicating that the period of heavy rains is close to its end, which in turn announces the time to start clearing new gardens.

The *tsoñech* tree (unidentified) blossoms in November. Its blue flowers indicate that this is the time of the year when people are fat after the plentiful months of the dry season. Informants say that in this time of the year the mystical jaguars that inhabit the highest hills of the San Matias and Yanachaga ranges descend to the valleys to feed on the Amuesha. This seems to be linked with *Yatesha'*, the dark cloud constellation known in Western astronomy as the Coalsack. The Amuesha see in this constellation the figure of a jaguar. By mid-November *Yatesha'* appears in the eastern horizon at midnight. This is precisely the time of the night when, according to the Amuesha, the mystical anthropophagous jaguars wander about their settlements. Thus, while the old celestial jaguar appears in the midnight sky, his terrestrial (though mystical) counterparts roam in search of people to eat.

The *shomasher* tree (unidentified) blossoms by mid-May. The Amuesha say that its bright yellow flowers indicate the beginning of the period in which the wild animals and fish are fat. The symbolic association is built upon a chromatic analogy. In the myth of origin of the coloured plumage of birds we are told that those birds that painted themselves with the fat of the dismembered body of *Yompor Eror*, a minor divinity, obtained yellow feathers. Yellow is the colour of fat and the yellow flowers of the *shomasher* tree expresses the fatness of the wild animals.

The flowering of the *shomasher* tree coincides with the disappearance of the Pleiades (*Oncoy*) from the night sky around the 15 May. This is in accordance with *Oncoy's* association with wetness and the rainy season which is a period when game is scarce. In contrast, the reappearance or heliacal rise of Orion's belt (*Pencoll*) — which takes place around mid-July — marks the height of the period in which animals are fat. The Amuesha say that this constellation has the quality of "attracting" animals and that when it reappears in the night sky it "brings abundance of game". This is in consonance with a natural fact : wild animals bear their offspring in July. Once again the Pleiades and Orion's belt are symbolically opposed : the meanness of *Oncoy*, who announces scarcity, is contrasted to the generosity of *Pencoll*, who brings abundance (see Lévi-Strauss 1969 : 220-6, for a similar opposition among Brazilian Indians).

The Amuesha eagerly await *Pencoll's* heliacal rise, for the first one in a household who sees it can solicit from the divinity anything they want : machetes, clothes, shotguns, beads, etc. People also ask from *Pencoll* to be able to clear two gardens a year, to finish sowing them in time, and to have an abundant harvest of manioc and plenty of game. The symbolic opposition of these two constellations is also expressed in the idiom of kinship : according to myth, *Oncoy* is *Pencoll's* father-in-law, and though the affinal relation can be eventually transformed into a consanguineal one, it entails dangers, tensions and contradictions (Santos Granero 1991 : Chap. 4).

In table 6, I have summarized in a simplified fashion the oppositions that the Amuesha establish to express the vital division of the year into two seasons. For each of the nine codes identified I have chosen that opposition which seems to be central to Amuesha thought. However, it must not be forgotten that several oppositions can be found within each of these codes. Moreover, Table 6 only presents those oppositions related to the broad contrast between dry and wet seasons, not considering the subtler distinctions that the Amuesha make within each of these periods. In fact, tables as the one presented should only be taken as a general guide or aide memoire ; otherwise we risk impoverishing the richness of associations established by the Amuesha between the movements of the celestial bodies, their subsistence activities and their ceremonial life.

The rainy season ruled by *Oncoy* is not only perceived as a period of scarcity, but as a time of death. When talking about the eldest members of the community, the Amuesha always wonder which of them will survive the coming rainy season. The cold and humidity, the heavy storms and rains that devastate the gardens, and the lack of game that characterize this period cause many deaths every year. The most vulnerable are the old people and the newly born. The worse months are December and January.

Not surprisingly the Amuesha associate this two-month period with the two ominous crosses of their astronomical tradition. Around the 1 December *Coros panteon*, 'the cemetery's cross' formed by stars of Carina and Vela, can be seen in the zenith at dawn above the constellation of the 'large cemetery' (Large Magellanic Cloud). By the end of January it is *Corsoch*, the Southern Cross, that can be seen in the zenith at dawn above the 'small cemetery' (Small Magellanic Cloud). For this reason, the Amuesha say that January is a bad time for children

TABLE 6. — Main codes and oppositions around the distinction between dry and wet season.

Codes	Dry season (charo)	Wet season (huapo)
Astronomical	— dry Antares — generous Orion's belt	— wet Pleiades — mean Pleiades
Temperature	hot	cold
Colour	red	white
Ornithological	mañ swallows	shellmeñ swallows
Botanical	yellow shomasher flowers	blue tsoñech flowers
Drinking	peach palm fruit beer	maize beer
Game	fat and abundant animals	thin and scarce animals
Musical	coshamñats celebrations	po'neshareteñets elleñets & huellasheñets celebrations
Livelihood	health and life	illness and death

to be born. Here again, the Amuesha star lore betrays Andan influences. The two Magellanic Clouds are known by the name of *Apampaña*, which they translate as 'cemeteries'. This name seems to stem from the Quichua terms '*pampay*' (= to bury) and '*pampakuy*' (= burial or funeral) (Cerrón Palomino 1976 : 202). Unfortunately I have found no information relating to these two dark nebulae in Andean astronomy. An analysis of the links between Amuesha and Andean astronomical classifications will be possible when more works on this latter area are available (see Zuidema & Urton 1976 ; Urton 1981).

CONCLUSIONS

In Amuesha thought the movement of the stars is in harmony with all the processes that take place in the cosmos. In this integrated view of the universe everything is tied up to everything else. I am sure that in this paper I have unveiled only a very small number of the associations that the Amuesha establish between the different natural phenomena that take place in their environment. I am also sure that I have conveyed very little of the aesthetic value of these associations. Much more could be said about the poetics of the star lore of the Amuesha. Stars, flowers, birds, music, colours and forms are summoned and converge to create a system that responds to very pragmatic needs, but transcends by far its utilitarian purposes.

In this system the Amuesha capture the beauty of the universe, as well as the dangers it poses for human survival. The mythical discourse revolving around the

celestial bodies deals with this latter theme. The stars and their characteristics are but a pretext for a deeper philosophical and religious reflection concerning human fallibility, the loss of the divine primordial essence of humankind, the origin of illness and death, and the hope for future redemption. The richness of these reflections is tightly linked to the existence of a category of priestly leaders devoted to finding a way of transcending the human condition. Together with this mythical discourse the Amuesha have developed a corpus of knowledge based on empirical observations, associations and classifications which are very much linked to agricultural and ceremonial activities. Mythical discourse and empirical knowledge based on the language of stellar kinetics support each other, making it possible for the Amuesha to find answers in the pages of the clear night skies to the questions posed by the issues of life and death, ritual and subsistence, the past and the future, the loss of immortality and the possibility of salvation.

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