The Rain Stars, the World’s River, the Horizon and the Sun’s Path: Astronomy along the Rio Urucauá, Amapá, Brazil

Lesley Green
University of Cape Town

David Green
University of Cape Town

Follow this and additional works at: https://digitalcommons.trinity.edu/tipiti

Part of the Anthropology Commons

Recommended Citation
Green, Lesley and Green, David (2010). "The Rain Stars, the World’s River, the Horizon and the Sun’s Path: Astronomy along the Rio Urucauá, Amapá, Brazil," Tipiti: Journal of the Society for the Anthropology of Lowland South America: Vol. 8: Iss. 2, Article 3.
Available at: https://digitalcommons.trinity.edu/tipiti/vol8/iss2/3

This Article is brought to you for free and open access by Digital Commons @ Trinity. It has been accepted for inclusion in Tipiti: Journal of the Society for the Anthropology of Lowland South America by an authorized editor of Digital Commons @ Trinity. For more information, please contact jcostanz@trinity.edu.
The Rain Stars, the World’s River, the Horizon and the Sun’s Path: Astronomy along the Rio Urucaú, Amapá, Brazil

LESLEY GREEN
DAVID GREEN
Department of Social Anthropology, University of Cape Town
lesley.green@uct.ac.za

Abstract

This article curates excerpts from astronomical narratives recorded in Palikur between 2000 and 2008 along the Rio Urucaú, in the Área Indígena do Uaçá on the border of Brazil and French Guiana. The material assembles around the seasonal cycle of stars associated with particular rains and seasonal changes in the landscape. Star maps of the major constellations are counterposed with wood carvings of the constellations. The curation of these narratives and carvings serves three arguments. First, the figures in this mythical cycle offer multiple references to Amerindian astronomies documented across lowland and highland South America. While the contemporary Palikur population knows its history as that of a federation of Amerindian groups and as one that has drawn Africans and Asians, slaves and settlers into its midst in relatively recent generations, the extent of the links that these texts offer to Amerindian astronomies elsewhere mitigates against

1 We gratefully acknowledge four years of support for translation work from the Brazil-South Africa fund of the National Research Foundation of South Africa, as well as field research funds from the Wenner Gren Foundation for Anthropological Research, the University of Cape Town (UCT), and the World Archaeological Congress. We also gratefully acknowledge the Rockefeller Fellowship from the Smithsonian Institution’s Centre for Folklife and Cultural Heritage, and the UCT-Harvard Mandela Fellowship at the WEB du Bois Institute. Without attributing responsibility for errors, opinions or omissions, this paper owes a considerable debt to Gary Urton for his generosity with his time and resources; to the late Anthony Fairall for assistance at the Iziko Planetarium in Cape Town, and to Thebe Medupe and Jarita Holbrook for suggestions on naked-eye astronomy. We acknowledge many valuable conversations with Harold and Diana Green (particularly for assistance with matters linguistic); Laura Rival, Fernando Santos-Granero, Marisol de la Cadena and Mario Blaser, and we thank Lux Vidal, Eduardo Góes Neves, Mariana Petry Cabral and João Darcy de Moura Saldanha for their encouragement of this enquiry. Many in Arukwa assisted during the period of research, in particular Mewkayan and Nenélio Batista, Vera Batista, Xoni Batista, Uwet Manoel Antonio dos Santos, Davi Sarisri Espírito Santo, João Felício, Ivanildo Gómes, Edwa Iaparrá, Emiliano Iaparrá, Fernando Iaparrá, Izanilda Ioió, Parakwayan Idoxi Ioió, Pupta Paraymeyano, Avelino Labonté, Ixawet Labonté, Leny Labonté, Tabenkwe Labonté, Xikoy Norino Martiniano, and Aldiere Orlando.
representing this astronomy in culturalist terms as “Palikur ethnoastronomy”. Rather, we argue, the material augments the view that astronomical knowledge in the region affirms the history of a vast and extended network among Amerindian populations. Second, the material demonstrates that astronomical knowledge is strongly present in everyday practices and in narratives of residents along the Rio Urucauá. That it is spoken of very little in the everyday, we argue, reflects not so much the forgetting of oral knowledge – since the material has not been forgotten – but the complex choices people make on a day to day basis in navigating the rationalities associated with citizenship of wider collectives, including the global economy, the frontier towns of Brazil and French Guiana, and a range of church groups of which significant sectors readily render Amerindian astronomies as somewhere between maleficient and irrational. The third argument moves toward rethinking the representation of Amerindian astronomy with attention to the ways in which the memory of movement serves alongside the memory of star patterns to establish the references that make star positions predictable in the seasons. Yet while the memory of movement is translatable with reference to axes and lines, the ontology that gives them meaning is that of the movements of living beings: anacondas, ancestors, a tortoise, shamans, birds, with whom the elders had relationships. While the material is readily presented in the global language of information, to borrow from Bruno Latour (2010), the sorrow that accompanies some of the tellings speak of people’s loss of astronomy in the everyday as a loss of the language of transformation: a way of knowing that implies presence and relationality.

A rich literature on Amerindian astronomy supported Claude Levi-Strauss’ four-volume *Introduction to a Science of Mythology* (1969, 1973, 1978, 1981). Not surprisingly, astronomy occupies a central place in ethnographic research that was pursued in the lowlands and highlands of South America in the 1970s and 1980s, including Christine Hugh-Jones (1979); Stephen Hugh-Jones (1982); Gerardo Reichel-Dolmatoff (1971, 1997); Marc de Civrieux (1980 [1970]); Jean-Paul Dumont (1972); Gary Urton (1981); Anthony Aveni and Gary Urton (eds, 1982); Stephen Michael Fabian (1992); Fernando Santos-Granero (1992); Edmundo Magaña (1986; 2005 [1996]); Fabiola Jara (2005 [1996]); Philippe Descola (1996 [1986]); Peter Roe (2005 [1996]); and Browman and Schwarz (eds, 1979), while Lawrence Sullivan (1988) offers an intriguing (if at times disconcerting) overview of Amerindian shamanic relationships with the stars. Surprisingly, given its centrality to Amerindian ecological knowledges, astronomical research waned in lowland South American anthropology in the 1990s. This was due, at least in part, to the urgency for rights-based and activist anthropologies, and a concomitant shift away from belief and symbolism to political economy, land rights and concerns with the politics of representation. The rise of political economy in Euro-American anthropology in particular had a great deal to do with a resistance
to the Othering that was inevitably associated with culturalist anthropology. Yet the substitute – a political strategy of Saming in much of the anthropology of the 1990s and 2000s that was inspired by the dictum “make familiar the strange, and make strange the familiar” – has been criticised by many Brazilian anthropologists, but perhaps most eloquently by Fausto and Heckenberger: “the risk of taking literally the maxim ‘nothing human is strange to me’ is to turn our common sense into what we share with (any) others” (Fausto and Heckenberger 2007:7).

This research, undertaken between 2000 and 2008 in Palikur villages along the Rio Urucauá in the Área Indígena do Uaçá in Amapá, Brazil, leads us to critique the assumption that the nature made known by Science is the definitive “Nature”. Taking a lead from the modernity-coloniality-decoloniality debate led by Walter Mignolo (1995) and Arturo Escobar (2008) among others, and in dialogue with work on multiple natures, political ontologies and cosmopolitics (Stengers 2004; Latour 2004, 2007; Blaser 2009, 2010; De la Cadena 2010; Viveiros de Castro 1998, 2003, 2004a, 2004b; Santos-Granero 1992, 2009), this paper suggests that the sidelining of matters astronomical in Amerindian ethnography in the past 20 years has been ill-conceived. In our view, astronomical knowledge is central to Amerindian intellectual heritage, a view that we share with Lux Vidal whose exhibition on Amerindian cosmologies in the Uaçá titled A

---

2 This was particularly so in South African anthropology, where politically progressive anthropology took a leading role in questioning the use of the idea of culture by apartheid ideologues (see Sharp and Boonzaier 1988). The contests over the ways in which culture figures in activist anthropology in contemporary South Africa (see Green 2009), and comparative research on activist Brazilian anthropology, offers grounds for a valuable discussion among anthropologists working in the global south.

3 With the benefit of several years’ work on the astronomical texts, this project now takes a view that contrasts significantly with that made in an earlier paper on Palikur astronomy by Lesley Green (2008), which takes scientific nature as a singular point of reference. That paper sought to rethink the line between belief and knowledge via pragmatic philosophers’ concept of “cognitive efficacy” as a test of tenable epistemology. However, the material presented here in this paper demonstrates that the shamanic relationship with the stars is not a causal one in which the shaman calls in the stars: that assertion rested on an early mistranslation. The 2008 paper reflects the translator’s world: that of the knowledge economy, which assumes that to understand cause is to be able to use it predictively. Such an approach to knowing has little in common with the astronomies presented here, which do not attend to the capacity to harness the forces of nature to one’s purpose. Of greater interest here is the ways in which knowing fosters vitality and ethical relationality. In short, while the 2008 paper is correct to identify partial connections between the sciences of astronomy and ways of knowing the sky in Arukwa, it does not attend to the ways in which the “things” being compared exceed the possibilities of translation into the language of information (cf. Latour 2010).
Presença do Invisível opened at the Museu do Índio in 2007 (Vidal 2008) and to which we were privileged to contribute (Vidal 2007). In this work, however, we are reluctant to adopt the conventions of describing ethnoastronomy in the language of bounded cultures (see Chamberlain et al. 2005). Besides the problems that attend the idea of a bounded culture, the material we present is so similar to material recorded on the same continent that it is clearly not reducible to a singular “Palikur cultural astronomy”. At the same time, given the range of partial connections to ideas in Euro-American astronomy, it is difficult to defend the argument that the astronomical material we present here is wholly Other to that of “the West”. Yet neither is it the same, for it exceeds the possibilities of translation into the conceptual apparatus of formal disciplinary knowledges. If the astronomy presented here can be set out neither as radically Other nor as essentially Same, the task is to try to tease out alternative possibilities for assemblage and translation, and as such this project is an exercise in an anthropology of knowledge and knowing, curation, translation and reassemblage.

This article presents edited extracts of multiple interviews recorded on video by David Green in villages along the Rio Urucauá, between 2000 and 2008, with assistance from Lesley Green in 2000-2003. The recordings were translated by David Green in a four-year project, during which he checked initial translations along the Urucauá in 2008 and recorded additional narratives. Tools for field astronomy have included a laser pointer; star maps in astronomical software, and the elegantly conceived Photographic Atlas of the Stars (Arnold et al. 1999).

The argument opens with an overview of the principles of astronomy that are evident in the narratives. Thereafter, we offer a selection of the many narratives that we recorded, organised around the annual star cycle, and illustrated with star maps and wood carvings of the constellations that we commissioned in 2005 after realising that the dominant local representational practice is not drawing but carving. Throughout, we try to trace references to previously published astronomical anthropology, and note the synergies between our findings and those of Gary Urton in the Andes (Urton 1981).

---

4 For a virtual tour of the exhibition, see http://oiapoque.museudoindio.gov.br/exposicao/tour-virtual/tourvirtual_oiapoque.html
5 For some of David Green’s images from that 2005 research trip, including a photograph of Kiyawwiye Uwet’s carving of Kayeb and our early attempt to render the Kayeb constellation as a stick figure diagram, see Povos Indígenas do Baixo Oiapoque: O encontro das águas, o encruzo dos saberes e a arte de viver (Vidal 2007).
The first principle of astronomy along the Rio Urucauá is that there are five different rains during the rainy season. Each of these rains is identified with a constellation that rises at dawn at the start of that season. The horizon, then, offers a key reference point, consonant with Edmundo Magaña’s studies of Carib astronomy (2005 [1996]:257). The second principle is that the major constellations form a seasonal cycle that is the backbone of ecosystemic knowledge, many narratives, the taskscapes of agriculture, hunting, fishing and building as well as, in times past, the calendar of seasonal festivals. Beginning in late December, the arrival of the first rains coincides with the solstice and the rising of Kayeb, the two-headed anaconda in the region of Scorpius. In February
Tavara the Kingfisher begins to rain, followed by the rains of Uwakti, a man in a house, in March. In April and May, the torrential rains of Kusuvwi the Older Brother and Kusuvwi the Younger Brother, the Pleiades, flood the grasslands and usher in the fishing season in the context of a titanic battle with Awahwi, the three-headed anaconda in Perseus. The softer rains of Wayam, the land tortoise, follow in July-August. The dry season begins around this time and continues until December.

“Heliacal rising”, the movement of stars that are directly ahead of the sun in the dawn sky and which trace its movement in the course of the day, is the third principle of astronomy along the Rio Urucuá. This too is familiar in Amerindian astronomy, and is noted by Fabian (1992), Roe (2005 [1996]), and Levi-Strauss (1969, 1973), among many others. The insight that our work brings to this conversation is that the path of the sun offers a guide as to where the major seasonal constellations will be in the course of the day, allowing one to track the path of the stars that have risen just ahead of dawn. Thus, as Magaña speculates might be the case, the path of the sun provides one aspect of what one might call a grid in the sky (2005 [1996]:256), in which the referents of space are the horizon, and the zenithal passage of the sun.

The fourth principle is that the December and June solstices provide key moments in the annual astronomical cycle. These are noted, respectively, in the narratives of the anacondas Kayeb (in the region of Scorpius) and Kusuvwi (in the region of Perseus, the Pleiades and Orion). The arrival point of the sun on the dawn horizon shifts between East North East (azimuth 245 at the 06h30 sunrise on June 21), and East South East (azimuth 293 at the 06h40 sunrise on December 21). The June solstice is marked by a particularly complex narrative (see the discussion on Kusuvwi, below) which people associate with the season for demarcating and cutting new fields.

The fifth principle is that knowing the constellations is not just knowing their shape (or which dots to join) but knowing the different qualities of their movement at different times of the year. The arc of the stars changes through the course of the year in much the same way as the arc of the sun will change. Stars closer to the poles appear to move more slowly than stars in the centre of the sky. And, as the earth travels around the sun each year, our window on the particular arm of our galaxy that we know as the Milky Way will twist around: sometimes lying overhead, and sometimes lying low on the horizon.

Kayeb and Kusuvwi are the most precise, in terms of heliacal risings. Uwet’s identification of Wayam is the least accurate (see the Wayam section later in this article) as Wayam rises further toward the south. However, if Sirius and Canopus are seen as the Waratwi [Tucumã] Palms beside Wayam, then Wayam would be much closer to a heliacal rising, and Wayam would be rising in late July as per oral tradition.
Narratives of the sky and underworld demonstrate an understanding of the workings of the cosmos, and can be seen as more than layers of an underworld that is overlain by this world and three upper worlds. Rather, the movement of the stars is understood as a journey around this world via the underworld to reappear in the dawn sky. The imaginary framework that undergirds this is not one of two-dimensional flat planes that are unconnected (for example, with a topography overlaid by astronomy), but of a three-dimensional model in which the levels are connected at a range of different channels and portals. The sun and stars travel through the underworld around this world from east, to zenith, to west, and nadir, before reappearing in the east.\(^7\)

Edmundo Magaña (2005 [1996]) conjectures that observers had failed to grasp the underlying structure of Amerindian astronomy.\(^8\) In this article, we propose a seventh principle: that the logic for tracking stars in the course of the year derives from the path of the Milky Way, well known as the celestial river in Amerindian astronomy, in relation to the path of the sun. The importance of the solstices, we suggest, is not simply that the path of the sun changes direction, but that on those two dates the path of the sun crosses the celestial river. The insight has direct relevance to Gary Urton’s insights on Andean astronomy, and evidences deep historical ties between highland and lowland South America.

\(^7\) See Roe’s diagram (2005 [1996]:197) of the path of the sun around the world.

\(^8\) Magaña elsewhere references Gary Urton’s masterful *At the Crossroads of the Earth and Sky: An Andean Cosmology* (1981); it is not clear why he did not engage Urton’s work in this particular comment.
Figure 2: The sky at sunrise in the December solstice showing the Milky Way (the Galactic plane) intersecting with the path of the sun. (*Image: RedShift 7*)

Figure 3: The sky at sunrise in the June solstice showing the Milky Way (the Galactic plane) intersecting with the path of the sun. (*Image: RedShift 7*)
THE ANNUAL CYCLE OF STARS AND THEIR STORIES

The First Rain: Kayeb, the Two-Headed Anaconda (December-January)

Kayeb is a two-headed anaconda whose body encompasses the stars constellated elsewhere as Scorpius, the Pointer Stars, the Crux or Southern Cross, and the dark matter of the Milky Way (see Green and Green 2006; Vidal 2007). During the dry season in August, Kayeb’s hand – the Crux – touches the ground at dusk and goes underground to get the Wayam, or land tortoise, which brings the August rains. Gradually in the course of that month, all of Kayeb disappears at sunset, and is not visible for several weeks. The reappearance of Kayeb in the dawn sky marks the December solstice, and the beginning of Kayeb’s rains. The season of Kayeb ends in February with the rising of Tavara, the Kingfisher-Anaconda.

In the story that follows, recorded in July 2008, former cacique Kiyavwiye (“senhor”) Emiliano Iaparrá explains the movement of Kayeb to David.

David: Pariye kayeb? Ba ig datka?
Emiliano: Aa! Nuvewkan kayeb datka.
Awaku igkis un anag.

Nuvewkan uhokri keh igkis hene.
Awaku nah aya ka aynsima nerras nor ku pariye lekkolya amin hawkri. Igkis awna igkis ka hiyak.
Ininewa. Nerrasnewa ku pariye

David: What is Kayeb? Is he an anaconda?
Emiliano: Oh! I think Kayeb is an anaconda.
All those, I think, who circle around, to arrive over here. Who rain. I think those: Uwakti. Tavara. All of them are anacondas.

Kusuvwi is an anaconda. Uwakti is an anaconda. Kayeb is an anaconda. Tavara is an anaconda. All of them!
Because they are the Sources [i.e. master spirits] of Water.
I think Uhokri [God] made them, like this.
But not all men in the world know. Like, that they are the Source of Water. Those: Tavara. Kayeb. Uwakti. No!

Because I have asked many times, those who school [study] about the world. They say-they do not know.

That’s all. Those who work with stars.
Like the other rain stars, Kayeb is an anaconda and a shaman, and can take many forms. Emiliano notes that Kayeb gets his name from the word “karewbet”, which means coiled up, curved, or twisted -- an association also noted by Fabiola Jara in her survey of Arawakan astronomy (Jara 2005[1996]:271).

Across the Rio Urucauá on the island of Mawihgi, Kiyavwiye Uwet explained that Kayeb wears a particular dance headdress, an iyuwti kamewgane, which is a circular crown of small breast-feathers, and not a iyuwti kavanyekhaki, which is the larger headdress with macaw wing-feathers sticking up and a back plate made of wood or cotton (cf. Jara 2005:271). His carving of the constellation (see below) is of a two-headed anaconda with a long hand into the region of the Crux or Southern Cross. The carving demonstrates that the body of the constellation occupies the dark space between the surrounding stars. In the account of Kiyavwiye Sarisri, Kayeb is a healer whose long hand can grab the Master of Sickness from far off, and who carries healing servants.

The idea to try wood carving was a last-ditch effort, in 2005, after the relative failure of our efforts to encourage people to render the constellations with pencil and paper. While some had drawn forms (such as the Hyades) in ways that were recognisable, most attempts to ask people to represent the constellations on paper with stick figures using dots or asterisks for stars were so ambiguous as to be of little use. The success of wood carving in representing the rain stars suggests that our earlier join-the-dot or stick-figure approach to astronomy was based on the wrong principles, since the constellations are not known along the Urucauá as points of light on a two-dimensional blank canvas, but as living beings whose life (or vitality) would be in the benches depicting them (McEwan 2001).

Peter Roe suggests that in Amazonia stars and dark space need to be understood in a figure-ground relationship (2005 [1996]). We would agree, but go further: that the carvings offer more than an indication that a different cognition of space is at play in the fields of the Amazon. The difference between the representational episteme in the stick-figure approach and a relational one implicit in the carvings of the stars as beings, is a point to which we will return later. Much as Roe’s research assistants drew his attention to the importance of the dark sky, particularly the dark patches in the brightest parts of the Milky Way, Kiyavwiye Emiliano uses the dark sky to locate Kayeb in the night sky. Here,
those dark patches reference a story of two jaguars attacking a deer, in which the jaguars are dark patches of the Milky Way and the stinger of the constellation of Scorpius forms the horns (gituw) of the deer.

Figure 4: Kiyavwiye Uwet Manuel Antônio dos Santos with his carving of Kayeb, October 2005. *Image: David Green*

A wide range of stories refer to this part of the sky. The elder Kiyavwiye Ishawet who lives far upstream on Yanawa island, about two hours’ paddle from the busy villages nearer Kumenê, says he does not know the stars which make up the Deer and the Jaguar, though he has heard of them. He sees Scorpius’s stinger as Kayeb’s head, and puts Kayeb’s body in the dark parts of the Milky Way. In his version, the pointer stars of the Southern Cross – Rigil Kentaurus and Hadar – are Kayeb’s two hands, not his two heads. Other narrators on this river recognise these as the two Poling Stars or Takehpene – two brothers poling alongside Kayeb, searching for a wife who has turned into a turtle.¹³ Kiyavuno (“Senhora”) Parakwayan, revered grandmother of many on the island of Kwikwit, describes the Takehpene as not the heads of Kayeb but the tracks of a boat that is poling in
the water alongside the boat of Kayeb. In our view, this range of stories suggests that there are many stories told about the night sky. Yet across the collection of tales, the narrative of Kayeb is by far the most prominent, almost certainly because of its links to the rain, and to travellers to the underworld who need a ride home.

David: Is there a story about Kayeb?
Parakwayan: There is Kayeb [the Two-headed Anaconda Constellation]. There is Takehpene [the Poling Stars] when the flood waters are high, he poles [through the flooded grasslands around the sky river].

Neg kawokwine aka neg kawokwine huwit ayteke utivut atan.
Ig wade pakwa ayegbiy ay. Ay yit ay.

Kiyavwiye Uwet Manoel Antônio dos Santos, storyteller extraordinary who lives on the island of Mawihgi across the river from Kumenê, links Kayeb’s rains with the jaguars. This interview took place at night, while he pointed at the sky with the laser pointer that David offered him.

Neg Kayeb wayk payak aka givig kawokwine.16
Neg kawokwine aka neg kawokwine huwit ayteke utivut atan.
Ig wade pakwa ayegbiy ay. Ay yit ay.

Neg Kiyavwiye Uwet Manoel Antônio dos Santos, storyteller extraordinary who lives on the island of Mawihgi across the river from Kumenê, links Kayeb’s rains with the jaguars. This interview took place at night, while he pointed at the sky with the laser pointer that David offered him.

Neg Kayeb wayk payak aka givig kawokwine.16
Neg kawokwine aka neg kawokwine huwit ayteke utivut atan.
Ig wade pakwa ayegbiy ay. Ay yit ay.
Pahavwi kamaxri ayteke gaduhyamadga.
Pahavwi kamaxri [unclear: gihepkatak?: giharaptak?] ay.

Igkis kanum Kayeb givig.

Neg Kayeb kavigyene inere.

Embe ineki keh kiyawwiyegben kanum: -Kawokwine Kayeb givig!

On the island village of Kamuywa (“Sun’s Place”), Kiyawwiye Daví Sarisri Espirito Santo’s stories tended to reflect the interests of the farmer, and consistently attend to the correlation of dawn stars, seasonal weather, and the ecosystem:

Sarisri: Murok pitatye. Warukma ig pitatye nor Kayeb.17
Kayeb. Kuri ig danuha wot ada ig waykwiye.
Nikwe payak aka mayg. Ka aynsima mayg kuwis.
Kuri ku ig wayk. Estuwa gidanhakis ku ig tivikwyey amadgawa ginawiya.
Ka aynsima mayg. Ka aynsima muwok.
Nikwe ig tivik.
[...]
Datka ig. Murok gahawkri.

Lesley: Aysaw [i.e. Kabet] ig kavusa?
Sarisri: Ig kavusa arimkat kayg ‘dezembro’ nutuhbe.
Heneme ka ik un. Aynesa un. Ik ada kariwruyan kan. Ik ada igyan ir

Sarisri: The first rains. The first star is Kayeb.
Kayeb comes up to us, so that he can start raining [falling to earth].
Together with the wind then. There is already lots of wind.
Kayeb rains and rains and rains.
Now when he starts raining. Their [the ancestors’] story says that he journeys on his boat.
There is lots of wind. There is lots of rain
Then he departs.
[...]
He is an anaconda. The Grandfather of Rains.
Lesley: When does he begin?

Sarisri: He begins around the month of ‘December’, I believe.
But it is not enough water [to flood the grasslands]. Just a little water. It is

The Second Rain: Tavara, the Kingfisher (February)

After Kayeb, comes Tavara, the Kingfisher, marked by the three stars in a row that resemble a kingfisher in flight with wings outstretched. These stars are known elsewhere as Tarazed, Altair and Alshain. They form part of the constellation known in formal astronomy as Aquila the Eagle, and noted by Peter Roe as the King Vulture stars in Shipibo lore (Roe 2005 [1996]:213-214). Fabiola Jara notes the significance of Aquila elsewhere in Arawakan lore, but the associations she recounts are not paralleled in our recordings. Tavara disappears at dusk in mid-December but reappears at dawn in mid-February. Kiyavuno (Senhora) Parakwayan gives this account of Tavara’s journey:

Parakwayan: Kuri igme tavara hawata makeknene avit inutwi. Now Tavara himself also follows [the path of Kayeb, and of the sun] up in the sky.

Kuri kabayweke pis hiyavgi ay kuwis. Now early in the morning, you see him already here.

Ku pase ig wayk. Kayeb wayk. Now he begins to rain. Kayeb rains. [He] rains. He dries up.

Wayk. Ig arewke. He [appears] high up. After he is up, he comes this way. [Beckons east to west]

Ig inute. Pase ig inut aytwe han. Now Tavara begins to leave. The Tavara leaves.

Kuri tavarame tivik. Inme tavara tivik. When he rains. [He] also rains again.

Lawe ig wayk hawata ig wayk akiw. Pase ig arawka. Inut. When he has cleared [dried up, or after there has been a short dry spell] he comes up [in the east]. Again.

Hawata akiw. Now [he] dries up in the sky above. After a good while [drying] again.
Ig tivik akiw.  He leaves again. [Points to the southwestward]

Tavara appears together with his food, all the little silver “ikar” (piaba) fish. Kiyavuno Pupta, who is wife to Kiyavwiye Ishawet, explains it in this way:

Pupta: Ig yagahg! Ig kadahan gimana ikar.19
Heneme ayhte gihmun [or: gimun]. Ayhte inut.
Atanme yuma.
Nah hiyavgi. Nah aki pit. Ig ayhte.
Ig himak ayhte. Tiyegem ig kahayak.
Msanbi kahayak.

[Tavara] is stretched out! He has his food, the piaba fish.
But way up high on his boat [or, where he is].
Here there is none. [ikar fish]
[If] I see him. I will show it to you. He is way over there.
He sleeps over there. At night, he is visible.
In the dark, he is visible.

Kiyavwiye Sarisri explains what to expect in the season of Tavara’s dawn rising.

Lesley: Pariye tavara awahkis?20
Ka aynsima punamna.
Ka aynsima urag kariymadga.
Hiyeg takah. Igkis kamax ka aynsima im.
Tavara awankis inere.
Ayteke ku tavara mpiya kuwis.
Yuma akiw.
Nikwe kuri uwaktime. Uwakti wayk hawata akiw.
Lesley: What does Tavara send?
Sarisri: Tavara sends [rain]. Now he sends lots more water. Then there are lots of water turtles [tracajá].
There are lots of cayman [jacaré-tinga].
There are lots of urag turtles [cabeçudo].
People pole [through the flooded grasslands]. They catch lots of fish.
That is what Tavara sends.
Afterwards when Tavara has already crossed over. There is no more [rain].
Then it is the time for Uwakti. Uwakti also rains again.

At our request, Kiyavwiye Uwet carved the constellation, and instructed his youngest daughter Dansa dos Santos on how to paint it. Note the details of the bright stars on the wings in the finished carving, as the stars in question are very bright and easy to see.
Figure 5 The carving of Tavara, in progress. (Image: David Green)

Figure 6 Tavara, the Kingfisher. (Image: David Green)
He is the one who is called Tavara. He is a Grandfather [Master Spirit] of Rains. He is big … such a huge bird!

He has his wings, this way. Regarding his wings.

That is one of this wing, up, this way.

But it is not yet clearly visible.

He has piaba [fish], this way, behind him, but they are not yet visible.

Because the weather is hazy, up above. You understand?

He has piaba fish.

He has piaba fish, this way, in front [of him].

He has piaba fish, on this side, behind him

He, Tavara, the elders called him, “the Grandfather of Rains”.

He, Tavara, is a bird. Such a huge bird!

He is that one. But [those stars are] his wings.

Uwet: Neg ku kanumka Tavara. Muwok gahawkri neg.21 Neg nopsad … ka nopsimahad kuhivrad.

Ig kadahan gihanbiy han. Amin inere gihanbi.
Inere pahatra gihanbiy inut han.
Sema kote kahayak kabayhtiwatma.
Ig kadahan ikar han butak sema kote kahayak.
Awaku hawkri kasayan inut. Pis hiyak?
Ig kadahan ikar.
Ig kadahan ikar han pitatak.

Ig kadahan ikar ayteke butak.

Neg tavara kiyavwiyegben kanum muwok gahawkri.
Neg tavara an kuhivra. Ka nopsimahad kuhivrad.
Ig neg. Heme gihanbi.

Figure 7: Tavara (Image: David Green)
If you are making [identifying the constellation of] Tavara. You do this. You make him. You make him, on this side. [These stars are] for his wings. It is a sign [symbol] that you make one star on his wing, on this side. [Another] one star, on this side, on this. He, Tavara, shows his [stars?] for he is a Grandfather of Rain. He floods the grasslands. He floods all the grasslands. People can pole everywhere on the [flooded] grasslands. David: Senhor, is there a star called, “the Master of Tavara”? Uwet: Yes! [that one, in the center?] That one is the Master of Tavara. Him! However, that one is his wing. That one is his wing, on the other side. That one, is the real Tavara. However, that one is his wing. That is a sign … if you see that Kayeb has already set, it is [now] he who causes rain to fall. He causes rain to fall. He floods all the grasslands. Completely [flooding] the grasslands! All the people pole everywhere through the flooded grasslands. Because of this … he pours out more than any of them here. Like the elder [Uwet’s grandfather] would say, “He pours out more.” He said, “He has more manioc beer than all of them here!” That is it then. [The shaman’s words?] He pours out more than all of them. So that is why, if you see Kayeb does not pour out [much], Tavara instead will

---


Arakat ku pi keh paha warukma amadga gihanbi aytekena. Paha warukma ayteke amadga inin.

Ig tavara arakat gidahan ada ig muwok gahawkri. Neg digisese kariy. Neg digise madikte kariy. Muwapuw hiyeg takah kariymadgew. Neg! David: Kiyavwiye, ba kadahan warukma ku pariye igkis kanum Tavara Akivara?


Igyewa tavara neg. Innme neg gihanbi. Inere arakat … ku pi hiya ku kayeb pituke kuwis igme ku waykse muwok.

Ig waykse muwok. Ig digisase kariy made!

Pahakte kariy!

Made hiyeg takah muwapuw kariymadgew.

Awaku inin … neg pi kahwite giwkis made ay.

Kiyavwiyebe ig awna: -Ig pi kahwite.

Ig awna: -Ig pi kadahante wohska giwkis made ay.

Inakni kuri. [Ihamwi giwn?]

Ig kahwi ariw made.

Embe ineki keh ku pi hiya Kayeb ka kahwiyneku sema tavarame pi
kahwinek
Tavara digisase kariy made.
Kayeb ka digise sema Tavara
digise kariy.
pour it out.
Tavara will flood all the grasslands.
Kayeb does not flood it, only Tavara
floods the grasslands.

Later that evening, Kyavwiye Uwet offered Tavara’s song:

Uwet: Ya. Ig tavara ig.  Uwet: Yes. He is a kingfisher.
Inakni kuri Maygikwene ig
usakwa sema ariku Maywaka.  Now that Maygikwene [Wind being], he
lives in Maywaka [this present sky world or atmosphere]
Yuma hiyeg hiyekten.  No person sees him.
Inin avat kuri. Igkis kanum  Now, this song. They call it,
Yemaygekwene.  Yemaygekwene [The Wind Being Song]
Ig usakwa ariku maygakwa.  He lives in the winds [air space].
Ig tavara usakwa sema  He, the kingfisher, lives only in the
Maygakwa ig usakwa.  winds.
Inne ini Kwekwene igkis kanum  But this Kwekwene [parrot perch or
Kwekwene awaku kweravimye squawking place], they call it Kwekwene
ku kiney ig bat amadga gevwiy. because it is Kweravimye, where he sits
Ayhte inurik ig bat amadga on his bench.
gevwiy.  Way up in Inurik [the upper world], he
Yuma hiyeg hiyekten sema igwa sits on his bench.
ihamwi hiyavri.  No person sees him, only the shaman
Ig ihamwi hiya. himself sees him.
Ig wew ku samah tiviga.  He, the shaman sees.
Ig tivik. Ig akumne. Ig hiya He walks as he journeys.
tavara.  He goes. He smokes. He sees the
Kuri ig usakwa sema arikit kingfisher.
Maywaka.  Now he lives only in Maywaka [this
Ineki keh pakni han: present sky world].
Uwet: *Yemayhrey, kwehne, tah-pahy-ra!* (x2) That is why it is sung like this:
*Yara, kwehkwehkeyone, tah-pahy-ra!* (x2) Uwet: *Yemayhrey, kwehne, tah-pahy-ra!*
*Yemayhrey, kwehne, tah-pahy-ra!* (x2) (x2)
-Ive tavara inut! *Ive ku ig ayhte “Look at the kingfisher, up above! Look
inut!* how he is way up above!”
Bawa ig usakwa sema arikut Maywaka.
Inme giwetrit ku kiney ig bat.
Kweravimye.
In Kweravimye usakwa wade akigbinne warik.
Ineki keh ig ihamwi batak ini avat.
Ka ayhsima ihamwi batak inere avat.
Ku aysaw ig kayne ig bat akebyi [barevviy?; ba gevviy?].
Ig iwe givig.

Ig keh [unclear: akisa barevviy?]
Nopsanyo akisa asugrik.
Ig batahkis atere. Ig batahkis [imakut?] ada ig paksig.
Ig paksig gavan.

But he lives just in Maywaka.
However his place where he sits [is] Kweravimye.
This Kweravimye is right at the edge of the river.
That is why the shaman performs this song.
The shaman performs this song, so much!
When he is dancing, he sits [on his bench?]
He takes his pets [animal spirits, helpers, familiars].
He [unclear: blows on the front of the bench?]..
A small [asugrik flute?].
He sits there. He sits [down?] so that he can sing.
He sings the song.

Uwakti, the Third Rain (March-April)

Uwakti is generally understood as an ancestor who ascended into the skies from a point in the Arukwa landscape called Uwaktewni, or Uwakti’s Spring. He builds his house – four posts with a central post for the roof – around the same time as Pegasus is rising in the eastern sky ahead of the sun, in late March through to early April. When we asked people to draw Uwakti, the constellation was fairly easily recognisable: the four stars with an off-centre mid-point looked remarkably like the Great Square of Pegasus, with several smaller stars inside the square that mark the presence of the man called Uwakti.
Lesley: Aysaw kavusa uwakti?23
Sarisri: Uwakti kavusaw aharit no … março aharit.
Ku pis hiya uwakti wayk kahyewa aharit março ka aynsima unad.
Igkis kanum inere Kahambarewka awaku eg kahamabar kew ka aynsima guw.
[…]
Lesley: Uwakti pariye gihivak?
Sarisri: Kaba ig ke warukmabe. Ig ke waravyube ig uwakti.

Ay ig aka inin kuri. Heneme kabeyweke ig pese.
Ke ba quatro horas. Kuwewanek uwakti pese.
Nikwe ig uwakti. Estuwa gidahan.

Lesley: When does Uwakti begin?
Sarisri: Uwakti begins around … March.
If you see that Uwakti really rains in March, there is a lot of water.”

[The Palikur] call this the ‘Tapereba Fruit Season’
because the tapereba trees bear lots of fruit.
[…]
Lesley: What does Uwakti look like?
Sarisri: He is almost like a large star [warukma]. Uwakti is like a small star [waravyu].
He is here [up in the sky] now. But he will come out in the early morning.
Around 4 a.m. Later Uwakti will come out.
So then, this is Uwakti’s story.
Ig kavinene ayhte uwaktewni.


He lived way off at Uwaktewni [on Ukupi Island].

There is land called Uwaktewni [an area with a lake and a point of land on Ukupi, called “Uwakti’s Spring”]. I do not know if you know about it, David? It is close by.

It is near Kuruvi. Among the *iwevra* bamboo. There. There a lake was formed. He said, “This is the traces [tracks; ruins; remains] of a house.” “Long ago, there was a house here. Our ancestor’s house.” “His name is Uwakti. Then he left. He climbed up [into the sky].” “Now he [lives] way up above.” [Uwakti] said, “Now I am leaving for up above. [If] my descendants go to my house, now they will only see me way up above. I will always send you rain.”

So he left that lake there.

The house ruins. The ruins of the sleeping place. He is Uwakti. Before there was no Uwakti [constellation]. There was no *warukma* star up above. But he climbed up, then he appeared. Afterwards they saw this to be true. “He really appeared!” They said, “It is a good [sign]!” “He will send lots of rain.” After [Uwakti] passes by, one more month ends. Now it is Kusuvwi [Constellation]. Now Kusuvwi rains to earth.
Uwakti brings a heavy rain but not the heaviest, perhaps in part explained by his not being directly in the World’s River, but between it and the path of the sun.

In between the rains of each rain star, there are said to be short, dry spells. Uwakti’s dry spell is the only one given a specific name: it is called *kahem* (in Kheuol) and *aberesvut* (in Palikur) which means the clearing of the skies. *Aberesvut* is also the name of a fruit which matures in March.

---

Ishawet: Ba uwakti? Ku samah ig wayk?²⁴
Ig wayk ada pahay paka. Ig arewke.
Hiyeg ka kamax kiyesradma. Ig [ka?] ewk unadma.
Pahay paka ig arewke.
Kuri ig inut aytene. Ig wayk abusku… kawkama pahay paka.
Abusku hawkri ig waykwad. Ig arewke.

Ishawet: … how Uwakti rains?
He rains for one week. He clears up [a dry spell].
People don’t catch much. He [doesn’t] bring high waters.
For one week [then?] he clears up.
Now when he is coming up. He rains for half … not even a full week.
Half a day he rains. He clears up.

Uwakti is also associated with heavy winds and storms, as this extract from Kiyavwiye Uwet’s version of the Masitwak tale suggests:

Uwet: Embe kuri ahwi uwakti danuh. Ig danuh bute.²⁵
Igkis danuh atere. Igkis ayapkere ada tivik amadgat.
Ahwi uwakti awna ta git: - Nukebyi! Ka ik ada ayh awaku numun aka mayg! Muwok!
Heme ig bakibe ka ik. Amawka ig wahanmi ahwi. Ahwi nemnik.
Me ahwi ayh nek. Neg ahwi kadahan kiyapyad nawyad. Me gahubwad. Inere gidahan yuma sabapti gimun. Awaku gimun

Uwet: So then, Grandfather [Master Spirit] Uwakti arrived. He arrived behind.
They arrived there. They asked to go onboard [Uwakti’s canoe].
Grandfather Uwakti said to him, “My relative! It is not possible to be transported because my canoe comes with wind! Rain! There is no [transportation for you?] onboard my canoe. When I cross over, there is no [hiding place?]. Only wind. For me [alone], it does not matter. Even in the rain. But for him, the child, it is not possible. He must wait for grandfather. Grandfather is coming. Soon grandfather will transport you. [This] grandfather [i.e. Kusuvwi] has a huge ship. Quite wide. With him, there is no getting wet.

Because his canoe is completely sealed. Rain does not enter there. Our [canoe] is not sealed. Our [canoe] goes as it is. We are rained upon, also.”

Pegasus is noted by Fabiola Jara as significant in Arawakan lore, but the associations she recounts are unfamiliar along the Urucaúá.

Kusuvwi: Torrents, the Fourth Rain (April-May)

The season of Kusuvwi, or “torrents”, begins in late April, the month in which the water rises and the fish disperse. Food is not plentiful in the early part of the season, but by late June to early July, the little silver ikar (piaba in Portuguese or kuahi26 in kheuol) begin to move in great schools upstream, looking not unlike stars as they jump the rapids in great waves. The kunan (peacock bass) and umayan (piranha) follow, making for a time of plenty in the river.

The Kusuvwi season has many dramatis personae, including the familiar two brothers. Kusuvwi Eggutye – literally, Kusuvwi the Older Brother – is a small star cluster similar to the Pleiades that is barely visible because he has been consumed by Awahwi, the three-headed anaconda (in the region of Perseus) who is big enough to swallow worlds, and who must be fought off. Though Kusuvwi Eggutye is small and in the belly of Awahwi, the boat of his younger brother Kusuvwi Isamwitye (Kusuvwi the Younger Brother) follows several weeks later, piloted by the one-legged man who is so very familiar in Amerindian astronomy. His name here is Mahuwkatye (“without a thigh”, or “Thighless”), and he is associated with the region around the three main stars of Orion’s belt plus Orion’s dagger, which is Mahuwkatye’s remaining leg. The other stars of Orion are here the stern of the ship, the Transporting Stars [Rigel] and the children of Mahuwkatye and Kusuvwi.

On board the boat is the bounty of the June-July season, as well as a constellation known as the Seagull (Wanawna), which is Kusuvwi’s small canoe for going ashore.
Figure 9 Kiyawwiye Uwet, carving Kusuvwi. (Image: David Green)

Figure 10 The completed carving of Kusuvwi’s boat. (Image: David Green)
The part of Kusuvwi Isamwitye is played by the Pleiades. He has to shoot the anaconda Awahwi who is about to eat him too. Awahwi dies, but as a spirit-creature he does not rot and remains visible.

The drama is, quite literally, cosmic, involving the sun, the stars and the Milky Way. The account of it marks the northernmost point of the Sun’s annual journey across the sky to the point of the June solstice, which will also be the moment at which the sun’s path meets the centre of the World’s River, or the Milky Way, or what astronomers would call the centre of the galactic plane. The cosmic drama involves turning back, and not allowing this world to be eaten by the anaconda Awahwi.

The scene opens, as it were, when Awahwi (in Perseus) begins to appear in late May on the northern side of the sun’s path. On the morning of the solstice on June 21, the sun rises East North East, at azimuth 246 on a sky map with inverted west and east, at exactly the spot where the arm of the Milky Way crosses the solar ecliptic (see Figure 2). The drama, annually played out, integrates the change of direction of the stars, the sun’s reversal, and the height of the rainy season. It also involves another actor who is very familiar in Amerindian stories: that of the one-legged man (in Orion) called Mahuwkatye, who plays the role of the pilot of the younger brother’s boat. The elder Kiyavwiye Sarisri (Davi), whose flair for the dramatic makes his stories so absorbing, tells the story like this:

Lesley: Nah timap kadahan kusuuywi. Eggutye. Isamwitye …

Sarisri: Ihi. Henewa!

Pitatye igkis pumukna nawiy.
Kuri igkis tivikiyekis pumuknamte.
Pahamku nawiy negni tivik pitatye.
Ku ig tivik pitatye kuwis.
Pahawwi datkad. Ka nopsimahad datkad.
Ig woke gibiy ayesri inin hawkri.

Inin datkad. Awahwad.
Giw awahwi. Ig datkad.
Kuri igme ka hiyaknima

Lesley: I hear that there are Kusuvwi the Older Brother and [Kusuvwi] the Younger Brother.

Sarisri: Yes. It is true!

At first, they were in two boats.
Now they journeyed in two boats together.
The one boat with the older brother went first.
When he had gone ahead already.
[There was] one large anaconda. A huge anaconda.
[When] he opens his mouth, it is the size of this world.
This huge anaconda. Huge Awahwi.
His name is Awahwi. He was a huge anaconda.
Now [the older brother] did not see him.
Ig kuwis tivik. Ka amuwa kuwis. He [the older brother] had already gone into the anaconda’ belly.] He does not shine brightly.

Ig ka wew ig kuwis danuh ayge. He doesn’t go anywhere. He has already arrived there.

Ig ka kahawksa havisgi. He did not have time to shoot him.
Ig taris giyaka. Aa! Kawa! Apa ig kuwis danuh ta gibiyakut. He pulled back his arrow. “Oh! No!” He had already entered [the anaconda’s] mouth!

Nikwe datka dakerevgi. So the anaconda swallowed him.
Datka dakerevgi nikwe. Gisamwi nemnik bute. After the anaconda had swallowed him, his younger brother came up from behind.

Kusuvwi gisamwi nemnikbo Kusuvwi’s younger brother was approaching.

Ku ig piyawkad. Ig iweg atere. Ig awna ta git mahuwkatye. While he was still far away, [the younger brother] looked there. The [younger brother] spoke to Mahuwkatye.

Ig awna: Axtig ayta! Ig dakere negni kuwis. Gimune. Haramnaba piyako! Havisig! [The younger brother] said, “An Axtig Monster is coming! He has swallowed my brother already! Ready your arrows! Shoot him!”

Ig mahuwkatye avisasew. Mahuwkatye was terrified.
Ig awna: Highhwa. Ba ayta huwetine nawiy. Nahwa! Nahwa atere. [The younger brother] said, “Get out of the way! Come back and steer the boat! Let me try! I will go in front there!”

Nikwe kusuvwi mpiya. So then Kusuvwi passed to the front [of the boat].

Kuri aka inin kuri mahuwkatye ayhte abuwik kusuvwi ginawiya. Even to this present day, Mahuwkatye is way back at the stern of Kusuvwi’s boat.

Igme kusuvwi mahuksatak. Kusuvwi [the younger brother] is at the prow.

Nikwe nor atere ig haviswig. So then [Awahwi the anaconda] was there. Kusuvwi [the younger brother] shot him. Twang! With an arrow!
Pang! Aka yakot! Thunk! Right in his eye! The big anaconda! The huge Awahwi!

Ta! Arikut giwyak! Datkad! Ka nopsimahad awahwad. So then [kusuvwi] shot him. He
Nikwe ig haviswig. Made ig miya.
Lesley: Awahwi?
Sarisri: Ya. Awahwi ig miya.
Ig miya nikwe kusuvwi mpiya.
Ineki keh madikte hiyeg hiyak kuri
Kusuvwi kabayhtiwa.
Igme gegni pis hiya henenwa.
Awaku ig ayhte gitunik datka.
Payak igme. Ku payak akak
gikamkayh.
Kadahan kusuvwi gikamkayh
wade giwtak mahuwkatye.
Igi mahuwkatye ig hiyegiwa
minikwak ay amadga inin.
Aynewa ig.
Awaku ig kamaxwa pahavu tino.
Gihayo.

The season is also the source of the abundance in the months to come, and in it
the winds associated with Uwakti have largely subsided. Kiyavuno Parakwayan,
of Kwikwit, makes this clear in her version of the story:

Parakwayan: Ya ku pimun han
nopsehsa pis ka buwisa pase
awaku ig parawhokwa.
Ig ahakwew parawhokwa ig
mpiya hawata.
Dik! Gimun. Ginawiyad dik aka
hiyeg.
Ig ka muwaka boboh. Ig umehe
kamaygviye made.
David: Pariye hiyeg amadga?
Parakwayan: Made ah gatip. Ah
ivatyo.

If your canoe is small, you will [still] not
sink because he [Kusuvwi] is in the
ocean.
He is in the ocean waters, he is also
passing through.
Loaded! His canoe. His large boat is
fully loaded with people.
He does not want waves. He kills all the
wind.
David: Which people are on [the boat]?
Parakwayan: All the tree spirits. Trees
that are mature. [ripe]
All fish. Peacock bass [tucunaré].
Pirarucu fish.

Pase ku ig inut. Embe kuri im wagehe. When he is up [in the sky]. Now then the fish start to climb [upstream].
Im. Ikar. Ikar. Fish. Ikar fish [silver piaba].
Kiyavwiye, nukamayh awna: - Fish. Ikar fish [silver piaba].
Mekavrik ka ayhsima ikar kuwis kavusa wagah. He said, “The fish are climbing. The season has started.
Ig awna: Wagehe im. Hawkri kuwis wagahkis. Now when [Kusuvwi] is up above, he starts to throw fish.
Kuri ku ig inute kuwis ig padak im. …
…
Ig ayta aka. Ig wagahkis. He brings them. He causes them to climb [upstream].

Ig amadgatak kuri ig padak im. He is onboard, now then he throws the fish [down].
Igkis wagah awuku ig nawiy ada im. [The fish] climb upstream because [Kusuvwi] is the boat for fish.
Ineki keh ig wagahkis. That is why he causes them to climb [upstream].

The association of this season with fish was noted by Claude Levi-Strauss who, in From Honey to Ashes, tells us that “[i]n the Guianese area … the Pleiades … forecast a plentiful supply of fish” (Levi-Strauss 1973:263-264), and adds also that “in the Guianese myths … we have seen … the connection between the Pleiades and the movement of fish upstream” (Levi-Strauss 1973:266).

Like Parakwayan, Kiyavwiye Uwet describes Kusuvwi as the “anag” or the “gahawkri” – the source or the master spirit of the trees that will grow in the coming season, and which produce the hallucinogenic sap of the tawni tree and the tobacco-like bark of the tawari tree, as well as tobacco, and fruit-bearing trees. In this version, Kusuvwi also carries on board the predator spirits or axtigs.

Uwet: Nah tiviknene. Nah waxwiy madikte ah gatip. Egu nawiy. 29
Kadahan sakeg. No gatip akebi udahan ba inin. Mpiya amadgew.

Uwet: [Kusuvwi said,] “I’m going on! I’m carrying all the spirits of the forest. The boat herself.
There is Sakeg. The spirit of the Sakeg tree [that produces a bright red paint] which is like our human spirits [or: like who we are]. [Uwet imitates someone painting his lips].
Kadahan tauni gitip ku mpiya amadgew. There was the spirit of the Tauni tree on board.

[This tree’s bark is a hallucinogen used in shamanic initiations; it is also used for various medicinal purposes.]

Kadahan kawokwine. Ka aynsima axtig mpiya gimadgew. There were jaguars. There were lots of axtig monsters on board.

Umuh ka nopsimahad sema ka aynsima axtig. The boat was huge but there were many monsters.

Kadahan arakembet axtig mpiya amadgew. All kinds of axtig monsters were on board.

In another story told by Kiyavwiye João Felício, he emphasises the healers on board Kusuvwi, a theme that was repeated in several other stories. Of interest is that he, as head pastor of the Palikur Assembleia de Deus in Kumenê, speaks here of shamans in the metaphor of medical doctors:


Ka ayhsima hiyeg ayge! So many people are there!

Ku igkis kanivwiye amadga nawi. Those who work onboard the ship.

Ka ayhsima mekseh gumadga! So many doctors are onboard her.

Ka ayhsima hiyeg kanumka mekseh. Ka ayhsima gumadga. So many people called doctors. So many onboard her.

Awaku eg ihamwi gihmun. Because she is a shaman’s ship.

Ihamwi hiyevune ka garanuhisma ada piyih hiyeg. The shaman seer/one who sees visions [of what has happened aboard Kusuvwi] has great wisdom/ability/powers to heal people.

Ka ayhsima ig keh iveryti ada hiyeg. He makes lots of medicine for people.

Ig makniw hiyeg ka ayhsima. He heals many people.

Kiyavwiye Uwet’s version (told in 2008) of the same epic, offers this section of the story in great detail, indicating also the kinds of fish and plants on board Kusuvwi’s boat. His narrative contains also a seagull constellation, and emphasises the way in which Kusuvwi circles around, and with him, many of the master spirits of the resources that will become abundant in the months of June and July.
Uwet: Ya kuri ig kusuvwi minehwe atere. He took him [the boy] then.
Ig iwevri ni kwene. He [the boy] climbed aboard, way up near him.
Ig katapta ayhte giwntak. He did not want him to stay there at the stern.
Ig ka muwaka ada ig usakwa han aburikut. Because at the stern, there were so many axtig [predators]!
Awaku aburikut ka kabe axtig! There is Tauni [the hallucinogenic tree spirit] who circles around [there].
Kadahan tauni ku ugesni ovre. Tauni’s spirit. It is not the [actual] tree here, which circles around.
Tauni gutip! Ka aynema ah uges. Her spirit circles around.
Gutip ugeswiye ovre. Palikar gutip ugeswiye ovre. Palikar’s spirit circles around.
Waxak gutip ugeswiye ovre. Waxak’s spirit circles around.
Nor .. mmahba nor? Wadidka gutip ugeswiye ovre. That .. what is that [called]? Wadidka’s spirit circles around.
Irimwi gutip ugeswiye ovre. Irimwi’s spirit [the spirit of the Tawari tree] circles around. [The thin bark of the tawari tree is used to wrap tobacco to form a cigar.]

Ku pariye ku akak inin. Like the ones which are here in the present. The leaf-bearing trees. All the leaves upon the trees.
Gavanvuwwata ah. Made gavan avewata ah. Do you know that they circle around onboard [Kusuvwi’s ship]?
Pis hiyak egkis ugeswiye amadga nor? He ties up, such huge trees. He circles them around onboard.
Ig waneke ka nopsimahad ahrad. So many! All kinds of predatory spirits circle around onboard her.
Ig ugeswiye gumadga. So he observed this, he stayed on the other side, alongside of him [Kusuvwi].
Ka ayhsima! Arakembet axtig ugeswe gumadga! He was here. He was here with him. He stayed there, all night long.
Embe ig hiyakni ig usekwe ayteke giwntak. He was there with him [in his boat].
Ig ay. Ig ay gikak. Ig keh ayge hewke tiyegim. The next morning then. In the daylight.
Ig ayge gimun. In the early morning, like this.
Hewke nikwe. Puwivak. He said to him, “Grandson! Go ahead
Hawakanewa ke ininbe.
Ig awna ta git: -Nex! Asa woke

Ya ig woke eg kiyesrad nikwene.
Ig awna: -Pariye inerewa ay?
Giwn: -Nuhiw! Masara! Piyana kunan ayteke. Iwe piyana kunan masara.
Ig ewke ta git kusuvwi.
Ig ewke payak aka miyug.
Ig ahegbete gidahan gimana.
Ig ahegbete. Ig iwe garap nikwene.
Ig ahegbetene gimanakis kabayhtiwa nikwene.
Ig awna git neg. Ig pituknaw kunan.
Ig awna git: -Nah ewkne im aytne.
Ig ewkne im ayteke.
Ig pitukne garayh. Harayh! Harayh!Ig pitukanye im made.
Wakehte nor gamar usekwe avit nor garap-
Ig ikevri paha.
Kuri igkis axne nikwe. Pisenwa gaxwenkis.
Ig awna git: -Nex! Asa padak wowbi ayhte akigbinne nawi.

Nawiyad kanopsimahad han. Ig muhuk ayhte waykwit.
Avit eg dax ta ahakwat un.
Ig danuh atere nikwe. Ig padak.
Igwata hiya giwbi. Naw! Ig hiya tuboh!
Ig hiya kiyapyad kunanad!

and open that trunk. There is one large trunk here. I know that you are hungry. [But] not me. I am not yet [hungry]. I can go two days before I eat [again]. But I can see that you are hungry.’’

And he opened the large trunk then.
He said, What is [in] there?’’
He said, “Grandson! Roasted [fish]! Two peacock bass are over there. Take the two roasted peacock bass!’’
He brought them to Kusuvwi.
He brought them on a plate.
He prepared his food for him.
He prepared it. He took out the fish bones then.
He prepared their food very well, then.

He spoke to him. He gutted the peacock bass.
He said to him, “I brought the fish to here.’’
He brought the fish from over there.
He took out the entrails. Slice! Slice! Slice!
He gutted all the fish.
Only the skin remained on top of the fish bones.
He gave him one.
Now they ate then. They finished their eating.
He said to him, “Grandson! Go ahead and throw our leftovers away, over at the prow of the ship!’’
The ship was so huge, like this. He descended far below.
Before it touched the water.
He arrived there then. He threw it.
He, himself, saw the leftovers. Splash!
He saw it splash into the water!
He saw a huge peacock bass!
Ig iwegeyh atere.
He was gazing there.
He said, “What is it there?”

Ig awna giwn: -Pariyeki ayge?
He said, “No. I threw the leftovers there. And a peacock bass [just appeared] in plain sight! It [swam away as] a large peacock bass, in this direction. A huge peacock bass!”

“And throw [another] one!”
He took it. He threw another one.

“If you see the same thing again, well, good!”
He threw [his leftovers]. Splash! There! Ker-splash! It swam away also.

“I saw it also. So [it turned into] that peacock bass.”

“When I arrive over there. I will take you to your father. At the beginning of July, if you go out onto the river to hunt fish there. If you see one peacock bass. A huge sized peacock bass. You shoot it. You look at it. It’s body is all burnt! It is completely burnt [as] with charcoal. You know it is the leftovers. It is the leftovers. Then you say to your father. You say, ‘Dad! I say to you. This is the peacock bass which we were eating with Grandfather Kusuvwi. I threw the leftovers into the water. It is this [very same] peacock bass. He said to me that those are the [young, blackened] bass which are [present] at the beginning of July. I did not tell you [before], but now I am telling you about it.”

“Is that how it is?”

“Yes. Look at its body. It is roasted! Look! Blackened roast.”

Now, they borrowed a canoe to carry him, because he [Kusuvwi] could not
awaku kiyapyad nawiyad! Pis hiyak?
Nor ihapka ka imihadma ada minahwa ta ihapkat.
Igkis sinap umuh gidahan.

Nor ku pariye Tumeh kinitihwa amin. Wanawna.
Wanawna ta iwevri. Eg iwevri atere nikwe.
Ig danuh atere nikwene.
Ig kataptase wanawna. Wanawna waxrri ta git gig.
Kuri ig iwe giyamtig.
Awaku ig wageste kabahte ke ihamwibe.
Awaku ig msekwe ka ayhsima ayhte.
Ig ugesbaki kabahte ke ihamwi ig uges.
Kuri ig iwe giyamtig.
Ig katapse giyamtig ta amadga wanawna.
Wanawna waxrevri ta git gig.
Ig danuh atere ig sarayhgi ta ihapkat.
[…]
Ig awna ta git. Ig awna: -Kibeyne pi waxrene nukamayh atere.
Kuri ig amekene ig awna ta git wanawna. Ig awna: -Wanawna!
Ka sam pi waxre nukamayh atan.
Nikwe wanawna avim inin hawkri ig hiyegte ig!
Ka ke kurima. Nikwe ig hiyegte.

Heme kuri aka inin kuri ig ugeswe kuhivra.
Pitatye ig hiyegiwa ig. Embe henebaki kiyavwiye.
doek at the shore. Because his ship was huge! You understand?
The shoreline was too shallow for him to dock at the shore.
They borrowed a canoe for him. [the seagull]
That [person] which Tumeh [Ishawet] spoke about, the wanawna [seagull].
The seagull took him. She took him there then.
He arrived there then.
He climbed aboard the seagull. The seagull took him to his father.
Now, he took his shaman’s basket.
Because he had almost turned into a shaman.
Because he had stayed over there, a long time.
He had transformed [into someone] almost like a shaman.
Now, he took his shaman’s basket.
He climbed onboard with his shaman’s basket onto the wanawna [seagull].
The seagull carried him to his father.
He arrived there. He deposited him on the shore.
[…]
He spoke to him. He said, “Thank you for carrying my child there.”
Then he, our ancestor, spoke to him, the seagull.
He said, “Seagull! It is okay, that you brought my child here.”
Then, the seagull, at that time, he was a person!
Not like it is today. Then, he was a person. He had the ability to do works of wonder.
But now, at the present time, he has turned into a bird.
At first, he was actually a person. So it is, Senhor.
He, the shaman himself, was carried over there on his canoe. His canoe was tiny. He had a beautiful little canoe. Upon this, he carried him. He brought him to his father.

The idea of renewal, or rejuvenation, is also familiar in regional astronomical literature. Kiyavwiye Emiliano’s version of the story also emphasizes the movement of Kusuvwi. In this discussion he emphasises the swirling waters of the celestial river in this part of the sky – a theme to which we will return later. Of interest is the idea of a person splashing into the water with Kusuvwi and crossing over to the other side, to find himself young again. Significant too is the way in which he speaks about Kusuvwi anchoring his boat when he has crossed to the other side.

The crossings in the annual night sky are several, and to be able to speak of them as predictible events, one must have an overall grasp of the interrelationships in the sky. Annually, nightly and seasonally, there are multiple crossings to know. The sun crosses the sky, overhead and underneath, as does the moon and planets, and the Milky Way / World’s River, which crosses the Sun’s path at the solstices (see Figure 2).

The thundering that Kiyavwiye Emiliano mentions as Kusuvwi dragging his anchor is typical of the season, in which very loud thundering occurs quite unpredictably. When the thunder rolls, it is not uncommon for people to look up and comment that “there’s Kusuvwi’s anchor”. For Kiyavwiye Emiliano, there are two kinds of thunderings: the anchor of Kusuvwi’s boat, and also the arrival of the season’s master spirits at their destinations.

Emiliano: They speak about this story. That we … like we who are here now. We who are together with the elder’s [ken, or knowledge, or wisdom]. But it is the season for Kusuvwi to circle around. When we … when he says, “I will circle around with Kusuvwi!” So then, he goes. Now when he arrives under the rock where there are strong currents [or swirling waters]. There are many currents swirling around there.


Ka aynsima amiyan wageswa ayge.
Now Kusuvwi said to him, Now, splash into the water!
When he splashed into the water, he surfaced on the other side.
So then, he climbed up onto Kusuvwi’s boat.
He became a young person again.
Those who were women, they became young girls.
When he arrives. Like him. Like you.

[Ku pis ] aytwe danuh atan.
Pivinwat.
Pis tivik msakwa ta pivinwat.

[If you] come and arrive here, at your house.
You depart [and then] stay at your house.
He departs also [and then] remains at his house.
He departs and remains at his house. He departs. [points in the cardinal directions]
But our ancestor’s speak these words, “When Kusuvwi’s people circle around with him. When he goes to his home. When he arrives at his home. He hears thunder coming from his house.”

They say, Kusuvwi’s people have already arrived at [their] home.
From way upstream [south]. From way over in the west. From the east. From the ocean [north]. There, where they live. [i.e. when you hear the thunder coming from those directions you know they have arrived at their homes.]

David: Are you talking about where his anchor is?
Emiliano: No! That is Kusuvwi, himself, when he reappears [in the east].
Kusuvwi, himself, when he reappears.

When he has already rained without
Takuwa mataytak. Ahewkemni ig humawhe ta pahambakat. Nikwe igwa isahkis giyokman atere.

Kiyapyad digidgiyad ig keh. Madikte hiyeg awna: -Kuwis kusuuvwi minahwa. Nikwe ku aysaw ig kusuuvwi humaw. Ig padak giyokman. Ayteke pisenwa nikwe

David: Ba ik ada pis awna amin giyokman akiw?

Emiliano: Aa! giyokman. Pahat arikna. Pis hiya madikte hiyeg kadahan akebyi nor. Mmahki wis awna arikut parantunka?

David: Ancora?


stopping.

Tomorrow, without stopping. The next day, he re appears on the other side. Then, he, himself, drops his anchor there.

He makes huge [loud] thunderings. All the people say, “Already, Kusuvwi has docked.”

So then, when he, Kusuvwi, appears. He throws his anchor. Afterwards, it is done then. David: Can you tell me about his anchor again?

Emiliano: Oh! His anchor. One thing. You see, all people have those [anchors]. What do we call it in Portuguese?

David: Anchor?

Emiliano: That anchor. So then, he had one of those also.

When he re-appears on the other side. He throws [it down] in order for the boat to remain [stationary]. [Fixed!] On the other side. So then, he anchors his boat. Now afterwards then, he speaks to all the people who circled around with him.

Then they leave. He says to them, “Please go home!”

This one goes to his house. That one goes to his house. In order to arrive. When our ancestors were here on this maywak [earth]. They also heard thunder way upstream. That [thunder] in the west. This way, towards downstream [north]. This way, in the east.

Our ancestors spoke these words,
Kusuvwi kuwis wageswe kuwis. Kuri hiyegavwu tivikwiyes ada danuh ta givinwakis.
Awaku igkis wageswiye aka kusuvwi.
Neras ku pariye wageswiye aka kusuvwi kuri.
Amakonukwa. Embe ku avim inin ig takwaye akiw. Awaku Ig wageswe aka kusuvwi kuwis.


At the present time, now, I cannot tell you, “It was this way. Or it was that way.”

Kawa! Nah kinetihwa ku samah igkis kinetihwa amin.
Heneme ku aysaw wixwiy kinetihwa nawanewa hiyakemniki amin inere ntuuhbe ka tuguh akak amekenegben gidahanks.
Ininewa estuwa wageska gikak kusuvwi. Hene amekenegben kinetihwa amin.

For Kiyavwiye Sarisri, the sound of Kusuvwi’s anchor marks the beginning of the season of field-making:

David: Kusuvwi giyokman?33 Emiliano: I do not understand this. [laughter] I do not know. But our ancestors’ story speaks about this.
Sarisri: Giyokman? Ihi. Kusuvwi ku ig tivik kuwis
Sarisri: His anchor? Yes. When Kusuvwi has already gone.

David: [And] Kusuvwi’s anchor?
Kusuvwi has already gone.
Kuri pis tima digidgiye wahamatak. Kuwis ig iki giyokmano
Giyokman kuwis ayteke. Ig kuwis hamah. Pahambakat.

Now you hear thunder coming from the east. He has already put out his anchor.

He has anchored/docked on the other side. He has already [come out in the east]. On the other side.

So [Kusuvwi] also thunders also.

He makes powerful thunder [and lightning].

Nikwe ig digidgiye gihawh.

Ig keh digidgiye gihawh.

He has anchored/docked on the other side. He has already [come out in the east]. On the other side.

Nikwe ig digidgiye hawata.

So [Kusuvwi] also thunders also.

He makes powerful thunder [and lightning].

Ba seis horas ig iki hawkanewa.

Around six o’clock in the morning, he thunders.

Digidiye.

So then, all the people say, “Kusuvwi has already come out on the other side.

Nikwe made hiyeg awna: Kusuvwi kuwis hamah pahambakat. Kuri yuma murok akiw.

Now there will be no more rain.”

Kuri danuh hawkanavrik wasewka.

Now arrives the season of wasewka [field making].

Ya ba ta uwasewka

“So then lots of people begin making their fields already.

Nikwe ka aynsima hiyeg ku wasawka kuwis.

That is what they call that [season] of Kusuvwi.

Hene igkis kanum inere kusuvwi.

In order for Kusuwi to pass and then anchor, however, Awahwi the anaconda has to be killed by the Younger Brother, in the Pleiades. The one-legged boat pilot, Mahuwkatye, steers the boat as it turns around – a significant moment in the narrative given that between May and June there is a marked turn in the direction of the Milky Way:

Pupta: Avanenekwa ig huwitene

Avanenekwa ig wages han.

He always turns around this way.

Pes ayteke atan

He come out here, on the other side.

Adukwnewa ig huwite aburik

He is always steering at the stern of the boat. He is there.

nawiy. Ayge ig.

Lesley: Like a pilot [portuguese]?

Lesley: Ke motoristabe?

Pupta: Ihi. Kuri pis hiyak. Hene

Pupta: Ilha.

Pupta: He is always steering the boat!

ganivwi.

Pupta: Yes. Now you understand. That was his job.

Mahuwkatye’s rather rough life history on the earth is the subject of a detailed narrative that space does not allow for here, but which is one of the most
widespread narratives in Amazonian anthropology. A short version is told by Ishawet:


Awaku ig wagehpiye han. Kuri ig havise yakot tah. Because [Mahuwkatye] began climbing this way [up to the sky] where he had shot an arrow.

Kuri igkis ganigvig sumuhe gibagwanminat ada putuk inere Neg ku Mahuwkatye biyuke. Now his in-laws grabbed on to his leg in order to pull it off.

Kuri ig ay aynte inut giburik Kusuvwi. Giburik Kusuvwi ig msakwa. Now he is way up there at the stern of Kusuvwi’s boat. He stays [there] as the servant/slave of Kusuvwi.

The drama is one of the most familiar in scholarship from the region, even if the actors have different names. Of all the dramatis personae in the narratives along the Urucauá, however, it is Awahwi that emerges as a cosmic predator who was overcome, and whose defeat enabled the world to head back to Kayeb as the source of the rain in the December solstice. References to the significance of this part of the sky are plentiful in Amerindian literature, though none in lowland South America refer to the crossing of the Sun’s Path and the World’s River – the meeting of the ecliptic and the galactic plane. Gary Urton’s (1981) account of this structure of astronomy in the Andes is the closest to this account.

The battle with Awahwi is hinted at in the account given by Levi-Strauss, who notes that “[a]ccording to the Kalina, there were two successive constellations of the Pleiades. The first was swallowed up by a snake. Another snake pursues the second constellation and rises in the east as the constellation is setting in the west. Time will come to an end when the snake catches up with the constellation” (Levi-Straus 1973:269). The stories, then, appear to be regional, and the similarity of Kaliña (Carib) and Palikur (Arawak) accounts indicate that this astronomy is not limited to cultural borderlines.

The point is underscored in this interview with Kiyawviye Uwet, who talks about the dances performed at this time of year in Galibi-Marworno settlements in the region (Vidal 2007:13). These he learned from his grandfather, Guillaume or Buyomin who was born on the Arukwa river. Kiyawviye Buyomin was an ihamwi (a shaman) who was living on Mawihgi Island when Curt Nimuendajú conducted his research in the early 1920s. Buyomin did, however,
spend some time working in French Guiana. He had strong enough relationships with people from the other rivers to learn the festival songs in kheuol (patoá) and invite their shaman to his house on Mawihgi.


Uwet: They call him Awahwi. Because he has three heads. One head. One head. One head. [pointing to heads on carving] They call him Awahwi … because this anaconda … they call him the Grandfather of Grandfathers. Awahwi. The Grandfather of the Day or World. [Or: The Source of the Day World]. This anaconda they call him, Awahwi. They also call him a Wakar [White Egret] person. He is a white egret person. The Grandfather of White Egrets.

Figure 11 Awahwi, as carved by Kiyawwiye Uwet. (Image: David Green)
Kiyavwiye Uwet’s carving of Awahwi was something that gave him much pleasure as he recounted how Buyomin had carved the same three-headed anaconda as a bench for the annual Turé dance. Like the other star anacondas, Awahwi is an amphibious creature that can ingest whole bodies. The encounter with Awahwi, in times past, was a prominent annual festival. David’s field notes of July 2008 bear this out:

Kusuvwi eggutyte is swallowed by Awahwi. Both constellations are “avikut warik Avatakni Hawkri”, i.e. in the river [Milky Way] at the joining seam of the world or the end of the world. Awahwi is killed by Kusuvwi Isamwitye, but Awahwi’s body does not rot -- one reason it is still visible.

Awahwi is a huge anaconda. Amekenegben awna “Awahwi gayesri mataka hawkri”: The ancestors say, “Awahwi is the size of the world.” A shaman summons Awahwi’s spirit by making his image on a wooden bench, “gahempak epti”, for Awahwi to enter. He says “Batamnika adahan inereka epti. “It is the sitting song for that bench.”

The minor constellation in the drama of Kusuvwi is that of the Seagull, who plays a small but significant role in several stories. From Kiyavwiye João Felício’s
David: Is the seagull his boat? Is it true?
João: Yes. She, the wanawna [seagull].
The shaman, himself, spoke about her, that she was a tiny, little canoe.
Because of how she splashes into the water. Splash!
Her head flattens out. Her wings flatten out. [João demonstrates as if the bird is transforming into a canoe.]
They say, “A boat! Kusuvwi’s rowboat [skiff]! It is called.”
Kusuvwi’s small boat that transports the people onboard to the shore. She, the seagull.
Now, at the present time, those seagulls that fly around here. So many, are at the ocean, at this [present time].
David: Long ago, was there a dance about the seagull?
João: They did not dance about the [seagull], but they did sing a song about it.
They sang about how the seagull was Kusuvwi’s little boat that transported people to the shore.
They called out her name. They sang it.
David: Also when he arrived, you said, he did not see his home. That when he ‘stepped on the land’, he saw the path.
João: Yes. He, our ancestor.
When he arrived at the shore, he did not see his way home.
He asked those who brought him, there. Onboard the seagull. The tiny,
nawiyesa.  
-Kineyki niguh givin ay? 
Ig awna giwn: -Pig givin nor ay.  
-Mmahni nah ka hiya? 
Ig awna: -Asa subuk amadga wayk!  
[Yes puwah?] ta ihapkat. 
Nopsehsa nawiy. Wanawna nopsesa. 
[Yes danuh] ayhte ihapka.  
-Pasa subuh ta waykwit! 
Ig subuhwa. Pahaye ig hiya ahin tarahad. 
Ig hiya gig givin kenese.  

little boat.  
“Where is my father’s house, here?”  
He spoke, “Your father’s house is that one, here.”  
[pointing]  
“Why can I not see it?”  
He said, “Go ahead and step onto the land!”  
[She paddled?] to the shore. 
A little boat. A little seagull.  

Wayam, the Land Tortoise:  
The Fifth Rain and the beginning of the dry season (July-August)

Wayam, the land tortoise and the trickster, can be seen under his tucumã palm tree in the dry season. Wayam’s rain is light, “because Wayam can only hold a little water”, and tends to be accompanied by low rumbles that sound like a land tortoise slowly dragging himself along a path. Ironically, the trickster was the most difficult to identify. In 2005, two men from Amomni Island identified Cassieopia as Wayam. But Cassieopia is visible at dawn in October, on the horizon at the northern end of the Milk Way, but no one else confirmed this as Wayam.

At the time of David’s departure at the beginning of the dry season in July 2008, Wayam was not visible in the dawn sky. With much hesitation, Uwet finally identified Wayam while looking at Starry Night Pro on a laptop computer, as a combination of the Constellations Vela and Carina. Yet, Uwet’s eyes are not good, and it is always difficult to translate the flat screen into the turning dome of the night sky. If he is correct, Wayam’s head is in the space around the stars Omicron Velorum and Delta Velorum, and Wayam’s left foot is near Kappa Velorum, and his right foot near the star called Avior. Smaller stars, slightly lower than the two feet, mark the presence of Wayam’s body. Near Wayam, there are two stars which represent waratwi (tucumã palm trees), whose palm fruit the land
tortoises love to eat. When rising in the southeast, the star above Wayam’s head is Suhail al Muhlif and the star below Wayam’s body is Miaplacidus.

However, this constellation only rises in the southeast in September and October, a month or two later than traditional oral accounts of Wayam’s rising. If indeed Uwet was slightly mistaken in his identifications, it is possible that the bright stars of Sirius and Canopus are the tucumã palms bordering Wayam, thus falling in line with oral tradition and the principles we are proposing for astronomy along the Urucauá.

It would appear that, unlike the Bororo tortoise constellations noted by Fabian in the region of Corvus (Fabian 1992:135), Wayam and his palm tree rise quite far south in the eastern sky. Since they are so far south, they move more slowly than the stars in the centre of the sky. The tortoise and his palm tree mark the path of the Milky Way at a place of the galactic arm when it is not too bright, so they play an important part in marking the course of the World’s River at a time when it is turning. They also mark the point in the sky when, in late October, the hand of Kayeb (the Crux or Southern Cross) reappears after going underground to get the tortoise.

Figure 13: Kiyavwiye Uwet’s carving of Wayam (Image: David Green)
With the observation of Wayam it becomes clear that all the major constellations are on the World’s River, with the exception of Uwakti (in Pegasus), although it could be argued that Uwakti marks a mid-point between the World’s River and the Sun’s Path.

There are dozens of trickster tales about Wayam. Their number is almost certainly bolstered by similar West African tales that have travelled to this region since the earliest African slaves arrived in the region in the early 1600s, and by the few runaway slaves who found a home in Palikur families. Despite the popularity of the Wayam tales – often ribald – there are not many stories about the stellar Wayam. Narrative comments focus mostly on seasonal changes associated with the Wayam, particularly that the Wayam is the last rain of the year.

Ishawet: Egme wayam butitye.\textsuperscript{42}

\begin{tabular}{ll}
Ishawet: & She, Wayam [the tortoise], is behind. [last].
Wayam ku wasewkaneku. & Wayam is during the field clearing time.

\begin{tabular}{ll}
Ku was made ihukaki. Kuri wayam metakwa wayk. & When the fields are all cut down [cleared]. Now finally Wayam rains.
Kuri wayk amadga woharit. & Now it rains while we are getting the fields ready to burn. During this the Wayam is above.
Amadga ini aew. Wayam. & \\
Eg yuma muwok akiw. Amaksewichten wayam & After her there is no more rain. Wayam is the last one.
\end{tabular}

Emiliano: Wayam eg hawata.\textsuperscript{43}

\begin{tabular}{ll}
Emiliano: & Wayam, she also.
Wayam hawata wayk aharit agosto. Wayam wayk. & Wayam also rains during August.
Heneme ka aritkannema. Ka kadahan estuwa gudahan kiyesrad. & Wayam rains.
Ininewa ku aysaw eg wayk. Amekenegben awna ku aysaw eg wayk eg digihwa. & But it is not a big thing. She does not have a [long] sized story.
Wayam waykno. Wayam digihwa ka aynsima. & “Why does she thunder here?”
Ininewa estuwa gudahan wayam & They say, “Because she is walking along. That [imitating the sound as “dara”]. Rumble! Rumble! Rumble!
& The Wayam rains. The Wayam thunders so much!
& That is all the story there is about the}
\end{tabular}
David: I also heard that when they turn [over] the Wayam. That is when you hear thunder. Can you talk about this?

Emiliano: Our ancestor’s say, “When Wayam rains, she brings rain also. It rains for one day. But she brings so much thunder!

“Why?”

I asked the elders, “Why does she bring so much thunder? Is she the Grandmother of All Thunder?”

“No!” They say, “No.”

When she walks. Walks! Walks! Rumble! Rumble!

That then, it thunders so much! But she is walking along. She goes along in order to circle around.

That is the Wayam’s story.

Uwet describes Wayam and her thunder:

Around ‘July’, then the Wayam [the Land Tortoise] arrives.

It is the Wayam’s [season]. Wayam laughs.

The Wayam also has [stars].

The Wayam has two waratwi palm trees.

One waratwi palm in front. One waratwi palm behind. Her food.

Now she rains. She brings rain to the earth.

She laughs. She laughs alot.

She goes, “Ha. Ha. Ha.”

“I make wind. I make lots of wind.”

“I make thunder”.

It is true.
Lawe, eg wayk. Eg wayk. Eg wayk. So, she rains. She rains. She rains.
Eg keh uguhguh [kariy peh]! She makes lightning [across the grasslands]!

Nahawkri Buyomin awna: - My grandfather Buyomin said, “The Tortoise is [turning over on her back].”
Ba tima guman? Have you heard her sound?
Guman gumar avit tip. Her sound is her shell on a rock.
Embe nikwe abet inin kayg, eg [kanve?]. So during this month, she [lays eggs].
Juktah pisenwa was uhukwaki. Until the [manioc] fields have been cut down.

Eg kaba mbaya was uhukwat aka muwok. She almost ruins the field clearing time with rain.
Atere no waykad made ‘setem’. She rains all the way until ‘September’.
Amadga ‘setem’ neku. Aharit ‘out’ neku In ‘September’. Around ‘October’
Gudahan arawka. Yuma akiw. Her drying up season. There is no more.
Atere! Barewye estuwa in. That is the end [of the story]. It is a beautiful story.

Kiyavwiye Sarisri makes a connection between the stellar Wayam and the terrestrial trickster:

Lesley: Aysaw Wayam? Lesley: When is Wayam [the Land Tortoise]?
Sarisri: Wayam kuwewanek aharit nutuhbe ... Julho. Sarisri: Wayam is later, I believe, around July.
Wayam wayk, wayk arikna. Wayam rains. Rains [some water]. [A fair amount of water], he rains.
Arikna ig wayk. It is possible … that people are almost not able to make [manioc] fields because of Wayam.
Ik ada hiyeg kaba ka ik ada keh was awaku wayam. […]

[...] David: Digidgiye? David: [And] lightning?
Sarisri: Ya. Inyerwa wayam keh hene. Sarisri: Yes, it is true. Wayam makes it.
Ba pis hiyak digidgiye ku akak inin? Have you seen the lightning, at the present time?
Wayam ganip. It is Wayam’s [mischievous] doing.
Mpuse danuh avim inin kayg julho. Ka aynsima digidgiye. Ka aynsima murok heme ka iki un.
Everytime the month of July arrives, [there is] lots of lightning. Lots of rain [which threatens] but it does not give up its water.
Kuri ada makere un made. Now [begins the time] that all the water dries up.
Ka avayvu. [or: ka aravusima] It does not help [flood the grasslands], [or, “it gets very dry.”] That is how the Wayam [rains are].

The long dry season is characterised by a dark sky at dawn, when the World’s River (Milky Way) is not lying in the eastern horizon at dawn, until the rising of Kayeb once again in late December. In that time, Wayam plods across the southern axis of the sky at around the 60° celestial marker, along which Southern Cross (Crux) will reappear in late October.

Uwakti: [Kuwewanek] wages ayteke.46
Pis hiyak mmahni wayam tivikiwe? Han manuke eg.
Do you know how the wayam leaves?
She crosses this way. [Uwakti points west]
Eg keh digidgiye
She makes thunder. She makes lightning. She makes all kinds of these. She crosses. She leaves.
Eg pes. Eg wages. Kuwis eg ahegbet ayteke. Eg ta imamna digiswaki. Eg kahayak kuwis.
She comes out. She turns around. She is already on the other side. She chants [to call forth] the flooding. She is visible again.
Eg keh novena digiswavye
Digis kabay. Eg araw. Nikwene eg kahayak.
She makes that flooding. [the last rains before dry season begins]
It floods well. [or rains well] She dries up. Then [Wayam] is visible.

Kiyawwiye Uwakti’s account here moves to mention yet another constellation, the Macaw, associated with Kayeb, which suggests that many more constellations play a minor role in these kinds of accounts. This would be consonant with the range of constellations noted by Jara (2005), Magaña (2005) and S. Hugh-Jones
Kiyavwiye Balaweh’s account focuses on the word for “Wayam” in the elder’s language of respect, or kiyavunka. Speaking of “Tuwatye” in the following account recorded in Kumenê in 2003, he was teaching a group of women and men the song of Tuwatye, with his characteristic reverent humour. Note that the reference to the constellation is understood as implicit by his audience, who are clearly unfamiliar with the song and the dance.

Balaweh: Ive kuri! Nah pak pahatuwa avat.47 Amadga inin. Gidahan tah minikwak! Neg tuwatye!

Ba pis hiyak ku tuwatye yis made ay? Pis hiyak ig tuwatye?

Balaweh: Observe now! I will sing a song!

On this. [About this]. [Our ancestor’s song] from long ago!

That one, Tuwatye! [the gentle, humble land tortoise]

Do all of you know who Tuwatye is?

Do you know him, Tuwatye?

All those [women] know Tuwatye. [pointing towards women]

All of you, do you know who is Tuwatye? [Questions women again]

What? Go ahead and speak. [laughter] You should say, Wayam [the land tortoise]. [gives answer away]

What is Tuwatye?!

One man speaks, “Wayam?”

Balaweh: Ihi.

She, Tuwatyo, she lives in the deep forest. [He switches to the feminine form.]

Yes. There are two of them. The taperebá [fruit] and the tucumã [palm fruit]

She lives [crawling on the forest floor?].

What is her food? Later, she will circle around.

Yes. There are two of them. The taperebé [fruit] and the tucumã [palm fruit]

Later, they will come around.

She is called, Tuwatyo.

She is gentle. [humble].
Kuri neg ukebyi ayepekpere gavan ku samah eg wageswe.

Now he, our relative [David], has requested the song [that is sung] when she circles around.

Pis timanni? Ba hene?

You have heard it? Is that true? [points to men]

Pis? Ya pis? Yuma pahatnema? Pis tima? Yuma kiyavunogben tima?

You? And you? Not one of you?! Have you heard it? Have none of you women heard it?

Kuri uyay pak payak. Wowhni payak.

Now, let us sing all together. [Singing] our words at the same time.


Wayama kaptenayh. Wayama kaptenayh.

I, Wayam, am the Captain. I, Wayam, am the Captain.

Kah ih pah ayhwo. Kah ih pah ayhwo. […]


Mmah hiya? Ba hiyak ku samah? Henewa in!

Do you see? Do you [now] know how it goes? That is it!

Egu [awna]: -Nahwane kapten nah!

She [said], “I, myself, am captain!”

-Nah ahavrikutyene nah usakwa

“I am the forest dweller [where] I remain.”

Amekenemni nor mmahba giw nor [Alifonsmin]. Ig pak inere.

Our ancestor … what is his name? That [Alifonsmin?]. He sang that [song].

…

Ignes pakne inakni avat.

They sang that song.

Minikwak igkis pakni inakni avat.

Long ago, they sang that song.

Ine tinwo awaku amawka wixwiy

That is why we are silent

… kadni ka biyuk.

[contemplative?] because we should

… our sorrow has not been forgotten.

Kiyavwiye Balawehe’s lesson, given with some sadness, and the great sorrow he expresses at the loss of the dances and the presence of the stars and the elders’ language of respect, are an appropriate moment with which to end this curation of extracts from the cycle of constellation stories. Kiyavunka, the language of respect of the elders, and kiyaptunka, the ceremonial language of the shamans, are barely spoken now in Arukwa. For elders like Kiyavwiye Balawehe and Kiyavwiye Ishawet, the time in which they were spoken was a time of beautiful words when the interrelations of people, landforms, waves, stars,
animals and spirit creatures were brought into being. Such a language and a way of speaking that approaches what Bruno Latour describes in his essay that addresses the dualism of knowledge and belief: a language not of information, but a language of transformation: the language of relationships (Latour 2010). Such an approach offers a path toward thinking about the anthropological translations that make up the field of ethnoastronomy.


The accounts given here work with four major referents that make up a set of interrelated and moving celestial markers:
1. The circle of the horizon;
2. The arc of the sun from east through zenith to west to nadir, through the upper and underworlds, together with a clear understanding of the shifting angle of that arc;
3. The circular course of the World’s River around the earth; and
4. The sequential arrival of the rain star constellations.

Knowing these four, and their interrelatedness, one can predict star positions and rainy seasons fairly accurately. It also begins to explain why the June and December solstices are so significant: it is on these dates that the plane of the ecliptic crosses the galactic plane, giving the appearance of having crossed over. However, that these narratives and their principles can be translated into equivalents in the language of astronomy does not mean that such a translation offers an adequate account of the particular “nature” in this material.

In the following conversation, recorded at night in July 2008, Kiyavwiye Uwet explains to David how the World’s River turns in the course of the year. Notice particularly the way in which he uses the word wages (pronounced wuh-GESS), which means to turn, swirl, or circle. The word wages can also mean to change one’s bodily form, as in when a shaman’s body transforms into a different creature such as a jaguar.

Uwet: Nor warik.              Uwet: That river.
Igkis Kiyavwiyegben kanum nor      They, the elders, called that world river,
warik hawkri gidahan giwakun.  “the world’s edge” [or: limits; borders;
Hawkri awakun. Nor warik.      channel. Could mean “the contained,
                               passageway of water.”] The world’s
Nor warik waxreyene nor Kayeb.  border [or edge or limits]. That river.
                               That river conveys Kayeb.
At first, the river is over on this side. Later, it circles around. It circles [moves] around!

Until it takes hold of Kayeb. It holds on to Kayeb then. Kayeb goes, together, with it. Then it also holds on to more again. Tavara again.

Tavara [the Kingfisher] is in the river. Because that river … they call that river a ‘river’. That is why Kayeb is right in the middle [of the river] because he is an anaconda!

He remains right in the middle of that river. He, Tavara, also is right in the middle of the same river. So that he can catch ikar fish, which is his food that he has [eats]. Our ancestors called that … not the Edge [or seam] of the World [as Emiliano called it]. They call it a river. She is a river.

But that river is not here, in this world. That river, Uhokri [God] made that river. Way up above. It belongs to those who … it belongs to Kayeb.

It belongs to Tavara. It belongs to Uwakti. It belongs to Kusuvwi the Older Brother. It belongs to Kusuvwi the Younger Brother.

She [the World’s River] conveys Kayeb, this way. When she conveys Kayeb, this way, now then … Then she conveys Tavara. Tavara follows along closely behind.

Now when Tavara is right in the middle
kuwisa. Uwakti inute ayteke.
Eg waxre Uwakti.
Lawe Uwakti wade amadga inin igta Kusuvwi kahayak.
Lawe Kusuvwi kahayak ayteke kuwisa kuri made hiyeg hiyakri.
Kuri Kusuvwi inutad kuwis.

Hiyeg awna: -Kuwis Kusuvwi inutad. Warik kuwis waxrevye. Iwevri ta inere [Kusuvwi isamwitye inutak?]
-Mmah hene?
-Ya. Ig ay aviku nor warik.
Ineki keh igkis ka ikise nor warik.
Ineki keh Kayeb aviku nor warik.
Tavara akigbimne warik.
Avikuwata warik.
Kusuvwi avikuwata warik.
Avikuw pahatenwa warik igkis mpiya!
Lawe igkis ugeswakis igkis ugeswekis aviku pahatrawa warik.
Kayeb ugeswe. Ig ugeswe han.

Ig pituke. Ig waykse muwok.
Kuri Tavara bute. Gihavu.
Lawe ig ugeswa han. Nor warik ugeswe gikak han.

Eg tivik akigbimne.

Lawe ig pituke ig waykse muwok.
Kusuvwi mpiya avikuwata ig mpiya.
Kusuvwi egutye mpiya ouvrewata avikwata.
of this, already. Uwakti comes up, over on that side.
She conveys Uwakti.
When Uwakti is right in the middle of this, then Kusuvwi is visible.
When Kusuvwi is visible, on that side, already, then all the people know it.
Now, Kusuvwi is high up above, already.
The people say, “Kusuvwi is high up above! The river has already brought him. Bringing him to that [Kusuvwi the Younger brother who rises up?]”
“Is that so?”
“Yes. He is here, in the river.”
That is why they do not leave the river.
That is why Kayeb is in the river.
Tavara is on the edge of the river. Right in the river.
Kusuvwi is right in the river.
In [the same] one river, they pass by!

When they circle around, they circle around in the one river.
Kayeb circles around. He circles, this way.
He sets. He causes rain to fall.
Then Tavara is behind. With him.
When he has circled around, this way.
The river circles around with him, this way.
It goes along [with him on] the edge [or bank] of it.
When he sets he causes rain to fall.
That is why they call it, “That river is Tavara’s channel Kayeb’s channel. Kusuvwi’s channel.
Kusuvwi passes by in the same [river], he passes by.
Kusuvwi The Older Brother passes through the same [river].
Kusuvwi isamwitye mpiya ouvrewata avikwata.
Juk Wayam butitiye uhawkanek Wayam mpiya ouvrewata avikwata.
Egu pahatenwa warik gidahankis.
Gidahankis peheten ahin gidahankis.
Ineki keh nor Kayeb giwak … Takehpene usakwa wade gavikuw nor warik.
Kayeb usakwa aywata gavikuw.
Tavara usakwa aywata gavikuw.
Awaku pahatuwa giwakunkis.
Igkis mpiya.
Ku ini warik yumate. Tavara kote inut
Kayeb kote inute.
-Ba yis kote kahayak? Warik ayhte!
-Èg kote kahayakte.
Ku aysaw eg ugestaw. Eg iwevun nikwe.
Kuri inute. Kayeb inute avikuhipi.
Tavara inute avikuhipi. Uwakti
inute avikuhipi.
Kusuvwi inute avikuhipi.
Isamwitye inute avikuhipi.
Awaku pahatuwa warik gidahankis!
Pahatuwa warik!
Ke usuhbe warikmo. Usuh kadahan pahatuwa warik ada usuh ta uyapkunka avikuw pahatuwa warik.

Kusuvwi The Younger Brother passes through the same [river].
Until Wayam, the last [rainy] season, Wayam passes through the same [river].
She is the one and only river that they travel on.
It is one path that belongs to them.
That is why Kayeb’s hand … the Poling Stars remain right in the middle of the river.
Kayeb remains, right here, in [the river].
Tavara remains, right here, in [the river].
Because there is one channel [for them].
They pass by.
If this river is not here. Tavara will not yet be up.
Kayeb will not yet be up.
“Do you not see it yet? The river over there!”
“She is not yet visible.”
When she circles around, she will bring them then.
Now rising up. Kayeb rises up moving along the middle of it.
Tavara rises up moving along the middle of it. Uwakti rises up moving along the middle of it.
Kusuvwi rises moving along the middle of it. The Younger Brother rises moving along the middle of it.
Because there is only one river for them!
One river!
Like us, when we are by [our] river. We have one river for us to go to Oiapoque, through one river.
Embe henewa gidahankis ay kuri. So it is, with theirs, here now. 
Xak gidahankis pase danuh For each one of them, because when 
hawkanavrikis neku. Igkis waykse their seasons arrive, they cause rain to 
muwok. fall. 
Kayeb waykse muwok lawe ig Kayeb causes rain to fall, when he is 
pitukwene. setting. 
[Then] Tavara’s season. When Tavara 
Danuh gihawkan neku. Ayhte arrives. 
waykwit neku ig waykse muwok. His season arrives. Way below, he 
Ka ayhsima muwok ig wayksene. causes rain to fall. So much rain, he 
Ig pituke. Ig pituke aka muwok. causes to fall. 
He sets. He sets with rain. 

In the nature that is made and made known by the sciences, the World’s River appears so irregular because the Milky Way (or World’s River) lies at 60° to the plane of the ecliptic, which is the movement of the earth around the sun. In this model, conceptualising the movement of the Milky Way is not easy given its apparently irregular curves in the course of each year. By contrast, Amerindian cosmologies draw instead on familiar kinds of movement to offer an aide memoire. The idea of a “celestial river” is widely known in regional ethnography, and is well accounted for in the celestial river diagram drawn by a Barasana shaman in dialogue with Stephen Hugh-Jones (S. Hugh-Jones 1982:187). That image depicts the “Star Path” or “Anaconda Path” as having two major twists in it, much as one would see the Milky Way twisting from one side of the sky to the other in the course of the year. Certainly, remembering its movements is quite similar to committing to memory the twists and turns of a river or a shoreline.

Like Barasana astronomy, the major constellations in the Palikur accounts offered here are along the river in the sky. Further similarities with Kiyavwiye Uwet’s explanations and Barasana models and ideas are apparent in the work of Christine Hugh-Jones, particularly with the emphasis on an Earth River and its anacondas (C. Hugh-Jones 1979:238). Although social life along the Rio Urucauá has little resemblance to longhouses, her comparison of movable axes such as bodies, anacondas, and wombs with referents fixed in everyday life (respectively, house, longhouse, and universe) is valuable because it demonstrates a means of analysis – the tools with which to think, as it were – that are not the static axes and forms of Archimedean and Platonic solids, but geometries that are applicable to movement. Pathways, flows, tracks, arcs, writhing, swimming, whirling, falling and coursing provide the three-dimensional dynamic conceptual forms that explain this Amerindian night sky. Such forms of dynamic abstraction are very
different to the kinds of plane-based Cartesian geometries that are more familiar in Euro-American disciplines.

In making the Palikur star stories comprehensible to the information society, the risk is that one focuses solely on the information that they contain – and in so doing, the risk is a reduction of a very different cosmos to the kind of nature known in the discipline of astronomy. Taking a lead, again, from Eduardo Viveiros de Castro, the question has to be *what of the untranslatables?*

At risk of taking too great a leap with the material, it seems that Kiyavwiye Balaweh’s great sorrow in speaking of matters of the sky in the old language of kiyavunka, too, attends to the untranslatables. He was not alone: not a few of the elders spoke with sorrow, and some with tears, of the loss of matters astronomical in the everyday. One of these was Kiyavwiye Ishawet, who with his wife Kiyavunoh Pupta had wept in singing some of the songs for us in 2003. In a recording made at the foot of Karumna Mountain in Arukwa in 2001, Kiyavwiye Ishawet had broken into what could only be described as an exultant joy as he explained the structure of the cosmos with the levels of the sky, earth and underworld. Significantly, like Kiyavwiye Balaweh, he linked speaking of matters cosmological with the old languages, kiyaptunka and kiyavunka, and lamented the ways in which contemporary everyday speech has lost its attentiveness to relationalities and respectfulness between people, spirit creatures, animals, and landforms.


Wayhpíyene hiyeg ayhte waykwi.

Udahanwiy amadga inin. Maywak
inin.
Kuri ariwntak inin maywak …
inurik.
Ariwntak inurik … nor … inukri.

Kuri ariwntak inukri … mayrap.
Amaksevwiy.

Ishawet: Long ago. The first [peoples]had their own [word for this earth]. I do not know what it was. But for the later people now, it has come to be called Maywak.

There is Maywak [earth]. There is Wayhpi [the underworld]. Way underneath. The Wayhpíyene people [live] under the ground.

Our [place] is on this [earth]. This Maywak.

Now above Maywak [earth] is …
Inurik. [first sky layer/ heaven]
Above Inurik is … Inukri. [second sky layer; heaven]

Now above Inukri is … Mayrap.
[That is the] end [limit] of the [sky / heaven].
Awaku kiyawwiye keh inin madikte udahan. Hiyeg.
Gikamkayhuwiyi. Ka ayhsima hiyeg.
Mpuse inere iwedrigit.

Because Sir [respected one] made all of this for us. People.
His children. There are lots of people.

There are many different places [levels of existence].
If it were not so, we would all stay on one [flat level].
Only on one level, then there would be no end [to the number] of his [children].
A [huge] amount of people.
That is why he made three En skies.
Way up above.
[And] four [levels if you include] underneath this [earth]. Underneath the ground. Wayhpiye [the underworld].

Ba ayesri hiyeg.
Ineki ig[kis?] keh mpanabu en ayhte inut

Long ago He [God] was here [in Maywak, this earth level].
That is why our ancestors spoke Kiyaptunka.
[the ceremonial language of respect]
They spoke Kiyavunka.
[the old and commonly-used language of respect]
They spoke all kinds of things.
They spoke with spirits.
They spoke with animals.
They spoke with everything.
They spoke with wasps.
Do you know what wasps are?
The wasps here. There is Parinut.
There is Asuyagi.
There is Kasuwavutne [stripped wasp]
They spoke with them.
Because [God] gave to the people words [communication].
Oh! Spirits! Snakes! They spoke with them.

Minikwak ig aynewa ig.
Ineki keh ku amekenegben awna kiyaptunka.
Igkis awna kiyavunka.

Igkis awna arakembet
Igkis kinetihwa akak wavitye.
Igkis kinetihwa aka puwikne.
Igkis kinetihwa aka made.
Igkis kinetihwa aka motye.
Ba pis hiyak ku pariye motye?
Motye ay. Kadahan parinut.
Kadahan nor asuyagi.
Kadahan kasuwavutne.
Igkis kinetihwa gikak.
Awaku kiyawwiye iki ta gitkis inetit.
Ee! Wavitye! Kaybune igkis kinetihwa gikak.
Datka. Iyakri. Igkis kinetihwa gikak.
Igkis tima giwn.
Kawokwine igkis kinetihwa gikak.
Yuma arikna hiyak asamanakis Awaku igkis kiyavwiyegben awna kiyaptunka.

... In kiyaptunka inyerwa uhokri giwn.

Nah batek aka inin kiyavunka yuwait.
Kiyavwiye Leon hawata awna aynes.
Inme minikwak avanenekwa aka kiyaptunka igkis kinetihwanene.
Ka aynsima kiytanikiy. Ka aynsima kiytan bakimnay.
Ada bakimnay tinogben.
Himanovyo. Kiyavunogben.
Takwavye. Bakimnay nopsanyovwiynin.
Ka aynsima kiyavunka yuwit igkis awna.
Inme usuh butye kuri ka humaw hene.

... Inme kiyavunka barewye in.
Kibeyne gihiyakemni.

Igkis kanum ariknebdi madikte [kewhekwiye?] 

... In kiyaptunka. In barewye.

Anacondas! Iyakri snake! They spoke with them.
They understood their language.
Jaguars! They spoke with them.
No creature knew more than they did.
Because our ancestors [the respected old ones] spoke kiyaptunka.

... This kiyaptunka is truly God’s language.
This is how it is, sir. This is what I say. What I am saying to you.
I love the Kiyavunka words.

Look at us. [Including] Senhor Eduar. What is it, sir? We only speak a little Kiyaptunka.
Senhor Leon also spoke a little.

No one else. Two. [Maybe] three. No more.
But long ago, they always spoke with Kiyaptunka.
There was lots of respect. Lots of respect for [of?] children.
For girl children. Young girls.
Women.
Young boys. Little children.

They spoke lots of Kiyavunka words.
But we who have come later, have not been raised in this manner.

... Kiyavunka is beautiful.
It is a good way of being. [good thinking/ wise/ pure]
They named all things clearly. [purely]

... This is kiyaptunka. It is beautiful. Sir.
Kiyavuno. Kiyavwiye.
Kiyavwiye.
Wis ta ba avitmin nor … Dano. “We are going to the top of …
Dano”[the Kiyavunka word for Karumna Mountain, meaning female
strength or hardness; rock]

Ke ba wis danuhpen. If we can arrive there
Aysaw akebyi wis wagah? How [many days before] we climb?
Nuwewkan ba takuwanek wis boh I think maybe tomorrow we will go
usuh aterenek. Iwasgi. there. And see it.
Kiyavwiyegegen giwn. This is our ancestor’s language.

Usuhme kuri: karumna! Now we say, “Karumna!”
Uyay atak karumnad! “Let us go to Karumna!”
Oo! Bakimni yuwit. Oh! Those are children’s words.
Bakimni guw gudahan. That is [what] the children call her.
Kiyavwiye, ka aynsima Senhor, there is so much of [our
kiyavwiyegegen giwn. ancestor’s] language.
Nah ka ba makisuwn I will not finish [with telling about]
kiyavwiyegegen giwn. [our ancestor’s] language.

In this conversation, Kiyavwiye Ishawet sets out the elders’ version of the
three skies (Mayrap, Inurik and Inukri), this world (Maywak) and the underworld
(Waynpiye). The elders’ language of respect (kiyaptunka and kiyavunka), he tells
us, was a language of respectful relationship. No one knew more than the elders
did, in their capacity to speak to animals ranging from wasps to jaguars, and
landforms like Karumna were among the creatures (or actors) whose relationships
made the world. His account of that time as a time when the creator had walked
the world converges with his account of a theology in which Jesus, like a shaman,
had gone up to the star level. It remains a text that pushes the limits of
translatability and refuses a simplistic division of tradition and modernity;
knowledge or belief. In this account, as in Kiyavwiye Balaweh’s, to know the
cosmos is to be transformed, as much as it is to be informed. And it is in this
sense that it would be a betrayal to the translated tongue to reduce these accounts
of the stars to points of information.

***

The material presented here demonstrates the presence of a complex astronomical
knowledge in everyday practices and narratives along the Rio Urucauá. The texts
have extensive resonance across lowland and highland South America, and affirm
an argument for a relatively recent history of vast and extensive networks, rather
than isolated indigenous settlements. That local astronomical stories are frequent references in everyday talk yet the longer versions were so hard to record, points to the complex navigations people make in regard to the ontologies and rationalities that govern citizenship of the wider networks in which they participate, including the Brazilian federal state, French Guiana, and church-based networks that were so dominant in Arukwa at the turn of the millenium when this research commenced.

The unease with astronomy that we encountered in 2000-2003 has diminished over the years. The reasons for this are, no doubt, multiple: conversations became easier as our insight into the cosmological stories developed; the opening of the Museu Kuahí, the indigenous-run community museum in the town of Oiapoque and the national exhibition on cosmology in the region served to expand the space for Amerindian ways of seeing the world (Vidal 2007, 2008); and the evangelical millenialism that accompanied the millenium in Arukwa as documented by Artionka Capiberibe (2007) has diminished somewhat, allowing a little more space for the stars. In the astronomical stories accumulated here, there is a frequent narrative element in which a person who goes on a journey through the annual cycle of stars comes back as a healer, because he or she has established a relationship with the master spirits of particular rains, and has insight into the relationalities of stars, rains, winds, plants and fish. Moving respectfully with them, negotiating a passage back, the shaman forms a relationship with the stars who themselves are healers, and who through the journey acquires the capacity to heal. The qualities the shaman acquires in these travels are not those of controlling the rains, but of participating in a web of relationalities through shared journeys with the master spirits of stars. The rains, in these stories, are a gift, from one traveller to another, based on a shared journey through the seasons.

Astronomical stories collected along the Rio Urucauá, far from standing either as monuments of an idealised past or as an ethnological equivalent of the discipline of astronomy, are rich resources for understanding an Amerindian philosophy of life and movement, and for a critique of the calculus of control that predominates in the discourses of modernity, science, development, and citizenships of almost – almost – every kind.

REFERENCES CITED

Arnold, H.J.P., Paul Doherty and Patrick Moore
 greentext

Aveni, Anthony and Gary Urton (editors)

Blaser, Mario
2010 *Storytelling and globalization from the Chaco and Beyond.* Durham: Duke University Press.

Browman, David and Ronald Schwarz (editors)

Chamberlain, Von Del, John B. Carlson and M. Jane Young (editors)

De Civrieux, Marc

De la Cadena, Marisol

Descola, Philippe

Dumont, Jean-Paul

Escobar, Arturo

Fabian, Stephen Michael

Fausto, Carlos and Michael Heckenberger

Green, Lesley


Green, Lesley and David Green


Green, Harold and Diana Green (editors)


Hugh-Jones, Christine


Hugh-Jones, Stephen


Iôiõ, Marcelo and Mateus Emilio Batista

1996 *Warukma akak Muwokwekri / The stars and the Rain Times*. Harold and Diana Green, editors. Belém: SIL.

Jara, Fabiola


Latour, Bruno


2010  “Thou Shalt Not Freeze-Frame, or How Not to Misunderstand the
Science and Religion Debate.” In *On the Modern Cult of the

Levi-Strauss, Claude
1978  *The Origin of Table Manners: Introduction to a Science of

Levinson, Stephen C.
2003  *Space in Language and Cognition: Explorations in Cognitive
Diversity.* Cambridge: Cambridge University Press.

Levinson, Stephen C. and David Wilkins
2006  *Grammars of Space: Explorations in Cognitive Diversity.*
Cambridge: Cambridge University Press.

Magaña, Edmundo
in the New World.* pp. 399-426. Netherlands: CEDLA.
2005 [1996]  “Tropical Tribal Astronomy: Ethnohistorical and
Ethnographic Notes.” pp. 244-263 in *Songs from the Sky:
Indigenous astronomical and cosmological traditions of the world.*
Ed. Von Del Chamberlain, John B Carlson and M Jane Young.
Bognor Regis: Ocarina Books.

McEwan, Colin
2001  “Seats of Power: Axiality and Access to Invisible Worlds.” In
*Unknown Amazon: Culture and Nature in Ancient Brazil.* Colin
McEwan, Cristiana Barreto and Eduardo Góes Neves, editors,

Mignolo, Walter
1995  *The Darker Side of the Renaissance: Literacy, Territoriality
and Colonization.* Ann Arbor: Michigan University Press.

Nimuendajú, Curt
1926  *Die Palikur Indianer und ihre Nachbarn.* Göteborg: Elanders
Boktryckeri Aktiebolag.

Reichel-Dolmatoff, Gerardo
1971  *Amazonian Cosmos: The sexual and Religious Symbolism of the

Roe, Peter

Santos-Granero, Fernando

Stengers, Isabelle

Sullivan, Lawrence E.

Urton, Gary

Vidal, Lux
2008 “A presença do invisível na vida cotidiana e ritual dos povos indígenas do Oiapoque: o contexto de uma exposição.” *Ciência e Cultura* 60(4)45-47.

Viveiros de Castro, Eduardo
2004a “Introdução ao Método do Perspectivismo / Perspectival Anthropology and the Method of Controlled Equivocation.”