

Capítulo 11

DE LOS GUSANOS DE SEDA SILVESTRES Y OTROS ANIMALEJOS Y GUSARAPOS NOTABLES, Y DE LA MUCHA VARIEDAD DE HORMIGAS DE ESTAS ISLAS

Muchos días (aun estando por acá) tuve por cosa de cuento el que hay gusanos de seda silvestres, como había oído decir a muchos, hasta que la vista de ellos y de sus capullos, me desengañó. Y no sólo hay una especie sino dos.

Lllaman a los mayores estos naturales *cubul*,¹ y son los gusanos, sin quitar ni poner, como los de España (que hartos he visto yo en el Reino de Valencia donde se avivan y crían² con la abundancia que se sabe), de varios colores, también como allá, y del mismo tamaño y grandor, pero estos crían de suyo y avivan en el campo, sin otras diligencias que su instinto natural con que se van en busca de árboles a propósito para sustentarse, y sin que sea necesario quien los mude y remude, ni quien les guarde el sueño, ni las demás prevenciones y atenciones que allá cuestan.

Por sí solos viven, crecen e hilan sus capullos en el monte. Hélos cogido yo por mi mano, y mandado coger también de los mismos árboles donde crían y dejan sus capullos hechos y labrados. El tamaño de los capullos es el mismo, el color no tan blanco como allá, ni el casco es tan sólido y tieso; cosa silvestre al fin.

Pasando yo en cierta ocasión costeano una isla llamada *Panamao*³ (que está delante de Leyte y hace estrecho con la punta que dio el nombre, como ya dijimos, a esta isla) vi a un árbol harto grande y alto, sin hoja chica ni grande, las varas largas y desnudas, pero lleno de

Chapter 11

CONCERNING THE WILD SILKWORMS AND OTHER REMARKABLE SMALL CREATURES; WATER WORMS AND THE GREAT VARIETY OF ANTS IN THESE ISLANDS

Even though I was over here for a long time, I regarded as a fable the existence of wild silk worms, as I have heard many say, until my seeing them and their cocoons set me aright. There is not just one species but two.

These natives call the larger ones *kubol*; they are like those of Spain adding or subtracting nothing (I have seen enough of them in the Kingdom of Valencia, where they are hatched and raised in abundance, as is known). They are also of various colors, as over there and of the same size and largeness. But these develop by themselves and hatch in the field, without other aid than their natural instinct by which they go in search of trees suitable for their sustenance and without anyone needed to move them and remove them or someone to keep vigil for them or the other precautions and attentions which they require over there [i.e. in Spain].

Here, they live by their own resources; they grow and spin their cocoons in the forest. I have captured them with my own hand and have ordered them taken also from the very trees where they grow and leave their cocoons fashioned and woven. The size of the cocoons is the same; the color not as white as there, nor is the shell as solid and tough. After all, it is not a cultivated creature.

On a certain occasion, while I was passing along the coast of an island called *Panamaw*, (which faces *Leyte* and forms the straits with the point which gave the name, as we have already stated about this island), I saw a tree, very large and tall without any leaf either large or

estos capullos que estaban, como si fueran su fruta, colgados. Admiréme, porque acá nunca⁴ se hallan árboles vivos tan sin hojas, y que lo estaba indicaban algunos⁵ renuevos que iba echando. Mandé por curiosidad verlo⁶, porque los indios me dijeron lo que era. Y fue verdad que eran capullos labrados en este árbol, que con sus hojas les había dado pasto, con sus ramas, cañizos o andamios, y con sus varas los céspedes que, para que suban a hilar se les ponen, que en Valencia llaman “boches”; con que es sin duda haber dichos gusanos que labran su seda en el monte.

No son empero muchos, como expuestos a todas las inclemencias del cielo; pero, fuéranlo sin duda si se criaran y domesticaran; cosa en que por acá no han dado los españoles, quizás por el mucho tedio y cuidado que cuesta su cría; aunque la razón de no hacerlo es, a mi ver, la grande abundancia de seda que traen acá de la Gran China y a precios más moderados; que quizás fuera mayor el gasto (si acá se hiciera, y con tantos riesgos como hay en su cría) que lo es el de comprar la seda labrada en mazo que acá llaman *quiña*⁷ o beneficiada en tantos tejidos, tan varios y tan buenos como se comercian de la China y otras partes, que de no pocas se traen a la ciudad de Manila como emporio general de todas.

Aun los naturales de estas Islas no se valen ahora (como solían los Bisayas en su antigüedad) de dichos capullos, ni los beneñician, sino que los dejan perder, porque hallan ahora la seda con el comercio más barata, con menos cansancio y mejor.

Añado que dichos gusanos, como también en España, a su tiempo se convierten en aquellas palomitas, o mariposas, que son las que hacen la semilla, pareándose ellas entre sí, sin que sea necesario como allá, irlos juntado y pareando para que salga la semilla, que es como granitos de mostaza, y aun menos prolífica, y se aviva a su tiempo; que de otra manera no lo es, como allá muestra la experiencia. Y acá sin ninguna de estas diligencias los aviva la naturaleza, los conserva y aumenta, como se ve por lo dicho.

Estos gusanos son los que llaman en latín *bombices*,⁸ y “de seda” en Castilla, y sólo en lo agreste se diferencian de aquellos; pero hay

small; the branches were long and bare, but full of these suspended cocoons which seemed as though they might be the fruit. I wondered because here one never finds, live trees without leaves. That it was alive was indicated by all kinds of shoots which it was sprouting. I asked to see it more closely because the natives told me what it was. It was true that there were woven cocoons on this tree which with its leaves had given them nourishment, with its branches as frames or tiers and with its twigs the vine shoots, which in Vaelncia are called '*boches*', which are placed so that the worms can climb up to weave their cocoons. Without doubt, therefore, these worms exist which weave their silk in the forest.

All in all, they are not so numerous, for they are exposed to all the inclemencies of the heavens. But they would be, without doubt, if they were raised and domesticated. This is a matter which the Spaniards here have not taken up; perhaps because of the great duty and care which it costs to raise them. However, in my opinion, the reason for not doing so is the great abundance of silk which is brought from Great China and at very moderate prices. Perchance, the expense would be higher (if it were done here, and with such great risks as there are in their cultivation) than it is to buy the silk worked in quantity, which is here called *quina* or manufactured in so many and such varied textures and as good as those traded from China and other places, no small quantities of which are brought to the City of Manila, as a general mart for all these things.

However, the natives of these islands place no value now (as the Bisayans did in their antiquity) on those cocoons, nor do they cultivate them, but they allow them to be lost because they find today the commercial silk more inexpensive, less troublesome and better.

I shall add that these silk worms, as also in Spain, at the proper time, change themselves into little doves or butterflies. These are the ones which produce the seed, joining themselves together in pairs without the necessity, as over there, of joining them off so that the seed might be brought forth. This is like little grains of mustard, and even less prolific. When the time comes, it hatches and otherwise it would not, as experience shows over there. Here, without any of these efforts nature vivifies them, preserves them and makes them grow, as may be seen by what has been said.

These worms are those which they call in Latin *bombices* and in Castille, silkworms; they only differ from these in their wild state. But

acá, fuera de los dichos, otra especie, que son mucho más ordinarios, en más cantidad y más pequeños. Llamánlos a éstos los indios con nombre diminutivo de los mayores, aunque se diferencian de aquellos en que el capullito va siempre asido con el gusano y le sirve de casa y, como él va creciendo, le va añadiendo, quedándose dentro cuando más grande.

No pasa de tamaño del [dedo]⁹ menor, y, en llegando a su grando[r] competente, se acaba de encerrar en él el dicho gusano, y se queda colgado de alguna ramilla u otro cualquier palo. No he visto las palomillas en que se convierten, sin duda, éstos también, pero sí en algunos gusanillos encogiendo¹⁰ y como dispuesto para ésto, y otros totalmente vacíos y agujereados por arriba, que es señal que se voló ya.

He probado yo mismo, por curiosidad, a sacar la seda de estos más pequeños, por parecerme que no lo sería. Y con agua caliente (como los grandes) se ablanda y da la hebra, que es mucho menor que la de los otros y no menos fuerte, pues por averiguarlo hice yo torcer algunos cordoncillos que en su firmeza parecían de seda, como la ordinaria.

Y esto baste tocante a dichos gusanos de seda; que a unos y a otros no los quisieran ver los indios, porque se comen las hojas tiernas y cogollos de algunos árboles frutales, con que los maltratan. Y son tantos a veces que es necesario, en árboles regalados, mandarlos sacar y matar porque luego se vuelven si los dejan vivos.

Llaman a estos gusanos en su lengua los indios “viudos,” porque se están como tales, metidos en sus capullos y solos, pues en ser de gusanos no tienen generación.

Quiero acompañar con estos de la seda otro gusano que acá llaman *basul*,¹¹ que quiere decir “dolor y contrición,” porque la causa, y, por ser notables, lo aparté de los de arriba. Es su hechura de gusano como de los de seda, pero lleno de pelos muy delgados y que parece un erizo con ellos. Es de tan mala calidad que, aunque no pica o muerde, deja [*sic*] aquellos pelillos que son sutilísimos, clavados en la mano o pie, o cualquiera parte del cuerpo donde llegare[n] a tocar (tal vez sucede que en los ojos) que pudren luego, hinchándose desafortadamente aquel lugar, y no son pocos los que por esta causa se han visto a peligro, y ven cada

here there is another variety which is more common, in greater quantities and smaller. The natives call these with the diminutive name of the larger, although they differ from these in that the little cocoon always goes fastened to the worms and serve as a house. As it continues to grow, the worm continues to add to the cocoon and remains inside when fully grown.

It never gets beyond the size of the little finger and coming to its full size, the worm completely encloses itself in it, and remains suspended from some little branch or any kind of limb. I have never seen the little butterfly into which these are also doubtless changed. But I have seen in some cocoons the little grub shiveled and as though ready for this, and others completely empty and with a hole through the top, which is a sign that it has already flown away.

I myself have tried, out of curiosity, to take the silk from these smallest ones because it seemed to me that it could not be such. With hot water (like the large ones) they are softened and yield a fiber which is much smaller than that of the others and no less strong. In order to test I managed to twist together some little threads which in their strength seemed like silk of the ordinary variety.

This is sufficient with reference to these silkworms. Whether of one kind or the other, the natives do not like to see them because the young leaves and the sprouts of some fruit trees are eaten so that the fruit is spoiled. There are so many of them at times that it is necessary in the fruit trees to order them taken out and killed because they return if permitted to live.

The natives call these silk worms *widower*, in their own language, because they resemble such in their cocoons all alone, for as worms they do not propagate.

I wish to accompany this treatment of the silkworms with that of another worm which they call here *basul*; this means "grief and contrition," because it causes it. Since this is a curious matter, I separated the treatment from those above. Their size as a worm is like that of the silkworms but covered with very fine hairs; it seems like a hedgehog because of them. It is such a bad character that although it does not sting or bite, it sheds those little hairs which become very delicately fastened in the hand or foot of whatever part of the body they happen to touch (sometimes it happens that they are left in the eyes). That spot then festers, swelling up excessively. There are quite a few who for this reason have found themselves in danger; they can be seen ev-

día, de perder mano o pie o quedar ciegos, y algunos con efecto lo han alcanzado; ¡tánta como ésta es su ponzoña!

Hay entre éstos¹² que saben sacar dichos pelillos con cera y con los cabellos de la cabeza largos, pasando los tirantes por las partes lesas. Y parecen deben de tener alguna simpatía los dichos pelos con los cabellos y se juntan¹³ con ellos, y suelen salir asidos.

Yo vi un principal, de los mayores de estas islas de Bisayas, que por la causa dicha se le había podrido un pie, porque en el empeine le había pasado dicho *basul*, y fue en tanto grado que se le cayó la carne podrida, y yo vide descubiertos los huesos y nervios. Tuvo suerte, porque pocos días antes me había dicho un Macasar (que son grandes herbolarios, preguntándole yo acaso el remedio, por ser este mal acá muy ordinario), que lo era la penca de cierta hierba, cuyas hojas son tan grandes como adargas¹⁴ de España, y acá llaman *badiang*¹⁵ (y nacen en partes húmedas muchas matas y muy grandes), estando ya para pudrirse de viejas, calentadas al rescoldo y exprimiendo el zumo en dichas llagas. Hízose la prueba y dentro de ocho días tuvo el pie tan bueno como antes.

Dicen de estos gusanos los Bisayas que, si el hombre ve primero al gusano, no le daña, aunque le toque o llegue a él, y que sólo es tan ponzoñoso, como hemos dicho, cuando no se ven (como dijo allá Virgilio de los lobos¹⁶ *lupi merim vi derire priores*. Esto les ha enseñado la experiencia; la causa no es tan fácil de señalar. Filósofenla los entendidos. Digo lo que he visto; y a mi me ha sucedido algunas veces hallar o ver en los vestidos algunos de estos gusanos y echarlos con un papirote sin sentir daño alguno. Quizás fue prevención el haberlo visto, pero esa fuera para no tocarle.

Dicen de él un proverbio, y lo experimentamos que, en sintiendo algo o viendo, se erizan y ponen los pelos en ristre como prevenido, o para guardarse o para dañar; bueno para lo que (decimos acá) “andar la barba sobre el hombro”; que, quien tiene enemigos, debe andar prevenido.

Vengamos ya a otros animalillos exangues, menos dañosos, antes provechosos y hermosos. Género de escarabajo es uno que acá llaman los bisayas *diao*¹⁷ y en otras partes *laniban*.¹⁸ Su tamaño es el de medio dedo, poco más o menos, en largo y grueso; su color verde finísimo,

eryday, loosing a hand or foot or becoming blind. Some in consequence have had it happen. This is the intensity of their poison.

There are among these some who know how to draw out these little hairs with wax and with the long hairs of the head, drawing them through the open wounds. It seems that these hairs must have some affinity with the hairs of the head and they join them and they usually come out attached.

I saw one of the greatest *principales* of these Bisayan Islands who for this reason had a foot rotten. This *basul* had passed across the instep. It was infected to such a degree that the rotted flesh fell off and I saw the bones and nerves opened. He was fortunate because a few days before a man from Macasar had told me (as they are great herbalists, I asked him, perchance, what might be the remedy because this disease was very common here) that it was the frond of a certain herb whose leaves are as large as the *adargas* of Spain. Here they call it *badiang* (and it grows in humid places in very large thick groves). When it was about to rot, he made the experiment using the old leaves heated over ashes and squeezing out the juice onto these ulcers. Within eight days the foot was as good as before.

The Bisayans say about these worms that if the person sees the worm, it will not harm one, even though it touches or passes over; that it is only poisonous as we have said, when it is not seen (as Virgil said once of the wolves: *lupi merim vi derire priores*). Experience has taught them this; the reason is not so easy to point out. Let the wise individuals philosophize over it; I speak about what I have seen. On various occasions it has happened that I found one of these worms or saw it on the clothing and I knocked it off with a flick of the finger without feeling any ill-effect whatever. Perhaps it was a protection to have seen it, but this might have been due to not touching it.

A proverb says about it, and we discovered it to be true, that on feeling or seeing something [the worm] bristle and puts its hairs on end as a precaution either to protect itself or to do damage. This is appropriate to what we say here, "to walk with the chin over the shoulder" and "whoever has enemies must be prepared."

We come now to other little bloodless creatures less dangerous, but instead useful and beautiful. One which the Bisayans call *di-aw* and in other places *laniban*, is a variety of the black beetle. It is the size of half a finger, more or less, in length and thickness. Its color is

y tanto que excede en este género aun al verde de las esmeraldas y reluce más que ellas, aunque no es tan transparente; parece verde sobre oro; tiene dos alillas sólidas y otras dos debajo blandas, con que vuela, y todo el cuerpecillo lo es, que apenas tiene entrañas.

La parte inferior del vientre es como una cortecilla de la piñas de España, y su remate algo colorado, con que se hacen de los vientrecillos hermosísimas piñas y cipreses que lucen mucho.

De las alillas se hacen varias cosas, y más aún de las piernecillas, que tiene seis, agujereadas naturalmente, y de ellas se hacen muchas cosas, como puntas, labores, bandas con granos de oro o que, bordadas entre hilos de oro, que campean más que perlas ni otras piedras preciosas, son incorruptibles por ser muy sólidas y enjugarse presto la poca materia que les servía de carne cuando vivos.

La muchedumbre los envilece por acá que, a hallarse pocos, fueran de mucha estima y valor, como lo tienen en otras partes donde se llevan de acá como a México y otras más lejos aún.

Segunda especie de estos hay, aunque menores; y otra, que son mucho mayores, y los llaman a estos grandes los indios los padres de los dichos *diaos*,¹⁹ no porque lo sean, que son especie distintos, y el verde no es tan fino ni reluciente, sino por ser la ala de uno de los grandes tan grande como cada uno de los dichos. Estos son menos en cantidad y aun en calidad. Es el verde de los menores de otra especie porque, aunque más²⁰ fino y siempre terso y resplandeciente, es verde mero y no parece como el otro, puesto sobre oro. Estos, aunque hay no pocos, se estiman menos acá, porque al lado de los otros parecen como un pedazo de vidrio, o cristal, junto a un diamante.

De los negros, que hay mucha variedad y cantidad, no hay alguno que merezca especial mención sino el grande, de que²¹ dijimos arriba que llaman *bagan*, y parece hecho de azabache, y aún más lustroso que él, por parecer negro sobre oro, y así no repito.

Muchos [otros]²² hay de este género, de varios colores, como colorados, amarillos, azules y entreverados con vetas, todos muy hermosos y vistosos, que motivan a alabanzas a su Criador; pero, por

the most delicate green, so much so that it excels in this regard even the green of emeralds and shines more than they, although transparent. It seems to be green over gold. It has two little hard wings, and two soft other ones beneath to fly with. The whole of its body is soft and scarcely has entrails.

The lower part of the stomach is like a little hull of the pine nuts of Spain; its end is somewhat reddish, so that from the abdomen are made very beautiful little pine and cypress nuts which glow very much.

From the little wings are made various articles, and more even from the little legs of which it has six below. From these are made many things like scallops, needlework, ribbons with granules of gold or that are embroidered with threads of gold. These excel pearls and other precious stones. The legs are incorruptible because they are very hard and the small amount of matter, which serves them as flesh while alive, quickly disappears.

The abundance of them cheapens them here; if they were scarce, they would be greatly esteemed and valued in other places where they are sent from here as, for instance, to Mexico and other places farther away.

There is a second species of these, though smaller and another which is much larger. The natives call the larger of these the parents of the *diyaw*, not because they may be so, for they are a separate kind and the green is not so fine and lustrous, but because the wing of one of the large ones is as large as each one of the small ones. The latter are smaller in number and also in quality. The green of the smallest ones is of another variety, because, even though it is very fine and always glossy and shining, it is merely green and does not seem like the other placed over gold. Therefore, a good number of persons regard them less highly today here because alongside the other they seem like a piece of glass or crystal next to a diamond.

Among the black ones, of which there is a great variety and number, none merits special attention except the large one, which we have already said above that they call *bagang*. It seems to be like black jet and even more lustrous than this because it seems to be black over gold, and so I shall not repeat.

There are many other of this variety, of various colors such as reds, yellows, blues, and multicolored ones with stripes. All are very beautiful and delightful and inspire one to praise their Creator. Since

no tener cosa singular, no hago más lata y especial mención, pues sólo las especies son muchísimas.

Merécela, empero, particular la de las luciérnegas de esta tierra, que son de este género de gusarapillos colorados, pero que vuelan (no gusanos como los de España). Llámánla acá los indios *bucatcat*,²³ que quiere decir “resplandecer,”; y *aniniput*,²⁴ por el lucir que uno y otro hacen. Es muy de ver los árboles (ya hicimos arriba mención de ellos) en que se recogen de noche y les sirven de pasto, que parecen un agregado de infinitas estrellitas. Quitada la cabeza, que no reluce, todo lo demás es como una lucecilla pequeña, y es tanta su luz que, pasando una de estas por los renglones de una carta, se puede leer con sola ella de noche.

Hubo un Padre, de los nuestros por acá, que tenía cantidad de ellas en una redomita²⁵ de vidrio sobre la mesa, y sin otra luz podía leer y escribir. Hélo probado²⁶ yo también, y, si supiéramos cómo sustentarlas allí dentro (que se mueren en breve), fuera traza muy imitable y provechosa.

Con esto paso a tratar de la cantidad, variedad y tamaño²⁷ de las hormigas de esta tierra, que son (si en alguna parte muchas) acá repiten para infinitas, pues campos, montes, árboles, plantas, casas y aun pantanos y arroyos o esteros donde entra y sale la mar, están llenos de ellas, y hacen unos montones o médanos de tierra donde labran sus casas, que algunas parecen bóbedas grandes, pues imitan su hechura, porque toda la tierra que van sacando (dejando hueco lo que les sirve de casa, pues, según se van aumentando, engrandecen) la juntan y pegan arriba, de modo que queda muy dura y parecen hechas a mano.

Hállanse dentro de estos hormigueros (que llaman *bondo*²⁸ estos naturales) espaciosos senos y unas como calles, que dudo haya laberinto más intrincado. Es cosa muy de ver (y hélo visto yo hartas veces cuando se ha ofrecido deshacer dichos montones) la distinción y dependencia con que están hechas sus divisiones, [a modo de un panal grande de cera, pero mayores las casillas y que se comunican unas con otras, y, según son de mayores o menores, así lo son sus divisiones,]²⁹ habiendo distinto lugar para guardar la comida, y para los excrementos aparte, y otro para los animalillos que hallan muertos, que todo lo recogen.

they do not have any outstanding characteristic, I do not take more space for special mention of them except that their species are most numerous.

The glow worms of this land, however, deserve particular attention. They are of this variety of small reddish worms, but they fly (they are not worms like those in Spain). The natives here call them *bukatkak*, which means 'to shine' and *aniniput*, because of the light that the two of them give off. It is a joy to see the trees (mention was made before) on which they stay during the night and help them as food. They seem to be a constellation of stars. Exception taken of the head, that is not translucent, the rest is like a small little light. So powerful is its light that on passing one of these over the lines of a letter, one can read by this means alone at night.

There was one of our Fathers here who had a quantity of them in a little glass flask on the table, and without any other light he was able to read and write. I have tried it out also, and if we knew how to sustain them there inside the flask (for they die in a short time) it would be very imitable and useful contrivance.

With this, I pass on to treat of the quantity variety and size of ants of this land which (if they are plentiful anywhere) here multiply in infinite numbers. The fields, forests, trees, plants, houses and even pools of stagnant water and *esteros*, where the sea enters and leaves, are full of them. They build heaps or mounds of earth where they construct their dwellings. Some of these appear to be large subterranean vaults, for they resemble their appearance, because all the soil which they bring out (leaving empty what serves them as a house, which continues to grow in size as they increase in numbers) they gather together and stick on above so that it becomes very hard and seems as if made by hand.

Within these ant hills (which these natives call *bondo*) there are spacious cavities and something like paths. I doubt that there maybe a more intricate labyrinth. It is a remarkable thing to see (I have seen it often enough when the opportunity offered to take one of these mounds apart) the distinction and dependence which its divisions are made like a large honeycomb of wax, but the little dwellings are larger and connected with one another. According to whether they are larger or smaller so are their divisions, having a distinct place for keeping the food and a separate one for excrement, and another for the little animals which they find dead, which all of them collect.

Suele haber en el centro de estas sus casas una hormiga tan grande como el dedo mayor o como el pulgar. De ésta dicen estos indios que es el rey, y nunca se sabe que salga de allí ni se ha visto fuera. Algunos son de color blanco totalmente, de estos que llaman reyes, aunque sean de casta negras las hormigas; otros algo colorados, que de ambos colores los he visto yo, y el hormigón dicho como un gusano de seda en lo grueso y largo, aunque su figura de hormiga.

Ya he dicho que son casi infinitas las diferencias, y solas las de una semejan a las de España que acá llaman *acot*,³⁰ que quiere decir “acarrear”; que, aunque todas lo hacen, estas exceden a las demás.

Las mayores, que son tan grandes como avispas, se llaman *amimitas*,³¹ según su nombre (que quiere decir “desasirse”) es su propiedad, porque muerden tan tenazmente que primero dejan la cabeza desasida y pegada en lo que mordieron que suelten la presa. Y así sirven de tomar punto en las heridas en partes difíciles de tomarlos con aguja, como en la barriga, telas de la cabeza y otras, porque, aplicando dos o tres o más de estas hormigas, según lo largo de la herida, con ellas (que dejan allí la cabeza) solamente quedan tan zurcidas como si fuera con hilo, y a menor peligro y aun riesgo, porque son medicinales, y hay en algunas casas (aun en las [de]³² nuestras doctrinas) tanta abundancia que tal vez es menester mudarles de aquel puesto porque son insufribles, y más de noche (que es cuando salen de sus nidos y caminan a buscar su vida,). Y una vez cargaron tantas en un gato que en una de nuestras casa estaba amarrado, que amaneció muerto de tantas como le invistieron en una sola noche.

A otras llaman *antig*,³³ que son algo menores y no pican menos, pero se dejan desasir cuando muerden, sin dejar la cabeza como las otras. Con todo, escuecen mucho, y es refran de estos naturales, cuando una cosa escuece mucho, o duele, decir “parece que le ha mordido el *antig*”.

Otras chiquillas hay, muy coloradas, que por su color, y por morder mucho, las han puesto los indios nombre de *holandesas*.³⁴ Y aunque pequeñas, dejan una muy grande roncha, diez veces mayores que ellas, cuando muerden. Y con esto, por no alargar (que fuera nunca acabar decir todas sus diferencias), sólo añadiré dos por lo raro.

They have in the center of these their houses an ant as long as the thumb of the forefinger. About this, these natives say that it is the king; never is it known to go out from there, nor has it been seen outside. Some of these they call kings are completely white in color, although the ants may be of black cast. Others are somewhat reddish. I have seen them of both colors and this giant ant like a silkworm in girth and length, although with the appearance of an ant.

I have already stated that the varieties are almost infinite; only one of these is similar to those in Spain. Here it is called *hakot*, which means 'to carry something'. Although all of them do this, these surpass the rest.

The largest, which are as big as wasps, are called *amimitas*; according to their name (which means 'to detach') this is their characteristic, because they bite so tenaciously that first their head is left detached and fastened to what they may have bitten and thus the victim is freed. Hence, they are used to make stitches in wounds in places where it is difficult to make them with a needle: such as in the abdomen, the scalp of the head and other places, because by applying two or three of these ants, depending on the length of the wound, simply with these ants (which leave their heads there) the wounds become so well stitched as if done with thread. They are less dangerous or even risky because they are medicinal and there is such an abundance of them in some houses (even in those belonging to *doctrinas*) that on occasions it is necessary to move them from that location because the ants are insufferable. This is true especially at night, which is when they emerge from their nests and travel about, looking for their livelihood. Once so many got on a cat, which was tied up in one of our houses, that by daybreak it was dead from so many attacking him in a single night.

Others are called *hamtik*, which is somewhat smaller. They do not bite less fiercely but usually detach themselves when they bite without leaving their heads like the other variety. Yet, they cause much pain. There is a saying among these natives when a thing is painful or hurts, which says, "It seems like the *hamtik* has bitten him."

There are others small and very red ones which because of their color and because they bite fiercely, the natives have given them the name '*holandesas*'. Although they are small, they leave a large swelling ten times larger than they are when they bite. With this, in order not to prolong this discussion (to describe all their difference would result in never finishing) I shall add only two, because they are rare.

Lllaman aca *lagha*³⁵ a unas hormigas algo coloradas. Su tamaño como tres de las nuestras si se juntasen. Estas son en dos diferencias: las menores viven en árboles; y en sus huecos, o en los vacíos de las ramas, hacen sus casas. La materia es sólida y como un género de goma o resina que les servía antes (y aun hoy a algunas de las mujeres) para sahumerio, que, aunque el olor no es muy bueno, pero es bastante a templar el malo de los cuerpos. Y dicen es bueno, en especial, para sobre partos, como el alucema³⁶ en España.

La otra diferencia (y son algo mayores los individuos de ella) vive en esteros y lugares pantanosos, cuales son en que suelen salir las mareas y entrar³⁷. En estos, en lo que no llega el agua, hacen sus casas u hormigueros, de la misma calidad que los otros, y de la misma, o resina o goma, o mixto de ella.

De esta goma se hace el lacre, que de la India se lleva a [España]³⁸ de varios colores, y sirve para cerrar cartas, y en sus tintes las mezclan los chinos. Y, para decir que es color que nunca se pierde ni deslustra, dicen es de *lagha*, y las que verdaderamente llevan³⁹ dicha goma al teñir, es cierto que nunca lo pierden ni se deslustran del primer color, y primero se rasgan, en particular el color colorado, que acá⁴⁰ llaman de *lagha* los españoles y chinos, que es el mejor quizás de todo el mundo, y que más dura.

La otra especie puede ser, por lo perjudicial⁴¹, famosa; (como el otro que, para serlo, quemó el templo de Venus) Llámanlas *anay*.⁴² Son hormigas blancas. Sólo el hociquillo tiene[n] colorado, pero es más duro que acero; por lo menos así lo muestran, pues suelen en una noche comerse, o tragarse, (si así se puede decir) un estante de libros. No son pocos los que ellas han comido sin ser letradas, y las podemos por esto llamar “Elvones Librorum”⁴³. Consumen cajones de ropas, de sedas, de mantelería, de frontales y ornamentos, sin perdonar a cosa alguna, y lo dejan todo sin provecho. Peores se pueden llamar que fuego, que éste con el humo se manifiesta y se atajan [*sic*]; esas otras, en arcas encerradas, en baúles, petacas y en cualquiera parte se meten sin ser vistas, y, si duermen algunas noches⁴⁴, lo dejan aun sin cenizas, pues, sin crecer ni engordar cosa considerable, o que se puede notar, dejan una arca bien grande y atestada de ropa, aun sin pavesas.

There are some ants a bit reddish in color which are called *lagha*. Their size is about three of ours, if they were put together. They are of two different types; the smaller live in trees and make their dwellings in the hollows and cavities of the branches. The material is hard and like a kind of gum or resin which once was used (and even today by some of the women) as an incense. Even though the fragrance is not very good, yet it is sufficient to moderate the unpleasant odor of the bodies. They say that it is good especially for convalescence after birth like the *alucema* in Spain.

The other type (and other of this variety are somewhat bigger) live in marshes and pools where the seas usually flow in and out. In these, in the parts where the water does not reach, they make their houses and ant hills of the same character as the others and from the same resin or gum or a mixture of it.

From this gum is made the sealing-wax, taken from India to Spain; which is found in various colors and is used to seal letters. The Chinese mix it in their inks. In order to explain that it is a color which is never lost or fades, they say that it is *laghas*. Those inks, which really contain it as a tint, are certain never to lose their original color nor become dulled. They will rather be destroyed especially the red color which the Spaniards and Chinese call here *lagha*, which is perhaps the best in the whole world and lasts the longest.

The other species could be famous because of its destructive quality (like that fellow who in order to be famous burned the temple of Venus) They are called *anay*. They are the white ants with only the snout reddish but as hard as iron, at least that is how it seems to appear; for in one night they can eat or swallow (if one can speak thus) a shell full of books. Without being learned they have consumed quite a few books and consequently we might call them '*elvones librorum*'. They consume chests of clothes, silks, tablecloths, altar hangings and ornaments, excepting absolutely nothing. They leave everything useless. One may regard them as worse than fire since this shows itself by smoke and can be stopped. These latter are hidden in chests, in leather trunks, and they get in anywhere without being seen. If they retire some night or nights there, they leave it even without ashes. For without growing or becoming fat in any considerable way or that can be noticed, they reduce a rather large chest crammed full of clothing without even cinders.

He leído y oído que las hay en otras partes, y en algunas las llaman comejen.⁴⁵ En estas es cierto que es una de las mayores plagas⁴⁶ que se pueden hallar, pues todo lo arruinan; que no sólo en las casas de madera (que esa es su “vidilla” como dicen) sino aun en las de piedra, en las mismas murallas y torres se meten, labran sus caminos huecos, que se pueden llamar estradas encubiertas (pues son de tan comunes perjudiciales⁴⁷ enemigos) y todo lo maltratan, sin que se haya hallado remedio para ello; que lo aplicaran muchos, a quien ha costado muchos millares de pesos, perdidos en pocas horas, si en todas y continuamente no se registra[n] y reconoce[n] las cosas en que puede[n] dañar, que son todas cuantas hay, si no es el bronce, pues aun hasta el hierro gustan⁴⁸, ayudadas de la humedad de la tierra.

Sólo para una cosa o dos (entre tanto malo) he oído decir a los indios que son buenas, y es para criar pollos, que las comen lindamente, y engordan cuando encuentran con ellas o se las dan deshechas, como suelen por acá, sus casas; y para curar llagas que, sahumándolas con sus casas (que no se sabrá decirse de qué son) dicen se enjugan y curan en breve; para que se conozca, sin duda, que no hay cosa, criada, por mala que sea, a nuestro juicio, en que no pudiese algo bueno el Criador de ellas con su infinita sabiduría.

I have heard and read that these are found in other places and in some they call them white ant [wood-fretter moth]. In these regions it is certain that it is one of the greatest of plagues that can be found, because they destroy everything; not only in wooden houses (which is their little life, as they say) but even in the stone houses, they get into the walls and towers, themselves carving out their open paths, which can be called covered military roads (for they are of such common and damaging enemies). They destroy everything without there having been found a remedy for it. Many would have applied the remedy, for it has cost them many thousands of pesos lost in a few hours, if everything that they can damage is not continuously inspected and examined closely. This is everything there is, unless it is bronze, because even in the case of iron they enjoy, helped from the humidity of the land.

Only for one or two things (among so much evil) I have heard the natives say that they are helpful: for raising chickens, which eat them joyfully and fatten themselves when they find them or give them destroyed nests, as it usually happens here; or to cure ulcers, fumigating them with their nests (I do not know how to explain what they are made of). They say that the ulcers are dried up and quickly healed. By this it can be seen that without doubt there is no created thing, however bad it may be, in our judgment, in which its Creator with His infinite wisdom did not put something good.

Chapter 11

ANNOTATIONS

¹ *Cubul*. A certain spell which is made or based on a tree which is also called *cubul*; which is to say that it has such a property: *nga bisan cusutlon an dahon diri dodotlan; cublan*, that which has such a *tambal*.

Cubul: some say is *ubol*, *hulup*: to grow lazy; tr. to retard, delay, obstruct; to discourage, to lose courage, lose heart; to faint, to swoon; to refuse, to decline. Now, under the entry *ubul*, Sanchez has these items: *Ubulun*, or, *ublun*: *cubul*, *tapul*, *taca*, *talaw*, *turaw*. To yield oneself to a difficulty. Antonio Sánchez de la Rosa, Antonio Valeriano, Alcazar, *Diccionario español-bisaya para las provincias de Sámar y Leyte*, Manila, 1914, p. 95, Bisayan Part. Tramp, makes this entry under *kubol*: Samar shrub, *Wikstromia* sp. *Op. cit.*, p. 115. Obviously, the grub is named after the tree or shrub.

² *Donde se crían y avivan*, in Muñoz.

³ An Island, now known as Biliran, not far from the northeast tip of Leyte; opposite of the town of Leyte on the Carigara Bay and on the northern side of the Biliran Strait. Artigas y Cuerva affirms that in ancient times it was called *Panamaw*, *Reseña*, *op. cit.*, p. 297. Prior to World War II, there were four large settlements: Kawayan (was also known as Almeria), Naval, Biliran and Kaibiran - established as a town in 1828.

The *pueblo* of Biliran is one of the rare ones which was made an object of intensive studies by an illustrious Filipino, Sr. Enrique Abella y Casariego, who wrote an interesting monograph about this island. Artigas y Cuerva draws some of the following data from it as a source.

It measures about 37 kilometers in length and 22 kilometers in width and has a shape of an inverted heart. There is a volcano on the island and the terrain shows evidence of volcanic activity.

The name *Biliran* is derived from *Bilid*, which means corner, spine, end and the suffix *-an*, indicating participation, existence, abundance. The 'd' of *Bilid* must be changed to 'r' as *Biliran* or *Kaibiran*.

Perhaps, it is also possible that the island received its name from a plant of the same name which is still abundant. *Reseña*, *op. cit.*, pp. 251-254.

Interesting! Sanchez makes this entry under *bilír*: also *Biliran* or *bildan*. Corner or edge of a boat, vase or anything protruding, like the veins, or the furrow made by the plow. Sánchez, *op. cit.*, 46, Bisayan Part.

It would be well, to add one more final note: In the years prior, during and after 1775, there was a secular Priest, *Cura Parroco* of Biliran and Maripipi Islands, who after a misunderstanding with the Franciscans in Leyte and Samar, broke away from jurisdiction and went into 'private practice'

He was Bachiller Don Gaspar de Guevara, who proclaimed himself as the primate of all priests the world over; claimed to work miracles, sent out hallucinated subjects of his to spread out and incite towns to rebellion; imposing new laws; granted indulgences; conferred sacred orders and ordained women deaconesses. His biggest 'sales pitch' was that anyone who comes for confession to him, will be absolved until such a one dies; no need to return again and again to confession. One shot does it all!

His popularity was great and kept snowbailing. Cf. An unpublished manuscript in the *Archivo Franciscano Ibero-Americano*, in Madrid: Caj. 41, leg. 3 - fol. 24 1775 - Crítica hecha por nuestro Fr. Antonio Selles, O.F.M., a los libros encontrados de los Jesuitas en Samar, Ms. 35h. en octavo, acquired in xerox by Cantius J. Kobak, on June 29, 1974.

In a report made to the 'Visitator General' by the Franciscans in Samar, in 1775, over and over, each one makes a serious complaint against the abuses of this Don Bachiller Gaspar de Guevara and all the havoc he causes and that the Augustinians on Leyte are not doing much about the matter. Cf. Caj. 41, leg 3, 1775 fols 1-27v, at *Archivo Franciscano Ibero Americano* in Madrid. Also see: Kobak, Cantius J., "Don Gaspar de Guevara of Biliran Island, Leyte: A Legendary Figure or a Historical Personality?", *Leyte-Samar Studies*, Vol. II, No. 1 (1968), pp. 44-91.

⁴ In Muñoz, *no*.

⁵ In Muñoz, *varios*.

⁶ In Muñoz, *Por curiosidad mandé verlo*.

⁷ We have not been able to find this word in the Spanish Dictionary.

⁸ A Latin word *bombix*: silk worm. *Bombices*, plural of *bombix*.

⁹ In Muñoz, *dedo*; absent in *Copia Naval*.

¹⁰ In Muñoz, *al gusanillo al gusanillo encogido* [sic].

¹¹ This is a hairy and poisonous worm. It does not bite, but the hairs come into the flesh like sharp thorns. *Alap ca, cay habasul ca*. Sanchez, *op. cit.* Tramp provides an added dimension -*basól*: remorse; harangue; animadversion. A caterpillar with itchy hairs; inchworm; slug caterpillar. *V.* to misplace; to disjoin; to lament; to rue, atone; to regret; to expiate. *V. Pass.* to blame; to be blamed. *vt.* to repent. *Op. Cit.*, p 43.

¹² In Muñoz, *algunos*.

¹³ In Muñoz, *que se juntan*.

¹⁴ A Spanish word for an oval or heart-shaped leather shield.

¹⁵ *Badiang* in both Muñoz and *Copia Naval* Texts. According to Sanchez, its primary meaning is: a millstone. 2. A big beetle which destroys the palm trees by eating the heart of the palm, if it can go inside. *Op. cit.* *Badiang*. A plant of brood leaves and red fruit; the juice or sap of this plant cause painful itchiness in any part of the body it touches. *Cabadiangan*, place with abundance of *badiang*. Cfr. Sanchez de la Rosa, A., *op.cit.*, Bisayan Part. *Badian*, without g, a town in South-west Cebu province.

¹⁶ *Lupi merim vi derire priores*. This is our reading of the manuscript. We have not been able to translate because probably the Latin text in the manuscript is misspelled.

¹⁷ *Diao*. A big insect of very intensive green. cfr. Sanchez de la Rosa, *op. cit.*, 110, Bisayan Part. This word is a synonym of *laniban* and is further treated below.

¹⁸ *Guiyaoguiyao*. A certain little creature, like a beetle, of intensive emerald color. Sanchez, [1711], *op. cit.* Tramp makes this entry: *laniban*: green buprestid, a poisonous beetle which being eaten by cattle causes them to swell and die. The larvae bore wood and are destructive to trees; iridescence. *Op. cit.*, p. 223.

¹⁹ Same as *di-aw* or *laniban*, as above.

²⁰ In Muñoz, *muy*.

²¹ In Muñoz, *que ya*.

²² In Muñoz, *otros*.

²³ *Bucatcat*. *Luciérnaga*, lightworm. Same as *aninipot*. See below.

²⁴ *Aninipot*. Same as *bucatcat* or *luciérnaga*. E.g. *Aniniputun an Amihan cay mauran*. Sanchez, *op. cit.* *Aninipot*; a glow-worm; a worm carried by bees. Tramp, *op. cit.*, p. 15.

²⁵ In Muñoz, *redoma*.

²⁶ In Muñoz, *practicado*.

²⁷ In Muñoz, *cantidad y variedad*. *Tamaño* is lacking.

²⁸ *Bonlo*. To fall, to fall flat on the back. Cfr. Sanchez de la Rosa, *op. cit.*, 53, Bisayan Part. This meaning is from Alcina's mention of *hormigueros*, anthills. Attempt various possibilities: *bonão*, *bundo*, *bundu*; *bonlo*, *bunlo*, *bunlu*; *bunro*, *bunru*, etc. Perhaps *bundoc*, mountainous, for the little mountains or *hills* the ants build.

²⁹ The lines in brackets are missing in *Copia Naval* and are taken in here from *Copia Muñoz*.

³⁰ *Acot*. These are ants, so-called because they are always gathering food for their houses; *baga guin hahacot na*, it is said of those who are scourged, they try to avoid it and kick like those bitten by the ants. Its primary meaning is: to confront; to face; brave. Sanchez, *op. cit.* Tramp's entry, *hakót*; portage; black ants. *Op. cit.*, p. 168.

³¹ *Amimitas*. Large red ants. *Ibid.*, p. 13.

³² In Muñoz, *de*.

³³ The Muñoz text has it as *antig*; the *Copia Naval* as *anug* - neither can be found in the dictionaries. Perhaps, it should read *hamtik* as in Sanchez: Vermilion ants that bite strongly, *hinamtic aco didto sa guiho*.

³⁴ Perhaps, a reference to the Dutch strikes or attempts at the Philippines. Perhaps the text seems to suggest color of the hair of the Dutch mariners and merchants, who supported by soldiers, tried to harass the Spaniards.

³⁵ Unable to locate the meaning of the word anywhere.

³⁶ *Alucema*. Vide *alhucema*, from the Arabic *al-juzâma*. The *diccionario* gives the Spanish word *espliego*, lavender. Cfr. *Diccionario de la lengua española*, Madrid, 1984, a-guzpatarra, 67. *Espliego*, from the Latin *spiculum*, diminutive of *spica*, *espiga*, head. The plant is very aromatic and principally from the flowers a special oil is extracted, of great use in perfumes. Also seed of the plant, used as incense (Cfr. *Ibidem*, 596).

³⁷ In Muñoz, *salir y entrar mareas*.

³⁸ In Muñoz, *España*.

³⁹ In Muñoz, *llevaron*.

⁴⁰ In Muñoz, *allá*.

⁴¹ In Muñoz, *perjuicial*.

⁴² *Anay*. This word has many meanings depending where the accent is placed. In the 5th place, Sanchez describes it thus: ants that built little hills called *posgo*. They lay many eggs, given to the chicken, others are simply lost. Sanchez de la Rosa defines *anay* as a very harmful ant; some are white, others black. The white ones, becoming red with time, are the most dangerous, 17, Bisayan Part. Tramp identifies them as 'white ants or termites', *op. cit.*, p. 14.

⁴³ A Latin term: "The elfs of the books."

⁴⁴ In Muñoz, *algunas noche o noches*.

⁴⁵ In Muñoz, *comegente*. This would mean eater of people. *Comején*, or white ant or wood-fretter moth is the best translation and the sense of Alcina's text.

⁴⁶ In Muñoz, *una plaga de las mayores*.

⁴⁷ In Muñoz, *son de tales y tan perjuiciales*.

⁴⁸ In Muñoz, *gastan*.