

## THE COMEBACK OF HENEQUÉN, A GREEN FIBRE WITH A COMPLEX HISTORY IN YUCATAN\*

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### ABSTRACT

One of the foremost fibers of the Mayas of Mexico and parts of Central America was the henequén, known internationally as sisal, named after a town by that name in Yucatan, which was one of the centers of production during the colonial period. Henequén for centuries was known as the 'Green Gold' of the Yucatan Peninsula. And Yucatec economy came to be established around these plantations, set up and exploited all the way up to the 20th century, providing ropes of all sorts, floor carpets, sacks, and coarse cloth for the world. At a point in the early 20th century, this monopoly was broken, when henequén plants were sold to the British, who in turn planted and reproduced them in Madagascar and Kenya, processing the fiber at cheaper prices. Thus, the henequén industries in Yucatan broke down, the haciendas sold, the processing plants dismantled, and the field became derelict. While small scale production still continued, local Maya still used the fiber for rope, cord, traditional hammocks and the woven bag, called sabucán. However, not many more henequén products were visible. This paper explains the processing involved and looks at the work of a New York designer and craftswoman who moved to Yucatan in the 1970's and who has remained behind the scenes all these years promoting the usage of the henequén in different hand-crafted products through her small production. The henequén is currently the source for many traditional and innovating Mayan craftsmen. Craft production has spread.

**Keywords:** Henequén, Mayan Culture, Fiber Process, Contemporary Craft Tradition, Agave Handbags

### HENEQUÉN'İN DÖNÜŞÜ, BİR YEŞİL LİF İLE YUCATAN'DA KARMAŞIK BİR TARİH

#### ÖZET

Meksika Mayaları ve Orta Amerika'nın önde gelen liflerinden birisi, sisal olarak bilinen Henequendir. Sömürgecilik döneminin üretim merkezlerinden birisi olan Yucatan'ın adını alan Henequén, yüzyıllarca Yucatan Yarımadasının "Yeşil Altın"ı olarak bilindi. Yucatek ekonomisi, 20. yüzyıl boyunca ihtiyaç duyulan her türlü ip, halı, çuval ve kaba kumaşları sağlayan henequén tarlaları etrafında gelişti, yerleşti ve serpildi. 20. yüzyılda henequén lifi, daha ucuz fiyatlarla Madagaskar ve Kenya'da işleyen ve üreten İngilizlere satıldığında bu tekel kırıldı. Böylece, Yucatan'daki henequén sanayi bozuldu, işleme tesisleri söküldü ve alan metruk oldu. Bugün küçük ölçekli üretim halen devam ederken, yerel Mayalı hala halat, kordon, geleneksel hamak ve sabucán denilen dokuma çanta için bu lifi kullanmaktadır. Yine de, daha birçok henequén ürün yoktur. Bu çalışma, lifin üretim sürecini açıklar ve 1970'li yıllarda Yucatan'a taşınan Newyorklu tasarımcılarla, bu yıllar boyunca henequeni tanıtan, küçük el ürünlerinde bu lifi kullanan zanaatkar kadınların çalışmasına odaklanır. Henequén günümüzde birçok geleneksel ve yenilikçi Mayalı ustanın kaynağıdır. El sanatı üretimi yaygınlaşmıştır.

**Anahtar Sözcükler:** Henequén, Maya Kültürü, Lif Süreci, Çağdaş El Sanatı Geleneği, Agave Çantalar

If there is one plant that could stand as the symbol of the Yucatan, it would have to be the Henequen plant. In tracing its story, the history of the Yucatan will be revealed in all its diverse layers. Although the peninsula is home to many fiber plants and although they have all played important roles, the henequen is the one plant that was there in the beginning -- and still is (Vogel, 2012a). Although the name "sisal" has been applied to the various fibres produced from different agaves of Mexico, it was from the Yucatec port of Sisal (see-saul) from the 18th to the 20th Century, that "bales and crates of fibre, rope and binder twine were shipped to the rest of the world" (Evans, 2007). Thus henequen (known abroad as sisal) is the fibre extracted from the Agave fourcoydes, the most outstanding plant native to the Yucatan Peninsula. This paper explains not only the processing involved in the elaboration of henequen (internationally known as sisal). It also works through its background, context, history traditional processing and current production. I propose to reflect on the work of a New York designer and craftswoman, Luisa Vogel, who moved to Yucatan in the late 1970's and who has remained behind the scenes all these years, promoting the usage of henequen through the different and well hand-crafted artefacts which she develops in her small workshop. I claim that her continued, limited-edition designs have stimulated the varied production of henequen artefacts throughout the state among the Mayan craftswomen and men, spurring tradition to the paths of innovation. The diversity of her almost one-of-a-kind bags, purses and other utilitarian objects together with various other conjunctive factors have given henequen a renewed yet subtle prominence, to the effect that presently practically every craft store in Yucatan offers a large variety of henequen hand-made products, off-springs of her original designs; and these, wherever presented or sold, are definitely identified as being Yucatec. Above all, I intend to underscore that despite the henequen industry's boom and pitfalls, the cultural relevance of the fibre has continued in Yucatec Mayan identity through the centuries. Thus, the current proliferation of henequen handicrafts is part of that heritage.

Henequen has for millennia been a part of Mayan traditional life, integrated into Mayan thought. Because this fibre is seemingly lowly, spiny and aggressive, it was mostly overlooked by the chroniclers who came with the Conquest and subsequent

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colonization. We have no detailed records regarding its use, process and its importance in Mayan societies at the time of European contact other than the minor mentions in Fernández de Oviedo (Biblioteca Anaya, Bilbao, 1963), who recorded that hammocks were made from the strong fiber and that these could be of great use for the armies in Spain; and Fray Diego de Landa mentioned in his notable *Relación de Cosas de Yucatán* (1566) that there were “infinite things that could be made from henequen” (Diego, 1941). But while others may have mentioned the plant in similar ways, there was no colonial effort to cultivate the plant on a plantation basis until the 19th century, when according to Sterling Evans, “It came to be one of those culturally ubiquitous and useful farm and household items that performed a million functions, perhaps as duct tape does today” (Evans, 2007: 24). Henequen’s ubiquity in Yucatan, manifest in the common usages among the Maya, continues today as it did five hundred or more years ago: the fibre and twisted twine serve to make ropes, cord, nets (for fishing, hunting, carrying and tying), hanging baskets, hammocks, bags, sacks and small cloths. According to Roland Chardon, the various age-old terms for the plants and their uses indicate that among the Maya, “henequen was a garden crop for family use and that it also provided the necessary fiber for ropes and cordage in the Mayan economy” (Chardon, 1961). This is significant because in the 19th century, the Peninsula came to experience a major transformation.

The landscape of most of the Yucatec Peninsula consists of a flat lime bedrock floor with very little earth and a varied thick, low vegetation of trees and undergrowth. It was amidst this diversity that the henequen plants grew scattered throughout. During the colonial period, major fortune-making products had taken the forefront and were the concern of the Conquistadores and overlords throughout the New Spain – these being primarily precious metals, such as gold and silver (nonexistent in Yucatan) and secondly, precious dye-woods, which were all exploited harshly in all ways possible. Thus, it was logwood, from the low jungles of the Peninsula that was exploited and exported to Europe in large quantities for dyeing a deep black the cloths of courtly wear in Spain and elsewhere. Deep study of Pre-Columbian pictorial motifs depicting henequen as fibres, plants or objects, still has not been deeply undertaken. Although one outstanding stone carving- Lintel 24 from Yaxchilán, in southern Chiapas, depicts Lady X’oc, priestess and legendary co-ruler of that city state in the 8th century AC, in an act of self-sacrifice pulling an henequen rope with obsidian blades through her tongue. This painful bloodletting meant that she could be deemed worthy of her new position, for it provoked the visions needed for her husband’s rule and she besides him. This impressive stone lintel actually deploys the importance of henequen, here as a ritual rope, along with obsidian, weavings and the regalia used for ritual. The provenance of these materials and manufacturing processes were considered to be of divine origin. Thus, they hold a place in the folklore of the Maya. The legend of mythological wise man Zamná who wanted to add the plants to his herbarium pinpoints the discovery of the henequen fibre: Zamná and his servant were walking through the brush when he was stabbed by the spine at the tip of an henequen penca (large leaf). One of his servants then cut off the offending leaf and beat it continuously in punishment. This revealed the fibres inside.

A varying version of this legend tells that Zamná tripped on a rock and his servants punished the rock by whipping it with henequen leaves, until its fibres flowed forth. Zamná is said to have seen this as an omen; he then declared, “Life was born in the company of pain; that through the wound was revealed a plant of great usefulness for the people” (Evans, 2007:34). Indeed, not only the fibres but also henequen thorns came to be involved in the daily rituals of bloodletting among the Maya, mentioned by Diego de Landa in 1536. According to Evans, who extensively studied the mutual interdependence of the henequen and wheat industries, the ancient Maya rasped more fibre from local plants and discovered many uses for it. Over time they made sandals, bags and baskets, thatch for roofs, traps and bows for hunting, and nets for fishing, needles from its spines and many other household useful items. They also used henequen plants for decorative purposes. More unique uses included fashioning musical instruments from its components, fermenting its juices to make wine, and making a cloth wrap with which to bind prisoners of war (2007:13). And I may add, henequen was also employed for making the cloth for the sacred bundles, which are also depicted in the stone lintels of Yaxchilán and Bonampak. In the diverse Mesoamerican cosmologies, all things in the natural world are considered have an owner, a guardian being, to whom permission is asked for in order to make use of the plant, animal or geological or physical entity, such as a river, land, cave, determined space and its resources. Every plant that comes to have particular importance within a culture will certainly have beliefs and mythologies engulfing it. These are integrated into that culture’s cosmology. Would it then not be valid then to claim that henequen, among the Maya, is a sacred plant, in the same way that similar agaves in other parts of Mexico have been and still are considered sacred? This indeed is the reason for its perseverance on a local level, even through the industrial boom and exploitation to which it was subjected. The traditional uses continued to exist, quietly, while major industrial production surged and dominated the scene. These traditional uses continued on after henequen’s industrial demise, which shook the entire Yucatan Peninsula.

**Henequen And Mayan Daily Life:** At a given point with the inventions of the Industrial Revolution in the United States, henequen became the source material for a major industry. It was launched to the world as the best natural fibre for ropes and twine, not only for ships but as the best binding twine for the large-scale mechanical wheat harvesters known as the McCormick reaper invented in the United States and used throughout the Great Plains of the US and Canada. Yucatec economy came to be established around henequen, which came to be known as the Green Gold of Yucatan, accounting for great, accrued wealth among the landowner families, who staked fortunes on this marvellous fibre grown exclusively in the Penin-

sula. Plantations were set up that turned the Yucatec landscape into a huge monoculture for large-scale fibre exploitation for export. Although these lands came to be owned by an elite class, henequen was harvested by hand by Mayan workers, who also worked in the processing plants.

Despite industrial developments, the actual cutting of the pencas, once a plant is seven years old, has to be done one by one with a hand-slung machete. Eventually, in the 20th Century with the temporary halt in the exportation due to the Mexican Revolution and other world factors, rope-making factories (formerly only in the US and Canada) were set up within Yucatan to not only process the fibre, as had been the case earlier, but to manufacture ropes of all sorts, floor carpets, sacks, and coarse cloth for the world. Given henequen's world status and the temporary standstill in exportation at the beginning of the 20th century, henequen agaves were smuggled out of Yucatan, and sold to the British, who in turn took them to their colonies to be reproduced. Kenya, Madagascar, India were primarily allocated to grow them on a large scale, later developing and cloning their own breeds adapted to foreign soil. Thus the fibre was put on the world market at cheaper prices, which continue to reign. This, of course, eventually caused the drastic fall of the henequen industry in Yucatan. Nonetheless, in 1933, henequen was still the most outstanding feature in the Yucatec landscape where the visitor, such as Sergei Eisenstein, would be impacted by fields and fields of the henequen plants extended over all the lime rock soil of the Peninsula, to the degree that one of his chapters of *Qué Viva México!* was cast in such a setting. Then competition from abroad eventually brought the fall of the henequen industry, in the latter second half of the 20th Century, causing a major crisis in the economy of Yucatan. The fields were abandoned, the major industrial weaving factories (for henequen carpets) such as Cordemex started to close down. Processing plants were dismantled and the former henequen haciendas began to be sold. Despite widespread bankruptcy of the industry and its magnates, the Mayan use of henequen pervaded in small scale, traditional hand-crafted productions, such as hammocks, Mayan bags known as *sabukán*, rope, twine, and netting. The henequen agave is an impressive plant as are other varieties of agaves, all native to the Americas. Agave *fourcroydes* of Yucatan is a particularly large one. Thus the length of the fibres running lengthwise along the interior of these pointed strong leaves is determined by the length of the leaf itself. Some varieties produce henequen fibres of up to a meter and half long. For Mayans, its value lies in the length and whiteness of the fibre – white being a 'colour' most appreciated in the hot climate of Yucatan, where traditional dress for men and women is also markedly, a brilliant white.

Traditional Mayan daily life in villages is centred on the solar that lot of land where the house is situated and its outdoor space at the back. Very often there are several such houses in these extended family compounds. The Mayan house is traditionally a thatched oval-shaped house with a door in the centre at the front and another opposite that leads towards the back house, where usually an adjacent awning or porch is situated or a separate thatched construction that serves as the kitchen. The back-space, that could be called a patio, has trees; it can be an orchard but also the area to keep household animals such as chickens, turkeys, dogs, cats, or where larger animals such as cows, goats, donkey, horse or pigs spend the night. The interiors of homes have but a few things. The inhabitants' clothes hang from a wooden beam or in a wardrobe, and during the day, the hammocks are rolled up and coiled into loose knots and hang from their wall hooks, so that the house space is freed up. Hammocks are also used for sitting, resting, socialising and sleeping. Thus the home in these tropics is minimalist and integrated. Thirty years ago after many travels to remote craft villages in Central Mexico, Luisa Vogel, who had studied textile design at Fashion Institute of Technology, a branch of the State University of New York, moved to Merida, the capital of the state of Yucatan, where she first encountered the henequen fibre. These were moments when the henequen industry had gone bankrupt; the henequen haciendas were being sold and only but a few of the processing plants were functioning. Not many henequen products were visible and those that were, were utilitarian – bags of traditional sorts made carelessly, because the Mexican Governments craft program to support craftsmen would buy up any craft production, even though there was no market for them. These came to be stored indefinitely in government warehouses. Luisa recalls that at that time the government was pushing aniline colours because it was considered that the tourists were looking for colour in Mexican souvenirs and handicrafts. Being highly interested in native Mexican craft traditions, she began researching and visiting villages throughout. The images of henequen artefacts in the collections of the National Institute of Anthropology (INAH) and documented in the catalogue in the 1980's served as a guide. She thus began searching for the actual makers of the documented artefacts. She tells: "When we began looking for craft, I was surprised to find no visible sign of weaving, even though we were travelling the towns pinpointed as centers for crafting henequen" (Vogel, 2012b). Those sticks on the floor were the loom she was using. At the time she visited many villages from which the documented artefacts came from, yet many of them were hard to find. As she delved deeper, a complex scene was revealed.

The limited variety as well as the specialization processes on one type of artefact in certain villages was made evident; also the family form of working within the compounds, so that the entire process was achieved - each family member contributing his or her part. Interestingly, like most Maya activities, producing craft in a village is a communal activity. The chores of washing, combing, carding, selecting fibers of the same length, setting up the warps, and other chores are done by different people, usually the people all coming from the same family compound. (ibid) Thus the men cut and extract the fibre – pounding, then washing it and setting it out to dry, then combing it. From there, the best and longest fibres are selected. The transcendental

moment in understanding the full henequen process came when she discovered that the fibres were not spun for weaving on the backstrap loom.<sup>1</sup> Rather, individual fibres are lain out on the warping board, then transferred onto the loom, where one continuous, sturdy string is used to make looped heddles that sustain the warp shed. A henequen cloth made of single fibres is a rarity, usually destined for a craft competition. Most group several fibres at a time, depending on the thickness of the cloth desired; but the fibres for weaving are never spun. That is, for weaving there is no one continuous long thread for either warp or weft. This discovery had not been documented previously by ethnologists. Doña Juana Francisca invited us into the rear of her cement block, one-room house. She did her weaving on the dirt floor of a lean-to structure where she cooked over an open fire. On the ground were what appeared to be a few well-worn sticks in a pile of henequen fiber. More amazing was the realization that the warp was made of single strands of fiber rather than thread; I never heard this mentioned when I spoke with craft experts. This was a revelation, and I was definitely hooked! (idem).

Thus is the fact that Mayan henequen cloths can only measure the length of the fibres - from eighty centimetres to a meter and a half at most. This fact makes them particularly precious. The question of width was also surprisingly peculiar- for the henequen cloths, called *sacán*, are not very wide- usually not more than forty centimetres from side to side, and sometimes even less. And although this may seem rather strange or even limited, the length is based on the shape of the *sabukán* used by workers to carry their tools and food to their field. The weavers tend to work using the same criteria, routine and measurements. Their warping boards longest measurement is set for a *sabukan* cloth 40x80. It is also a known fact that backstrap weaving is determined by the comfortable weight of the fibres and loom on the woman's waist as well as by the reach of the weaver. Yet here, there is no heddle stick as in normal backstrap weaving - only the hand reaching through the fibres of the warp shed to put the weft in place. One hand puts the fibres halfway into the open shed from one side; then, the other hand enters from the other side to pull them through. When the fibre length ends there is an overlapping with the next fibre to make it almost unnoticeable on the cloth. Thicker, stronger cloths have several fibres grouped together and very fine light cloths are woven with few fibres in both warp and weft. This particular form of weaving with this so called "hard" fibre still has another distinguishing factor: the blade of the beater, known as a machete, is different from that of other Mesoamerican looms, for it is slightly curved only on one side and is completely flat on the other. It is thus adapted to beating the henequen. Luisa considers that "these subtleties make this hard fiber cloth something more than just another woven product." (ibid) She thus found out that henequen cloths are made only in certain villages. Henequen hammocks are worked only in a few sites. In other villages, the *sabukán* bag is woven. That is, a craftsman or craftswoman woman works usually in their own specialty, and does not necessarily dominate all the techniques with henequen involved in the other processes. Luisa's own workshops to maintain traditions among the Maya given in various communities have entailed teaching techniques from other villages- not to train them in other techniques and processes, but so that these help them make better what they do. That is, her intention is to enrich the craftspeople's knowledge of what they do, through an awareness of the other techniques carried out by Mayan artisans in other parts and the possibilities these render. In this way, with broader knowledge, the maker excels even more in his or her own specialty, perhaps even opening up to new creativities within it. Although in many parts of the Peninsula various crafting processes are carried out, these activities during Luisa's research seemed apparently scarce, given that the products are usually made for local use. Making henequen products has not been a *modus vivendi*, but a complement to people's lives. An artisan could not sustain himself from making henequen bags, for example, but takes them to the weekly market and offers for sale to market goers. And so, our education into the ways of hard fiber weaving started there. I had no knowledge of the Yucatec Maya language, and Clementina (her Mayan associate) had no experience with the specific Maya vocabulary related to sisal craft. We began to visit villages, observing, sometimes participating in the hand rasping, the washing and drying, and setting up warps and looms (ibid).

And when the opportunity to enter a state competition- Luisa designed three bags and formed a team so that each artisan worked her own specialty: ...one prepared and dyed the fiber, another produced the cloth and the third made the handbag. Because we had submitted a team project we did not receive the top award but our designs were included among the most outstanding designs exhibited. We received honorable mention in the competition and pictures of the bags appeared in the local newspapers. This recognition gave our project validity among the henequen artisans (ibid). Luisa first posed to herself the following challenge: not to intervene in the traditional *sabukán*-making, but to reshape the actual bag in as many ways possible- such as gathering the sides, folding the bag to give it another form it and so on. Eventually, she commenced working with the actual henequen cloths to explore diverse shapes. These have sprouted to a diverse exploration involving, colours, shapes, folding pleating and above all, sewing techniques which demand high quality finishes, such as braiding, cording and invisible seams. So that in every case, the henequen qualities are not disguised, but made evident.

These involve the lustre of the fibre, and its visibility both on the outside as within the bag. Her concern has always been that the bags and other henequen products have exemplary finishes. In response to the colour being produced, she commenced the exploration of vegetable dyes for new colour combinations, including non-symmetrical woven stripes. Using mostly bark

1. The backstrap loom has been and is used widely throughout all the Americas.

dyes endemic to the Peninsula, and diverse brown and ochres came to be her favourites. Although she and Clementina occasionally would harvest wild indigo, dying the fibres with the fresh plant is something that she considers necessary because of the nature of the Yucatec vegetation. “To the modern Maya, ‘good henequen’ is ‘white henequen.’ Therefore, when we dye henequen, we’re utilizing the dye stuffs the ancient Maya used, but not necessarily the way they used them” (Vogel, 2012c). Luisa considers that, it is important that people in contemporary world desire the henequen products. She herself hand-rolls the fibres on her thigh to make her own thread to sew up her bags and objects. Thus, the original bags, transformed sabukanes in diverse natural colours (almost plaids), were made over the years, each time searching for a new way to use the cloth and working in similar way as the Mayan women. Sometimes in one-of-a-kind editions, at times several of a kind was made varying the cloth and its striped designs.

The Maya women themselves do not repeat more than once or twice a given colour pattern. In laying each thread for the warp, they strive for innate symmetry. When weaving using more than one colour, the weavers will do warp sequences that are balanced designs which mirror image off the centre of their cloth. Luisa herself has lost count of the multiple designs she has executed, and although she may have made only one of a given design, that design of a bag is however found replicated many times in craft stores in diverse cloths, for it has been taken up and appropriated by Mayan craftswomen throughout. Currently one sees a diversity of models, some highly stylish. Although the majority are not made with the care and emphasis that Luisa puts into her bags, they are nonetheless proliferating in diverse interpretations; and some of her first designs are still currently made by the artisans. Mayan creativity too has taken traditional models of bags and integrated natural dyes to embellish them. Thus quite fashionable bags are produced as accessories, usable by urban dwellers. Additionally, many other objects from henequen fibre are now found in the craft boutiques of Yucatan, which Luisa originally explored as experiments, such as the coiled basket-boxes that she started, henequen place mats for table settings, henequen cushions, hardened meshed fibre boxes, and diverse accessories for the home. One can now also find earrings and toys. Clementina, her former associate, too has taken the craftmaking to her home village from where she produces substantial quantities of henequen products learned during her workshop years with Luisa. Luisa’s current project involves going beyond the normal size of bags – that is going beyond the size limits of traditional henequen cloth – by joining several of the cloths for making large functional bags. And curiously enough, even Saks Fifth Avenue, has ordered some samples of bags to try out. However, distinct qualities remain in the henequen – because it is, after all, completely crafted by hand: it is time consuming; minor supposed faults in the material are sometime visible, such as its innate stiffness or flexibility which make a machine mechanized production impossible. They thus take time and she produces them in very limited editions. Like the Maya, Luisa herself does not live from henequen bag-making. It is an activity that complements life. In her case, it is a creative one, and satisfaction comes in seeing that tradition is regenerated and furthered innovated.

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